



Optimization Technologies for Cutting

Opty-Way Enterprise 4.2 User's Guide

OPTIMA SOFTWARE

OPTIMA S.r.l.
Via A. Vespucci, 4 • 40017 San Giovanni in Persiceto - BO - Italy
Phone +39 051 826336 • Fax +39 051 825182
Internet: www.optima.it
E-mail: optima@optima.it

Copyright © 1997-2010 Optima S.r.l.
All rights reserved

The company OPTIMA S.r.l. declines any liability concerning this documentation, included any warranty of sale and suitability for special purposes. The company OPTIMA S.r.l. is not responsible for possible mistakes contained in this documentation, or casual damages occurring during working or due to the use of this package. No part of this handbook may be reproduced in any form or by any means or translated into any other languages without the express written permission of OPTIMA S.r.l. Information in this handbook is subject to change without notice.

This handbook refers to the whole Optima range of products for processing and working flat surfaces. Some parts of this handbook refer to a specific product only and are to be considered if corresponding to the type and level of installation purchased. **OPTIMA** S.r.l. declines any liability concerning a wrong interpretation thereof.

The registered marks and trademarks of the products mentioned therein are the property of their respective owners.

Index

1 - ENTERPRISE SYSTEM	9
Welcome	9
Main Features.....	9
Main Data Management	10
Bill of Materials and Cycles	10
Offer and Order Management (Optional).....	10
Sales Price List Management (Optional).....	10
Production Management	11
Optimization.....	11
Production Control.....	12
Printouts and Editing Reports.....	12
Label Management - Label-Way	12
Other modules	13
Post-Processor (Optional).....	13
Rack-Way (Optional).....	13
Doors-Way (Optional)	13
Decorative Glazing Units (Optional).....	13
Bar-Way (Optional)	13
TV-Way (Optional)	13
Optistrato (Optional).....	13
Hardware Requirements	14
Minimum Requirements for Enterprise.....	14
Installing Opty-Way Enterprise	15
Installing your product	15
Registering Opty-Way	15
Start Opty-Way Enterprise	15
Folder and File Structure	16
Folders.....	16
CNC	16
M.R	16
OPTIOPS (Optional)	16
OPTIOTH (Optional)	16
SHAPE (Optional).....	16
OPTIMSG	16
Files	16
Config.ini	16
Macchine.ini.....	16
Optima.ini.....	17
Parco.ini.....	17
.lab	17
OWE_user.xml.....	17
Product structure and organization	18
The Main Window	18
Window management.....	18
Navigation Toolbar	19
Status bar	20
Standard Functions	20
New.....	20
Duplicate.....	20
Remove	21
First/Prior/Next/Last Record.....	21
Search	21
New Search	21
Filter.....	21
Enable/Disable Filter.....	21

Filter Selection	21
Save	21
Cancel	22
Refresh	22
Close	22
Standard Functions in Specific Menus	22
Print	22
Print Screen	22
Standard Functions of Tree-Structured Grids.....	23
New.....	23
New Group.....	23
Duplicate.....	23
Duplicate Node	23
Move Element.....	23
Expand Node	23
Expand Tree	23
Expand All.....	24
Expand Level	24
Collapse Node	24
Collapse Tree.....	24
Collapse All.....	24
Collapse Level	24
Print Grids.....	24
Clear Sort Order.....	24
Restore Column Size	24
2 - BASIC TOOLS.....	25
Customizing Grids	25
Customize Current View	26
Configurations.....	26
Sort	26
Show.....	27
Group.....	28
Totals.....	29
Filter.....	29
Export	31
Group By.....	31
Configurations	31
User-Defined Filters.....	32
Filter Work Modes.....	32
Filter Types.....	32
Default Filters.....	33
Creating a selection filter	33
Editing a filter	34
Pop-Up Filter.....	38
Advanced Filter.....	38
Selecting/Activating a filter	39
Data Search.....	39
Search command.....	39
How the Search command works.....	40
Searching in a grid.....	40
Data Selection	41
Commands for the multiple selection inside grids	41
Print Report	42
Report Selection	42
Report Preview	44
Creating and Editing a Report	44
3 - SUPPORT TABLES.....	45
Introduction.....	45
Structure of Tables	45
General Tables	47
Countries	47
Delivery Routes.....	47

Customers / Suppliers Categories	48
Languages	48
Banks	49
Working Centers	50
Stocks List	51
Attachment Main Data	52
Customer Items	53
Customer's Conditions	54
Setup Tables	57
Company Data	57
Predefined Lists	57
Product Types	58
Counter Definition	59
Sales Tables	60
VAT	60
Taxes	60
Currency	61
Payments	61
Reasons for Transports	62
Forms of Transports	62
Shipping Racks	63
Carriers Data	63
Goods Aspect	64
Price List Tables	65
Goods Categories	65
Categories	66
Additional Customers Tables	68
Destinations	68
Customer Counter Assignment	69
Contacts	69
4 - MAIN DATA ARCHIVES	70
Introduction	70
Coding conventions	70
Customer Main Data	71
Window Structure	71
Editing Customer Main Data	72
Browse	72
Customer Data	72
Fiscal Data	74
Documents and Conditions	75
Particular Conditions	77
Customer Articles	77
Material Stock Main Data	78
Window Structure	78
Editing Stock Main Data	79
Browse	79
Main Data	79
Detail	80
Quantity	83
Additional Data	84
Categories	85
Work Types Main Data	86
Window Structure	86
Editing Work Types Main Data	87
Browse	87
Main Data	87
Detail	89
Categories	90
Bill of Material	91
Window Structure	92
Bill of Material	92
Editing of a BOM	93

Creating a Bill of Materials or Product.....	93
Product Details	94
Defining the Product composition	95
BOM Branch Parameters	96
Product Description.....	97
Shape Master Data Archive	98
Introduction.....	98
Window Structure	98
List.....	99
Editing Shape Master Data.....	100
Dynamic Creation from Parametric Library	100
Details.....	102
Categories	102
5 - ORDER MANAGEMENT	104
Introduction.....	104
Offers	105
Sales Orders.....	105
Production Orders	106
The Main Window	107
Browse Tab.....	108
Creating an Order.....	109
Selecting a Customer Code	110
Selecting a Delivery Date.....	110
Main Data	111
Inspector on the Right.....	113
Shipping Data Inspector.....	113
Totals Inspector	114
Details:.....	115
Product Types.....	116
Data Entry Notes.....	117
Entering a Single Glazing Unit	117
Entering a Double Glazing Unit.....	120
Entering a Triple Glazing Unit	121
Entering a Structural Glazing Unit.....	122
Entering a General Product.....	123
Modifying a standard BOM.....	123
Notes Field Management.....	125
Prices.....	126
Price Grid	127
Product Inspector.....	127
Prices Inspector	128
Discounts Inspector	128
Totals Inspector	128
Modifying prices manually.....	129
Line Editing Features	130
Duplicate Line	130
Remove Line.....	130
Line Production Status - Manual Management	130
Order Management.....	131
Displaying and Finding Orders.....	131
Order Copy	132
Import Orders.....	132
Delete Orders.....	134
Order Production Status - Manual Management.....	136
Release Orders.....	136
Create Transport Documents.....	136
Other Order-related features.....	136
Importing/Exporting Orders.....	136
Import/Export Orders	137
Export Orders.....	138
6 - SALES.....	139
Introduction.....	139

Offers	140
Introduction	140
Create Order from Quotation	140
Sales Orders.....	141
Price List.....	142
Introduction	142
General Concepts	142
The importance of the Goods Category	142
Valuing types	144
Enterprise's Price Search.....	148
Relationship between calculation method and Master Data.....	152
Price List Management	153
Creating a New Price List.....	153
Deleting a Price List.....	154
Duplicating a Price List	154
Price List Detail Management.....	155
Adding a Price List Item	155
Price Item Types	161
Price List Calculation Modes.....	162
Calculation Factors	165
Entering multiple lists and/or CUBES.....	166
Editing a Price List Item	168
Duplicating a Price List Item.....	168
Removing a Price List Item	168
Printing - Exporting price list items in Excel format	168
Customers' Contracts	170
Introduction	170
How Contracts work.....	170
Price History	171
Introduction.....	171
Price History Database.....	171
Consulting the Price History	171
Price History Menu.....	171
Consulting from within Orders.....	172
7 - PRODUCTION MANAGEMENT	173
Introduction.....	173
Production Management Modes.....	174
Production Batches	175
Work Orders	175
Production Orders.....	176
Work Orders.....	176
Production Release	178
Selecting Data	179
First Level Selection.....	180
Second Level Selection	181
Production Features	182
Release Orders.....	183
Unwork.....	187
Production and Shipping Rack Management.....	187
Label Printing (Label-Way module).....	187
Work Orders	189
The Work Order Window	190
Selecting a Batch	190
Work Orders Window Features.....	191
Cutting Work Orders.....	192
Optimization.....	192
Edit-Way	192
Print Optimization.....	192
Transmission Data Send.....	193
Paste Work Orders	194
Upload/Download Sheets	195
Set Priority	196

Print Labels	197
Reprint Labels	197
Rack-Way (Optional)	198
TV-Way (Optional)	198
Bending Work Orders	199
Spacers Optimization	199
Selecting Bar Sizes	200
Optimization Parameters	200
Status of a Work Order	200
Show Work Order Status	201
Show Related Work Orders	202
Change Work Order Status	202
Undo Working	203
Gmc-Way - Production progress control via barcode	204
Nomenclature and definitions	204
Starting GMC-Way	205
Completing Workings	207
Using GMC-Way to manage Production Progress	208
"Breaking" pieces through GMC-Way	208
Manual Mode	208
Cutting Optimization	210
Cutting Table Window	210
Selecting Sheet Sizes	211
Optimization Parameters	211
Optimization	211
Optimization Mode	212
Sheets/Offcuts	212
Tool	213
Summary Table	213
Toolbar Functions	214
Optimization	214
Edit-Way	214
Edit-Way Autostart	214
Automatic Exit	214
Waste Calculation	215
Total Waste	215
Real Waste	215
Net Waste	216
Trim Waste	216
Last Sheet Waste	217
Tool Waste	217
Final Waste	217
Reusable Waste	217
Order Progress	218
Window Structure	218
Order line grid	219
Progress Data Inspector	219
Order Progress commands	221
Selecting Data	221
Creating a document	222
Complete Quantities	223
8 - SETUP	224
Basic Notions	224
Open set-up menu	225
General	226
General Data	227
Pieces Mask Setup	228
Material Mask Setup	228
Stock Management	229
Optimization Parameters Configuration	229
Cutting Table Setup	229
Connections	229

Adding a Cutting Table	230
Removing a Cutting Table.....	230
Machine Parameters	231
Parameters	231
Tool Parameters	232
Piece Data	232
Numeric Control Setup.....	232
Setup	232
Path	233
Serial.....	233
Transmission	233
CNC Options.....	234
Profiles.....	235
Paths.....	236
Pre/Post-Path.....	237
Bending Machines Setup	237
Connections.....	237
Machine Parameters	238
Setup	239
Unit of Measurement	239
U.M. Code.....	240
Linear U.M.	241
Print Dimension Setup String	241
Area U.M.....	241
Weight U.M.....	241
Using different units of measurement.....	242

1 - Enterprise system

This USER'S MANUAL is a step-by-step guide for using the standard version of Opty-Way Enterprise. It provides information about commands as they appear in the standard graphics interface supplied by Optima S.r.l.

Welcome

Congratulations for purchasing a program from OPTIMA S.r.l.

The **OPTY-WAY ENTERPRISE** program is a useful reference for managing all glazery activities, from handling customer orders to shipping goods, from optimizing cutting to tracking orders.

This package has been designed after many years of work, co-operation and experience in the relevant field by skilled engineers always attentive to the problems of firms.

All procedures have been made fully automatic and self-guided in order to allow even the less experienced users to learn the various functions of the program easily.

OPTY-WAY ENTERPRISE has been entirely developed at 32 bits on the Windows XP operating system. It has therefore all technical features of this operating system, thus being totally compatible with it.

Any peripheral or pointing system, such as printers and mice, supported by Windows XP/VISTA and Windows Server 2003/2008 are automatically compatible with Opty-Way Enterprise.

Main Features

The Opty-Way® Enterprise software system has been designed, based on Windows logic, to make the application simpler and easier to use, thus structuring the user interface according to predefined specifications. When Enterprise is run for the first time, you will note how most of the interface set-up follows a predetermined and uniform scheme. This ensures rapid and precise understanding right from the initial contact.

The entire application is structured around multiple Tables that can be used for consultation and to enter data quickly and easily. When Enterprise is started, all the tables are completely closed and can be opened from the menu items.

In addition, the system also displays data Grids that form the “table” where work is being carried out. This means that specific data can be consulted quickly and easily.

“Selection” functions can be activated on these grids through the search functions available in the menus or on the Toolbars. Each column of the grids can also be placed in ascending/descending order. You can even modify the horizontal size of the grids, as well as the order with which they are presented on the screen. Data that is unnecessary for the work to be carried out can be hidden to simplify grids.

These are just some of the basic rules for using the program that provide the user with a single, simple and easy-to-understand operating procedure.

Main Data Management

Like any other software product that offers global management of a manufacturer or business company, Opty-Way® Enterprise also utilizes a set of basic archives, called Main Data, that contain all the information that in some way is repetitive and standard for that specific firm.

External contact names and data, such as Customers and Suppliers, or all the names related in some way to the firm can be managed using the corresponding Main Data archive.

Likewise, a specific Main Data archive will allow the coding of stock items starting from the materials to be worked to the coding of the finished products.

Different types of work including a list of costs and departments in which the Work Types will be carried out can also be entered.

Bill of Materials and Cycles

Bill of Materials (BOM) built on various levels. Possibility of managing a set of restrictions regarding the "replacement" of list items. This method allows the basic “prototypes” to be defined very quickly while reducing finished product construction errors. This is a new concept of “variables/options” of the classic BOMs. Predefined work cycles can also be entered in the BOM structure.

Offer and Order Management (Optional)

Together with Main Data archive management, Order Management is one of the cornerstones of the Enterprise application in which it is possible to process and define all the information relative to a work order received from a customer. This includes customer specifications, definition of the characteristics of the material to be worked as well as the single workings to carry out on the piece. In this phase, which is certainly the most important in the entire data definition cycle, Enterprise will carry out various processing functions. It's obvious that correctly defining data while they are being entered will guarantee precise and efficient management of the entire production cycle. Data acquired from external sources can be processed by Enterprise.

Sales Price List Management (Optional)

Product price lists based on different criteria. Due to the extreme variability of the glass sector the adoption of a very complex and articulated system to draw

up sales price lists has been necessary. In brief, Enterprise implements the following techniques:

- ◆ size-based
- ◆ x/y dimension range-based
- ◆ piece-based
- ◆ component sum-based (Work Types included).

The possibility of defining price lists by customer category or specific customer or linking products to a specific customer is also granted.

Production Management

Work Orders characterize the putting into production of what has been entered into the archives of the Enterprise Order Management. Through the Selection functions of the program the user can "select what" to put into production according to the information at his/her disposal, as well as to the capacities of the company production system (in-house or not).

After the putting into production and for each type of Work Type specified, Enterprise generates many Work Orders subdivided, if needed, by type of material to be worked. Work Orders thus generated can be viewed and changed in the relevant sections they refer to (cutting, bending and all other Work Types the version installed is capable of managing). In the Batch management you can have a view of the different work orders linked to a specific production batch or launch and the work order status.

Optimization

In Opty-Way® Enterprise the optimization concept gets applied to various work stages and is dealt with specific solutions according to the different requirements.

Enterprise allows:

- Optimizing the flat material cutting (glass, marble, sheet metal, plastics, etc.);
- Optimizing the linear material cutting (spacer bars, bars, etc.);
- Optimizing the tempering furnace charge;
- Optimizing the piece-on-rack arrangement;

Each type of optimization takes into account a series of parameters for calculating waste, or uses a calculation algorithm that has been specifically developed for the function in question.

Production Control

Once production has been activated, Enterprise can be used to control and manage the status of a work order at any time. These Enterprise tools provide the user with a powerful and efficient means of controlling his/her production lines and, as a consequence, allow him/her to evaluate each action to be taken.

The Enterprise user, through the Production Batch Control/Status and Work Order Control/Status functions, can track the entire production cycle and obtain the information he/she needs relative to the execution status of a customer order, the regular production progress, the evaluation of how much and what to put into production.

As an additional means of supporting the control and checking phase, if the Link to the TV-Way industrial monitor or the use of bar codes for the production tracking is activated, the user can receive information in real time about the progress and execution of the cutting phase on automatic cutting plants.

Printouts and Editing Reports

Complete set of operating Printouts, from work orders to defined BOMs, customer Main Data, graphic report of shapes in the archive, configuration of the installed machinery, etc.

Free design of hard copies. The user is granted the possibility of editing the structure of the print reports available in the basic software freely and with no need for code writing or specific information technology knowledge. This makes the application software extremely flexible and gives the user freedom of action.

Label Management - Label-Way

Customized label printing. Labels may be given all necessary data relating to the cut pieces (CUSTOMER, ORDER, DIMENSIONS, NOTES, etc.) with the opportunity of setting printing quantity, data and label size as required.

Other modules

Post-Processor (Optional)

Automatic optimization of the cutting path and subsequent creation of the CNC file for ANY linear or shape cutting machine and for the bending machine.

Rack-Way (Optional)

This module automatically sorts pieces so that they can be stacked quickly and easily onto available racks. This module can manage both Standard and Harp Racks.

Doors-Way (Optional)

Easy and interactive creation of doors, including notches to be traced by the cutting machine, thanks to the relevant preset library.

Decorative Glazing Units (Optional)

Use the preset library in this module to create decorative glazing units easily and interactively. You can choose the different parts of the glazing units as well as their material.

Bar-Way (Optional)

This module allows you to create simple and composite glazing units with the application of "Georgian" glazing bars. Just enter the basic data of the required dimensions, type of material and glazing bar grid dimensions.

TV-Way (Optional)

This module displays the machine on board cutting sequence, thus making sheet breakout operations much easier.

Optistrato (Optional)

Special module for optimizing and cutting laminated glass with particular settings and limits.

NOTE: Due to the complexity of this product, Enterprise add-on modules may not be described in this guide. If this is the case, refer to the specific product guides.

Hardware Requirements

The following are the general requirements for Opty-Way Enterprise to operate correctly:

Minimum Requirements for Enterprise

SERVER REQUIREMENTS

Component	Minimum	Recommended
CPU TYPE	AMD Opteron, AMD Athlon 64, Intel Xeon with Intel EM64T support, Intel Pentium IV with EM64T support .	
CPU SPEED	1,4 Ghz	2,4 Ghz or more
RAM	2 Gb	4 Gb
HARD DISK	20 Gb free space	2 or more hard disks with raid controller and mirroring ; 500 Gb
OPERATING SYSTEM	Windows 2003 server	Windows 2008 server or later
DATABASE	SQL Server 2005 Express Edition (included on the Optima installation CD)	Microsoft SQL Server 2005

CLIENTS REQUIREMENTS

Component	Minimum	Recommended
CPU TYPE	Pentium 4 (or equivalent)	Pentium 4 dual core (or equivalent)
CPU SPEED	1,6	2,6
RAM	1 Gb	2 Gb or more
HARD DISK	20Gb	40Gb or more
OPERATING SYSTEM	Ms Windows Xp Professional	Ms Windows Xp Pro or later
OTHER SOFTWARE	MSXML 6 or later	MSXML 6 or later
OTHER HARDWARE	USB port Laser or ink-jet printer	USB port Laser or ink-jet printer

NET REQUIREMENTS

Minimum net speed (and network adapters) 100 mbps; server access granted to clients .

If the technical features of your computer do not match those listed above, or if you have any doubts about the required minimum configuration, do not hesitate to contact OPTIMA's service department for additional details.

Installing Opty-Way Enterprise

Installing your product

For instructions on how to install Opty-Way Enterprise, refer to the corresponding documentation included on the product CD.

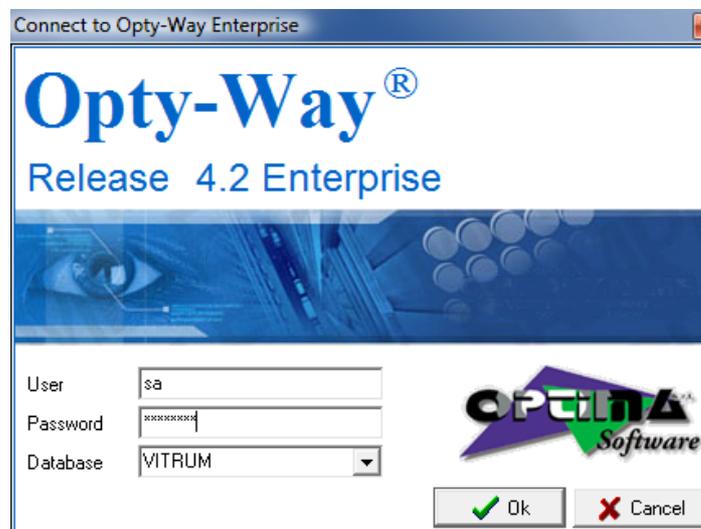
Registering Opty-Way

Registering your program (through the registration card attached to this manual) entitles you to receive information on future updates, to access the Optima Technical Assistance Service and to have the product repaired or replaced in case of accidental damage.

To register your program simply fill in the registration card and send it to Optima S.r.l.

Start Opty-Way Enterprise

To run Opty-Way Enterprise double click Enterprise desktop icon and enter user name and password.



It is possible to set Enterprise to automatically login on the database, that is without typing username and password each time you run the program. To do so and to define username for login please contact Optima support service.

Folder and File Structure

The Opty-Way Enterprise folder contains a large number of files and folders. Knowing their functions can be very useful in many cases and, above all, when reinstalling the program to avoid losing the work already completed or the previous parameter settings. Only those files and folders considered useful for you will be described below.

Folders

CNC

This folder contains the files transmitted to the cutting and bending machines. These are the files sent directly to the path specified in the corresponding machine setting. Files are divided into subfolders.

M.R

This folder contains the r01 files of any completed optimizations. These files can be viewed using Edit-Way.

OPTIOPS (Optional)

This folder contains parameter-based shapes in the .OPS format. Shapes are divided into families.

OPTIOTH (Optional)

This folder contains the shapes for vinyl cutting as well as the .ODF files created by Geo-Way.

SHAPE (Optional)

This folder contains the shapes in the .SAG format used in optimizations.

OPTIMSG

This folder contains all files for languages translation: file ita.ini e all those with _ita.ini contain text for Italian language translation, eng.ini file the English translations, etc...

Files

Config.ini

This file contains settings relating to supported units of measurement, languages and digitizers.

Macchine.ini

This file contains all the cutting machines supported by the program and the relevant default parameters.

Optima.ini

This file contains all the program settings. Flags activated inside the optimization window, for example, are stored here.

Parco.ini

This file contains the machine characteristics configured in the setup. All cutting and bending machines used are saved in this file.

.lab

All .lab files are label format files. By default, there are 6 label formats, but you can create as many formats as you wish by using the Label-Way program.

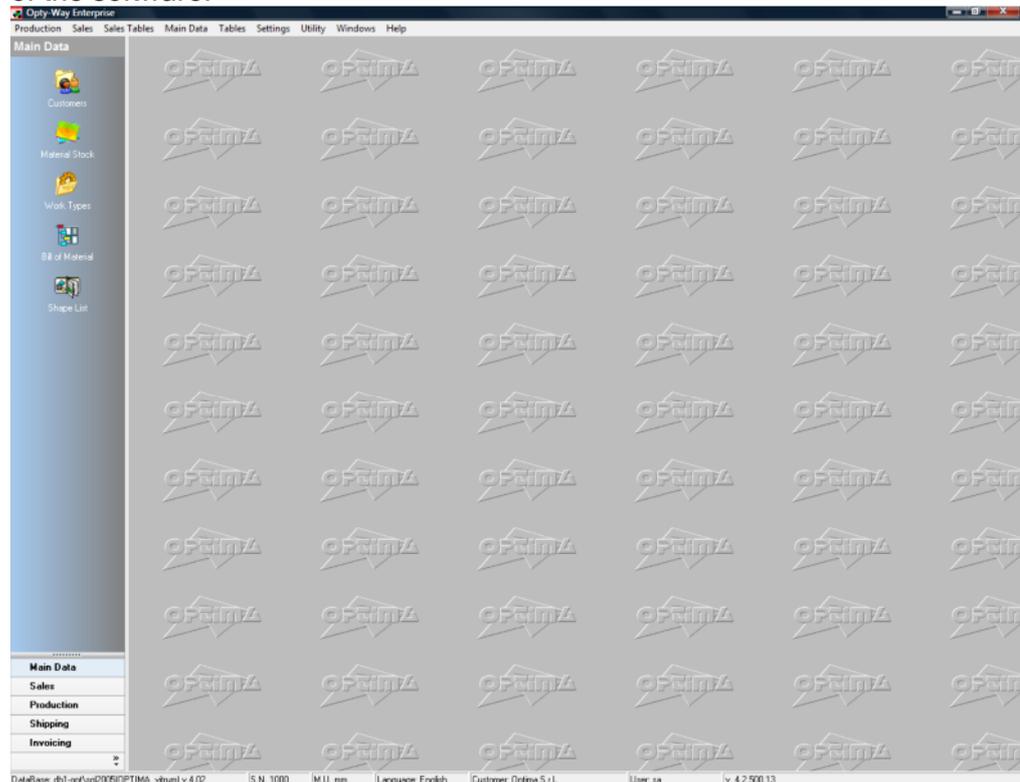
OWE_user.xml

This file contains all settings pertaining to tables, i.e. the order of the fields and their width.

Product structure and organization

The Main Window

From the main program window (that pops up when you start the program) you can access the various subsections or menus and thus the different functions of the software.

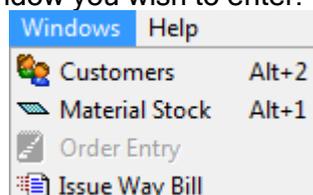


Window management

Special mention should be made of the problem of managing on-screen windows.

As a last-generation system, Enterprise allows different functions to be interoperable. This means that different "Windows" can be simultaneously open.

The "Windows" menu option shows the currently active windows and allows you to move between them directly and immediately. To do so, simply click on the window you wish to enter.



You can close active windows in two different ways. You can:

- ◆ Click on the Close **X** button on the top right part of each window.
- ◆ Click with the right mouse button on the area inside the Task Bar. A menu option similar to  **Close** appears. Confirm to close the active window.

NOTE: When you close a window, Enterprise displays the window open underneath (if any). If no other window is active, the initial window appears.

Navigation Toolbar

The side Navigation Toolbar shows the main modules of the application depending on the enabling options acquired by the customer and built-in when preparing the installation.

- ◆ **Main Data:** Management of all basic Main Data the entire software system relies on: customer, stock item, and Work Type Main Data, as well as BOM, work cycle and shaped figure Main Data.
- ◆ **Sales:** Offers and Sales Orders. Sales Price List Management.
- ◆ **Production:** Selection and putting into production of order lines. Definition of production batches, creation of racks and piece work orders.
- ◆ **Shipping:** Production management and control, creation of transport documents and accompanying invoices.
- ◆ **Invoicing:** Issuing and maintenance of order invoicing documents. Bill-book management. Transmission of data to company's accounting systems.



Once any of the main options of the Navigation Toolbar has been selected (options may vary in number depending on the program version and type available), the list of related buttons is displayed.

The buttons located on the Navigation Toolbar can do the following:

- ◆ Open a specific pop-up window directly.
- ◆ Open a specific built-in window directly.
- ◆ Open a lower-level Navigation Toolbar.

Status bar

Opty-Way Enterprise Status Bar provides the following information:

- ◆ **Database:** Name of the SQL Server and database you logged on to.
DataBase: DB1-OPT(OPTIMA) v.4.01
- ◆ **Serial Number:** Serial Number of the hardware security key installed on the active post.
S.N. 1000
- ◆ **Unit of Measurement:** Main unit of measurement of the active post.
M.U. mm
- ◆ **Language:** Operation language of the active post.
Language: Italiano
- ◆ **Customer:** Identity of the customer entered when installing the system or defining setup characteristics.
Customer: Optima S.r.l.
- ◆ **User:** Name of the user who logged on to the database.
User: sa
- ◆ **Version:** Opty-Way Enterprise version in use.
v. 4.0.401.18

Standard Functions

The Opty-Way Enterprise software system is based on a generic layout structure and a set of operating conventions. For a rapid understanding of the system and also to avoid boring repetitions within this guide these are defined here.



The following are those icons that always have the same meaning in Enterprise.

New

Creates a new record inside the window in which you are working.

 Toolbar	
 Modify Menu	New
 Shortcut Key	Shift+F4

Duplicate

Duplicates the currently selected record.

 Toolbar	
 Modify Menu	Duplicate
 Shortcut Key	Shift+F6

Remove

Removes the selected record.

 Toolbar	
 Modify Menu	Remove
 Shortcut Key	Del

First/Prior/Next/Last Record

Scrolls forward/backward through on-screen records and moves to the first/last record available.

 Toolbar	
 Modify Menu	First / Prior / Next / Last Record
 Shortcut Key	Ctrl+Home / Arrow Up / Arrow Down / Ctrl+End

Search

Rapidly searches through all on-screen data, once the corresponding field has been selected. For additional details refer to the corresponding section.

 Toolbar	
 Modify Menu	Search
 Shortcut Key	Ctrl+F

New Search

Rapidly searches through all on-screen data, once the corresponding field has been selected. For additional details refer to the corresponding section.

 Toolbar	
 Modify Menu	New Search
 Shortcut Key	Ctrl+N

Filter

Edits the selection filter. For additional details refer to the corresponding section.

 Toolbar	
---	---

Enable/Disable Filter

Activates or deactivates the selected filter.

 Toolbar	
---	---

Filter Selection

Filter selection/activation combo box.

 Toolbar	 30 days ▾
---	---

Save

Saves modifications made to the window in the database.

 Toolbar	
 Modify Menu	Save
 Shortcut Key	F12

Cancel

Cancels the modifications made to the window.

 Toolbar	
 Modify Menu	Cancel
 Shortcut Key	F11

Refresh

Refreshes on-screen data.

 Toolbar	
 Modify Menu	Refresh

Close

Closes the currently active window.

 Toolbar	
---	---

Standard Functions in Specific Menus

In any open window, you can display a special menu bearing the name of the table. In the Material Main Data table, for instance, the Materials menu will appear, whereas the Customers window will show the Customers menu. These menus contain useful functions for the relevant window. Some functions are available in all the menus:

Print

Opens the print report selection/editing window (for additional details refer to the corresponding section of the Report module).

 Toolbar	
 Specific menu	Print

Print Screen

Prints the displayed screen.

 Specific menu	Print Screen
 Shortcut Key	Ctrl+P

Standard Functions of Tree-Structured Grids

Tree-structured grids (for instance the Categories or Materials grids) - due to their nature - include a set of specific functions for creating or sorting the data they contain.

The New, Duplicate and Remove functions described above in the Standard Functions are also available in the menu that appears when clicking the Right mouse button. In addition, the following functions are available:

New

Creates a new record inside the window in which you are working.

 Toolbar	
 Modify Menu	New
 Shortcut Key	F4

New Group

A group is only used to group "homogeneous" codes (e.g. all clear float glass items).

 Toolbar	
 [Right Click]	New ▶  New Group
 Modify Menu	New Group
 Shortcut Key	F5

Duplicate

Duplicates the currently selected record.

 Toolbar	
 Modify Menu	Duplicate
 Shortcut Key	F6

Duplicate Node

Allows you to duplicate the selected code and all its sublevels.

 [Right Click]	Duplicate ▶ Duplicate Node
 Shortcut Key	F7

Move Element

Allows you to move item groups or single items from a tree branch to another.

 [Right Click]	 Move Element
---	--

Expand Node

Expands the selected node, but leaves the position of existing sublevels (if any) unchanged.

 [Right Click]	 Expand Node
---	---

Expand Tree

Expands the selected node as well as all the existing sublevels (if any).

 [Right Click]	 Expand Tree
---	---

Expand All

Expands all tree levels.

 [Right Click]

 Expand All

Expand Level

Expands all the nodes at the same level of the selected node, but leaves the position of existing sublevels (if any) unchanged.

 [Right Click]

 Expand Level

Collapse Node

Collapses the selected node.

 [Right Click]

 Collapse Node

Collapse Tree

Collapses the selected node as well as all the existing sublevels (if any).

 [Right Click]

 Collapse Tree

Collapse All

Collapses all tree levels.

 [Right Click]

 Collapse All

Collapse Level

Collapses all the nodes at the same level of the selected node, but leaves the position of existing sublevels (if any) unchanged.

 [Right Click]

 Collapse Level

Print Grids

Allows you to print the on-screen grid with exactly the same layout and size.

 [Right Click]

 Print Grids

Clear Sort Order

Clears all grid sorting actions performed by the user during a work session.

 [Right Click]

 Clear Sort Order

Restore Column Size

Cancels the column size change made by the user during a work session.

 [Right Click]

 Restore Column Size

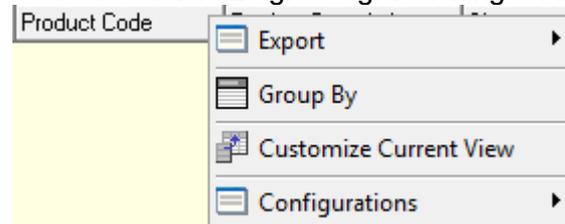
2 - Basic Tools

This Chapter describes all the functions available throughout the Enterprise system. In brief, they are:

- ◆ Setting and customization of the appearance of data grids and data group levels.
- ◆ Data export to external systems using data grids.
- ◆ Creation of customized tools for selecting data using a special tool available in Enterprise.
- ◆ Search filters generalized to CTRL-F.
- ◆ Report creation and editing.
- ◆ Other system-supporting utility functions.

Customizing Grids

You can customize grids right-clicking on the column header



NOTE: The image refers to the "Production menu". This feature is not available for all menu, some grids cannot be customized (users cannot define which column show but only act on column position). Grids contained in the following list cannot be customized:

- Customers (Main Data)
- Workings (Production)

For material, Work Types and Bill of Materials only the Customize current view option is available.

Customize Current View

First you need to create a customized view depending on your needs.

Click on Customize Appearance. A window opens containing the following tabs:

Configurations

This page allows you to create new configurations or to decide which configuration to use.

Click on the icon to activate the selected grid configuration.

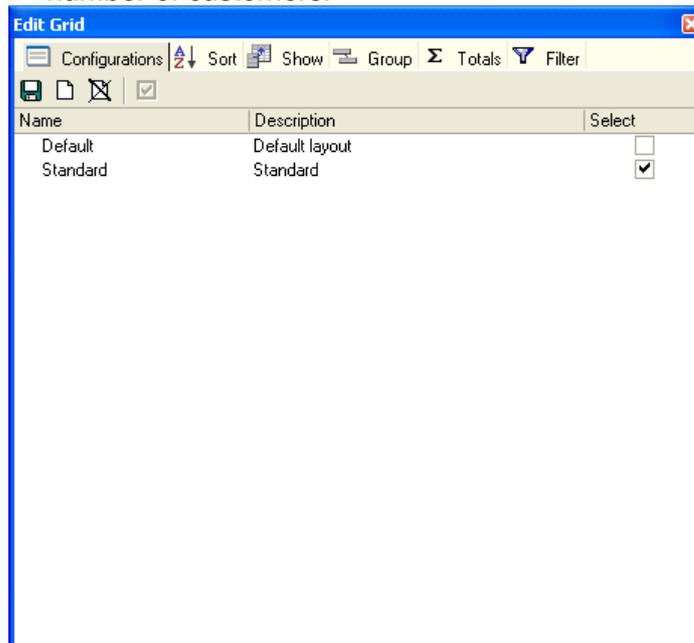
Click on the  icon to create a new configuration. Now you need to select it, set the desired characteristics and save the modifications.

Click on the  icon to delete the selected configuration.

Click on the  icon to save the selected configuration. All the changes you made are now permanent.

By default, two configurations are available:

- ◆ Default: Basic program configuration (cannot be modified).
- ◆ Standard: Configuration defined to meet the requirements of the greatest number of customers.

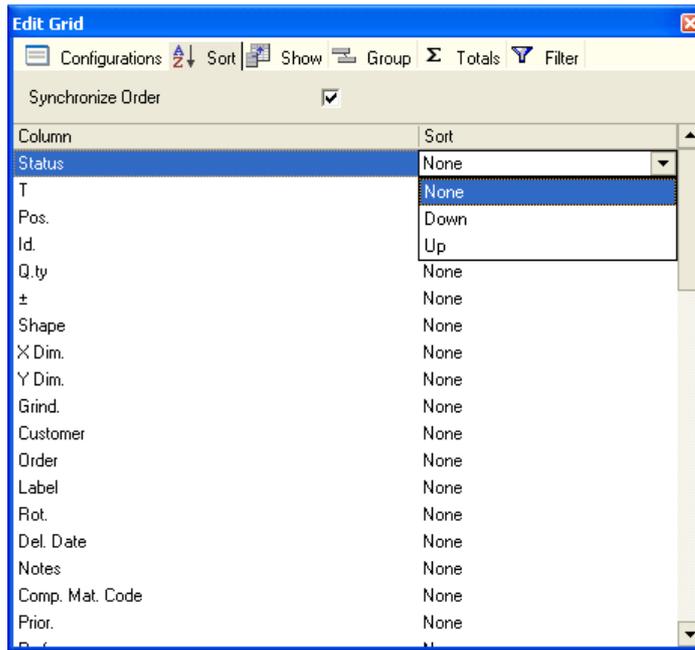


Sort

This tab allows you to decide which fields to order and in what order (ascending or descending).

If there are no groups, you can sort only one field (the last one set).

If there are groups, you can define the order of each grouping level and one single field of the grid.



The “Synchronize Order” flag is used to align the displayed data with data inside the database.

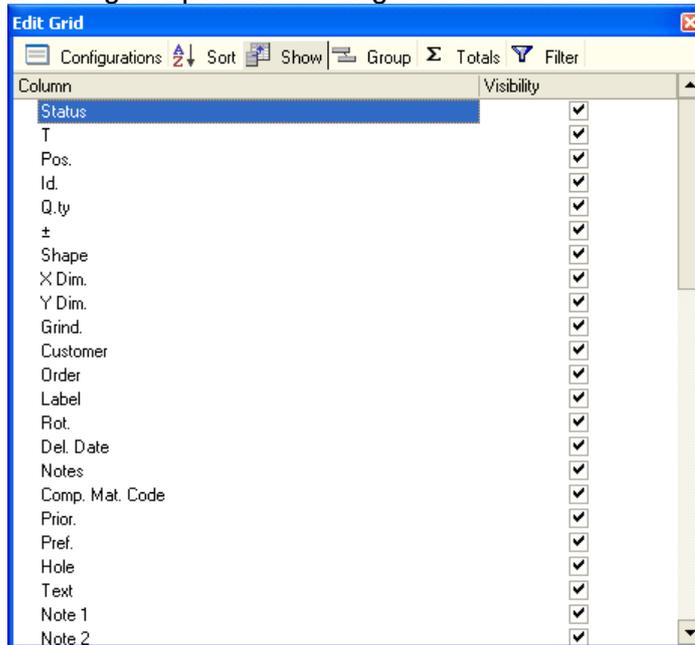
If this feature is active, printouts (labels also) and transmissions to bending machines follow the same order as in the grid.

Show

This tab allows you to select which fields to display in the grid.

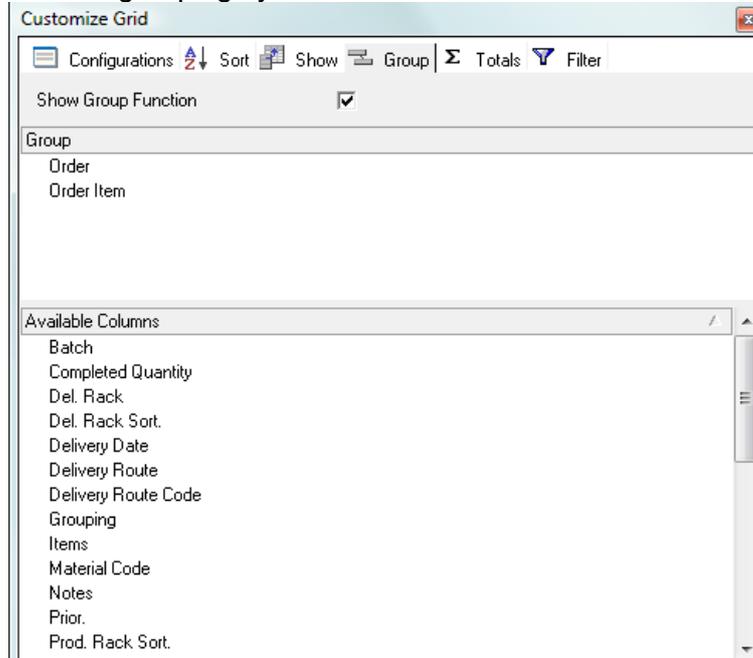
To hide a field, simply uncheck the field name.

This page also allows you to order the fields. Drag a field upward or downward to change its position in the grid.



Group

This tab lets you decide which fields to use to group the grid. Select and drag one or more fields from Selectable Columns to Group to activate grouping by those fields.



Sorting the fields by Customer and then by Order (as in the example) creates a display similar to the one below.

Order	Order Item	Material Code	Work Type C...	Product Description	Work ...	Q.ty to ...	Q.ty	Complete...	P...
-	+	Order : ORD-45-09 - 24/10/2009 - Optima S.r.l.							
	+	Order Item : IG FL4 \ 12ALU \ FL4 - 4 - 700.0 mm x 980.0 mm () - 29/10/2009							
	+	Order Item : IG FL3 \ 10ALU \ FL3 - 6 - 450.0 mm x 1145.0 mm () - 29/10/2009							
	+	Order Item : IG FL3 \ 12ALU \ FL4 - 4 - 1980.0 mm x 450.0 mm () - 29/10/2009							
	+	Order Item : IG FL4 \ 12ALU \ FL5 - 4 - 498.0 mm x 1180.0 mm () - 29/10/2009							
	+	Order Item : IG FL4 \ 15ALU \ FL4LOWE - 2 - 1020.0 mm x 820.0 mm (68) - 29/10/2009							
	+	Order Item : GBG FL4 \ 12ALU \ FL4 \ HELIMA - 4 - 1000.0 mm x 600.0 mm (69) - 29/10/2009							
	+	Order Item : GBG LAM33 \ 10ALU \ FL5 \ HELIMA - 4 - 1000.0 mm x 830.0 mm (70) - 29/10/2009							
-	+	Order : ORD-49-09 - 25/10/2009 - Optima S.r.l.							
	+	Order Item : SG FL8+P4S+Drill ø 21-40+Temper - 10 - 1200.0 mm x 600.0 mm (75) - 29/10/2009							
	+	Order Item : SG FL6+POLSH+SB Draw - 4 - 3167.5 mm x 2059.3 mm (76) - 29/10/2009							

You can create as many grouping levels as you wish. Some icons are available on the Toolbar of the various menus (Orders, Cutting, Bending and Stock) and in the Standard Pieces window to help you manage groups.

-  **Expand / Collapse Node:** Expands/Closes the selected node.
-  **Expand All Nodes:** Expands all nodes.
-  **Collapse All Nodes:** Collapses all nodes.
-  **Refresh:** Refreshes grids.

The “Show Grouping Case” flag shows/hides the Grouping case above the grid header line. Groupings can be added or removed just by dragging the columns inside this bar.

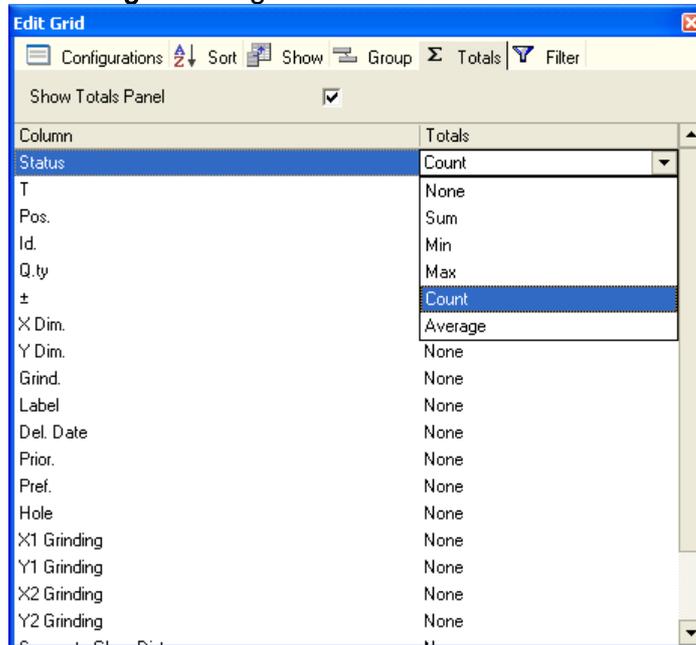


Totals

This tab allows you to add the Totals Board with the statistical data relating to the fields selected in this tab to the status bar.

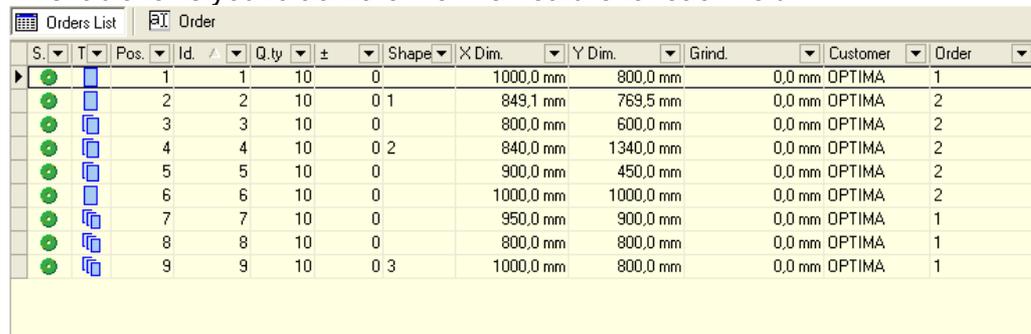
You can decide which of the following to display:

- ◆ **Sum:** The sum of the values in the field. It may be useful, for example, to see how many pieces have been entered on all order lines.
- ◆ **Min.:** Minimum value in the fields. It can be used, for example, to check if too small dimensions have been entered by mistake.
- ◆ **Max.:** Maximum value in the fields. It can be used, for example, to check if too big dimensions have been entered by mistake.
- ◆ **Count:** When applied to a field, it returns the number of lines where it is present.
- ◆ **Average:** Average value for the selected field.



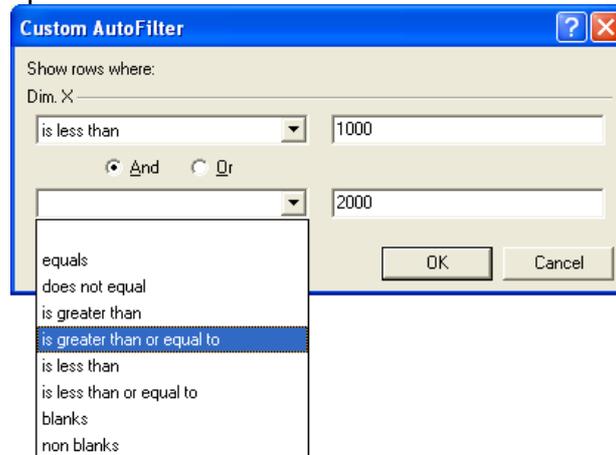
Filter

This tab allows you to activate the filter feature for each field.



When this feature is active, a triangle is displayed beside each table field containing all values assigned to the field on the various lines. Therefore, you can decide what values to display.

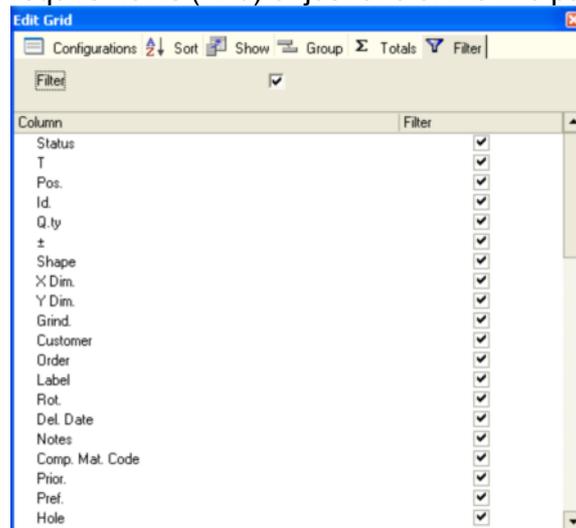
You can also set a customized filter by using Custom. The following window opens:



The two fields on the left are used to indicate the type of operation you wish to perform. Fields on the right must be filled out with the values you wish to filter.

- ◆ **Equals:** Displays the fields containing a value equal to the one indicated.
- ◆ **Does not equal:** Displays fields that do not contain the value indicated.
- ◆ **Is greater than:** Displays fields containing a value greater than the one indicated.
- ◆ **Is greater than or equal to:** Displays the fields containing a value greater than or equal to the one indicated.
- ◆ **Is less than:** Displays the fields containing a value less than the one indicated.
- ◆ **Is less than or equal to:** Displays the fields containing a value less than or equal to the one indicated.
- ◆ **Blanks:** Displays blank fields.
- ◆ **Non-blanks:** Displays non-blank fields.

You can set two filters and decide whether the fields displayed must meet both requirements (And) or just one of the two parameters (Or).



Export

You can save configurations by using the Export feature. To do so, click with the right mouse button on the grid header and select Export.



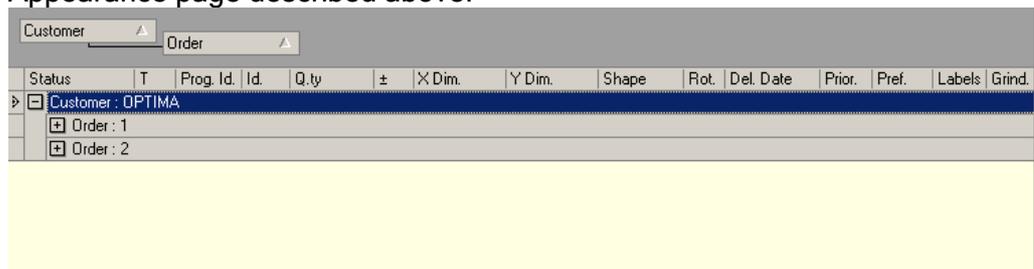
You can choose among three different types of export files:

- ◆ XML File;
- ◆ HTML Page;
- ◆ Excel File (XLS);

For each type a file is created in the selected format containing all the data in the grid when the export operation is carried out.

Group By

This option allows you to activate or deactivate the view of the Grouping bar. This bar contains the list of the grouping levels and their order. If this bar is active, you can perform a grouping just by dragging the desired field onto it. These groups, however, are not permanent. To make them permanent, you have to save the configuration from the Customize Appearance page described above.



Configurations

This option allows you to select stored configurations and change them at any time.

User-Defined Filters

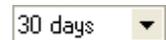
Another basic feature of the Enterprise application software - which makes it very flexible and powerful - allows "selections" or queries to be made against the available database without the user having to be an actual computer technician.

A hard job has been made to provide the end customer with a tool that makes data selection and display easy and clear.

The Toolbar on the top part of the program screen always contains a selection combo box and two icons.

 Allows you to create and edit the desired filter.

 Activates or deactivates the filter selected in the combo box next to it, i.e.



It should be noted that filters are available in the database and thus they can be used by all the users transparently, but they can be copied or transferred to other company databases only by means of specific SQL functions.

Filter Work Modes

Data hidden by the filter cannot be used in any way, unless the filter is modified.

An action on "All Rows" will be thus performed only on on-screen rows (that meet the criteria of the filter in use).

This means that the user must pay the greatest attention to the filter active on the window he/she is working in or displaying.

NOTE: Printouts from within the window the user is working in will always include currently filtered data (unless reports are specifically set-up differently).

Filter Types

Enterprise filters fall into three types due to their utilization. In detail, following families are offered:

- ◆ **Standard:** Filters the data in the active Window.
- ◆ **Popup:** Allows you to open a pop-up window containing the data filtered from the desired table.
- ◆ **Advanced:** Allows you to create filters using SQL commands directly. A good knowledge of the Enterprise database structure is thus needed to use it.

Default Filters

Some windows may contain a huge amount of data. This makes the load time longer and the search for data difficult (obviously a filter must be used in this case).

To avoid these problems, the user can set one of the filters available as the "default filter" for the window. In this way, each time the window is opened, it gets "loaded or populated" only with the data that meets the criteria of the default filter set by the user.

In brief, the window is loaded using the required filter, without the user having to set it manually.

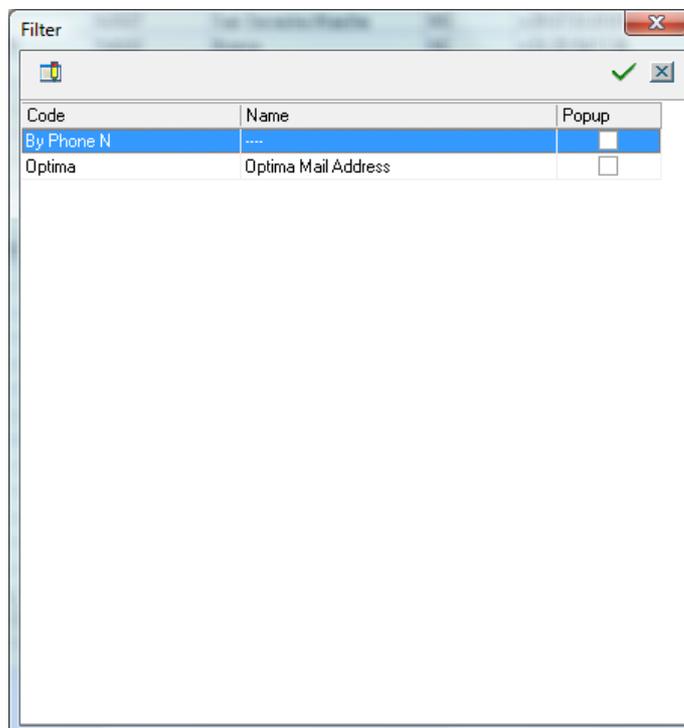
For a better understanding some practical examples of the use of the above-mentioned technique are provided below:

- ◆ Offers window: Normally, the user wishes to display the list of offers that have not been confirmed by the customer, yet.
- ◆ Batches window: The user wishes to display only the currently active batches and not those that have already been closed/executed.

Obviously, the user can set a different filter at any time, without modifying the default filter.

Creating a selection filter

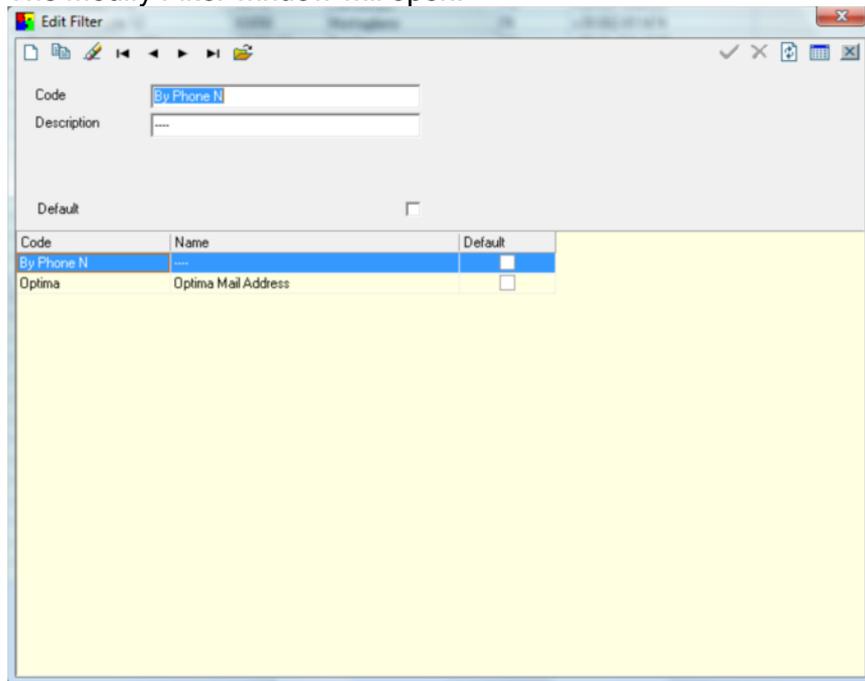
If you activate the filter editing feature , the window below appears:



From this window you can select the filter to apply to the data of the active Window by clicking on the  button. This will also close the Select Filter window.

Instead, click on the  button to create or edit a selection filter.

The Modify Filter window will open.

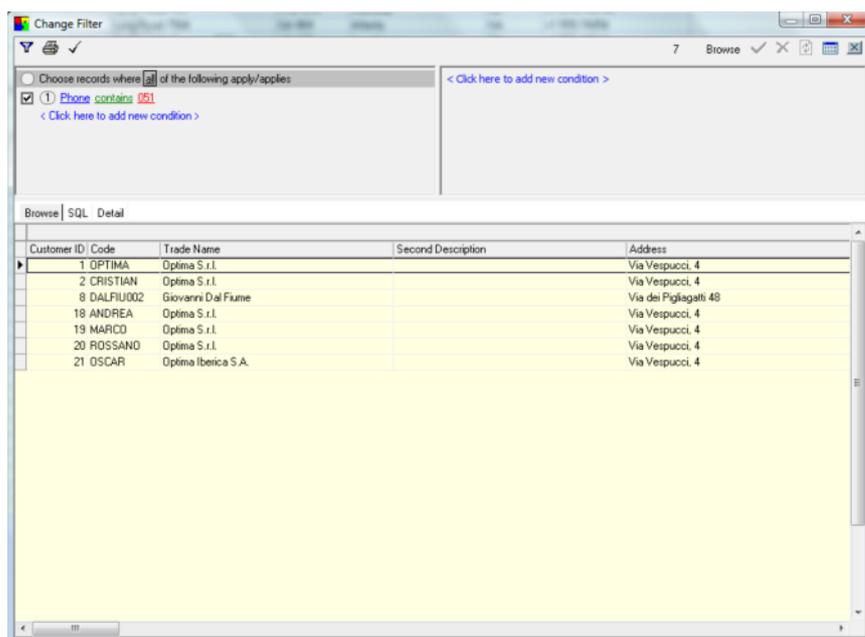


Editing a filter

The Modify Filter window lets you make all necessary modifications to selection filters, create new filters or remove filters from the database.

Modifications can be made both to the filter code and to the filter description. The code must be unique.

To open the filter conditions window, click on 



From this window you can:

- ◆ Enter the filter selection criteria (top left section).

Choose records where all of the following apply/applies

① Order Date **This Week**

[< Click here to add new condition >](#)

- ◆ Set the desired data order (top right section).

① Doc. No. Ascending

[< Click here to add new condition >](#)

- ◆ Display selected data (bottom central section).

Customer	Trade Name	Second Description	Address	City
CRISTIAN	Optima S.r.l.		Via Vespucci, 4	S. Giovanni
AREERS SIA	Aebars SIA		Katankalna iela 11	Riga
DHL	DHL		Not so far	Near here
CRISTIAN	Optima S.r.l.		Via Vespucci, 4	S. Giovanni
ANDREA	Optima S.r.l.		Via Vespucci, 4	S. Giovanni
DOOR003	Doors Associated LTDA		Rua Don Velasco, 157	Brazil
ANDREA	Optima S.r.l.		Via Vespucci, 4	S. Giovanni
ANDREA	Optima S.r.l.		Via Vespucci, 4	S. Giovanni
ANDREA	Optima S.r.l.		Via Vespucci, 4	S. Giovanni
DOOR003	Doors Associated LTDA		Rua Don Velasco, 157	Brazil
AREERS SIA	Aebars SIA		Katankalna iela 11	Riga

- ◆ View the created SQL query (SQL TAB).

```

Browse | SQL |
SELECT *
FROM ORDINIVENDITA_VIEW
WHERE
(
DATEDIFF ( day, ORDINIVENDITA_VIEW.DATAORD, round( convert( float, getdate() ) , 0, 1) ) between 0 and 30
)
ORDER BY Stato ASC, ORDINIVENDITA_VIEW.RIF DESC, ORDINIVENDITA_VIEW.DATAORD ASC
    
```

Setting conditions

Once the filter editing function has been activated, you are prompted to enter conditions in the condition setting section (top left part).

If it is a new filter then the following will appear:

Choose records where all of the following apply/applies

[< Click here to add new condition >](#)

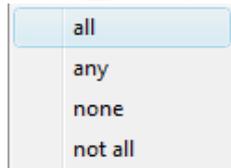
You are prompted to specify the "first" condition to be used in the filter.

If the filter already exists and you are "modifying" it, a series of pre-set conditions is proposed for modification:



Applying conditions

Click on **all** in the first line. The pull-down menu shown below will appear:

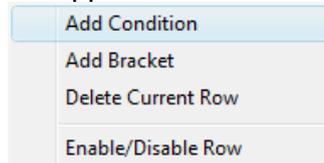


In this way, you can decide how the following conditions must be applied:

- ◆ **All:** All the conditions must be met for the data item to be considered good. This option acts the same as the AND logical operator.
- ◆ **Any:** If just one of the conditions is met, the data item is considered good. This option acts the same as the OR logical operator.
- ◆ **None:** None of the conditions must be met for the data item to be accepted. This option acts the same as the NAND logical operator.
- ◆ **Not all:** If just one of the conditions is not met, the data item is considered acceptable. This option acts the same as the NOR logical operator.

Adding/removing single conditions and branches of conditions

Click on the numbers that identify each condition. The pop-up menu shown below appears:



- ◆ **Add Condition:** Creates a new empty condition to be modified.
- ◆ **Add Bracket:** Adds a branch under the general condition. For the branch you can enter a set of conditions and define how they must be applied (by means of the menu described above and containing "All", "Any", etc.).



- ◆ **Delete Current Row.**
- ◆ **Enable/Disable Row:** Activates or deactivates the single conditions without destroying the selection condition. It is thus a "temporary" way of making a modification. The same result can be obtained using check boxes.

Modifying a condition

To modify or create a condition three parameters must be set:

- ◆ **Data Item To Be Filtered:** Field on which the condition must be checked for. It is the blue part of the condition.
- ◆ **Operator:** Defines the case in which the comparison between Data Item To Be Filtered and Comparison Field is true, thus making the condition accepted. It is the green part of the condition.

- ◆ **Comparison Field:** Value field with which the Data Item To Be Filtered is compared. It is the red part of the condition.

Available operators

Operators available depend basically on the nature of the field subject to comparison.

The following is the list of available operators.

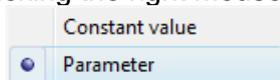
The first image represents the operators available when the selected Data Item To Be Filtered is of the Date type, whereas the second refers to a common numeric or alphanumeric field.



NOTE: When Operators such as "is empty" or "last 6 months" are selected, no Comparison Field is needed.

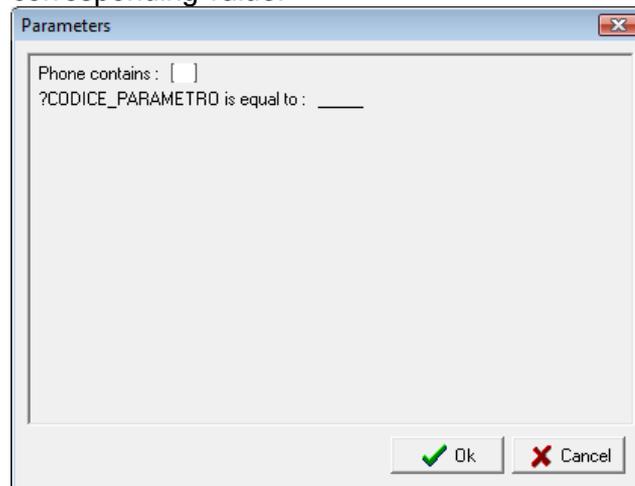
Comparison Field

The last element necessary to define a condition is the "Comparison Field". Clicking the right mouse button will display two choices:



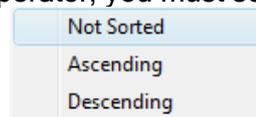
- ◆ **Constant Value:** You are prompted to enter a fixed value to be used to compare the data in the database.
- ◆ **Parameter:** To use a variable value filter (a typical example is a date criterion), set the field to Parameter. Each time the filter is applied, the

window shown below opens, in which you are prompted to enter the corresponding value:



Sort order

The sort order is set similarly to the conditions described above. Instead of the Operator, you must set the Sort Order for which 3 choices are offered:



- ◆ Not Sorted.
- ◆ Ascending.
- ◆ Descending.

Pop-Up Filter

The Pop-Up Filter differs from the standard filter in that the selection is carried out in a window other than the initial window.

This option may be useful when "temporary" or rapid selections are needed or when you do not want to lose the content of the currently active selection in the window you started from.

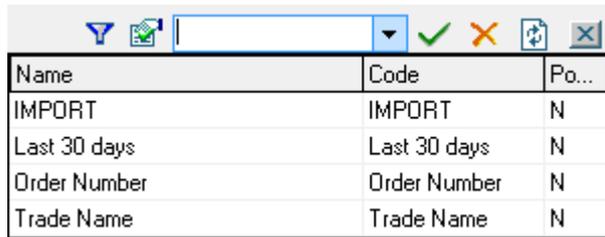
Advanced Filter

This special type of filter offers the user a variety of possibilities to take full advantage of the SQL technical features.

Because this is a complex subject, please contact our technical support department, which will be pleased to offer expert users its knowledge.

Selecting/Activating a filter

To activate a filter just click on the  button on the main toolbar or open the combo box next to the same button. If you clicked on the button, the last filter used is activated or deactivated, whereas the combo box lets you select one of the filters currently available in the database.



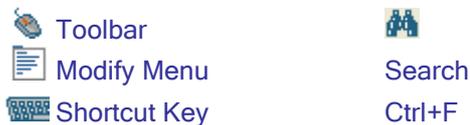
Name	Code	Po...
IMPORT	IMPORT	N
Last 30 days	Last 30 days	N
Order Number	Order Number	N
Trade Name	Trade Name	N

Once the filter has been selected from the combo box, the window will show only the data that meets the requirements or criteria you set in the filter.

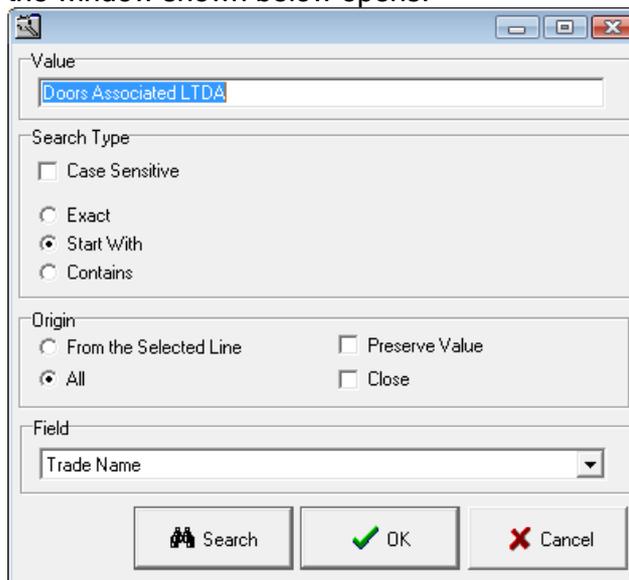
NOTE: In some cases the window may be empty, because none of the records in the database tables meets the selected criteria.

Data Search

Search command



Enterprise has a system to rapidly search for data. Once it has been selected, the window shown below opens:



Value
Doors Associated LTDA

Search Type

Case Sensitive

Exact

Start With

Contains

Origin

From the Selected Line Preserve Value

All Close

Field
Trade Name

How the Search command works

The following fields and options are available in the filter:

- ◆ **Value:** Value used to compare the selection.
- ◆ **Case Sensitive:** If this option has been selected, upper-case letters and lower-case letters are considered to be different.
- ◆ **Equal:** Only a result "equal to" the Exact value is considered to be valid.
- ◆ **Start with:** Any partial result is considered to be valid if corresponding to the beginning of the search string.
- ◆ **Contains:** Any partial result is considered to be valid if corresponding to any part of the search string.
- ◆ **Field:** This is the database field in which the search must be performed.
- ◆ **From the Selected Line:** The search is performed in the grid starting from the selected row downwards.
- ◆ **All:** The search is performed in all the grid records.
- ◆ **Preserve Value:** Lets you preserve the set Value when you change the Field in which the search must be performed.
- ◆ **Close:** Closes the search window at the end of a search.

Once the desired value has been entered and the search method and the reference fields have been selected, click on the Search button. The system will display the first row found. If none of the rows meets the requirements, the user will see the corresponding warning on screen.

Searching in a grid

Another data search method consists in selecting the field in which the search must be performed directly in the grid and keying in the beginning of the desired search string. In this way, while composing a word or code, the selection focus will move to the grid and the first occurrence of the search string will be selected.

For instance, if you want to search for OPTIMA (value) in Customer (field), just key-in "O" to select the desired row.

This happens only if no other row of the field starts with the letter you keyed-in! On the contrary, you must key-in other letters (for example "OPT").

When more rows of the grid contain the search string in the selected field (for instance the OPTIMA value in the Customer field), the selection focus will move to the first of these rows.

Data Selection

Commands for the multiple selection inside grids

Like any other software program that offers Windows standard functions, Enterprise has special commands for the multiple selection of rows inside data grids.

- ◆ **Ctrl + Click:** To "manually" select the desired rows. You can select all the desired rows one after the other, although they are separated by other rows you want to exclude.
- ◆ **Ctrl + Shift:** To select all the rows between the row highlighted in the grid and the selected row.

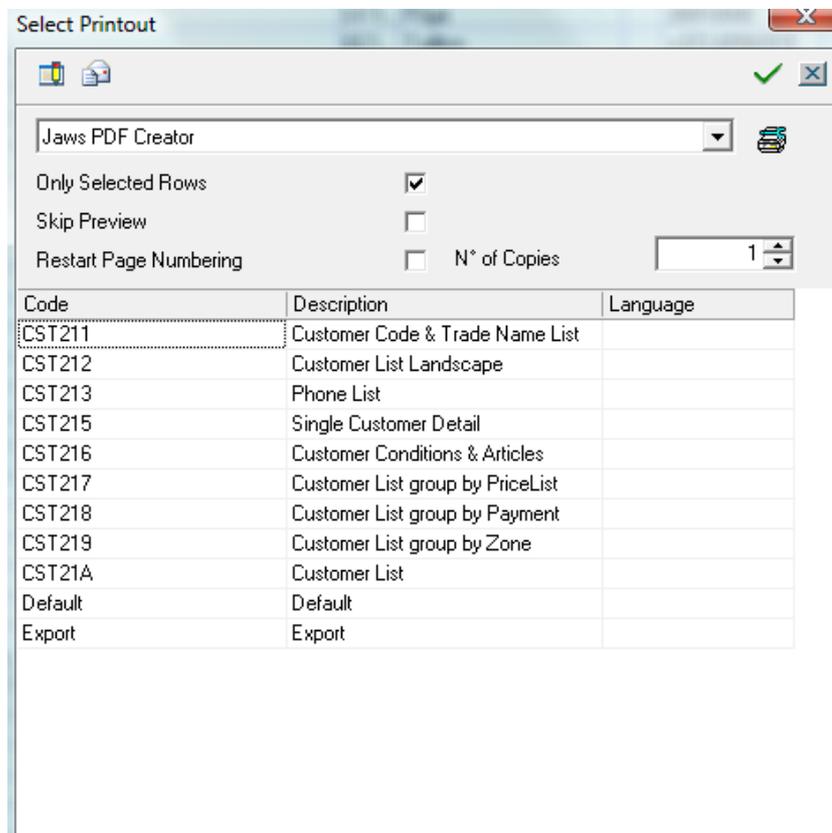
Print Report

Another feature common to all Enterprise windows is the one that allows report generation to print documents with data contained in the various forms of Enterprise. The tool available inside Enterprise is a powerful report management system able to create, edit and print any type of Report.

In this manual section we'll give just a quick overview on the main features of this tool, referring other external technical document for a detailed description.

Report Selection

The following window appears when you click on the button .

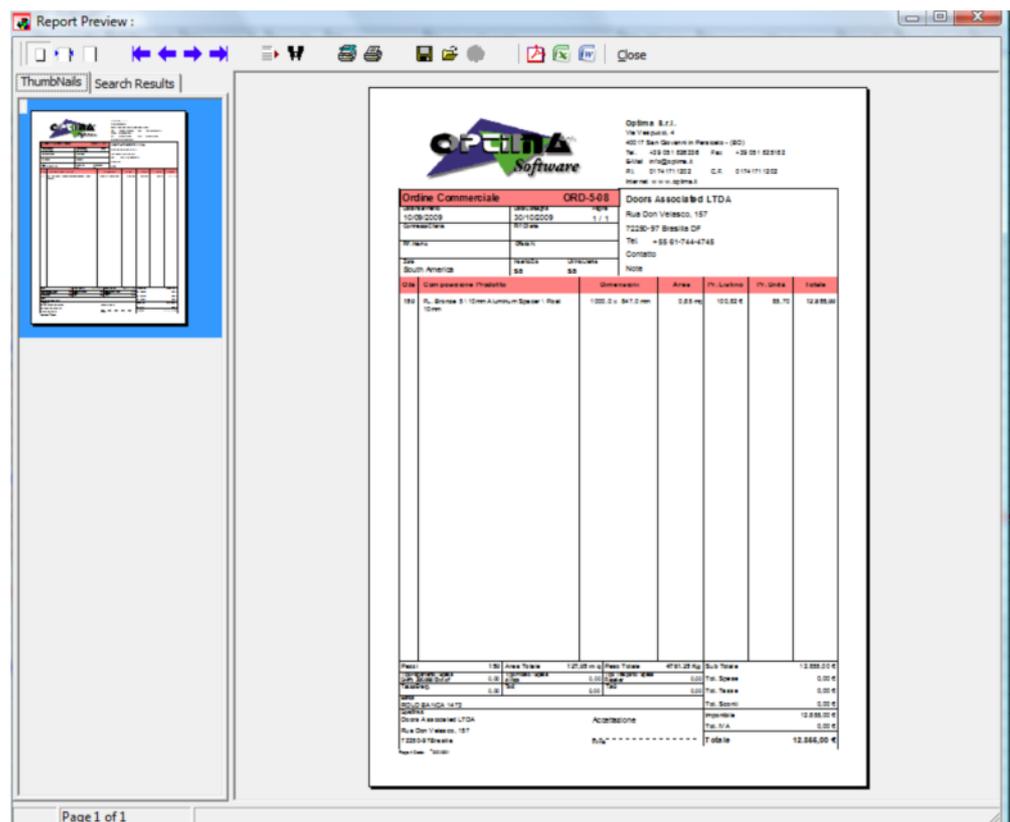


In the bottom side of the window there's the list of all available and selectable reports. Here's a list of the available options:

- ◆ **Edit Report** : Opens editing report menu (for authorized and skilled user only)
- ◆ **Send by Mail** : Convert selected report in PDF format and attach PDF file to a new mail message (works only with Microsoft Outlook)
- ◆ **Confirm** : Runs selected report preview
- ◆ **Close** : Closes select printout window

- ◆ **Printer Selection** : Using this combo you can select the printer on which you'll run the printing process. The combo lists all and only the printers installed on the computer on which Enterprise is running,
- ◆ **Printer Setup** : Opens windows printer setup for the selected printer;
- ◆ **Only Selected Rows**: If checked prints only selected rows, otherwise prints all the rows in Browser tab
- ◆ **Skip Preview**: Send the document directly to the printer without preview.
- ◆ **Restart Page Numbering**: When you print more that one document at the same time, this option allows you to restart page numbering for each document. If checked works together with Skip preview.
- ◆ **N° of Copies**: Number of copies to print
- ◆ **Grid Selection**: It is possible to select more than one report at the same time and have them printed in line.
- ◆ **Language**: It is possible to select the language in which the report will be printed. If nothing is selected the report will be printed in the language set for the program.

After printer selection and report selection, when you click on  the system runs selected report preview:



Report Preview

In the Report Preview window it is possible to decide whether to print or cancel the print job

During this phase users can see their and scroll their data

- ◆ Scrolling pages on the preview using right bar
- ◆ Using features available on the following toolbar



- ◆ **Data Preview Size** : Use the corresponding icons to change the preview size.
- ◆ **Scroll Pages** : Allows you to scroll pages.
- ◆ **Find Page** : Allows you to find a specific page.
- ◆ **Find Text** : Allows you to find a specific text. Once found, the text is displayed in the corresponding result Tab.
- ◆ **Printer Setup** : Opens the Windows screen that allows you to change the setup and the parameters of the selected printer.
- ◆ **Print** : Allows you to print.
- ◆ **Save** : Allows you to save the print format (refer to the technical guide for additional information).
- ◆ **Load report** : Allows you to load a report (refer to the technical guide for additional information).
- ◆ **Edit Report with** : Saves the document locally and opens the report in the selected format (Acrobat, Microsoft Excel, and Microsoft Word).
- ◆ **Close**: Exits the preview without printing.

Creating and Editing a Report

The report structure can be created and edited by any user who is allowed to do that.

Because this is a complex subject and reports are closely linked to the database structure that contains program data, please refer to the corresponding **Report Designer Technical Guide** for a detailed description of report design techniques and contact Optima's technical support department for any technical issues. Our personnel will be pleased to offer expert users its knowledge.

3 - Support Tables

Introduction

Support Tables are represented by the entire range of data summarized by a code and a description, and other relatively limited information.

This is the usual way in which information is represented about Language, Zones, Countries, Province, Bank, Branch and/or Agency, Goods Category, Work Types and/or Departments, Cost Centers.

In Enterprise, this type of information has been grouped into windows that have the same data entry and consultation interface.

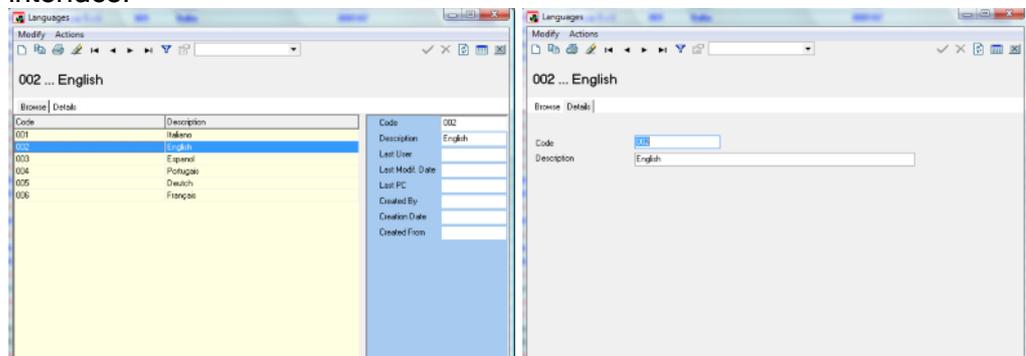
Each time the user must deal with this type of information, he/she will use the same entry/consultation process, and this will make the learning process faster and more efficient.

Because the Enterprise system deals with wide and complex subjects, it includes a variety of different tables that involve the various modules.

The following is a brief presentation of the support tables divided by module to which they belong.

Structure of Tables

As already stated, most of the Support Tables have the same double-tab interface:



In the List tab, you can display the entire set of data that is contained in the table.

In the Details tab, instead, you can modify data as well as enter new data.

Usually, only the following fields are present:

- ◆ **Code:** Code that identifies the data item inside the table. Must be unique.
- ◆ **Description:** Text that identifies the data item.

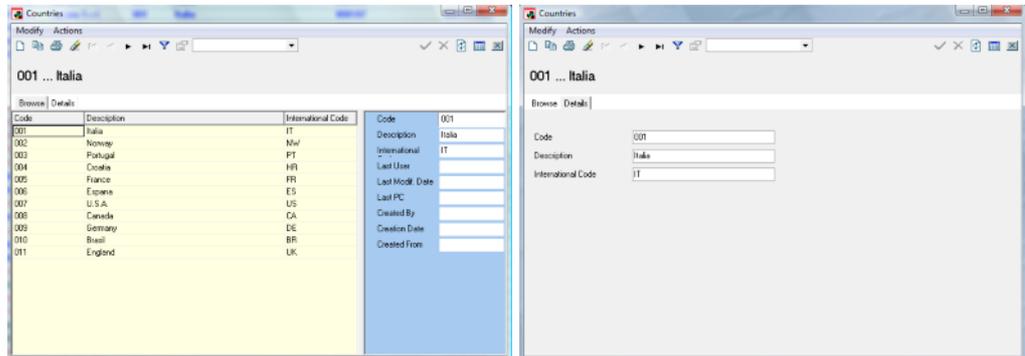
The following is a description of the function of each table and its fields.

General Tables

Countries

 Tables Menu

 Countries



Allows you to enter those countries with which you have business relations. This data can be used in the Customer Main Data archives or the identification of the goods destination.

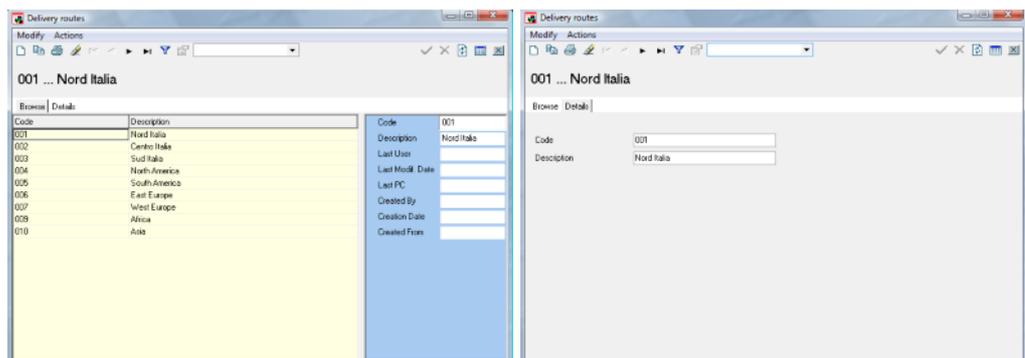
You will be prompted to fill in the following fields:

- ◆ **Code**
- ◆ **Description**
- ◆ **International Code:** EEC code used to apply the correct VAT.

Delivery Routes

 Tables Menu

 Delivery Routes



Allows you to divide the territory in which you have business activities into various parts, for example, for a better management of the trucks that transport goods.

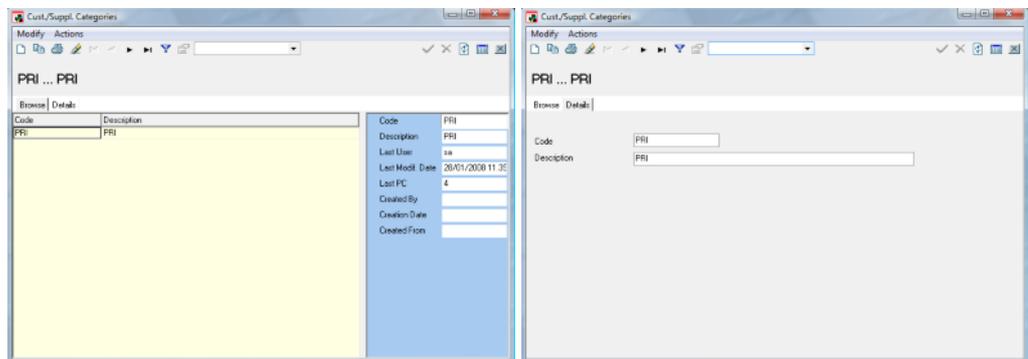
You will be prompted to fill in the following fields:

- ◆ **Code**
- ◆ **Description**

Customers / Suppliers Categories

 Tables Menu

 Customers / Suppliers Categories



Allows you to divide customers into various types for an easier identification and management.

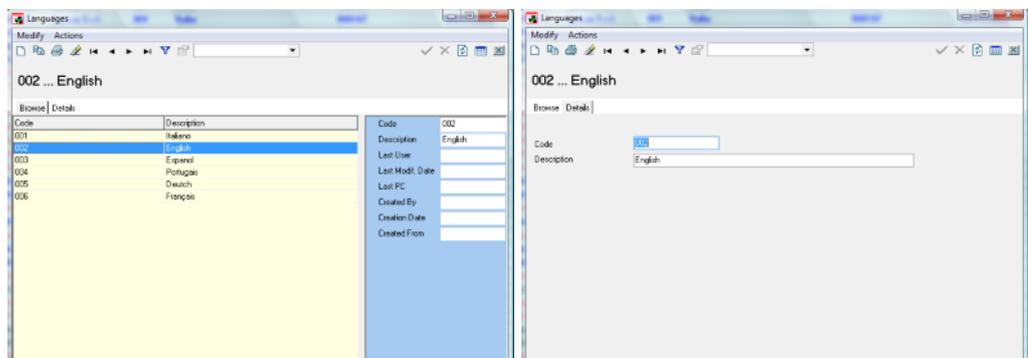
You will be prompted to fill in the following fields:

- ◆ Code
- ◆ Description

Languages

 Tables Menu

 Languages



Identifies the list of the languages spoken by your customers. In this way, you know which language to use to communicate with each contact person and to draw up documents and invoices.

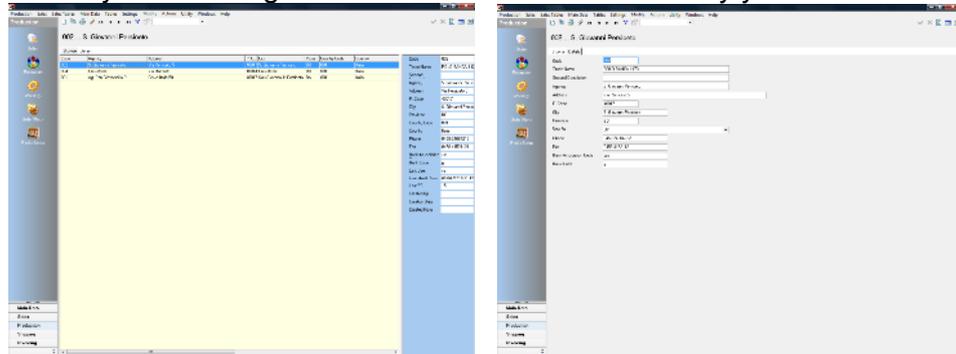
You will be prompted to fill in the following fields:

- ◆ Code
- ◆ Description

Banks



Allows you to manage the list of bank branches used by your customers.



You will be prompted to fill in the following fields:

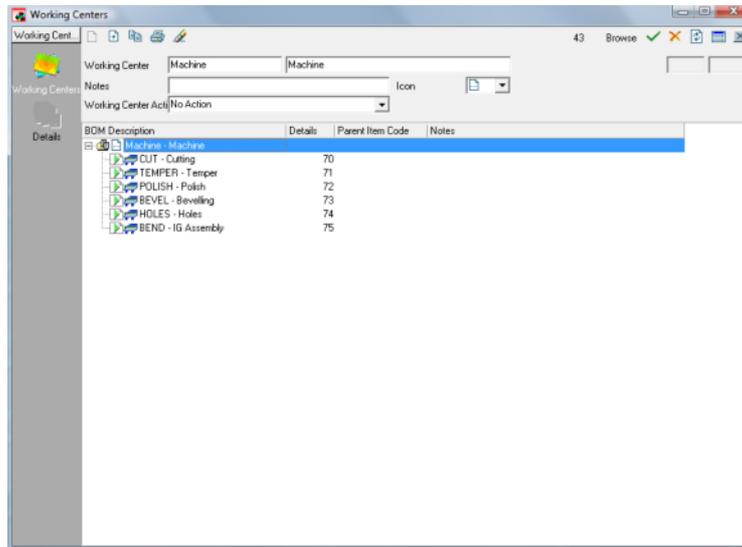
- ◆ **Code**
- ◆ **Trade Name:** Name of the bank to which the branch belongs.
- ◆ **Second Description:** Additional description field.
- ◆ **Agency:** Name of the bank branch.
- ◆ **Address:** Address of the bank branch.
- ◆ **Postal Code:** Postal/Zoning improvement plan (ZIP) code of the bank branch.
- ◆ **City:** Place in which the bank branch is located.
- ◆ **Province:** Province in which the bank branch is located.
- ◆ **Country:** Country in which the bank branch is located.
- ◆ **Phone:** Telephone number of the bank branch.
- ◆ **Fax:** Fax number of the bank branch.
- ◆ **ABI - Bank Association Code:** Code that identifies the bank.
- ◆ **CAB - Bank Code:** Code that identifies the bank branch.

Working Centers

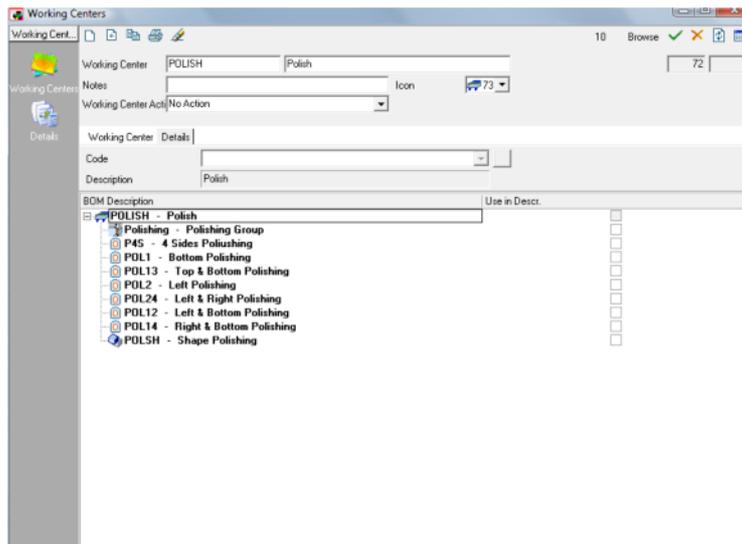


Working centers are used along with the GMC-Way module to complete processing a piece, work order or batch. Actually, they represent the "check points" of the various processing stages.

This allows you to identify the various company's working centers and to associate one or more workings operations to each machine (post). It is the user who decides how far the single activities must be differentiated and how many workings operations must be associated to each post.



Following the same method described in the BOMs window you can associate the various workings to be performed to a center



Working Center Action combo defines the action to be performed in the Temper Progress Window.

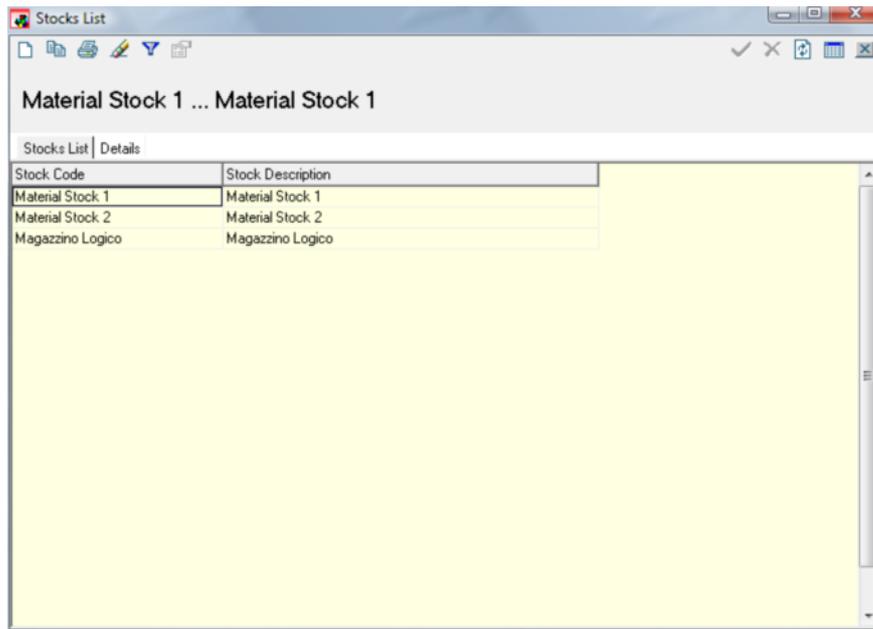
Stocks List

 Tables Menu

 Stocks List

List of the physical places in which materials and accessories are stored. A company may have more places in which, for example, glass sheets or spacer bars are stored. Obviously, not all warehouses always contain all the materials. This data item is used to identify where a certain material can be found.

It is possible to configure Enterprise so that a particular cutting table will be able to see and use only sheet from one or more particular stock list.



Stock Code	Stock Description
Material Stock 1	Material Stock 1
Material Stock 2	Material Stock 2
Magazzino Logico	Magazzino Logico

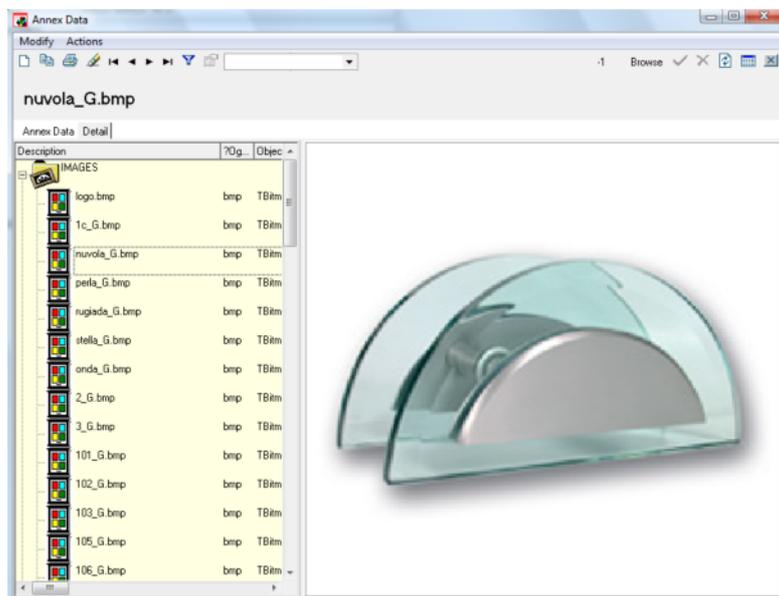
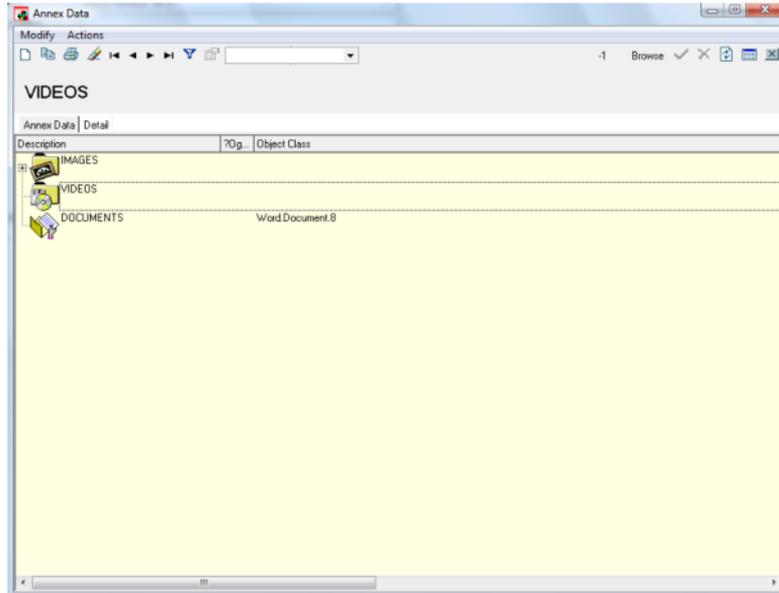
You will be prompted to fill in the following fields:

- ◆ Code
- ◆ Description

Attachment Main Data



Allows you to attach images, videos and documents to the database. These attachments can be used and displayed in various program phases within reports.



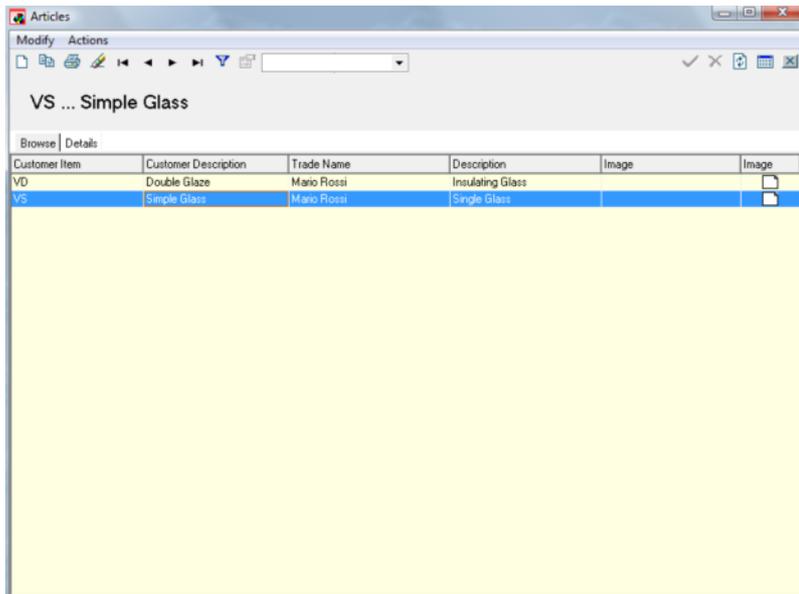
Customer Items

 Tables Menu

 Customer Spec.  Customer Items

Set of specific definitions used by the customer.

To a Product, you can also associate the code and description used by your customer. These will be printed on the documents you supply to the customer, who can thus identify its items more easily.



Customer Item	Customer Description	Trade Name	Description	Image	Image
VD	Double Glaze	Mario Rossi	Insulating Glass		
VS	Simple Glass	Mario Rossi	Single Glass		

You will be prompted to fill in the following fields:

- ◆ **Customer:** Allows you to choose the Customer code to which this Product name must be associated.

 Navigation Bar

Main Data 

 Double Click on Field

 Main Data Menu

 Customers  Customers

 Shortcut Key

Alt+2

- ◆ **Product:** Code of the product to be renamed.

 Navigation Bar

Main Data 

 Main Data Menu

 Bill of Material

 Shortcut Key

Alt+4

- ◆ **Code:** New code to be assigned to the product to meet customer's needs.
- ◆ **Description:** New description to be assigned to the product to meet customer's needs.
- ◆ **Drawing:** Allows you to select an image among those available in the Attachment Main Data archive.

Customer's Conditions

 Tables Menu

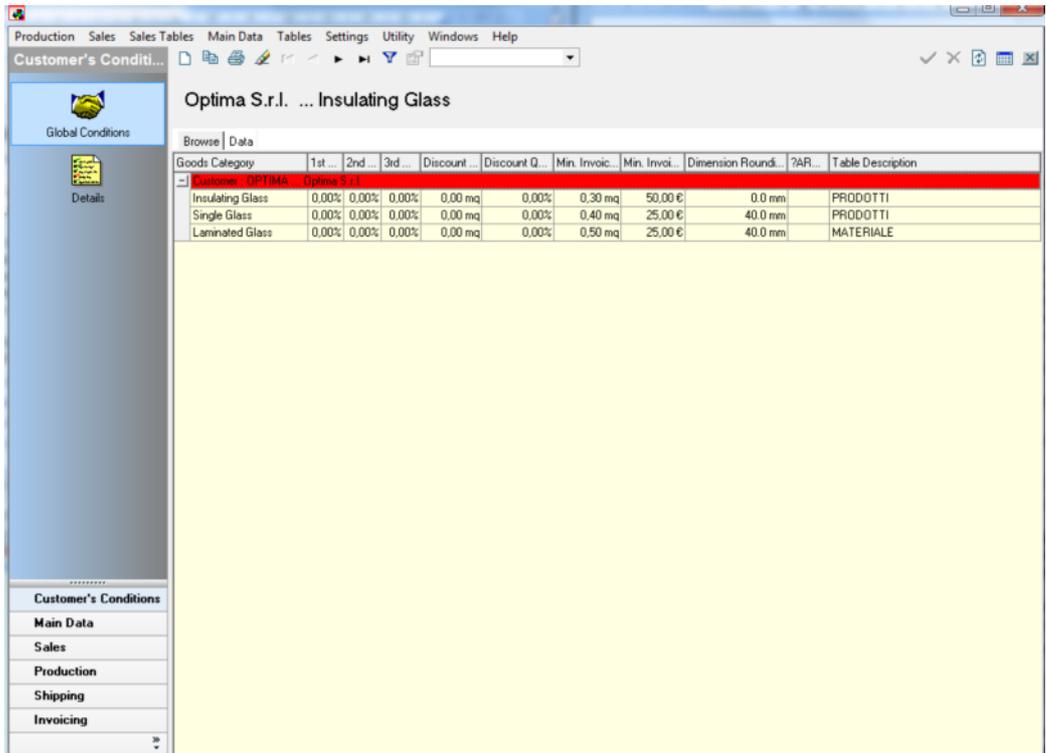
 Customer Spec.  Customer's Conditions

Set of particular conditions granted to the customer based on product types or categories.

Conditions are managed in two different phases.

In the first phase you can enter the conditions for the selected Goods Category (for instance, Insulating Glass or Simple Glass Item).

In the second phase you can associate limits to each Goods Category depending on the selected Materials or Work Types.



Goods Category	1st	2nd	3rd	Discount	Discount Q.	Min. Invoic.	Min. Invoic.	Dimension Round.	?AR.	Table Description
Customer - OPTIMA - Optima S.r.l.										
Insulating Glass	0,00%	0,00%	0,00%	0,00 mq	0,00%	0,30 mq	50,00 €	0,0 mm		PRODOTTI
Single Glass	0,00%	0,00%	0,00%	0,00 mq	0,00%	0,40 mq	25,00 €	40,0 mm		PRODOTTI
Laminated Glass	0,00%	0,00%	0,00%	0,00 mq	0,00%	0,50 mq	25,00 €	40,0 mm		MATERIALE

In the first phase you are prompted to enter the following data (into the Data tab):

 **Customer:** Allows you to specify the Customer to whom the condition will be applied.

 Navigation Bar

Main Data 

 Double Click on Field

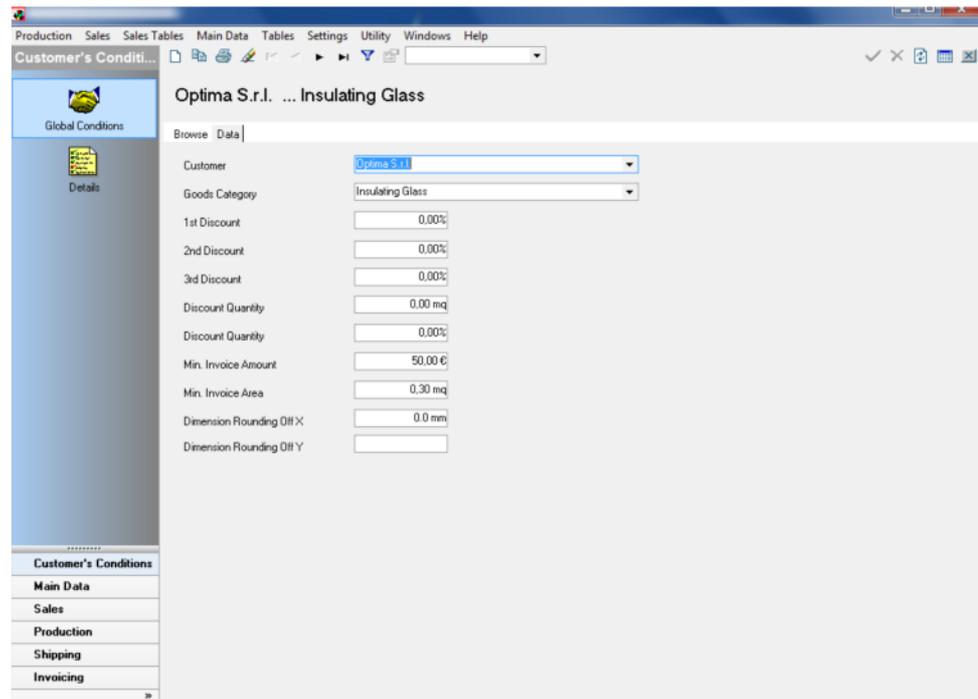
 Main Data Menu

 Customers  Customers

 Shortcut Key

Alt+2

NOTE: To enter a particular sales condition (for example, the minimum invoice surface area or the linear dimension rounding off) for all the customers, just associate the condition to the company's Main Data.



- ◆ **Goods Categories:** Goods Category to which the condition must be applied. The combo will show only goods category set as product.



Sales Menu



Price Lists



Goods Categories



Shortcut Key

Double Click on Field

NOTE: If no Goods Category is entered, the Condition will be used for all the Goods Categories.

- ◆ **1st / 2nd / 3rd Discount:** Set of three cascade-applied discounts.
- ◆ **Detail Area for Additional Discount:** Minimum surface area that a single detail row must occupy (thus considering the quantity of the single order line) for a certain discount to be applied.
- ◆ **Additional Discount %:** Discount to be applied when the detail area is greater than that specified in the "Detail Area for Additional Discount" field.
- ◆ **Minimum Invoice Amount:** Minimum amount to be invoiced for a single order detail line. When the calculated price for the piece is lower, the minimum invoice price will be indicated.
- ◆ **Minimum Invoice Area:** Minimum surface area to be invoiced for a single order detail line. When the surface area of the piece is smaller, the minimum invoice area will be indicated

NOTE: This type of area is used as a surface area to calculate the price of the piece only when you decided - in the Price List - that prices must be calculated on the basis of Sales Areas (Crossfooting) and not on the basis of Production Areas (Area)

- ◆ **Dimension Rounding Off X/Y:** System to round off areas by multiples. Normally, this is used to invoice slightly greater areas to recoup the waste generated when optimizing sheets.
It is possible to define a specific rounding off for X dimension and a different one for Y dimension; if the value for Y is missing, the value set for X will be used for each glass item dimension (both X and Y).
When a value greater than 0 is specified in one of these two fields, the length of the glass will be rounded off to the higher multiple of the set value

(for example, a dimension of 980 mm will be rounded off to 1000 mm if the rounding off factor is 40 mm).

NOTE: The conditions you enter here are specific for the customer. For those conditions that you do not specify for the customer, the system will use the conditions you entered into the Main Data of the company you are working on.

In the second phase (that can be activated from the Details option on the Navigation Toolbar) you can enter specific limits for single materials or Work Types.

If you click on New you can enter the following data:

- ◆ **Calculation Factor:** Unit of measurement on the basis of which the condition will be calculated. For example: No. of Pieces, Area, and Linear Length.
- ◆ **Code:** Work Type or material to which the condition will be applied. If you select a group, the condition will be valid for all the elements that belong to the group.
- ◆ **Minimum Invoice Amount:** Minimum amount to be invoiced for a single order detail line. When the calculated price for the piece is lower, the minimum invoice price will be indicated.
- ◆ **Minimum Invoice Area:** Minimum surface area to be invoiced for a single order detail line. When the surface area of the piece is smaller, the minimum invoice area will be indicated

NOTE: This type of area is used as a surface area to calculate the price of the piece only when you decided - in the Price List - that prices must be calculated on the basis of Sales Areas (Crossfooting) and not on the basis of Production Areas (Area)

- ◆ **Dimension Rounding Off:** System to round off areas by multiples. Normally, this is used to invoice slightly greater areas to recoup the waste generated when optimizing sheets. Each glass item dimension (both X and Y) will be rounded off to the higher multiple of the set value (for example, a dimension of 980 mm will be rounded off to 1000 mm if the rounding off factor is 40 mm).

Setup Tables

Company Data



Settings Menu



Company Data

Customer Main Data archive. It includes company's data. Refer to the Customer Main Data section for additional details.

This archive allows you to set the data that will be used by default when creating a new Customer Main Data archive or an Order. Thus, it includes default data to be later used in the various program phases.

The only additional menu, not included in the Customer Main Data Menu, is the Company Data menu, which allows you to manage:

- ◆ **Company Logo:** Allows you to select an image among those previously loaded in the Attachment Main Data archive and use it as the Company Logo on the various documents. To better fit the size and space available, the image must be in the BMP format and have a size of 350 x 200 pixels.
- ◆ **Mail Server/ User / Pwd:** E-mail account data to be used during automatic mail message creation with report as attachment

Predefined Lists



Settings Menu



Predefined Lists

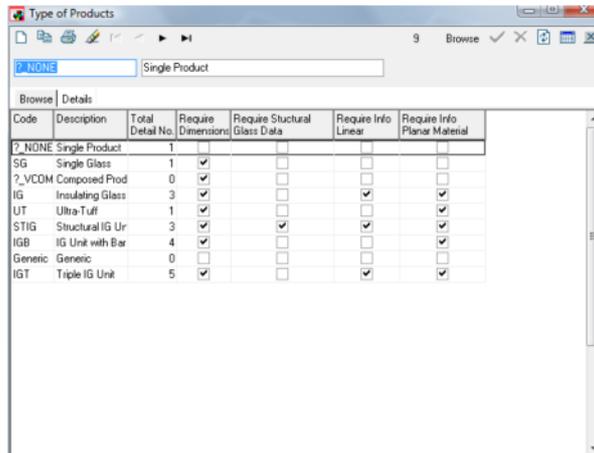
Default shortcut keys associated to BOMs.

For display purposes only.

This is an internal table that allows you to translate and assign a standard product to a specific feature. To avoid unexpected software actions, it is recommended that you ask Optima to make any necessary modifications.

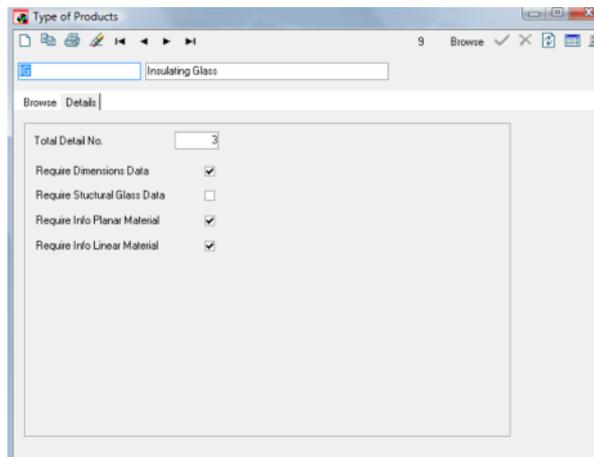
Code	Item Code	Icon	Description
VS	SG		Single Glass
VC	IG		Insulating Glass
VT	3IG		Triple Insulating Glass
VSTR	STG		Structural Glass
VGB	GBG		Georgian Bars Glass
GLASS	GLASS		GLASS Group
SPACER	SPACER		Spacer Group
BAR	GEORGIAN BAR		English type Windows Group
CUT	Cut		Cut
BEND	Bend		Bend
TEMPER	Temper		Temper
CLOSE	Silicon		Silicon
BARS	Bars		Georgian Bars Assembling
PLASTIC	PVB		PVB Group
VL	LG		Laminated Glass

Product Types



Allows you to set that data that will be requested on the screen depending on the type of product you wish to enter.

These parameters are used both for creating a BOM and for entering an Order (provided that no limits were set for the BOM of the product that you are entering).

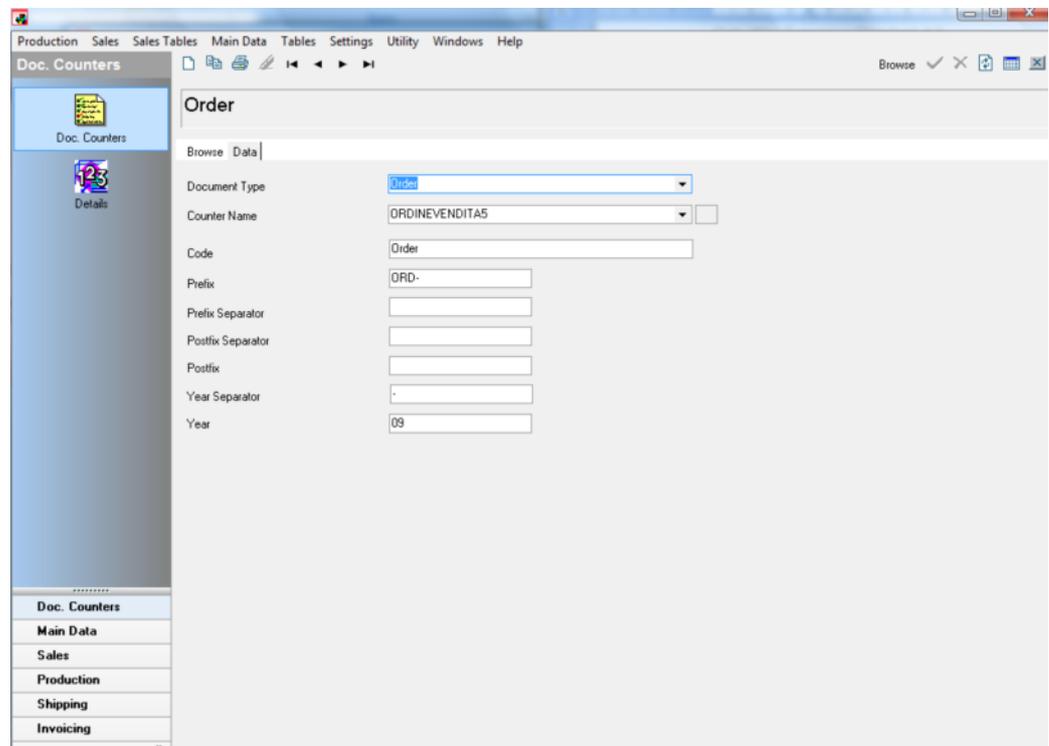


- ◆ **Code**
- ◆ **Description:** Description of the Type of Product.
- ◆ **Total Detail No.:** Number of materials requested when entering the Product. For instance, for an Insulating Glass Unit two glass items and a spacer bar must be requested. Therefore, the number of Details must be 3.
- ◆ **Require Dimensions Data:** Displays dimension fields when a Product is entered.
- ◆ **Require Structural Glass Data:** Displays the fields concerning structural glazing (stepped) when a Product is entered.
- ◆ **Require Info Planar Material:** The data concerning flat glass (Grinding, Rotation, Exceed, etc.) is requested.
- ◆ **Require Info Linear Material:** The data concerning linear material (Fixed Text, Hole, Spacer to Glass Distance, etc.) is requested.

Counter Definition



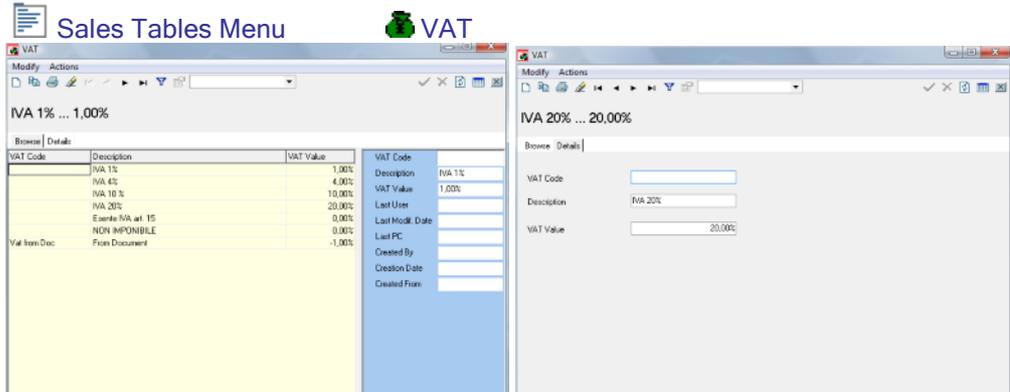
Allows you to define how the various numerators that exist in the program must be handled.



- ◆ **Document Type:** Type of document to which the counter is applied.
- ◆ **Counter Name:** Name that identifies the counter.
- ◆ **Code**
- ◆ **Prefix:** Initial part of the counter.
- ◆ **Prefix Separator:** Character that separates the prefix from the progressive number of the counter.
- ◆ **Postfix Separator:** Character that separates the postfix from the progressive number of the counter.
- ◆ **Postfix:** Part that follows the counter number.
- ◆ **Year Separator:** Character that separates the postfix from the year.
- ◆ **Year:** Year in which the document was issued.

Sales Tables

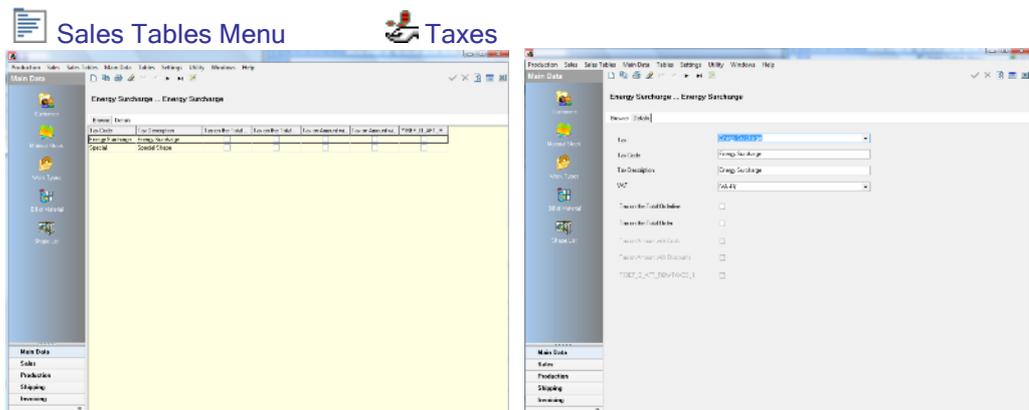
VAT



- ◆ VAT Code
- ◆ Description
- ◆ VAT Value: VAT percentage.

NOTE: A VAT value of -1 indicates that the VAT percentage entered in the order will be used.

Taxes



Allows you to add additional taxes (other than VAT) depending on the country in which the company is located.

- ◆ **Tax:** Category to which the tax must be associated. You cannot define a direct value for the tax. First, you must associate the tax to a Category, and then you must assign a value to the Category from the Price List.

◆ Double Click on Field

◆ Toolbar

◆ Sales Menu



◆ Price Lists ▶ Categories

- ◆ Tax Code

- ◆ Tax Description

- ◆ VAT: Value for the VAT applied to the tax.

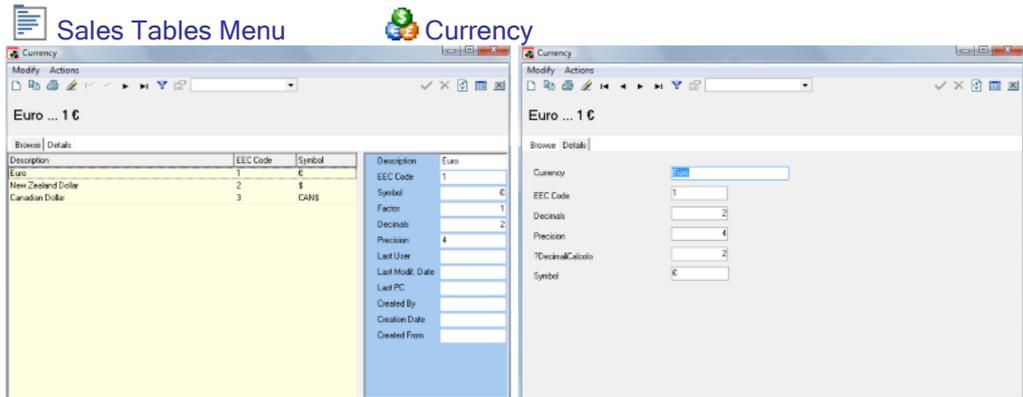
◆ Double Click on Field

◆ Sales Tables Menu



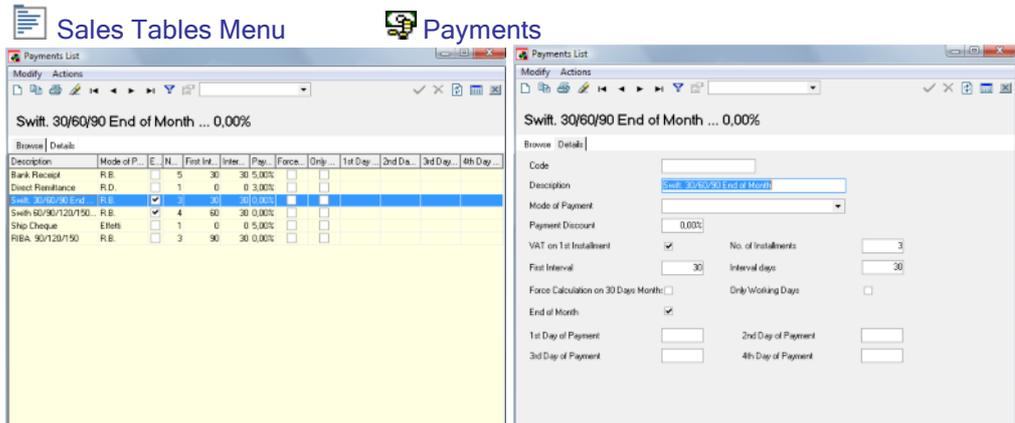
- ◆ **Tax on Amount with Costs:** Defines whether the tax must be applied to the final price of the product with or without shipping, packaging and transport costs.
- ◆ **Tax on Amount without Discounts:** Defines whether the tax must be applied to the price with or without discounts.
- ◆ **Tax on the Total Order Line:** Applies the tax to each Order Line.
- ◆ **Tax on the Total Order:** Applies the tax to the final price of the entire Order.

Currency



- ◆ **Currency:** Name of the currency.
- ◆ **EEC Code:** Code that identifies the country (or countries) using this currency.
- ◆ **Decimals:** Number of decimal places to be displayed on the currency value.
- ◆ **Precision:** Number of decimal places used for calculations to obtain the most accurate result possible.
- ◆ **Symbol:** Symbol of the currency.

Payments

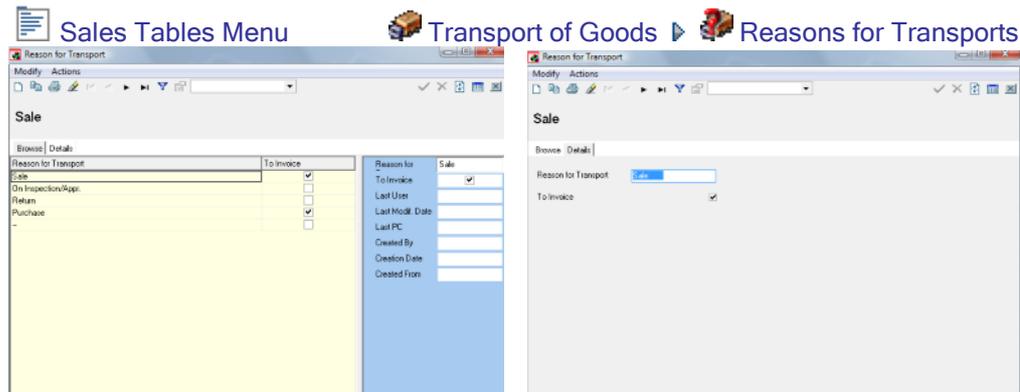


Allows you to set the payment forms accepted by the company.

- ◆ **Code**
- ◆ **Description**
- ◆ **Mode of Payment:** Type of payment.
- ◆ **Payment Discount:** Discount applied when the customer decides to use this form of payment.
- ◆ **VAT on 1st Installment:** If selected, VAT is applied to the first installment.
- ◆ **No. Of Installments:** Number of installments into which the total payment amount is divided.
- ◆ **First Interval:** Time interval between the delivery and the payment of the first installment.
- ◆ **Interval Days:** Time interval between installments (after the first one).

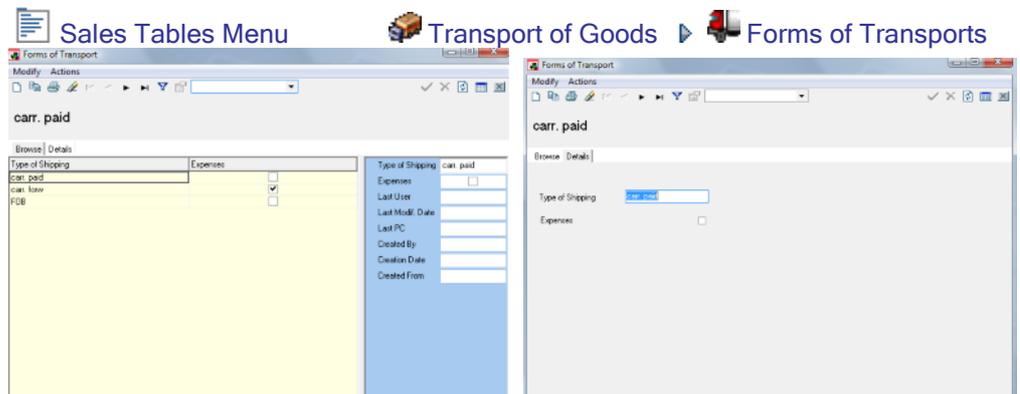
- ◆ **Force Calculation on 30 Days Months:** If activated, it allows you to postpone payments by entire months. For example, an invoice falling due on 15th February can be postponed to 15th March if payment is to be effected within 30 days.
- ◆ **Only Working Days:** If deactivated, it considers non-working days as if they were normal working days so that payments can be fixed on them as well.
- ◆ **End of Month:** Postpones payments to the end of the corresponding month.
- ◆ **1st / 2nd / 3rd 4th Day of Payment:** Allows you to fix up to 4 days a month to which payments must be postponed.

Reasons for Transports



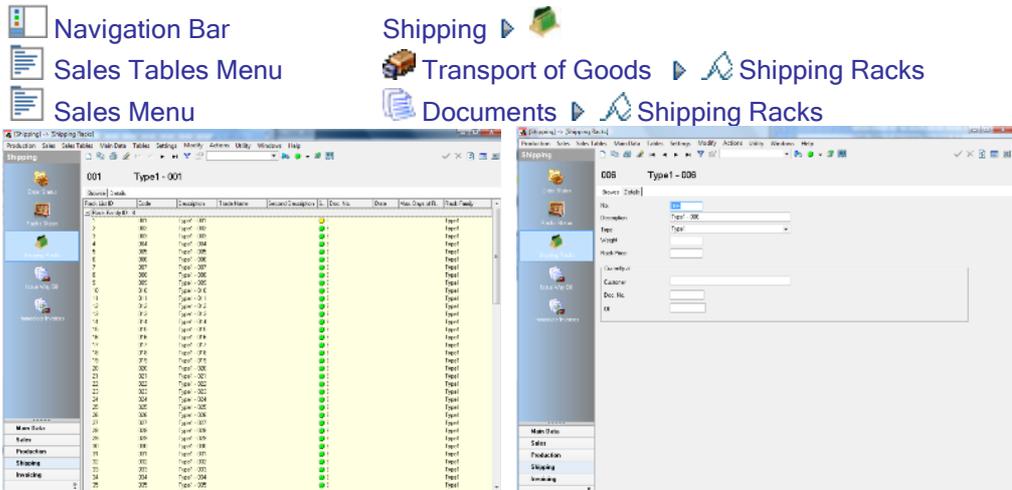
- ◆ **Reason for Transport:** Identifies the reason for transport.
- ◆ **To Invoice:** If selected, it indicates that an invoice related to the Transport Document must be issued after transport.

Forms of Transports



- ◆ **Type of Shipping:** Type of transport.
- ◆ **Expenses:** If selected, it adds transport costs (if any) to the final invoice price.

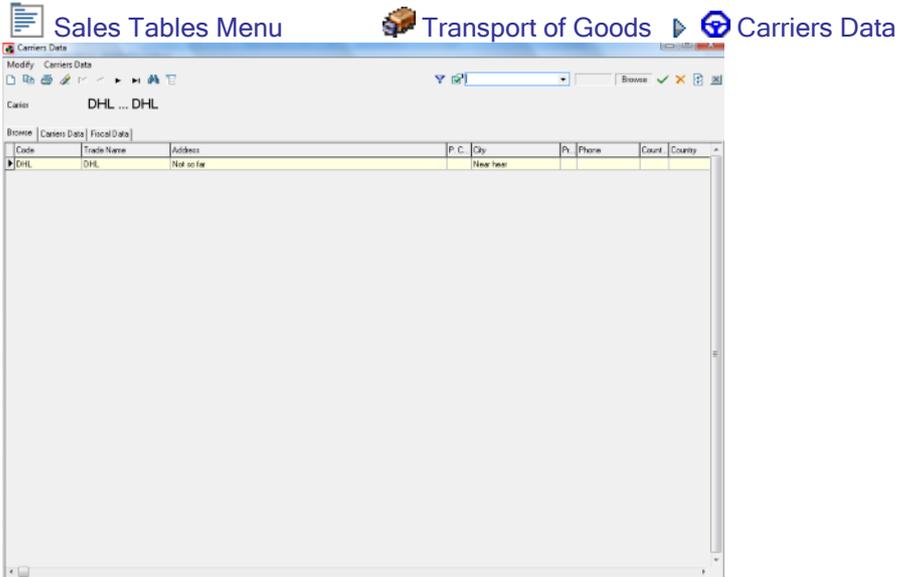
Shipping Racks



- ◆ **No.:** Code of the rack.
- ◆ **Description**
- ◆ **Type:** Association of the rack code to its dimensions and type. This data item will be used only if racks are managed using the Rack-Way add-on module.
- ◆ **Weight:** Weight of the empty rack.
- ◆ **Rack Price:** Price of the rack.

Other fields are available in the "Currently At" section. These fields are automatically handled when the Rack-Way Shipping add-on module is installed. For additional details refer to the Shipping section.

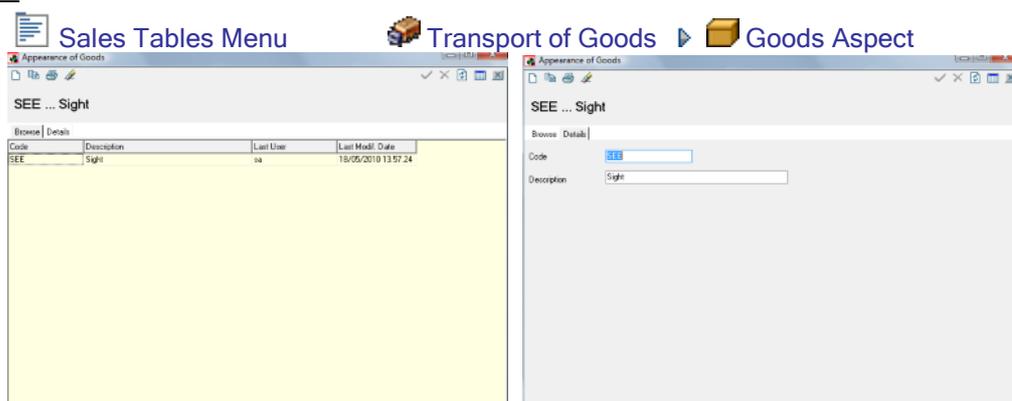
Carriers Data



Allows you to manage the data concerning the shipping companies your firm utilizes in the same way as the normal Customer Main Data. The only difference is that only the "Identifying Data" and the "Fiscal Data" sections are available.

Refer to the Customer Main Data section for additional details.

Goods Aspect

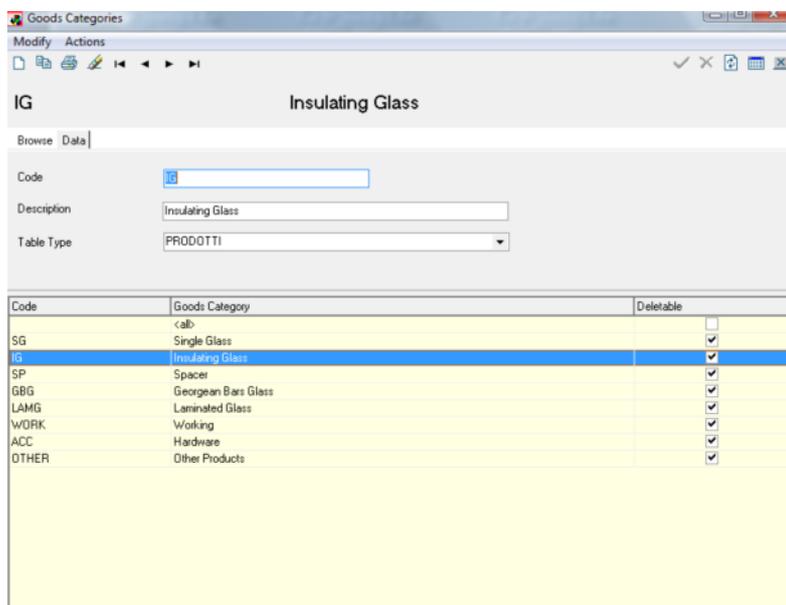
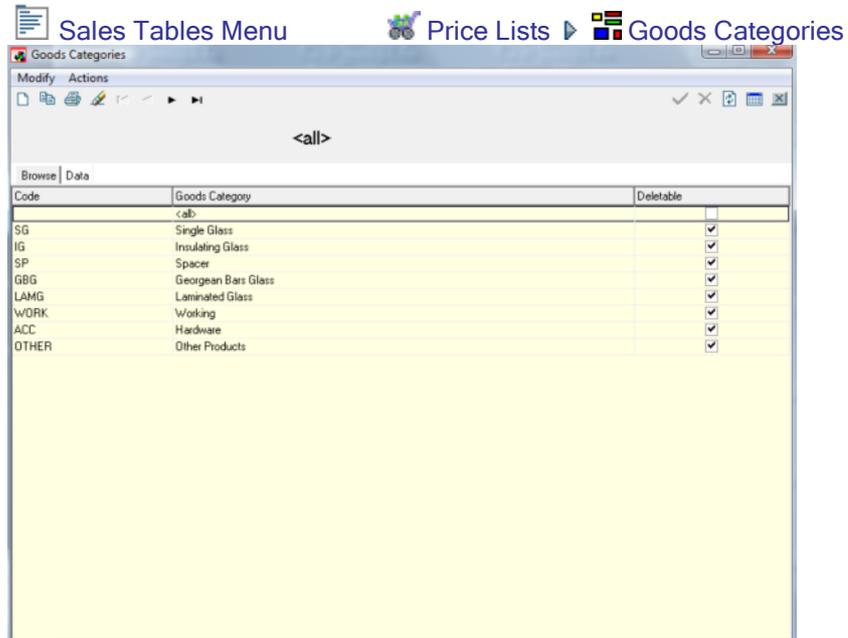


Allows you to define some description to indicate goods aspect on packing list documents.

- ◆ Code
- ◆ Description

Price List Tables

Goods Categories



Main concept of the price list structure. Allows you to identify the categories of Products or Work Types that can be supplied to a customer.

- ◆ **Code**
- ◆ **Description**
- ◆ **Table Type:** Allows you to associate a type of product or Work Type to the Goods Category.

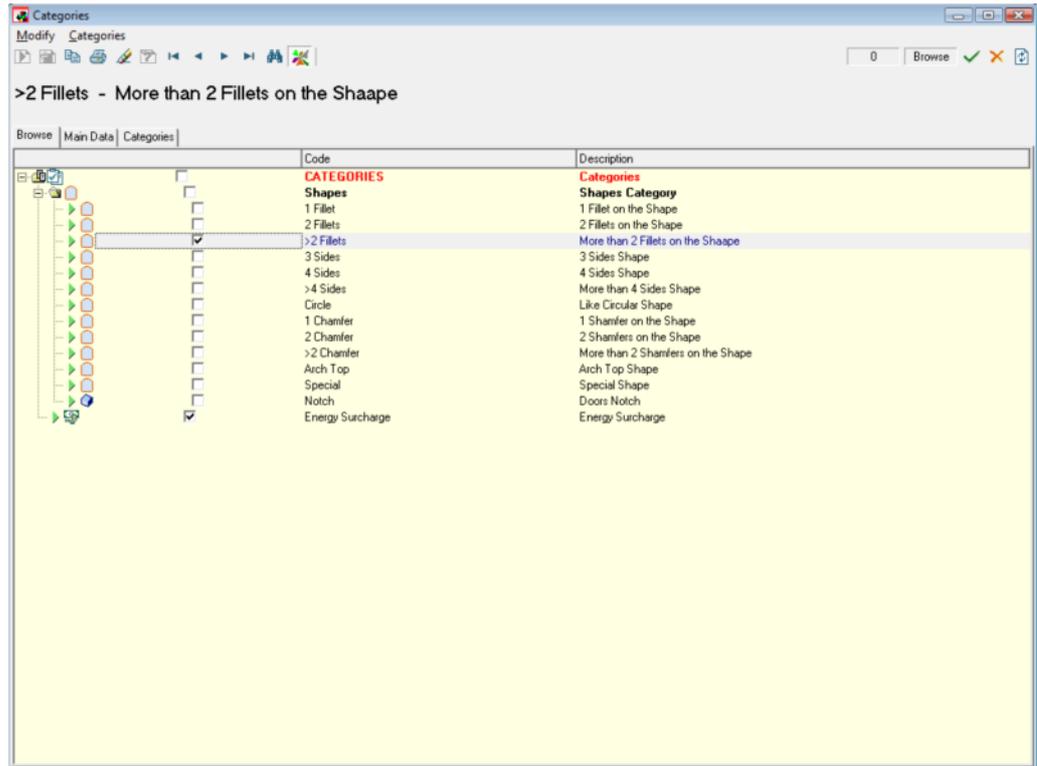
Refer to the price list section for more details on this feature.

Categories

 Sales Menu  Price Lists  Categories

Another innovative method introduced in Enterprise is the massive and transversal utilization of the concept of Categories.

Like Main Data, Categories are "groups" that can be defined and managed by the user as required and applied to any Main Data thus contributing to the highest level of autonomy and flexibility of the system.



Using Categories

Categories are used - along with the Price List - to automatically and precisely identify all the characteristics of a glass item to calculate its right price to the end customer.

As more detailed explained below in the Price List section, the price of a finished product is given by the cost of glass per square meter, the price of Work Types and possible surcharges or discounts that can be applied through the Categories.

Categories are mainly used as follows:

- ◆ **Shape Categories:** You can create different Categories, each for a shape characteristic. To each Category you will then associate those parametric shapes that meet the specific characteristic. You can thus add a surcharge related to a Category to the Price List.

For example, you can create Categories related to the number of sides of a shape or to the number of curved sides (that usually imply more work). Obviously, a shape can be associated to various categories depending on its characteristics.

NOTE: For additional information on how to make associations to Categories of this kind, refer to the Shape Main Data section.

- ◆ **Customer Categories:** You can create Categories related to the type of customer to which the end product refers. To the Category you will then associate those customers that fall into this specific group. From within the Price List you can enter particular price conditions for the Category. For instance, you can group all the customers that belong to an association and apply a discount.

NOTE: For additional information on how to make associations to Categories of this kind, refer to the Customer Main Data section.

- ◆ **Product Categories:** You can associate a list of products to a Category to apply a certain price.

NOTE: This is just one of the ways in which you can make this association. Enterprise's flexibility allows you to perform this kind of actions in a variety of ways depending on how you structured your work. The same result can be obtained simply using the Price List if the material Stock has been prepared accordingly.

NOTE: For additional information on how to make associations to Categories of this kind, refer to the Material Main Data section.

- ◆ **Tax Categories:** Categories of this kind can be created both with associations to customers and with associations to products. You can thus define to which customers or products a specific surcharge must be associated. Normally, the "Energy Tax" falls into this type of Categories. This is a glass price surcharge that depends on the increase in the price of glass fixed by glass manufactures.

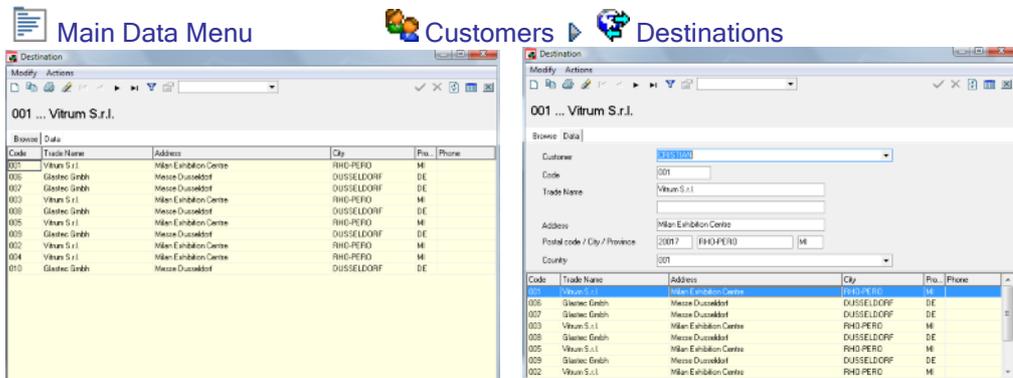
NOTE: For additional information on how to make associations to Categories of this kind, refer to the Material or Customer Main Data section depending on the result you wish to obtain.

Obviously, the user can create all the required categories (and not only those described here!).

NOTE: Categories can be applied to all the Main Data tables that exist in Enterprise, as well as to all support tables.

Additional Customers Tables

Destinations



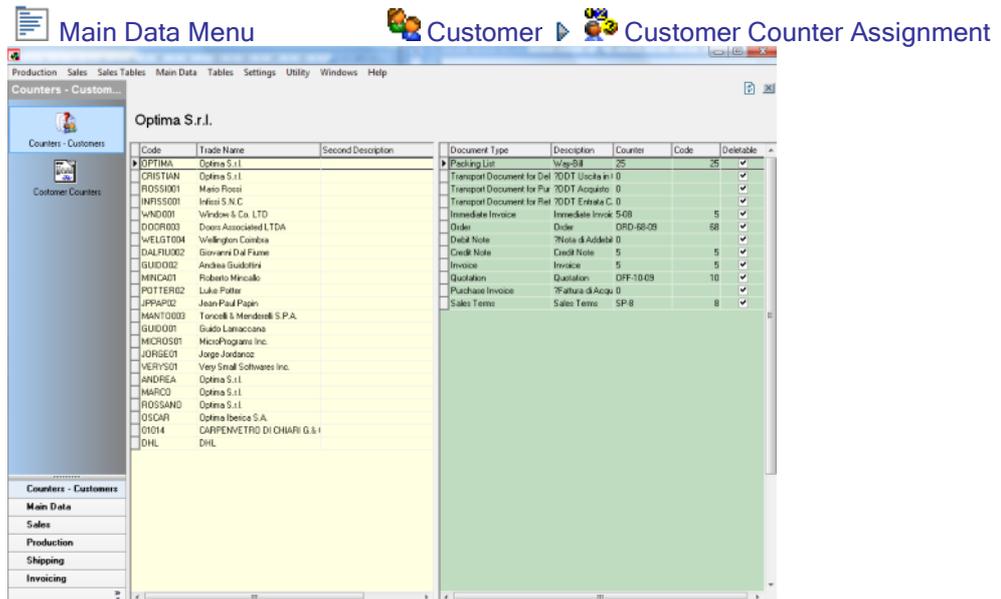
Allows you to add various Destinations and associate them to specific Customers.

When you enter an Order, you can decide whether products must be shipped to the Default destination (directly associated to the Customer Main Data) or to another address to be chosen among those in the Destinations table and associated to the specific Customer.

- ◆ Customer
- ◆ Code
- ◆ Trade Name
- ◆ Address
- ◆ Postal Code
- ◆ City
- ◆ Province
- ◆ Country

NOTE: Refer to the "Customer Main Data" section for additional information.

Customer Counter Assignment

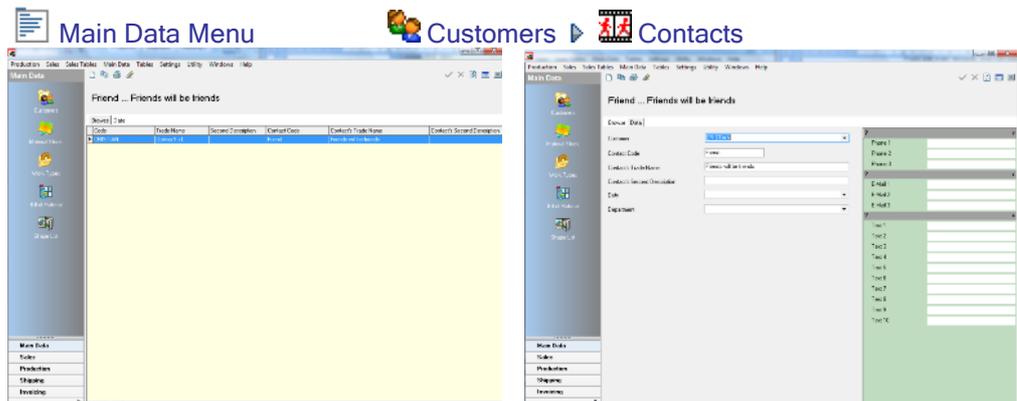


Allows you to use customized counters for Customers. From the main window, you can select the Customer (from the grid on the left) and the Document (from the grid on the right). In the Details page, instead, you can modify the Counter.

◆ **Counter Type:** To be selected among those available in the Document Numerator Definition table.



Contacts



Allows you to manage and store an undefined number of Contacts associated to the different Customers.

- ◆ **Customer**
- ◆ **Contact Code**
- ◆ **Contact's Trade Name**
- ◆ **Contact's Second Description**

Furthermore, the Inspector on the right offers 3 fields to enter telephone numbers, 3 fields to enter E-Mail addresses and 10 additional texts to be used as notes.

4 - Main Data Archives

Introduction

NOTE: In some software versions, the Main Data archives described here may be different, partially available or even missing. This depends on the set of modules installed.

Coding conventions

One of Enterprise's distinctive features is the capability - throughout the entire system - of modifying the code management mode as required and at any time.

This distinguishes Enterprise from "classic" management systems, in which the Main Data coding system must always be defined at start-up of the company's IT system.

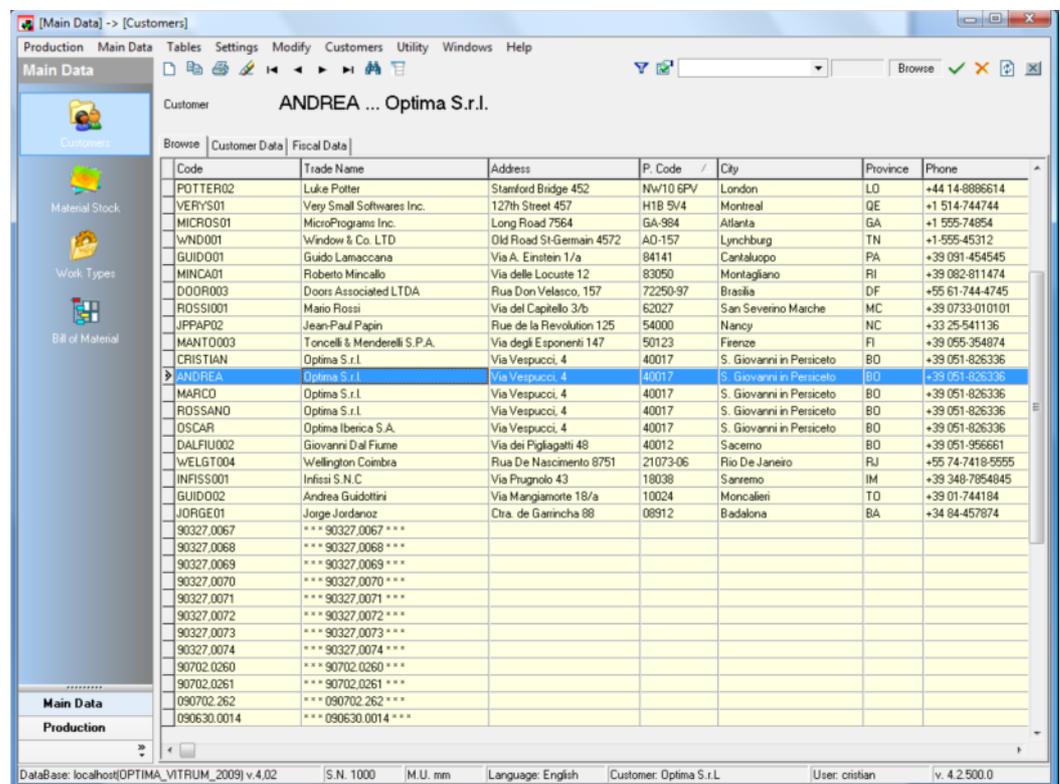
In addition, a classic system does not allow the chosen method to be changed after start-up, because this would mean having repetitive codes (e.g.: the customer "Rossi" may be represented by the code 000001 as well as by the code Ross01).

Enterprise, instead, takes full advantage of advanced SQL system features that allow the user to keep the "visible" code of the Main Data "completely" separated from the code "inside" the database. This method allows the code to be changed as required and when required without generating data repetitions or redundancy and above all still maintaining data congruence.

Customer Main Data



The Customers/Suppliers section allows the user to code all the data necessary to recognize and contact external subjects. Therefore, in this section you can classify customers and suppliers in relation to their characteristics, expressed in terms of company name, address, contact elements (tel., fax, mail, web or other), fiscally useful data and customer and/or supplier commercial data.



Window Structure

When defining a customer you are prompted to enter various types of data. Much of this data is additional and thus not strictly necessary for defining a customer. However, this data is important to better recognize the customer and its characteristics.

The Customer Main Data entry window has a table layout on more levels:

- ◆ **Browse:** Full browsing in all the currently filtered Main Data (no edit actions allowed).
- ◆ **Customer Data:** General data pertaining to a customer.
- ◆ **Fiscal Data:** Specific data pertaining to a customer.

- ◆ **Documents and Conditions:** Set of information pertaining to the terms and conditions applied to a customer.
- ◆ **Particular Conditions:** "Specific" terms and conditions applied to a customer based on goods categories.
- ◆ **Customer Articles:** Definition/terms and conditions pertaining to an items/a product.

NOTE: You may not need to supply some of the data above depending on how deep you want to utilize the Enterprise program. For instance, Fiscal Data is not required if you do not want to utilize Enterprise to manage your company's commercial section.

Editing Customer Main Data

To enter and manage Main Data the normal New, Duplicate and Remove functions are used.

NOTE: When copying an existing code, the Enterprise system checks for the "univocity" of the code, whereas all the other information can be accepted.

NOTE: Because the Main Data table is cross-checked against other database tables, deleting some Main Data tables may fail, if the code you want to delete is "present" in other management sections (e.g. the customer has active orders or documents such as way-bills and invoices).

Browse

The complete list of currently filtered Main Data tables is displayed. As for all the other windows, multiple row selection commands and the standard search and filter functions are available.

For a proper and precise display you can adjust on-screen grids to fit your needs (refer to the "Customizing Grids" section of this guide).

Customer Data

This Tab contains general fields pertaining to a customer. They allow for the customer to be clearly identified both by name and physical location.

In detail, following families of fields/values are offered:

- ◆ **Code:** Unique alphanumeric code identifying the customer. This is the code you must select (or type) when you create an order pertaining to this customer. Mandatory
- ◆ **Trade Name:** Set of two different descriptions that can be associated to the customer's Trade Name. Mandatory

Headquarter / Administrative Office

- ◆ **Address**
- ◆ **City**
- ◆ **Postal Code:** Postal/Zoning improvement plan (ZIP) code.
- ◆ **Province**
- ◆ **Country:** To be selected among those entered in the corresponding table.



Double Click on Field



Tables Menu



Countries

Customer **WND001 ... Window & Co. LTD**

Browse Customer Data Fiscal Data

Code

Trade Name

Headquarter

Address

City

P. Code Province

Country

Created By

Creation Date

Last User

Last Modif. Date

Administrative Office

Address

City

P. Code Province

Country

Delivery Route

Language

Phone

Fax

E-Mail

Internet

Agent Ref.

Main Contact

Name

Surname

Birthplace

Prov. / Date / Sex

Type

Other references:

- ◆ **Delivery Routes:** To be selected among those entered in the corresponding table. They may refer to local or global areas depending on how you divided the geographical areas in which your company operates.



Double Click on Field



Tables Menu



Delivery Routes

- ◆ **Language:** To be selected among those entered in the corresponding table.



Double Click on Field



Tables Menu



Languages

- ◆ **Phone**
- ◆ **Fax**
- ◆ **E-mail:** E-Mail address to use for contacting the customer.
- ◆ **Internet:** Customer's Internet site address.
- ◆ **Agent Ref.:** Customer's reference agent.

Main Contact:

- ◆ **Name**
- ◆ **Surname**
- ◆ **Birthplace:** Birthplace of the contact person.
- ◆ **Province:** Birth province of the contact person.
- ◆ **Date:** Birth date of the contact person.
- ◆ **Sex**
- ◆ **Type:** Contact type (either Natural Person or Corporation).

If you must enter more contact persons for the same customer, use the Contacts window, in which you can add contacts for all the customers and then filter those required using the normal filter options available in all Enterprise windows.

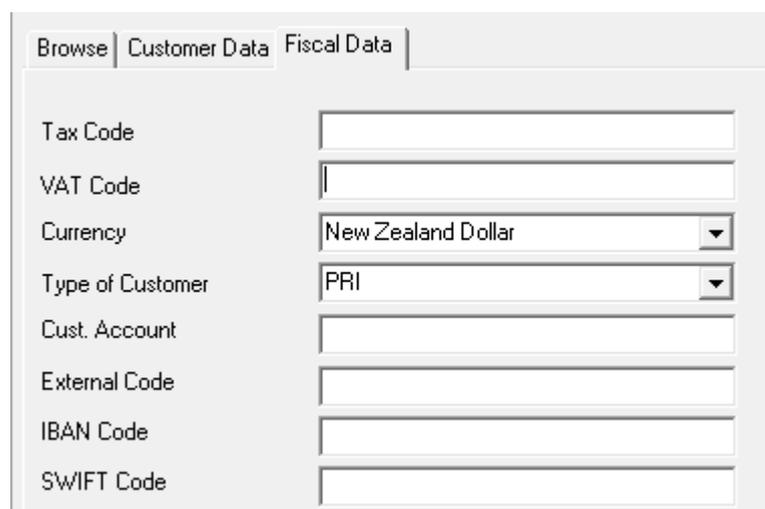
 [Double Click on Field](#)

 [Main Data Menu](#)

 [Customers](#) ▶  [Contacts](#)

Fiscal Data

Bank details pertaining to the customer.



In detail, following fields are offered:

- ◆ **Tax Code:** Tax code in alphanumeric form.
- ◆ **VAT Code:** Value Added Tax identification number.
- ◆ **Currency:** Currency in which the customer effects payments. To be selected among those entered in the corresponding table.
 -  [Double Click on Field](#)
 -  [Sales Tables Menu](#)
 -  [Currency](#)
- ◆ **Type of Customer:** To be selected among those entered in the corresponding table.
 -  [Double Click on Field](#)
 -  [Tables Menu](#)
 -  [Customers / Suppliers Categories](#)
- ◆ **Customer Account:** Bank account details.
- ◆ **External Code:** Coding system used by other IT systems.
- ◆ **IBAN Code:** International Bank Account Number.
- ◆ **SWIFT Code:** Customer's SWIFT code to use for international payments.

Documents and Conditions

Set of information pertaining to the trade terms and conditions applied to the customer.

NOTE: The conditions you enter here are specific for the customer. For those conditions that you do not specify for the customer, the system will use the conditions you entered into the Main Data of the company you are working on.

Documents:

- ◆ **Invoice Copies:** Number of copies to be made for the document "Invoice".
- ◆ **Shipping Document Copies:** Number of copies to be made for the document "Way-Bill".
- ◆ **Document Type:** Type of document that must usually be issued for this customer. You can choose between Way-Bill and Immediate Invoice.
- ◆ **Transported by:** The name of the goods carrier is indicated here. You can choose among data entered in the table "Forms of Transport". Examples: Sender (if transport is effected by your company), Receiver (if goods are collected by the customer directly) and Carrier (if goods are transported by an external company).
- ◆ **Carrier:** If goods are transported by an external company you can specify the carrier's details in the corresponding table, and then select it here. You can choose among data entered in the table "Carriers Data"

 Double Click on Field

 Sales Tables Menu

 Transport of Goods ▶  Carriers Data

- ◆ **Goods Appearance:** Appearance of the goods to be delivered. To be selected among those entered in the corresponding table.

 Double Click on Field

 Sales Tables Menu

 Transport of Goods ▶  Goods Aspect

- ◆ **Forms of Transport:** To be selected among those entered in the corresponding table.

 Double Click on Field

 Sales Tables Menu

 Transport of Goods ▶  Forms of Transport

VAT:

- ◆ **VAT:** To be selected among those entered in the corresponding table.

 Double Click on Field

 Sales Tables Menu  VAT

- ◆ **VAT in Suspense:** VAT suspension system for usual exporters.
- ◆ **Expiration date:** Date when the exemption ends.
- ◆ **VAT Communications:** Formal communication references.

Invoicing Data:

- ◆ **Invoice to:** Not used.

- ◆ **Price List:** Price list applied to the customer.

 Navigation Bar  Sales 

 Double Click on Field

 Sales Menu  Price Lists  Price Lists

- ◆ **Payment:** Form of payment. To be selected among those entered in the corresponding table.

 Double Click on Field

 Sales Tables Menu  Payments

- ◆ **Bank:** To be selected among those entered in the corresponding table.

 Double Click on Field

 Tables Menu  Banks

- ◆ **Transport/Packaging/Payment Collection Costs:** Flag to activate costs, the VAT system applied and the value for the costs. Costs are set for each Order, Way-bill or Accompanying Invoice created for the customer.

- ◆ **Max Days of Rack Use:** Maximum number of days for which a shipping rack is available on loan for use.

- ◆ **Max Granted Credit Limit:** Maximum amount of credit granted to the customer.

Move Payment Terms:

- ◆ **Move Payment Terms:** Coding system for automatically moving payment dates when generating the customer's bill-book.

Discounts:

- ◆ **Discounts:** Allows you to set up to 4 different types of discount to be applied to the customer. Discounts are applied "in cascade". They are not summed-up. For example, a discount of 15% and a discount of 5% do not correspond to a discount of 20% because the second discount is applied on the price calculated after deducting the first discount percentage.

Particular Conditions

Set of particular conditions granted to the customer based on product types or categories. This window will only display these particular conditions.

As these are very "delicate" cause affect the final prices that customer will have to pay, we decided to keep the modification of these conditions separated from their simple display.

To create new conditions, you must use the corresponding table, which is the same for all the customers (Table Menu, Customer Conditions).

 [Tables Menu](#)  [Customer Spec.](#) ▶  [Customer's Cond.](#)

Browse Data		1st Discount	2nd Discount	3rd Discount	Discount Quantity
Customer : OPTIMA ... Optima S.r.l.					
Single Glass		0,00%	0,00%	0,00%	0,00 mq
Laminated Glass		0,00%	0,00%	0,00%	0,00 mq
Insulating Glass		0,00%	0,00%	0,00%	0,00 mq

NOTE: For additional details on how the "Customer Conditions" table works refer to the corresponding section of this guide.

Customer Articles

Set of specific definitions used by the customer.

To a Product, you can also associate the code and description used by your customer. These will be printed on the documents you supply to the customer, who can thus identify its items more easily.

Like Customer Conditions, Customer Items are only displayed in this window.

To enter new customer-defined items, you must use the corresponding table.

 [Tables Menu](#)  [Customer Spec.](#) ▶  [Customer Items](#)

Browse Details		Trade Name	Description
VD	Double Glaze	Mario Rossi	Insulating Glass
VS	Simple Glass	Mario Rossi	Single Glass

NOTE: For additional details on how the "Customer Items" table works refer to the corresponding section of this guide.

Material Stock Main Data



The Opty-Way Enterprise product has been developed to manage a wide range of materials, accessories and finished products.

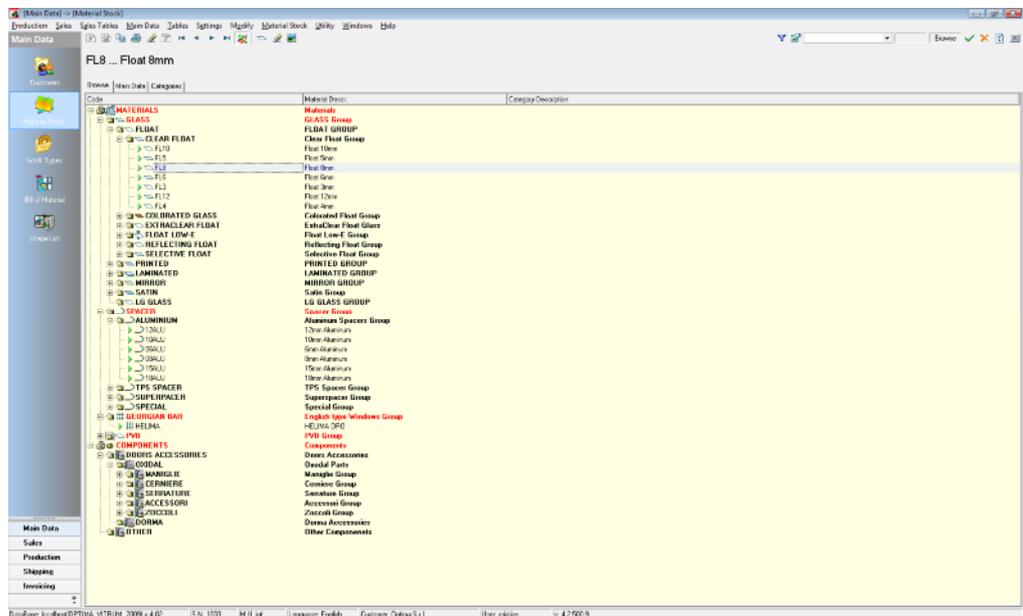
For materials to be cut (monolithic glass, patterned glass, laminated glass, sheet metal, wood, etc.) you must enter the relevant code, main parameters (thickness, trims, etc.) and sheet sizes that exist in stock.

For accessories and finished products (handles, notches. etc.) you just need to enter the code or some basic data depending on the types of work you wish to carry out and control.

NOTE: Correct material coding and classification ensure that the production process can be managed as effectively as possible, thus avoiding working errors and simplifying product identification.

By using the Statistics Printouts, you can obtain important information about consumption, waste, stocks and the traceability of information.

Window Structure



The Stock Main Data entry window has a table layout on more levels and a tree structure.

Data is subdivided in tables for a better display and identification.

The following tables are present:

- ◆ **Browse:** Full browsing in all the currently filtered Main Data.
- ◆ **Main Data:** General data pertaining to the stock.
- ◆ **Categories:** View of the Main Data depending on the categories entered.

Editing Stock Main Data

To enter and manage Main Data the normal New, Duplicate and Remove functions are used.

NOTE: When copying an existing code, the Enterprise system checks for the "univocity" of the code, whereas all the other information can be accepted.

NOTE: Because the Main Data table is cross-checked against other database tables, deleting some Main Data tables may fail, if the code you want to delete is "present" in other management sections (for instance, the Material is present in some active orders, in documents such as way-bills or invoices, in prices in the price list or in products in the BOM).

Browse

The so-called "tree" structure allows you to view a large amount of even complex Main Data archives rapidly and precisely such as those of a glass-working plant for which materials must be divided into groups and subgroups, for example, by type, thickness or color, depending on the company's needs. Through the special buttons  and  you can expand and collapse the different Main Data branches.

All the standard commands available for the tree-structured grids and described in the corresponding section are also present.

Main Data

In this section you can enter the data of the material you selected from the List table.

The top part of the screen shows the main data related to the identification code and the material type.

The screenshot shows a software interface for editing material data. At the top, it says 'FL5 ... Float 5mm'. Below this, there are several input fields: 'Code' with 'FL5', 'Description' with 'Float 5mm', 'Goods Category' (empty), 'Icon' with '15', 'Machine' (empty), and 'Mat. Type' with 'MONOLITHIC'. There is also a 'Notes' field at the bottom.

- ◆ **Code:** Is the short name of the material and can consist of a string of max 16 alphanumeric characters. This is the code you must select (or type) when you create an order.
- ◆ **Icon:** Type of icon associated to the material. This is used only to identify the various materials more easily when you select them from the List table.
- ◆ **Description:** Includes all important data about the material; it can consist of max. 32 alphanumeric characters.
- ◆ **Machine:** Refers to the machine selected by default for the optimization of the material. If no machine is set, the default machine will be proposed.
- ◆ **Goods Category:** Allows you to associate one of the goods categories that are available in the corresponding table.

 [Double Click on Field](#)

 [Sales Menu](#)

 [Price Lists](#)   [Goods Categories](#)

- ◆ **Mat. Type:** Identifies the type of material associated with the code.
- ◆ **Notes:** Note field for the material.

Detail

The bottom part of the items header has all the technological information about the material "type". This means that fields displayed may vary depending on the selection made on the Mat.Type combo.

The following material types can be handled:

- ◆ **Flat Materials:** Glass sheets, sheet metal, wood, etc.
- ◆ **Standard Linear Materials:** Spacer bars.
- ◆ **Complex Linear Materials:** Georgian bar systems.
- ◆ **Simple Materials:** Finished products such as handles, notches, etc., which - due to their nature - do not require further parameters.

Flat Materials

If you set Flat Materials, the following window opens:

Detail	Quantity	Additional data
Weight	<input type="text" value="2.50 Kg"/>	
Grain	<input type="text" value="..."/>	
Color	<input type="text" value=""/>	
Thickness	<input type="text" value="5.0 mm"/>	
X1 / Y1 Trims	<input type="text" value="20.0 mm"/>	<input type="text" value="20.0 mm"/>
X2 / Y2 Trims	<input type="text" value="0.0 mm"/>	<input type="text" value="0.0 mm"/>
Minimum Distance	<input type="text" value="20.0 mm"/>	
Grinding	<input type="text" value="1.0 mm"/>	
Max X/Y Crosscut	<input type="text" value="9999.0 mm"/>	<input type="text" value="9999.0 mm"/>
X/Y Waste	<input type="text" value="0.0 mm"/>	<input type="text" value="0.0 mm"/>
Aut. Shape	<input type="text" value="20.0 mm"/>	
Sh. Trim Angle	<input type="text" value="20"/>	

- ◆ **Weight:** The specific weight of the selected material. It may be useful to determine how many pieces can be placed on a single rack.
- ◆ **Grain:** Defines the direction of veins (it can be along X or Y, or free).
- ◆ **Color:** Identifies the code of the selected color.
- ◆ **Thickness:** The number of available fields depends on the material type.

Thickness	<input type="text" value="3.0 mm"/>
-----------	-------------------------------------

For monolithic glasses you have only one field in which you can set the thickness of the selected material.

Thickness	<input type="text" value="10.4 mm"/>	<input type="text" value="5.0 mm"/>	<input type="text" value="0.4 mm"/>	<input type="text" value="5.0 mm"/>
-----------	--------------------------------------	-------------------------------------	-------------------------------------	-------------------------------------

For laminated glass, you need to fill in the three active fields with the values for the first glass layer, the plastic material and the second glass layer, while the first field refers to the total glass thickness and is calculated automatically.

- ◆ **X1-Y2 Trims:** Correspond respectively to the distance from the lower edge, the left edge, the upper edge and the right edge of the glass sheet, where cuts to square the sheet have to be made and starting from which pieces are arranged in the optimization.

Trims X1 and Y1 are actually cut by the machine. They are useful to avoid using the edge of the sheet, which is usually irregular. Trims X2 and Y2 refer, instead, to the minimum distance from the upper and right edge where pieces cannot be arranged.

NOTE: If a Minimum Distance value is set instead of the trim values X2 and Y2, the optimization program uses that distance value also for sides X2 and Y2. This means that pieces are arranged, if possible, so that their sides coincide with the sheet edge. If this is not possible, pieces are arranged at a distance from the sheet edge that's at least the Minimum Distance setting.

- ◆ **Minimum Distance:** Corresponds to the minimum permissible distance between two parallel cuts, which is necessary to allow pieces to be easily separated. If you set this value to 20 mm, for example, no cutting plan will include two nearby pieces or cuts that have a distance one from the other lower than 20 mm. Obviously, whenever the same cut is shared by two pieces, such a distance is not taken into account.
- ◆ **Grinding:** Default grinding value to be used for the piece when the piece grinding is enabled.
- ◆ **Max X/Y Crosscut:** Is a particular type of cut, namely a cut that divides a sheet into two parts along the X side. This allows the sheet to be broken out by means of the breakout bars of the cutting table. The value you set corresponds to the maximum distance from the Y side of the sheet, where a crosscut has to be made.
- ◆ **X/Y Waste:** Minimum dimensions of waste areas that the optimization program generates and you wish to consider as Offcuts. All wastes bigger than X/Y waste will be recognized as offcuts to be reused in the following optimizations and can be loaded in the stock.
- ◆ **Automatic Shape Trim:** Sets the trim value for the shapes when the shape has angles that are smaller than the value set in the "Angle" field
- ◆ **Shape Trim Angle:** Value for the angle to be trimmed automatically.

Standard Linear Materials

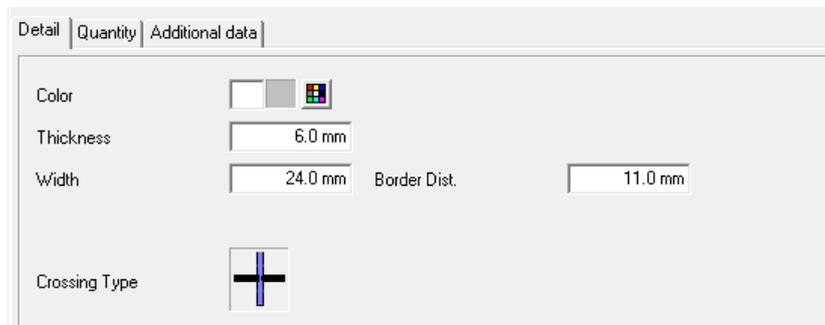
If you set Standard Linear Materials, the following window opens:

- ◆ **Color:** Identifies the code of the selected color.
- ◆ **Thickness:** This field refers to the total thickness of the material (distance between glasses of a double-glaze unit).
- ◆ **Width:** Indicates the width when the material chosen is a spacer bar.
- ◆ **Border Distance:** Distance between the edge of the glass and the edge of the spacer bar.
- ◆ **Connections Length:** Indicates the length of connections when the material chosen is a spacer bar.

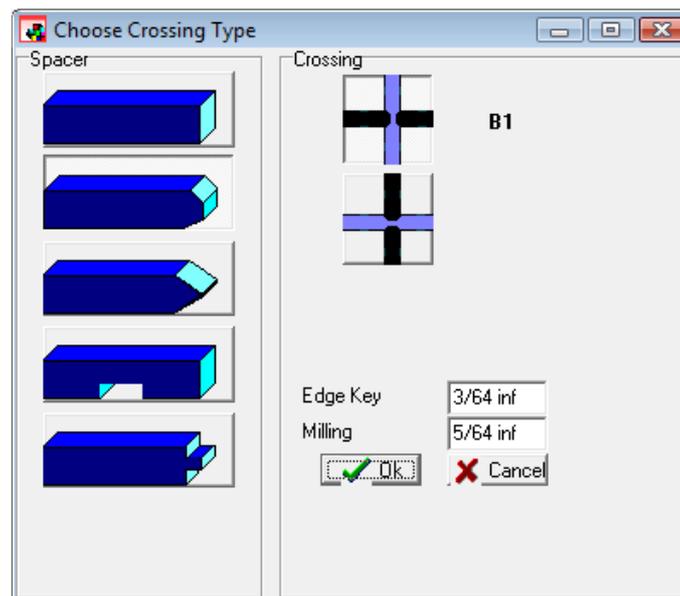
Field	Value
Color	[Color Selection Icon]
Thickness	10.0 mm
Width	8.0 mm
Conn. Len.	22.0 mm
Border Dist.	3.6 mm

Special Linear Materials

If you set Special Linear Materials, the following window opens:



- ◆ **Color:** Identifies the code of the selected color.
- ◆ **Thickness:** This field refers to the total thickness of the material.
- ◆ **Border Distance:** Distance between the edge of the glass and the edge of the spacer bar.
- ◆ **Width:** Indicates the width when the material chosen is a spacer bar.
- ◆ **Crossing Type:** Classification of the type of crossing to be used for assembling Georgian bars.



Depending on the type of crossing you select, you will have to enter some technical parameters of the Georgian bars, such as End Cup, Milling or Connection Length.

Quantity

For each material entered and coded in Enterprise you can manage the relevant stock based on the physical characteristics of the product itself.

NOTE: This version of Enterprise is not equipped with a full system to manage stocks. Please contact Optima sales structure for further information on the Passive Cycle module (under development) that will handle these problems comprehensively.

To create new stocks, you must use the corresponding function on the Toolbar:



Browse Main Data Categories

Code: FL5 Icon: 15
 Description: Float 5mm Machine:
 Goods Category: Mat. Type: MONOLITHIC

Notes:

Detail Quantity Additional data

Quantity: 1000
 Stock:
 Rack:
 Notes:
 X/Y Dim: 6000.0 mm 3210.0 mm
 Crosscut Type: X
 Priority: 0
 Waste:
 Loader Code:

Code	Material Descr.	Pos.	X Dim.	Y Dim.	R.	C.	Waste	P.	Quantity
CLEAR FLOAT									
Clear Float Group									
FL5	Float 5mm	1	3210.0 mm	2400.0 mm	X	Y	<input type="checkbox"/>	0	1000
FL5	Float 5mm	2	6000.0 mm	3210.0 mm	X		<input type="checkbox"/>	0	1000
FL5	Float 5mm	3	3210.0 mm	2000.0 mm	X	Y	<input type="checkbox"/>	0	1000

The data required varies depending on the type of material you set. It is as follows:

- ◆ **Quantity:** Indicates the number of sheets available in the stock.
- ◆ **Stock:** Warehouse in which the sheet is located. You can choose among the various company's warehouses you can enter through the corresponding table.



It is possible to configure Enterprise so that a particular cutting table will be able to see and use only sheet from one or more particular stock list.

- ◆ **Rack:** Is the rack on which the sheet size you are entering is placed.
- ◆ **Notes:** Note field for the sheet size.
- ◆ **X Dimension:** Is the length of the sheet. The X dimension usually corresponds to the greater dimension, as it refers to the longer side of the cutting table. For spacer bars, it is the only dimension present.
- ◆ **Y Dimension:** Is the width of the sheet. The Y dimension usually corresponds to the smaller dimension, as it refers to the shorter side of the cutting table. For spacer bars, this dimension does not exist.
- ◆ **Crosscut Type:** Allows you to define how the sheet is to be optimized. In particular, it allows you to decide whether the Crosscut is to be made on the shorter side of the sheet only (X value), on the longer side only (Y value) or if the optimization program is free to decide which is best (X/Y). This last

solution usually generates a smaller waste coefficient, but even cutting plans, which, in some circumstances, may be difficult to open.

- ◆ **Priority:** Is the priority of use given to a sheet with respect to the others. The higher the value for priority (maximum value 999) the more the selected size is used. The program cannot use a size with a low priority until all sizes with a higher priority have been used.
- ◆ **Waste:** Allows you to define whether the sheet is a normal sheet or an offcut sheet. Offcut sheets are always used before normal sheets. This field allows you to enter Offcuts generated manually.
- ◆ **Loader Code:** Reference slot for identifying the material in automatic loading systems.

To remove a sheet size:



Modify Menu



Remove Sheet/Bar

NOTE: The right grid shows the details of the sheet sizes entered and present in stock. When the user is placed on a product "family" (e.g. Float glass) and not on an item, the right grid shows the entire stock of Float glass and thus: FL4, FL6 etc. Obviously, this allows a correct display of stock data and available sizes and - thanks to the special functions offered by the Customize Grids - of totals as well.

Additional Data

Allows you to enter purchase data pertaining to sheets. All data entered in this section are only for internal statistic purposes, there isn't any link with sales and price list modules.

- ◆ **1st Purchase Price:** Price at which the sheet was purchased.
- ◆ **2nd Purchase Price:** Second price at which the sheet was purchased (if it was not purchased from the usual supplier).
- ◆ **3rd Purchase Price:** Third price at which the sheet was purchased (if it was not purchased from any of the previous suppliers).
- ◆ **First % Mark Up:** Percentage mark-up on the sheet purchased at the first price.
- ◆ **Second % Mark Up:** Percentage mark-up on the sheet purchased at the second price.
- ◆ **Third % Mark Up:** Percentage mark-up on the sheet purchased at the third price.
- ◆ **Purchase UM:** Unit of measurement in which the glass is purchased.
- ◆ **Usual Supplier:** Name of the usual supplier from whom the sheet is purchased.



Navigation Bar

Main Data ▶



Double Click on Field



Main Data Menu



Customers ▶



Shortcut Key

Alt+2

- ◆ **Sales UM:** Unit of measurement in which the glass is sold.
- ◆ **VAT:** VAT applied when the glass was purchased.



Double Click on Field



Sales Tables Menu



VAT

Detail | Quantity | Additional data

1st Purchase Price

2nd Purchase Price

3rd Purchase Price

First % Mark Up

Second % Mark Up

Third % Mark Up

Purchase UM

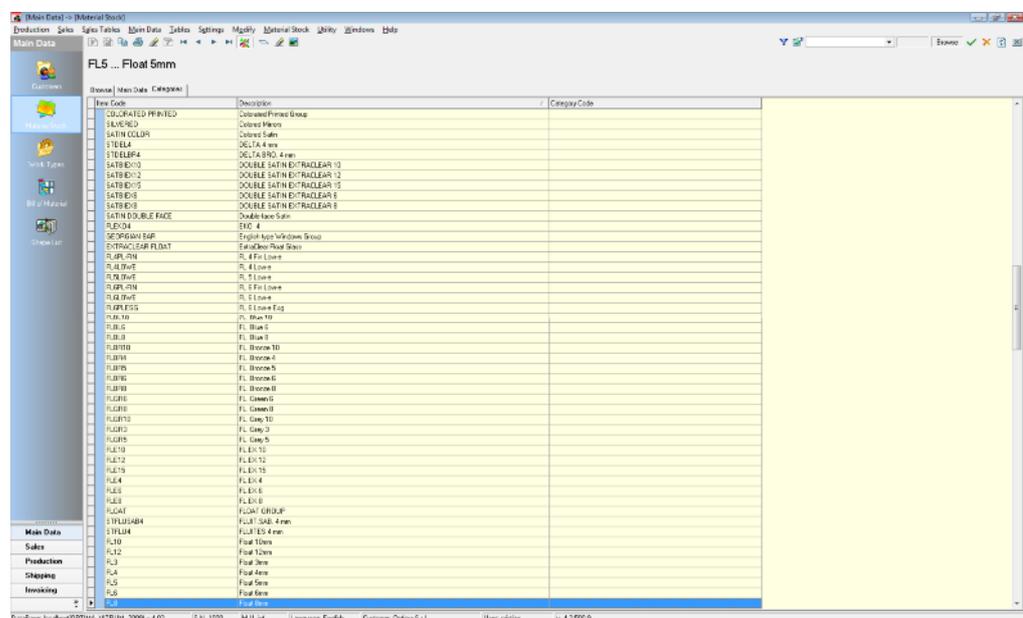
Usual Supplier

Sales UM

VAT

Categories

Like any other Main Data archive that exists in Enterprise, also the Materials Main Data archive allows you to code categories freely and to view a grid with all the codes you assigned.



You can associate a data item to a Category through the corresponding function in the List table.



[Right Click]



Categories

A window will open in which you can select the Categories to which the data item belongs.

Work Types Main Data



Opty-Way® Enterprise can manage various types of Work Types such as the cutting of flat and linear surfaces, the bending of spacer bars, the optimization of the tempering furnace charge or specific Work Types to perform with working centers.

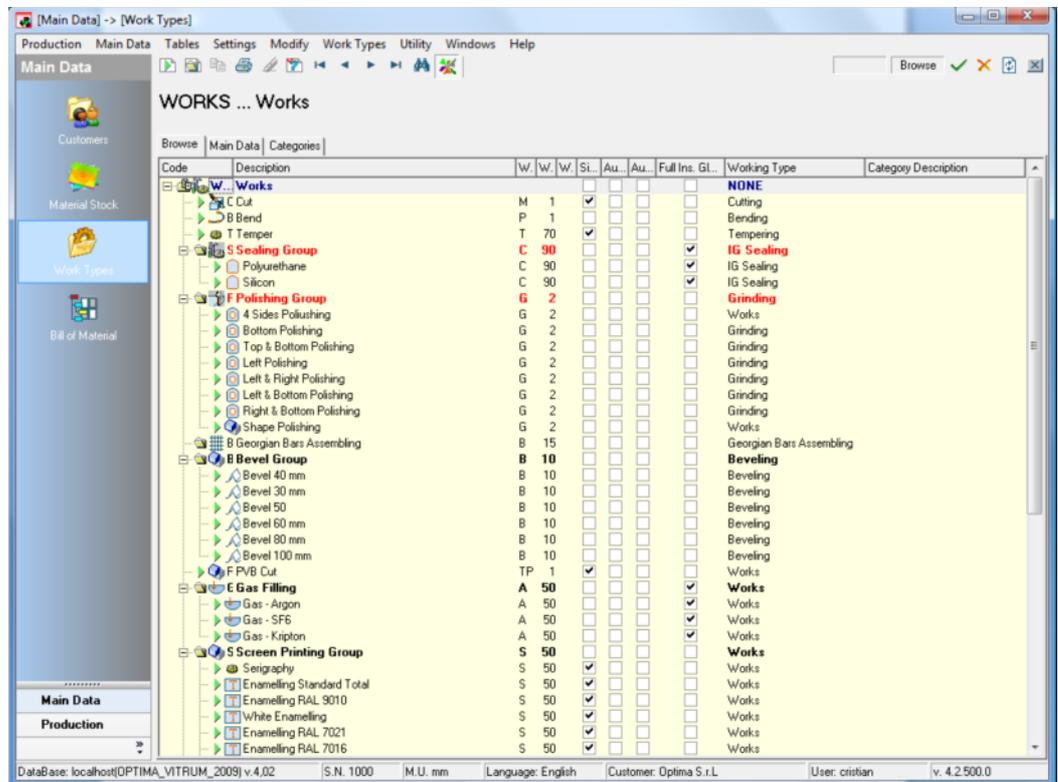
Each Work type is defined and managed by means of the corresponding Work Type Table. Their modification can be freely performed by the user except for the three main Work Types (cutting, bending, tempering) considered as default operations by the system and thus unchangeable.

Enterprise handles each Work Type specifically on the basis of its characteristics.

Each Work Type can be set as default from inside the Product BOM management window or entered manually when loading the customer order.

Enterprise monitors each one of these work stages both as a specific Work Order and as a Production Batch and keeps traces of its progress and completion.

Window Structure



The Work Types Main Data entry and management window has a table layout on more levels and a tree structure.

Data is subdivided in tables for a better display and identification. The following tables are present:

- ◆ **Browse:** Full browsing in all the currently filtered Main Data.
- ◆ **Main Data:** General data pertaining to the stock.
- ◆ **Categories:** View of the Main Data depending on the categories you entered.

Editing Work Types Main Data

To enter and manage Main Data the normal New, Duplicate and Remove functions are used.

NOTE: When copying an existing code, the Enterprise system checks for the "univocity" of the code, whereas all the other information can be accepted.

NOTE: Because the Main Data table is cross-checked against other database tables, deleting some Main Data tables may fail, if the code you want to delete is "present" in other management sections (for instance, the Work Type is used in some active orders, in documents such as way-bills or invoices, in prices in the price list or in products in the BOM).

Browse

The so-called "tree" structure allows you to view a large amount of even complex Main Data archives rapidly and precisely such as those of a glass-working plant for which Work Types must be divided into groups and subgroups, for example, by type or work posts, depending on the company's needs.

Through the special buttons  and  you can expand and collapse the different Main Data branches.

All the standard commands available for the tree-structured grids and described in the corresponding section are also present.

Main Data

You can enter into this window the main data pertaining to the Work Type selected in the List table and above all the main technological data that is essential for the proper working of the entire Enterprise system.

You must enter the following information:

- ◆ **Code:** Code of the Work Type. It can consist of a string of max. 16 alphanumeric characters. This is the code you must select (or type) when you create an order.
- ◆ **Icon:** Type of icon associated to the material. This is used only to identify the various materials more easily when you select them from the List table.
- ◆ **Description:** Description of the Work Type.
- ◆ **Machine:** Plant associated to the Work Type.

- ◆ **Goods Category:** Allows you to associate one of the goods categories that are available in the corresponding table.

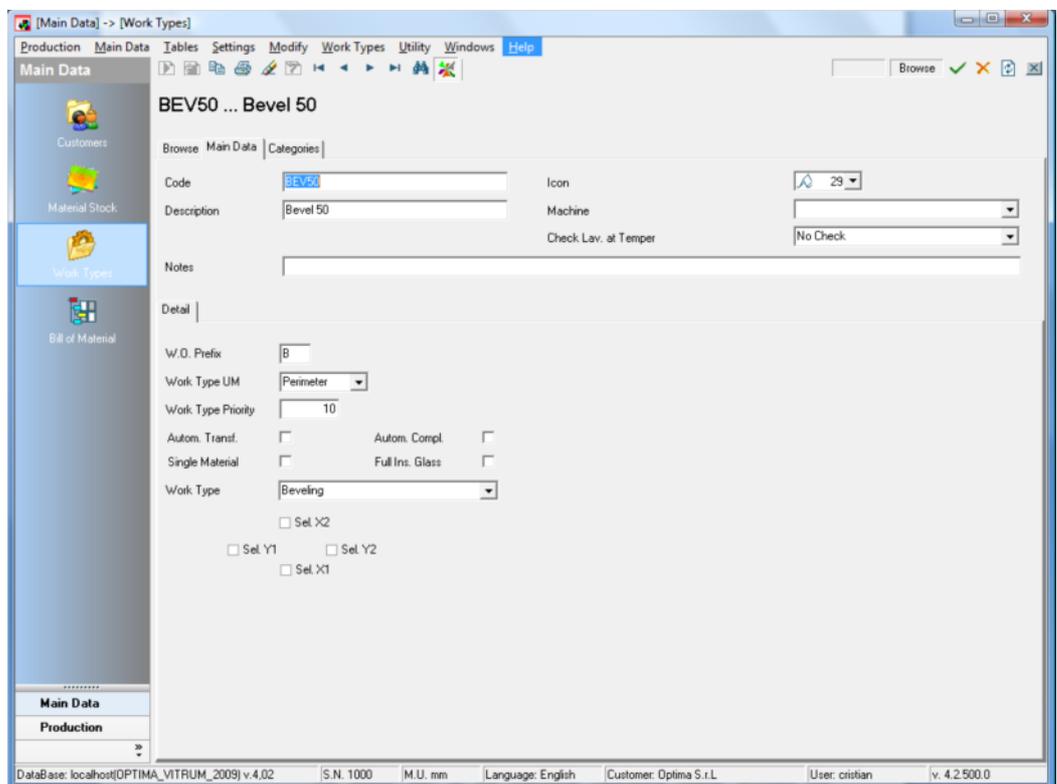
 Sales Menu  Price Lists ▶  Goods Categories

 Shortcut Key Double click on Field

- ◆ **Check Lav. at Temper:** Allows you to define system behavior on the Temper progress Window. Using this feature you can activate and configure the work status control at temper: if you are on the Temper progress window and read a code of a piece/product with workings not completed, the system can forbid piece queue or generate a warning message for the operator. The available options are:

- **No Control:** No Actions
- **Control and Warning:** Appears a pop-up with a list of not completed workings
- **Control and Block:** Forbids piece queue on the temper progress window

◆ **Notes**



Detail

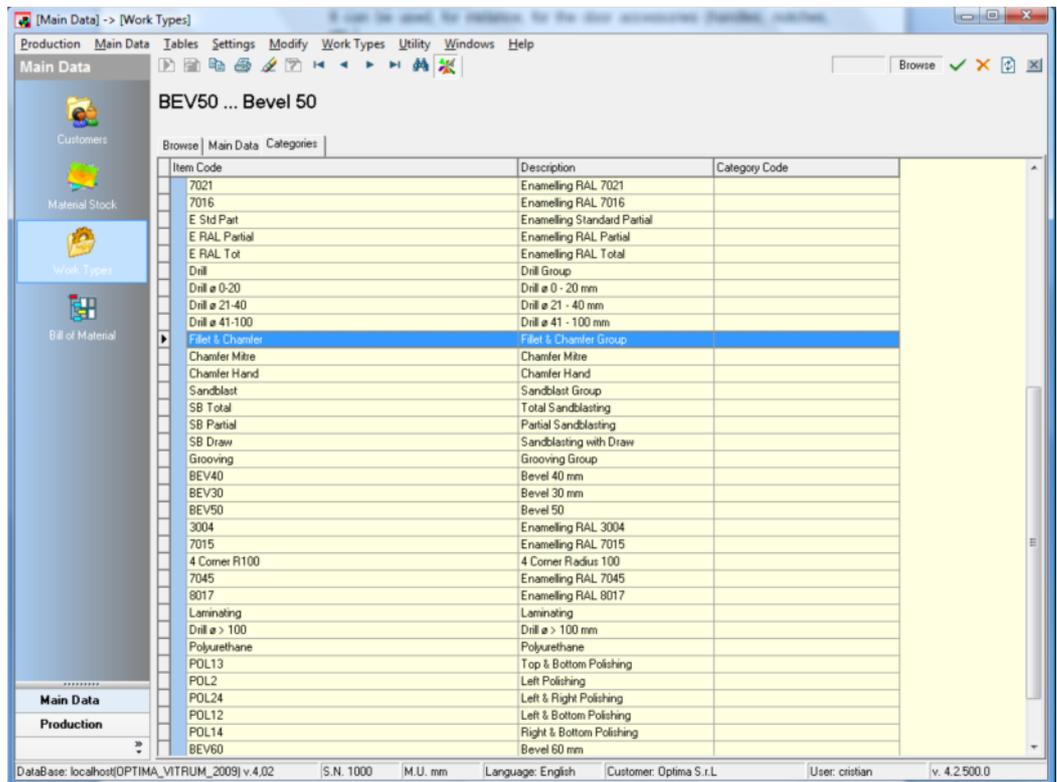
The bottom part of the Work Types header provides the technological information necessary for managing the work cycles in the production area.

The following information is required:

- ◆ **W.O. Prefix:** "Alphanumeric" code consisting of one or two letters. It is used to identify the work orders the Enterprise system creates when putting an item into production (e.g.: M000001 is the identifier of a work order, where the "M" character marks all the work stages of the same kind).
- ◆ **Work Type UM:** Identifies the unit of measurement necessary for quantifying the Work Type. This classification is also used by the quotation system and sales price list. You can choose among Perimeter, Surface Area, Weight and Quantity.
- ◆ **Work Type Priority:** Indicates the "hierarchical" sequence in which Work Types are carried out inside the cycle defined in the BOM.
For instance, the grinding operation will be performed on a piece only after glass cutting. Therefore, cutting must have a (numerically) lower priority than grinding.
- ◆ **Automatic Transfer:** Indicates that the work order must always be created although for the associated order only a part of the production cycle is put into production.
- ◆ **Automatic Completion:** The work order created by this Work Type will be "automatically" closed.
This is useful when you do not wish to check whether an operation has been carried out or not (for example, the piece assembly).
- ◆ **Single Material:** If you set this flag, the system will have to create work orders and divide them by type of material. This means that each work order will include only one type of material.
This is fundamental, for example, when cutting glass. In the case of a work order for a bending machine, instead, it would be better to have a single work order with all the different materials in it.
- ◆ **Full Ins. Glass:** This flag allows you to associate a Work Type to a finished product code.
It can be used, for instance, for the door accessories (handles, notches, etc.).
- ◆ **Work Type:** Indicates the general type of Work Type. It is used to create "homogeneous" groups of Work Types.

Categories

Like any other Main Data archive that exists in Enterprise, also the Work Types Main Data archive allows you to code categories freely and to view a grid with all the codes you assigned.



You can associate a data item to a Category through the corresponding function in the List table.

 [Right Click]  Categories

A window will open in which you can select the Categories to which the data item belongs.

Bill of Material



This section can be used to define and manage the Bills of Materials (BOMs) related to a Product whether it is simple or consists of various items and diverse processes in the work cycle.

With this function the user can analytically define the set of products, the subject of his/her production (double glazing, compound and assembled glazing, special worked glazing, etc.) that can be directly recalled during the customer order entry phase.

The Enterprise BOM or Product coding section allows the user to define the structure of a finished or semi-finished product, and namely:

- ◆ **Materials:** Structure of the materials that compose a product.
- ◆ **Work Types:** List of the Work Types to be performed "hierarchically" on a product or the single materials that compose it.

You can thus create different types of BOMs:

- ◆ **General:** To be adapted when entering an order.
The default BOMs created for Single Glass Items or IG units belong to this type of BOMs. When you enter an order, you will need to enter the type of product, the materials that compose it, the dimensions as well as further Work Types to be performed (if any).
- ◆ **Standard Products:** Products that your company normally manufactures, but whose end dimensions can be freely set by the user when entering an order. With this type of BOM, you can set fixed materials to be used for the product.
This is useful for frequently manufactured products. Instead of choosing, each time, the materials that compose the product, the user can enter a simple BOM code that identifies all the components.
- ◆ **Special Products:** Special products that your company manufactures. Neither their materials nor their dimensions can be modified.
Special products can be, for instance, all those products that are included in a company's product catalog, such as shower enclosures or doors, which are normally sold in standard dimensions and materials.

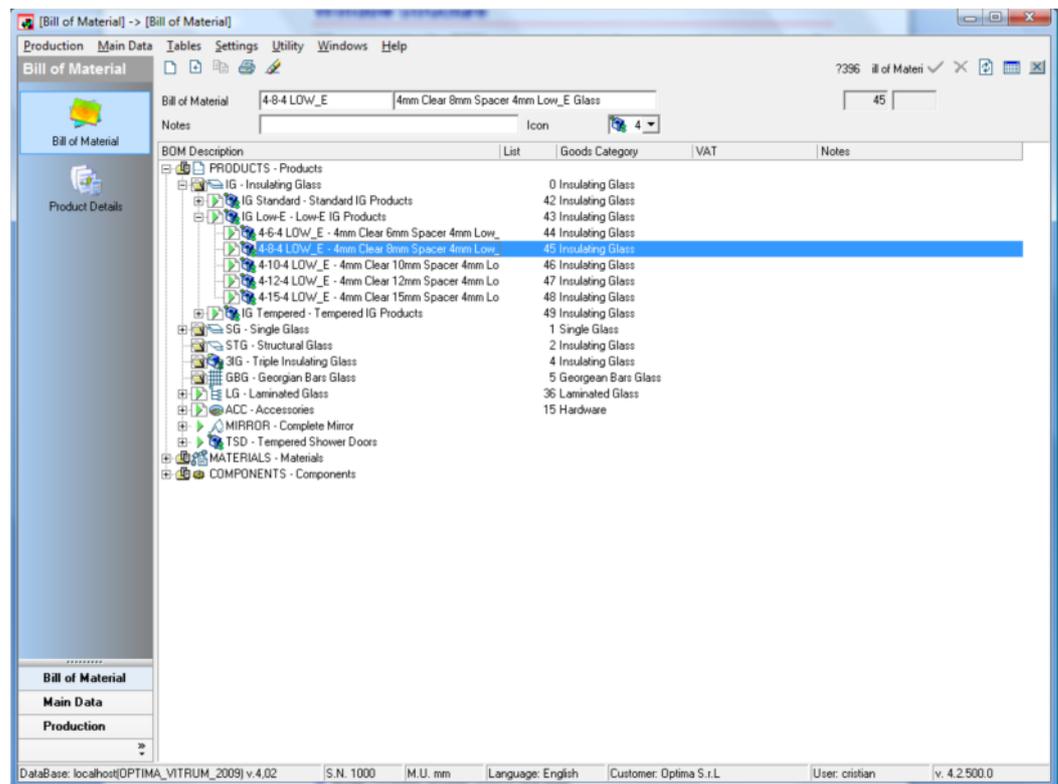
NOTE: BOMs are essential. When entering an order, first you will have to choose a BOM and then you will enter the materials and dimensions of the finished product.

NOTE: The BOMs you can select when you create an order are only those that are available under the Products branch.

NOTE: BOMs related to materials and accessories are only used when recalled from other BOMs inside Products.

Window Structure

When you enter the Bill of Materials (BOMs) management window a new option appears on the Navigation Toolbar, and namely "Bill of Materials". In the general screen you can display a user-friendly tree-structured grid with the list of the products and materials entered.



The second window, Product Details, allows you to create or edit BOMs.

Bill of Material

The so-called "tree" structure allows you to view a large amount of even complex data rapidly and precisely such as the data of a glass-working plant, which must be divided into a wide range of groups and subgroups. Through the special buttons  and  you can expand and collapse the different Main Data branches.

From inside this window you can also modify the following fields:

- ◆ **Bill of Material:** Unique alphanumeric code identifying the product.
- ◆ **Description:** Description of the product.
- ◆ **Notes**
- ◆ **Icon:** Graphic image used in the tree.

Editing of a BOM

Due to the complex working of Bills of Materials, their creation and editing is slightly different from that of the other Main Data archives described so far. It consists of two different stages:

- ◆ **Creating/editing a code:** This can be achieved directly from inside the window with the BOM grid through the use of the New, Duplicate and Remove buttons. This is done only to indicate a code for the product created.



Toolbar



"New Row"



[Right Click]



"New Product" (Same Level)

This button allows you to create a new tree branch at the same level of the branch you are on when pressing the button.

Example: 4-12-4 - Float 4mm Clear 12m
4-10-4 - Float 4mm Clear 10m



Toolbar



"New Child Row"



[Right Click]



"New Product" (Next Level)

This button allows you to create a new tree branch at a lower level than the initial one.

Example: IG Low-E - Low-E IG Products
4-6-4 LOW_E - 4mm Clear 6m

NOTE: Unlike Main Data, duplicating a Bill of Materials actually means duplicating only its header and not its body. Therefore, only the code and the description are copied in this case, but not the branches under them.

After that, the Enterprise system creates an automatic code (a number that is written in the code and description fields).

- ◆ **Defining a Bill of Materials and its work cycle:** You access this page by double-clicking on the row or, if the Bill of Materials already exists, through the Product Details option on the Navigation Toolbar.



Double Click on Field

Creating a Bill of Materials or Product

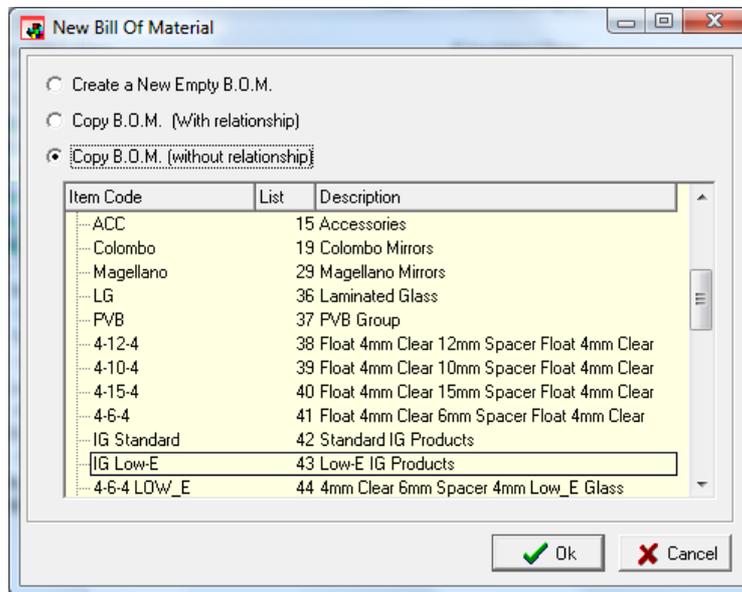
You can create a Bill of Materials **only** by double-clicking on the previously created numeric code.

You are now prompted to confirm the creation of a Bill of Materials. If you reply Yes, a window opens in which you have three choices:

- ◆ **Create a New Empty BOM:** Allows you to create a Bill of Materials "freehand", i.e. no information is pre-loaded or derived from a template.
- ◆ **Copy BOM (with relationship):** The Bill of Materials of the code selected in the window part underneath is chosen as a template. The Bill of Materials thus created will be a mirror copy of the selected one and inherit all the future modifications made to the original code.

NOTE: Please pay the greatest attention when you apply the "inheritability" feature to a BOM code to avoid a malfunctioning of the system or unwanted changes in its behavior.

- ◆ **Copy BOM (without relationship):** The Bill of Materials of the code selected in the window part underneath is chosen as a template. The Bill of Materials thus created will be a mirror copy of the selected one, but it will not inherit the future modifications made to the original code.



Once the desired method has been chosen, the Enterprise system will open the Product Details window and fill-in the appropriate fields (in case an existing BOM was copied).

Product Details

Once the Bill of Materials has been created, you can use the Product Details window to modify any of its parts, to manage all the BOM header information (from inside the general screen you can only enter the BOM code and description) and enter all the relating materials and Work Types. The following header data is available:

Bill of Material	4-6-4 LOW_E	4mm Clear 8mm Spacer 4mm Low_E Glass	45
Notes		Icon	4
VAT		Goods Category	Insulating Glass
Product Type	Insulating Glass		
	FL4 \ 08ALU \ FL4LOWE		

- ◆ **Bill of Material:** Code and description of the product.
- ◆ **Notes**
- ◆ **Icon:** Graphic image used in the tree.
- ◆ **VAT:** VAT applied when the glass was purchased. If empty (default setting), the VAT associated to the Customer or that selected when entering the Order is used.
 - Double Click on Field
 - Sales Tables Menu
 - VAT
- ◆ **Goods Category:** Allows you to associate one of the goods categories that are available in the corresponding table.

-  Sales Menu
-  Price Lists
-  Goods Categories
-  Shortcut Key
-  Double Click on Field
-  **Product Types:** Type of product. This is used to indicate which data (materials or dimensions) the user must enter manually when entering the Product inside an Order. You can select a type of product among those available in the corresponding table.
-  Settings Menu
-  Product Types
-  Shortcut Key
-  Double Click on Field

Defining the Product composition

Once the BOM header has been entered, you must define the BOM/cycle itself.

In this stage you specify the exact composition of the product and the corresponding work cycle to be performed. To do this, you adopt the same method used for creating the Product, and namely:

-  Toolbar
-  "New Row"
-  [Right Click]
-  "New Product" (Same Level)

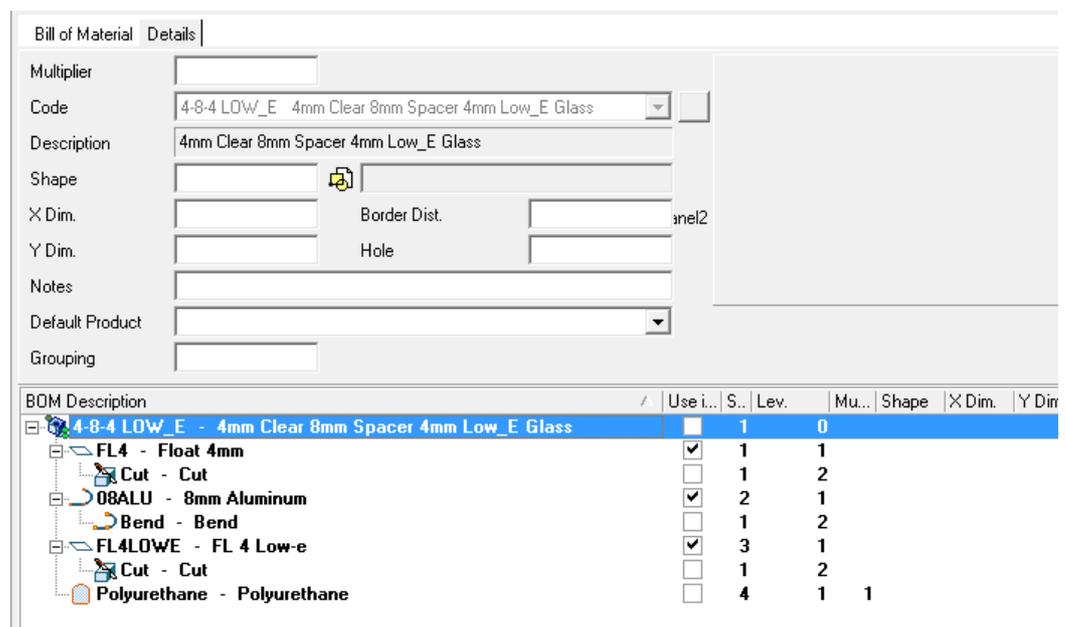
This button allows you to create a new tree branch at the same level of the branch you are on when pressing the button.

Example:  VETRO - Gruppo VETRO
 LISTELLI - Gruppo LISTELLI

-  Toolbar
-  "New Row Child"
-  [Right Click]
-  "New Product" (Next Level)

This button allows you to create a new tree branch at a lower level than the initial one.

Example:  VETRO - Gruppo VETRO
 Taglio - Taglio



After selecting one of these modes (depending on the structure to be produced), open the combo box pertaining to the code. A menu appears that allows you to choose a group or code of materials or Work Types to be inserted in the BOM.

If you choose a specific code (at the last level of the Materials, Products, Accessories or Work Types tree) when entering an Order you will neither be able nor need to select a different material/work type. This method is normally used to code company's standard products (such as standard IG units or complete products, for example, shower enclosures or doors).

Instead, if you choose a group code, you will be able and need to select a specific code when entering an Order. This is useful to define generic products, such as IG units.

NOTE: In the example in the previous figure three materials have been entered (the user can select them when entering an Order). The first and the last material are glass items, whereas the second is a spacer bar. On the second glass item a Work Type of the Tempering type will be carried out. When this product is entered in one order row, you'll be able to select glass within all materials coded under the leaf GLASS of the material tree-structure. It's possible to change BOM so that only a well defined kind of glass will be selectable during order entry (e.g. clear float instead than low-e); it all depends on the tree-structure of materials.

Once the desired code has been selected, the user is asked whether he wishes or not to keep the BOM associated to the code (for instance, glass items are, by default, linked to a cutting operation and spacer bars to a bending operation).

If the user replies Yes, the system will automatically create also the branches underneath of the BOM linked to the code.

NOTE: This procedure must be repeated for all the levels that compose the product, both in terms of materials and relevant Work Types (without restrictions on the subsequent branches).

BOM Branch Parameters

Once the BOM branch has been entered, you can fill-in the details of the Bill of Materials.

- ◆ **Multiplier:** Number of times the same Work Type must be applied.
- ◆ **Code:** Code of the Product to be used (as described above).
- ◆ **Description:** Description of the selected product.
- ◆ **shape:** Indicates a specific shape to be used.
- ◆ **X / Y Dimensions:** Indicates the X and Y dimensions to be used.
- ◆ **Border Distance:** Distance between the Spacer Bar and the edge of the glass.
- ◆ **Hole:** Type of hole (to be used on the Spacer Bar).
- ◆ **Notes:** Fixed note to be used.
- ◆ **Default Product:** Default code used for the Main Data archive. When entering an Order, you can change from this code to any of the codes available in the branch selected in the Code field.
- ◆ **Grouping:** This field is used to group products of the same kind at a later stage after the order entry.

Product Description

To define the name of the finished product you can use special functions that allow you to dynamically enter the materials and Work Types that compose it. To do so, you must use the "Use in Description" option available in the Product Details grid.



[Right Click]

Use in description

You can now define which items of the tree will compose the description of the product.

NOTE: In the example, the user decided to compose the code using the First Glass Item, the Spacer Bar, the Second Glass Item and the Tempering operation.

If the codes "FL4-LE", "D12", "FL6" are selected when entering the Order, the code will be created as follows:

"FL4-LE / D12 / FL6+TEMP".

Shape Master Data Archive



In Enterprise, the Shape Master Data Archive is used to link to every shape in the system - or imported from other systems - one or more specific categories in order to value the various characteristics that identify it.

These categories, however, may have repercussions on the production management system, because they may contain technological information.

Introduction

Shape Master Data Archives can include parametric as well as "normal" drawings (created by a CAD or another type of program).

Due to their nature, parametric shapes allow you to create a virtually endless number of similar shapes.

Naturally, this makes coding much simpler and faster. You will not need to code 20 circles of different size, but you simply insert the corresponding parametric shape (or shapes) and all circles created are automatically recognized.

When shapes are imported from other systems, instead, you will need to code each shape and select its characteristics individually.

It should be recalled at this point that the Shape Master Data Archive management is for commercial purposes only and is used to obtain the right price for every item you will cut and then sell.

With this in mind, it is recommended that you first code parametric and standard shapes (frequently used drawings with fixed dimensions, if any).

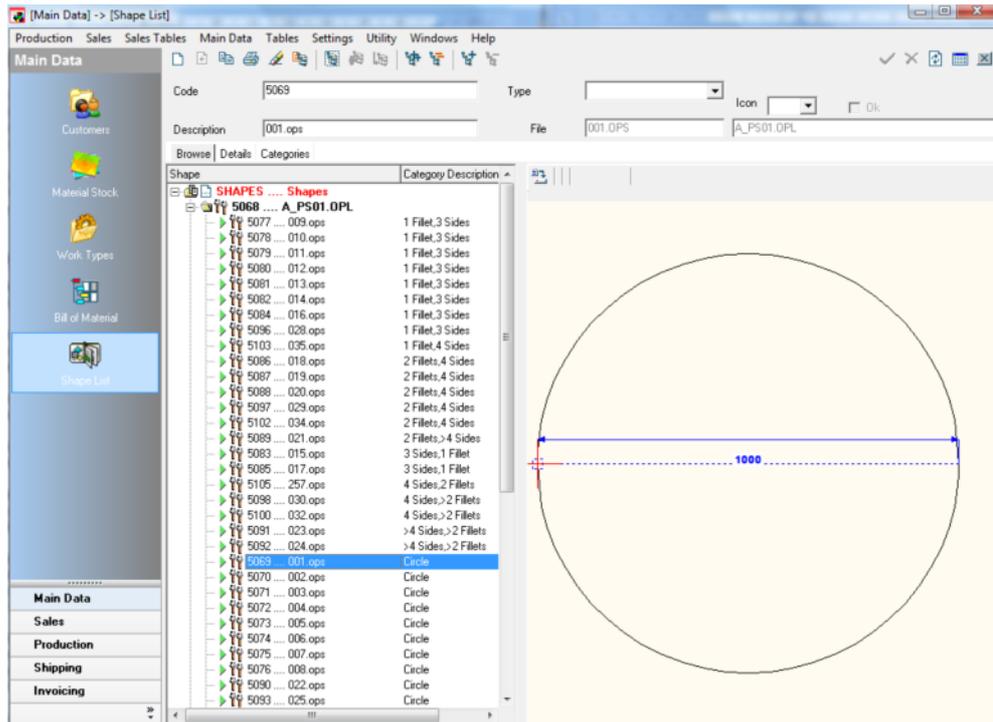
For non-frequently used shapes, it is the user who decides each time whether to code them as Master Data, because they are constantly reused, or to modify the final price manually.

It is obvious that coding as Master Data a shape that is used only once is absolutely unnecessary, because you can obtain the same price results by using general surcharges (or discounts).

Managing shapes as Master Data is practical when a (parametric or imported) file must be repeatedly used. Depending on the selected type of shape, surcharges will be added automatically.

Window Structure

The Shape Master Data entry and management window has a tree-structured table layout.



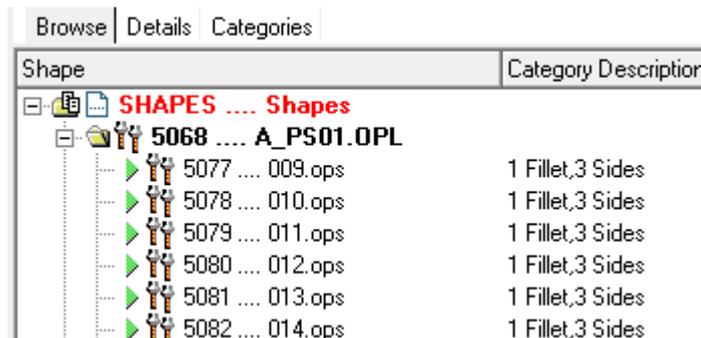
Data is subdivided in tables for a better display and identification.

The following tables are present:

- ◆ **List:** Tree-structured display of master data, shape and shape parameter preview.
- ◆ **Details:** Shape identification data.
- ◆ **Categories:** View of the master data depending on the categories entered.

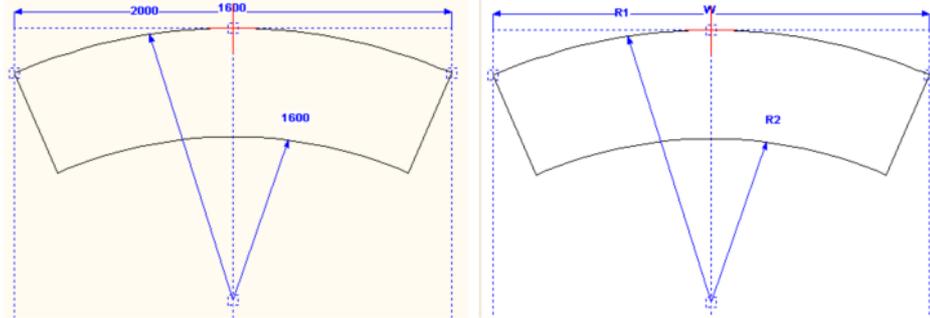
List

The left part of the window displays the complete list of shape master data archives entered, arranged in a tree from.



Here you can scroll master data archives and see the shape and its dimensions or parameters, if the shape comes from a parametric library, in the right part of the window.

NOTE: To switch from parameter mode to dimension mode, simply click on the shape preview area.



In case of a normal drawing, instead, the profile is displayed without dimensions or parameters.

Editing Shape Master Data

When Enterprise is run for the first time, the coding system may be completely empty. It is the user, if he/she wishes so, who must code the proper shapes to meet the company's production needs.

There are two ways of entering Master Data:

- ◆ **Dynamic Creation from Parametric Library:** Allows you to insert all the parametric shapes available in the system and to code them automatically. Then, you can assign shapes to the various categories.
- ◆ **Manual Code Creation:** Allows you to manually enter all the shapes that you wish to make parametric or import from other systems.

To access these features, press the "Expand"  button. This will open the toolbar with the commands to link shapes.

Dynamic Creation from Parametric Library

Enterprise offers the user a variety of modules, among which is a parametric drawing system called Geo-Way (refer to the corresponding guide for additional details), which includes over 400 pre-defined parametric shapes.

Creating and assigning the parametric shapes available in the system is fully automatic and is possible via the corresponding feature:



The system will create as many shape master data records as the number of files available in the parametric shape directory, including sub-directories, if any, and automatically number the codes created.

NOTE: The user, however, can modify the created code or description.

Group Creation and Management

Before creating a new Shape Master Archive, it is recommended that you first create a series of Groups to better subdivide the various types of shape.

To do so, two commands are available:



This button allows you to create a new group-type "branch" at the same level of the one you selected.

 Toolbar	 "New Group" (Lower Level)
 Right Button	

This button allows you to create a new group-type "branch" at a lower level than the one you selected.

Alternatively, you can copy an existing group.

 Toolbar	
 Right Button	 "Duplicate"

Code Creation and Management

At this point, you can create a new code. To do so, use the New Shape command.

 Right Button	 "New Shape"
--	---

Alternatively, you can copy an existing code.

 Toolbar	
 Right Button	 "Duplicate"

After that, the Enterprise system creates an automatic code (a number that is written in the code and description fields).
You must fill in the following fields:

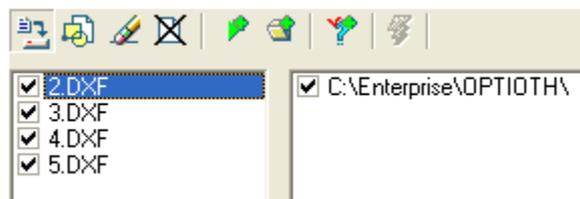
- ◆ **Code:** Alphanumeric code identifying the shape.
- ◆ **Description:** A description for the shape.
- ◆ **Type:** Type of material associated with the shape.
- ◆ **Icon:** Graphic image used in the tree.

NOTE: At this stage, Enterprise creates a code only, not a real specification.

Selecting and assigning a drawing

Now you have a code and a description of a shape, but not the link to the real drawing file.

The "Select Files"  icon allows you to open the standard Windows screen where you can select the specific file to which you wish to link the shape code. The bottom part of the window will be populated with the names of the selected files (on the left) and the folders they are in (on the right).



Select the "Change Shape"  button and the system will link the selected file to the source shape code after you confirm the operation.

Quick Selection and Creation

You can also create a code from a shape automatically.

To do so, simply select the file using the "Select Files"  feature described above and insert the shape with the "Add Shape"  button. A code will be created with a shape already associated with it.

To create a group that contains a series of shapes (available in the same source folder), you can load various files and create the group using the “Add Folder”  button.

Managing the File List

Now, it can be useful to manage the data available in the file list you wish to load. To do so, you can use the following commands:

 **Toolbar**  **Delete Shape**
 Deletes the selected file (highlighted in blue).

 **Toolbar** 
 Deletes all files available in the table.

Details

This tab presents data differently to include, beside the tree and the shape preview, an inspector that displays all the information available for the selected master record.

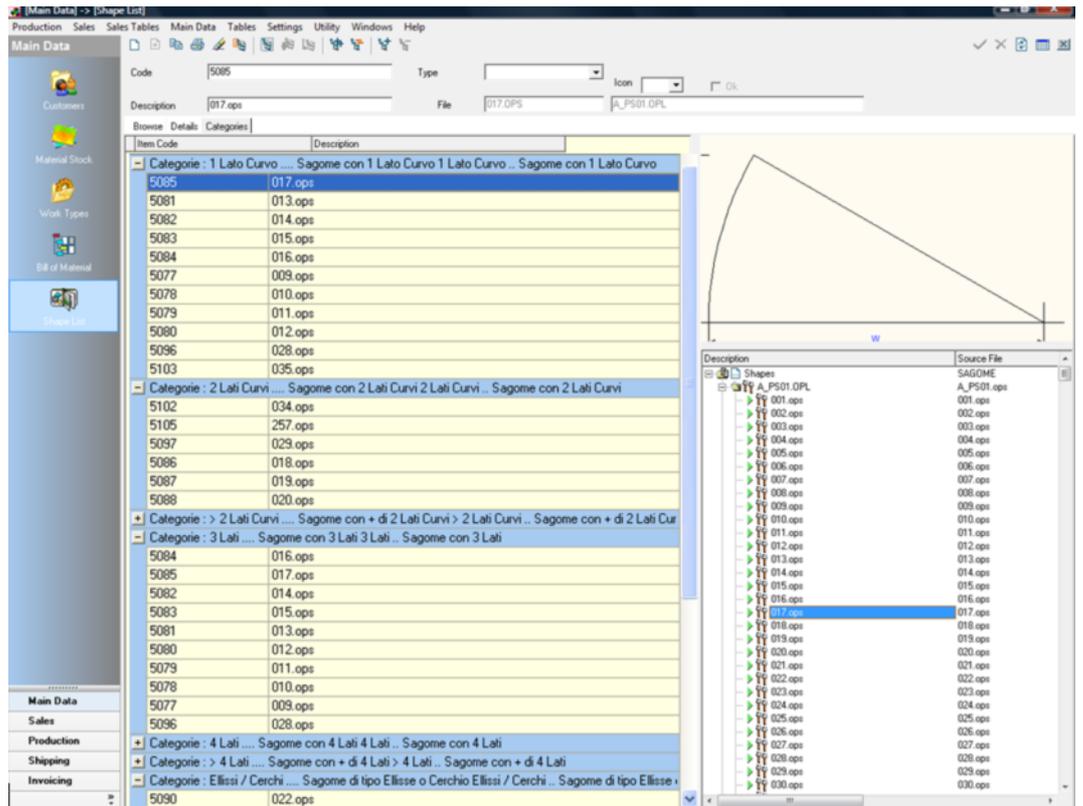
Browse Details Categories	
Shape	5068 A_PS01.OPL
Category Description	
Notes	
ID	2
Source File	A_PS01.ops
Path	A_PS01.OPS
Kind	STANDARD
Type	STANDARD
Parameters No.	2
Blocks No.	0

Categories

Allows you to display Shapes subdivided into (previously created) Categories. This window is the heart of the Shape Master Record, because it is used to assign to each Shape a price calculated on the basis of the shape characteristics.

Therefore, you need to closely consider the parameters according to which the price of an item must change for your company so that you can create the Categories that better meet your requirements and assign them to shapes in one go.

Please note, in fact, that if you later add a Category, you will need to scroll through the entire list of shapes and add each shape that corresponds to that characteristic to the new Category.



You can assign a data item to a Category through the corresponding function in the List table.



A window will open in which you can select the Categories to which the data item belongs.

5 - Order Management

Introduction

This Chapter describes the Order entry.

Because the Order types the program can manage (Offers, Sales Orders and Production Orders) are very similar, the most comprehensive type, i.e. Sales Order, will be dealt with.

If you do not have Enterprise's Sales module, please ignore the sections regarding Order pricing, work tickets/shipping documents and invoicing.

Order management offers various features depending on the type of program and modules you have acquired.

If you have Enterprise's Sales module and you decide to manage the entire commercial section, i.e. price calculation and related documents (Work Tickets/Shipping Documents and Invoices) with it, you will need to enter Orders as Sales Orders.

On the contrary, you will need to use Production Orders.

The two Order types are the same except for the fact that Sales Orders have more tables to calculate prices.

In this way, the two features are more uniform and thus easier to use.

Please note that even if you have Enterprise's Sales module it is recommended that you know a lot about Production Orders, since these will be automatically created when working Sales Orders and also because, in some special cases, you may need to enter pieces into Production only (e.g. for re-processing caused by glass breakage).

Enterprise allows you to create documents at different stages: depending on your requirements, you may start with a quotation, a sales order or directly a production order. If you create a quotation, the document will have to pass through all the intermediate stages before becoming a production order. A quotation may also remain as such without being passed on. In this case, it can be consulted from the Offers menu only.

Offers



In Enterprise, Offers structure and management are almost identical to those of the Sales Orders module. Please refer to the Sales Order section for a detailed description.

It should be noted that the main difference between the two types of order lies in the fact that an offer CANNOT be passed to Production without being previously converted into a sales order. This conversion can be made using the "Create Order from Quotation" feature from the Offers menu.

Sales Orders



The Sales Order management module is one of Enterprise's key elements. This module allows you to:

- ◆ Rapidly and schematically define any type of product relating to glass-processing.
- ◆ Manage all the technical data needed to recognize and process a specific product.
- ◆ Manage shapes.
- ◆ Automatically calculate the various workings and components of a glass product based on the associated BOM and work cycle.
- ◆ Automatically calculate prices based on the criteria set in Enterprise's Price List.
- ◆ Manually modify calculated prices, if needed.
- ◆ Release a product and check its production status.

As you can see, the Orders module offers a variety of complex features. It is thus recommended that the user pay the greatest attention when trained about this module and how it works.

Correctly setting the Orders module, as well as Price Lists, is fundamental to the proper functioning of the entire Enterprise system.

Production Orders

 Navigation Toolbar	Production 
 Production Menu	 Production Orders
 Shortcut Key	Alt+5

Enterprise has a specific module to manage and process production orders. This module allows you to:

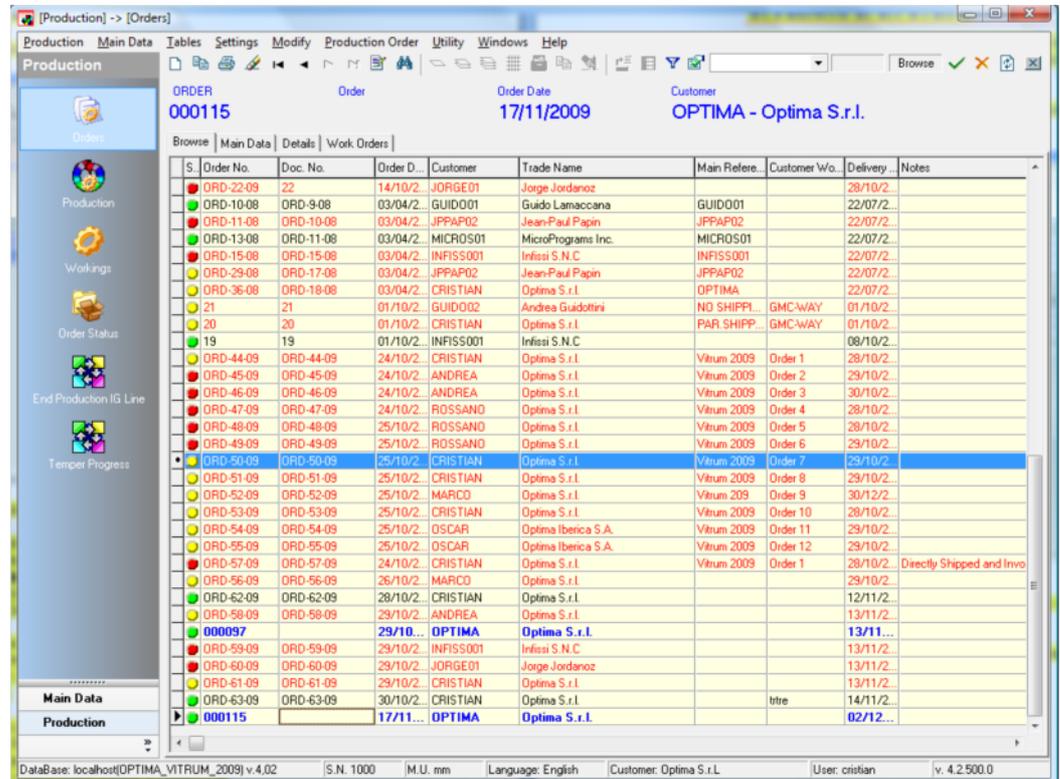
- ◆ Enter and manage all Orders, if you do not have Enterprise's Sales module.
- ◆ Create production orders that are totally unlinked to the sales system.
- ◆ Create orders for re-processing. These can be generated and controlled by Enterprise's re-processing system automatically (if active).
- ◆ Manage orders to restore stocks, i.e. orders that do not refer to any customer order.
- ◆ Follow the progress of the entire company's order portfolio.

The Production Order system structure is similar to the Sales Orders module structure.

N.B.: In the Production Order Module, all commercial data have been disabled.

The Main Window

The main window of the Orders module is the following:



It includes three main tabs with the following options:

- ◆ **List:** List of the existing Sales Orders that meet the currently activated selection filter.
- ◆ **Main Data:** Order-specific data including, for instance, customer, delivery date, destination or total amounts to be invoiced.
- ◆ **Details:** List of the pieces required by the customer with the selected order.

Browse Tab

The Browse tab is a read-only table; you cannot change data from that tab.

To enter an order completely, first you must create an order line, enter the Main Data and then fill in lines with the relevant technical and construction data, and finally set prices.

Depending on the filter you have applied, the list of the desired orders appears in the main window. The main data text color depends on the order status:

- **BLUE:** Refers to orders that are being entered (not confirmed).
- **BLACK:** Refers to orders that have been entered and confirmed.
- **RED:** Refers to orders that have already been released (inserted in a Batch).

Two special columns show the production status (indicated in general as "Status") and the shipping status respectively.

- ◆ **(Production) Status:** Indicates the production status for the order line.
 - Identifies an order *To Be Worked*. It is used when an order has been entered, but no part of it has been worked.
 - Identifies an order *Being Worked*. It is used when a part of the order has been worked (only glass items or only spacer bars have been worked or only a part of the order line has been worked).
 - Identifies an order that has been worked and *completed*.
- ◆ **Shipping Status:** Indicates the shipping and/or invoicing document status.
 - Identifies an order *To Be Shipped*. It is used when no order line has been entered into a transport document.
 - Identifies an order *Being Shipped*. It is used when a part of the order has been entered into a transport document.
 - Identifies an order that has been *Shipped*. It is used when all the order lines have been entered into a transport document.

Other available fields:

- ◆ **Pos.:** Indicates the number of lines that exist in the order.
- ◆ **Tot. Pieces:** Indicates the number of products that exist in the order (sum of ordered quantities by line).
- ◆ **Import File:** Indicates the name of the file from which the order was imported.
- ◆ **Last Transport Document No./Last Transport Document Date** Refer to the last transport document generated using lines from the selected order.
- ◆ **Last Invoice No./Last Invoice Date:** Refer to the last invoice generated using lines from the selected order.

The order line display grid has several fields, some of which are not mentioned in this brief introduction and refer to fields in the Main Data tab that will be described in the following section.

To enter an order completely, first you must create an order line, enter the Main Data and then fill in lines with the relevant technical and construction data, and finally set prices.

Creating an Order

The New Order  entry option can be managed and activated from within both the List window and an order header to speed up data entry.

Pressing the New button automatically opens the Main Data window:

Many fields will be empty, the only ones that are automatically filled are listed here:

- Document Type and Counter Type
- Order No
- Order Date
-

The cursor will be automatically positioned on the Customer field, i.e. the most important data item when entering an Order.

Two fields are mandatory:

- Customer Code
- Delivery Date

Then the user must fill in all the fields required for correctly defining the order.

Selecting a Customer Code

A customer can be selected in three ways.

- ◆ **Typing the Code:** When you start typing the code, the selection cursor moves to the records whose code matches the characters you typed (dynamic selection filter).

Code	Trade Name	Currency
01014	CARPENVETRO DI CHIARI G.& C. SNC	
ANDREA	Optima S.r.l.	
ARÈERS SIA	Aeèers SIA	
CRISTIAN	Optima S.r.l.	Euro
DALFIU002	Giovanni Dal Fiume	Euro
DHL	DHL	
DOOR003	Doors Associated LTDA	New Zealand [
GUIDO01	Guido Lamaccana	Euro

- ◆ **Opening the Customer Master Data Table:** Double click on the customer code field to open the customer master data table.
- ◆ **Selecting a Customer by Field:** Use the shortcut keys *SHIFT+Click* to open a new table. Here you can sort data by any of the columns available in the customer master data archive. You can also locate the customer master data archive by typing the content of the selected column. If you position the cursor on the Trade Name column, you can search for the customer by typing the name you stored in that column. The selection cursor will move to the record whose data item matches the characters you typed (dynamic selection filter).

Custome	Code	Trade Name
23	01014	CARPENVETRO DI CHIARI G & C. SNC
18	ANDREA	Optima S.r.l.
26	ARÈERS SIA	Aeèers SIA
2	CRISTIAN	Optima S.r.l.
8	DALFIU002	Giovanni Dal Fiume
24	DHL	DHL
6	DOOR003	Doors Associated LTDA
14	GUIDO01	Guido Lamaccana
9	GUIDO02	Andrea Guidottini
4	INFISS001	Infissi S.N.C
16	JORGE01	Jorge Jordanoz
12	JPPAPO2	Jean-Paul Papin
13	MANTO003	Toncelli & Menderelli S.P.A.
19	MARCO	Optima S.r.l.
15	MICROS01	MicroPrograms Inc.
10	MINCA01	Roberto Mincallo
1	OPTIMA	Optima S.r.l.

Once the customer has been selected, the corresponding data from the master data archive are inserted into the relevant fields of the Main Data menu.

Selecting a Delivery Date

The delivery date must be chosen manually from the corresponding field.

You can configure Enterprise so that a delivery date is automatically assigned when an order is created. If activated, this option will assign a delivery date as a predefined number of days after the order date.

Contact Optima's technical support department for additional information about this option.

Main Data

Main Data is the following:

- ◆ **Document Type:** It is mandatory and cannot be modified. Indicates the type of Order you are entering.
- ◆ **Customer:** Code of the customer to which the order refers. It can be selected among those that have already been entered into the corresponding Main Data archive.



Once you have set the desired customer code, some on-screen fields will be filled in with the data from the customer Main Data archive. Then, you will be able to modify any fields except those pertaining to the Customer's headquarters.

- ◆ **Counter Type:** Allows you to select the type of counter to be used to assign the order a final number.
- ◆ **Destination:** Allows you to define a special destination, when it differs from the customer's headquarters. You can select a destination among those previously assigned to that specific customer or enter a new destination directly into the existing text fields.



- ◆ **Order Number:** When an order is created, an internal progressive number is assigned to it. If this value is not modified by the user, the previously set counter type will be used when the order is confirmed. If the value is modified by the user, the modified value will be stored.
- ◆ **Document Number:** Number of the Order confirmed with the counter. If the Order Number has not been modified manually, Order Number and Document Number will be the same.
- ◆ **Customer's Reference:** Is a Reference used by the End Customer to identify the Order. It is expressly indicated by the Customer as a reference.
- ◆ **Customer's Order:** Is the Original Number of the Order sent by the customer. It is expressly indicated by the Customer as a reference.
- ◆ **Internal Reference:** In-house reference. It can be, for instance, an internal contact person in charge of handling the specific Order.
- ◆ **Agent's reference:** Name of the agent or salesman who made the sale. By default, the program uses the agent's reference code entered into the corresponding Customer Main Data archive.

- ◆ **Document Reference:** If the Order comes from an Offer that had previously been entered from the corresponding menu, it indicates the Number of the Offer that generated the Order.
- ◆ **Reference Document No.:** Document Number of the Offer that generated the Order.
- ◆ **Order Date:** Date on which the Order was entered. The program automatically enters the system date, but it allows the user to change it.
- ◆ **Delivery Date:** Date on which the delivery of the (entire) Order is scheduled. This field is mandatory, thus a Delivery Date must be entered. Through configuration, a certain number of days can be automatically added to the Order Entry Date.
- ◆ **Scheduled Production Start Date:** Date on which the production of the products requested in the Order is scheduled to be started. If the field is empty, the program automatically assigns a date when one of the existing items is inserted in a batch.
- ◆ **Scheduled Production End Date:** Date on which the production of the products requested in the Order is scheduled to be ended. If the field is empty, the program automatically assigns a date when the last one of the existing items, inserted in a batch, is completed.
- ◆ **Confirmed Document:** Confirms/Re-opens the Order. An Order is a "Draft" when it is not confirmed. An Unconfirmed Order cannot be inserted in a batch and can be modified as required. On the contrary, a Confirmed Order can be inserted in a Batch, but it cannot be modified in all its parts, because the program automatically blocks some features or disables some modification options.
- ◆ **Contract:** If valid Contracts have been assigned to the specified Customer, you can select one from the combo box. In this case the Order will refer to it and search for prices inside contract as primary choice.

Numerous Inspectors are also available to display and, in some cases, modify the data pertaining to transport and prices.

NOTE: For Production Orders, these Inspectors will not be available.

Inspector on the Right

Shows the data pertaining to price, discounts and forms of payment. For offers and sales orders, the following data items are mandatory:

- Price List
- Payment Description
- Currency
- VAT

When an order is created, the program inserts in these fields the data you specified in the customer master data archive. The search is sequential and hierarchical: first, the program searches for and inserts the conditions and settings defined in the master data pertaining to the customer the document refers to. Then, for the fields for which there are no details in the master data archive of the specific customer, the program inserts the conditions and settings defined in the company master data archive.

◆ **Price List:** Price List to be used when a price is searched for. It can be selected among those previously coded from the Price Lists menu.

 [Commercial menu](#)  [Price Lists](#) ▶  [Price Lists](#)

◆ **Payment Description:** Type of payment applied to the Order. It can be selected among those previously coded in the Payments Table.

 [Commercial Tables Menu](#)  [Payments](#)

◆ **Payment Discount:** Discount percentage applied to the Order depending on the form of payment chosen.

◆ **Currency:** Currency used for payment.

 [Commercial Tables Menu](#)  [Currencies](#)

◆ **VAT:** Type of VAT applied to the Order. It can be selected among those previously coded in the Payments Table. The set value will then be applied, by default, to all items that are entered afterwards.

 [Commercial Tables Menu](#)  [VAT](#)

◆ **VAT Suspension:** Allows you to cancel VAT application.

◆ **Discounts:** Allows you to specify 4 cascading discount levels on the Order header. If you set 10% as a primary discount and 5% as a secondary discount, this does not mean that the discount is 15%, because the primary discount is applied first, and then the secondary discount is applied on the already discounted amount.

Shipping Data Inspector

Shows the data that can be modified, pertaining to goods Transport and shipping.

◆ **Reason for Transport:** Allows you to select one of the options you previously coded in the "Reasons for Transport" table.

 [Commercial Tables Menu](#)  [Transport of Goods](#) ▶  [Reasons for Transport](#)

◆ **Carriage:** Allows you to select one of the options you previously coded in the "Forms of Transport" table.

 [Commercial Tables Menu](#)  [Transport of Goods](#) ▶  [Forms of Transport](#)

- ◆ **Appearance of Goods:** Allows you to select one of the options you previously coded in the "Appearance of Goods" table.

 [Commercial Tables Menu](#)  [Transport of Goods](#) ▶  [Appearance of Goods](#)

- ◆ **Transport by:** The name of the goods carrier is indicated here. You can choose among Sender (if transport is effected by your company), Receiver (if goods are collected by the customer directly) and Carrier (if goods are transported by an external company).

- ◆ **Carrier:** It can be activated only if "Transport by" is set to "Carrier". Allows you to select one of the options you previously coded in the "Carrier Master Data" table.

 [Commercial Tables Menu](#)  [Transport of Goods](#) ▶  [Carrier Master Data](#)

- ◆ **Transport Costs:** VAT value and type for transport costs.
- ◆ **Packaging Costs:** VAT value and type for packaging costs.
- ◆ **Payment Collection Costs:** VAT value and type for payment collection costs.

Totals Inspector

Read-only Inspector that shows the totals (unchangeable) pertaining to the amount of the entire order and relevant taxes.

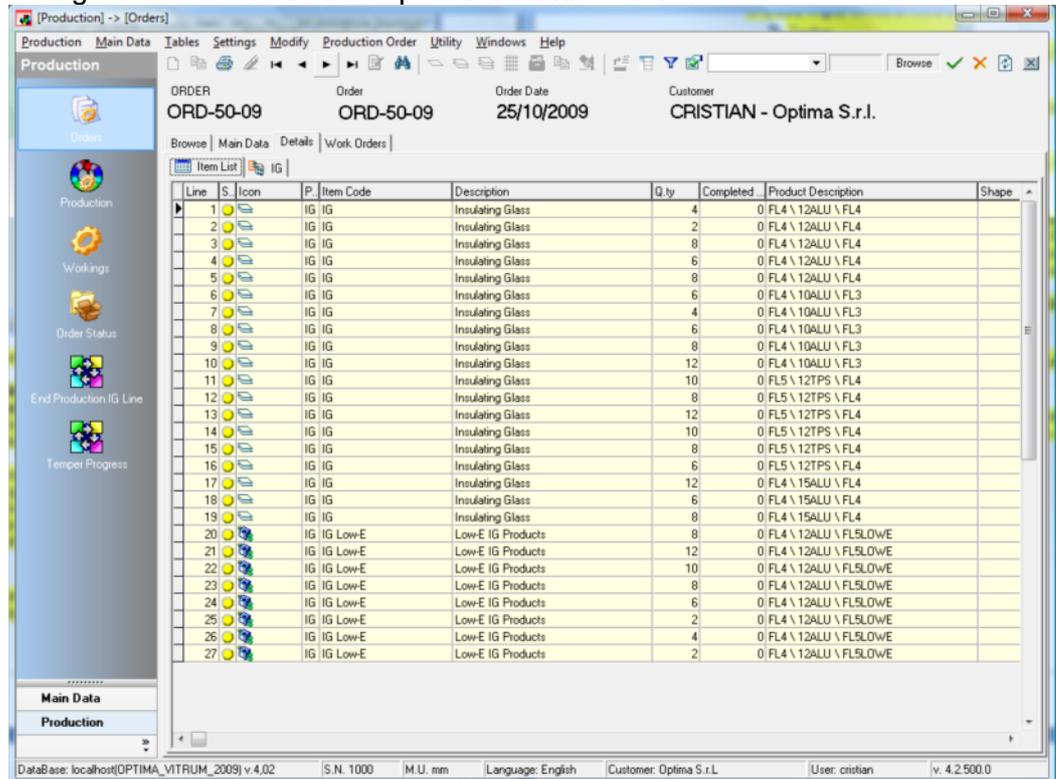
- ◆ **Total Line Value:** Gross total amount for the document.
- ◆ **Line Discount:** Discount applied to each Order line.
- ◆ **Header Discount:** Discount applied to the total amount of the Order.
- ◆ **Total Discount:** Total discount applied.
- ◆ **Total Taxes:** Taxes applied to the Order.
- ◆ **Total VAT on Taxes:** Total increase due to the VAT applied to taxes.
- ◆ **Total Costs:** Total amount of costs.
- ◆ **Total VAT on Costs:** Total increase due to the VAT applied to costs.
- ◆ **Total Discounted Tax Value:** Total value of discounted goods. It does not include costs and taxes.
- ◆ **Total VAT:** Total VAT to be added due to the cost of goods.
- ◆ **Total Value:** Total amount VAT excluded.
- ◆ **Total VAT Amounts:** Total amounts of the VAT to be added. It includes the VAT applied to goods, to taxes and to costs.
- ◆ **Total Document Value:** Total amount to be paid by the customer.

NOTE: Totals Inspector data is calculated and refreshed only after saving  or refreshing .

Details:

Once the order header has been entered, the user can proceed to entering the ordered goods after selecting the corresponding tab.

This gives access to a further product definition level.



Here you find three additional tabs:

- ◆ **Order Lines:** List of the lines that exist in the Order.
- ◆ **Product Type:** Technical structure of the product, including the BOM and the work cycle the product will undergo.
- ◆ **Prices:** Fix product price.

From now, all the options to enter the different product types Enterprise can manage are available.

Before the description on how order line details are managed, a description of the basic types Enterprise can currently handle is provided.

Product Types

As already illustrated in the BOM section, Enterprise allows you to manage different Product types, each having its own technical characteristics. Some of these are standard products for a glass processor and can be entered very quickly.

- ◆ **Single Glazing Unit:** Single glass pane with or without additional Work Types.



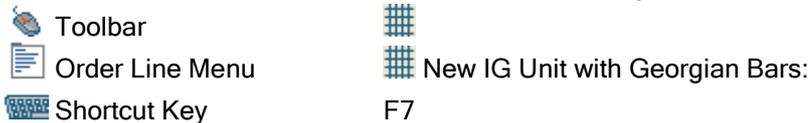
- ◆ **IG Unit:** Insulating glass consisting of two glass panes hold apart by a spacer bar, with or without additional Work Types.



- ◆ **Triple Glazing Unit:** Similar to the double glazing unit, but it consists of three glass panes hold apart by two spacer bars.

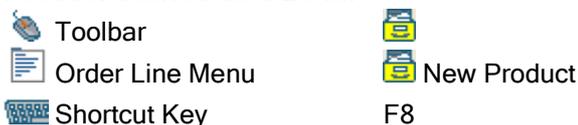


- ◆ **IG Unit with Georgian Bars:** Similar to the normal insulating glass, but it includes some decorative bars between the two glass panes.



Other product types can be customized to be adapted to your needs and the Work Types you perform in your company. First you need to define these Products as new BOMs, and then you will be able to enter them via General Product.

- ◆ **General Product:** Allows you to enter any (standard and non-standard) Product defined as a BOM.



Depending on the product type you selected, the second tab, which refers to the product technical structure, will be different according to the product requirements.

Data Entry Notes

Based on the work mode the user will adopt and how the user will build its product list, data entry may considerably vary.

The Tempered Glass product, for instance, can be entered in the following ways:

- ◆ Single Glazing Unit product to which a Tempering operation is added each time.
- ◆ Tempered Glass product coded in the BOM.
- ◆ Single Glazing Unit product, selecting as the material a Tempered Glass coded within the Stock. In this case, the Tempering operation will not be handled in any way.

Each mode has pros and cons and the user will have to consider them when initially entering and configuring the Product. Obviously, depending on the user's needs and how the user will work, Stock and BOM data entry will considerably vary.

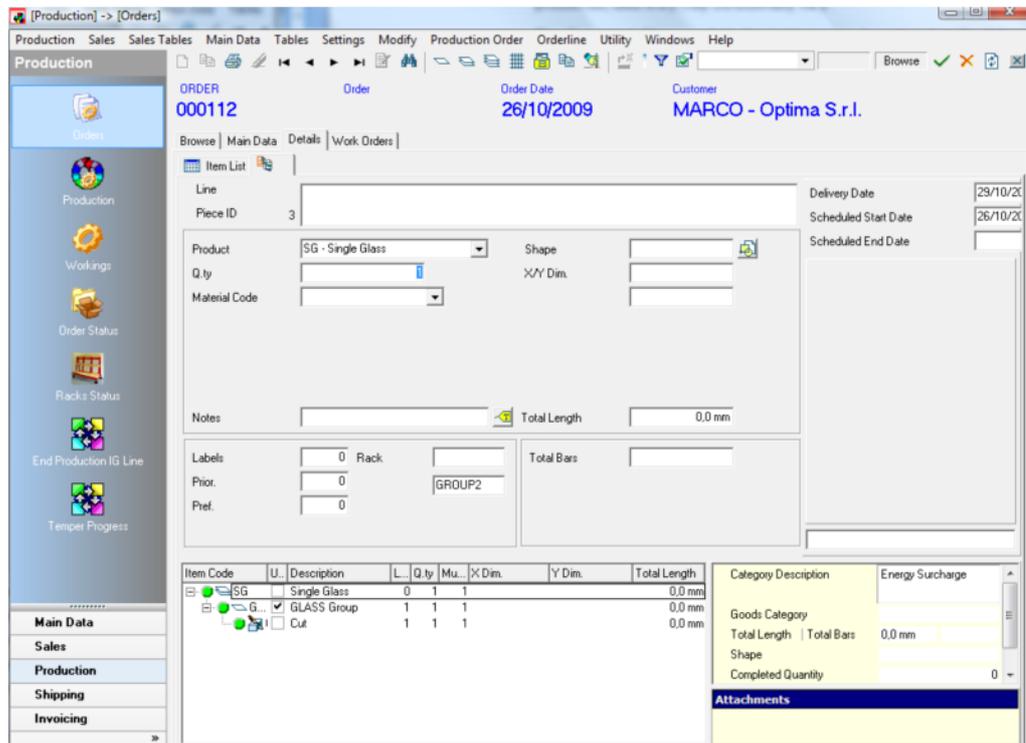
For all standard products, following data are mandatory:

- Quantity
- Material(s)
- X and Y Dimensions

Entering a Single Glazing Unit

In general, the Single Glazing Unit is certainly the simplest basic Product. It contains a reduced amount of information.

When creating a New Single Glazing Unit, the window shown below opens:



Here you need to fill in the following fields:

- ◆ **Product Description:** Free text field to describe the product you are entering.

NOTE: The product description is automatically "assembled" by the system based on what was set in the Product BOM. This description can be edited by the user as required, both by typing directly in the field and by using the flags of the BOM in the bottom part of the line data entry window.

- ◆ **Product:** Code and description of the product you are entering.
- ◆ **Q.ty:** The number of pieces to be cut to the same size using the same material.
- ◆ **± (Exceed):** Is the max. percentage deviation allowed with respect to the number of pieces you entered for the optimization. This deviation defines a range the optimizer can freely manage in order to achieve more linear optimizations with a low waste percentage.
- ◆ **Material Code:** Code of the glass item.
- ◆ **Shape:** Refers to the code of the shape you previously created with the drawing program CAD-WAY or GEO-WAY. When you insert a shape, the dimensions of the relevant bounding box are automatically displayed in the X and Y dimension field. Max. 8 alphanumeric characters are accepted.
- ◆ **X Dimension:** Refer to the X dimensions of the piece (not requested in case of shape entry) and the relevant unit of measurement
- ◆ **Y Dimension:** Refer to the Y dimensions of the piece (not requested in case of shape entry) and the relevant unit of measurement.
- ◆ **Grind.:** Is a value to be summed up to the X and Y dimensions of the piece. It is useful to define the actual dimensions of the piece to be cut and finished piece. The piece size is thus increased, but its correct dimensions are printed on labels.

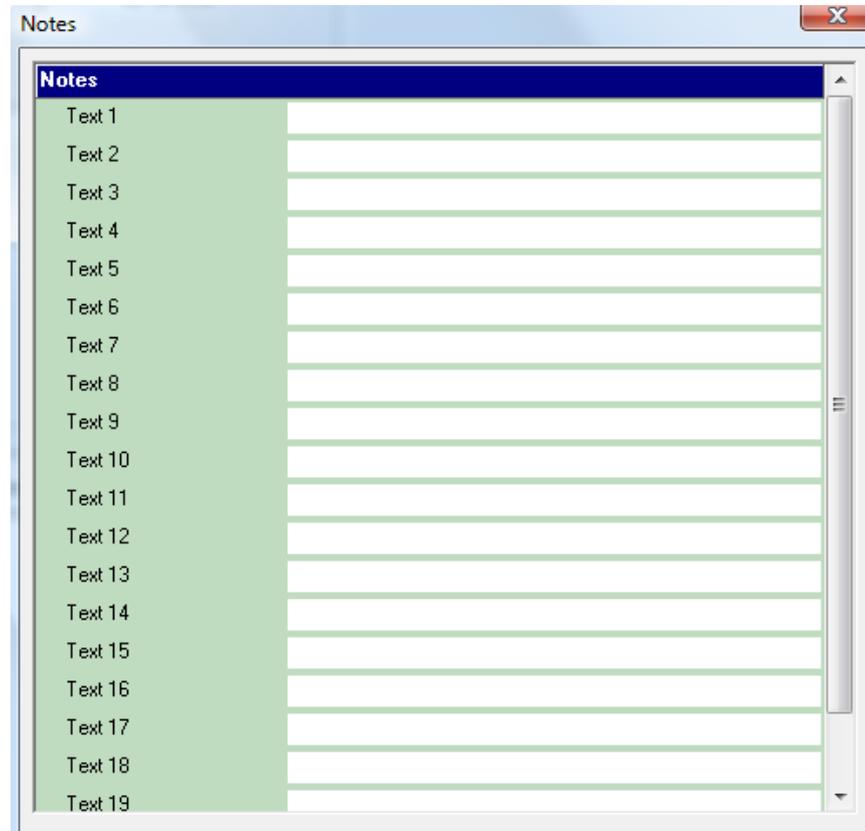
In case of rectangular pieces (i.e. without shapes), 4 fields will be available to enter the single grinding values for the 4 sides.



The grinding value is automatically applied, if required, based on the Work Type you set and the glass thickness. For information on how to use this feature please refer to the work type setup.

- ◆ **X1 Grinding:** The grinding value for the X1 side (lower side) when grinding is performed on four sides.
- ◆ **Y1 Grinding:** The grinding value for the Y1 side (left side) when grinding is performed on four sides.
- ◆ **X2 Grinding:** The grinding value for the X2 side (upper side) when grinding is performed on four sides.
- ◆ **Y2 Grinding:** The grinding value for the Y2 side (right side) when grinding is performed on four sides.
- ◆ **Note:** Is an additional description for each work order line. It can be printed, for instance, on self-adhesive labels to be applied onto cut pieces. Any type of description can be entered with a max. of 32 alphanumeric characters.

- ◆ **Notes 1-20:** 20 fields for extra notes with a max. of 32 characters each. You can access them by using the  button next to the main Notes field.



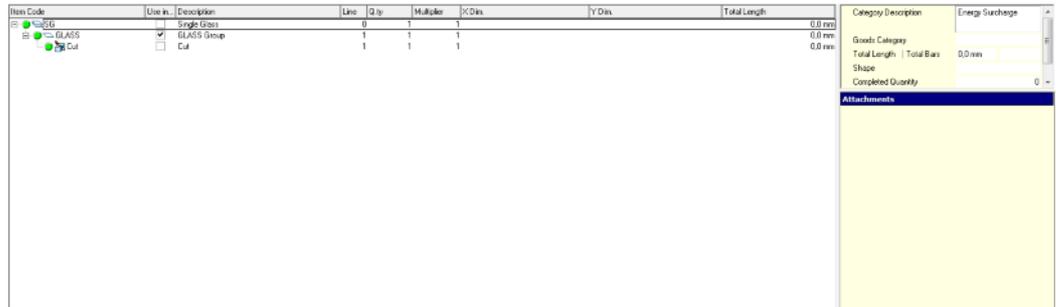
- ◆ **Total Length:** Calculated value for the piece perimeter. If you've selected a row related to a working with grinding checkboxes activated, the total length field shows the sum of sides on which working is applied.
- ◆ **Labels:** The number of labels to be printed for each position entered. Such a number may be different from the number of pieces entered.
- ◆ **Priority:** Is the priority of use given to a position with respect to the others. Pieces with a higher priority value are always inserted into the first sheets. The max. value is 99. Priority leads to a worse result as for waste.
- ◆ **Preference:** Is similar to the priority function. The main difference lies in the fact that Preference does not exclude the other functions, i.e. the selected piece is inserted (into the first cutting plan) as many times as the value you entered into this field.
- ◆ **Rotation:** Refers to the orientation of pieces inside a cutting plan. All pieces are oriented according to the same principle. This function is to be used only when cutting a material that has a pattern or veins, as all pieces are arranged following the same direction. Rotation leads to a worse result as for waste.
- ◆ **Delivery Date:** Scheduled delivery date of the piece to be cut.

In the Right part of the screen you can modify:

- ◆ **Delivery Date**
- ◆ **Scheduled Production Start Date**
- ◆ **Scheduled Production End Date**

Values displayed by default are the values you set in the corresponding fields of the Order header.

In the bottom right part of the screen, the Inspector shows summary data pertaining to the Order line and the selected BOM level.



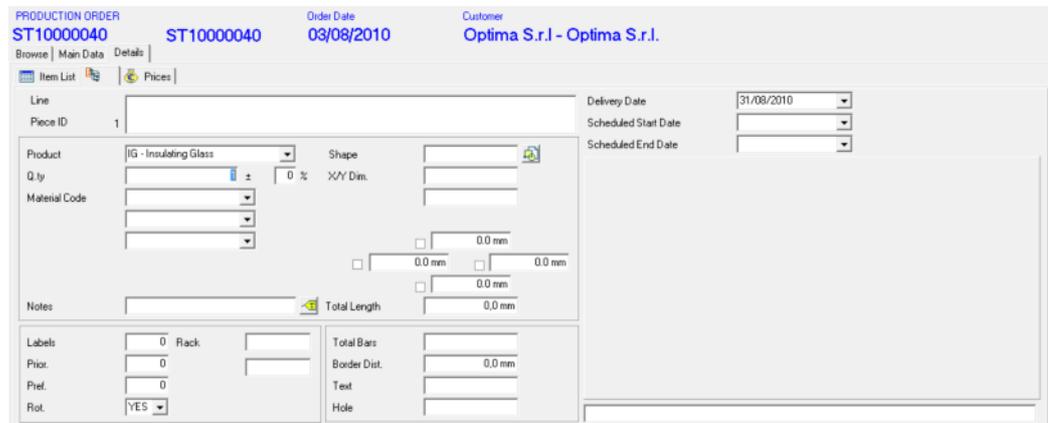
- ◆ **Goods Category:** Displays the goods category set for the BOM in use.
- ◆ **Category Description:** Displays the list of the Categories assigned to the various Main Data items used in the current Order line.
- ◆ **Ready Q.ty:** Displays the quantity of goods completed and ready for shipping.
- ◆ **Shape:** In case you entered a shape, it indicates its code.
- ◆ **Total Length:** Indicates the Length of the specific Work Type.
- ◆ **Total Bar Length:** Indicates the total length of Georgian Bars.
- ◆ **Notes:** Displays the Note description field.
- ◆ **Area:** Indicates the surface area of the piece.
- ◆ **Weight:** Indicates the weight of the piece.

In the bottom right corner is available a box that allows you to manage single row attachments. Please refer to the attachments section of the manual for further information over this feature.

Entering a Double Glazing Unit

A standard Double Glazing or IG Unit is a product composed of two glass panes with a spacer bar in between.

When creating a New Double Glazing Unit, the window shown below opens:



Here you need to fill in the following further specific fields:

- ◆ **Second Material:** Spacer bar in the insulating glass unit.
- ◆ **Third Material:** Second glass pane of the insulating glass unit.

- ◆ **Spacer to Glass Dist.:** In case the automatic spacer bar Bending Machine management feature is available, it is the distance between the edge of the glass and the edge of the spacer bar. For each order line you can reduce the size of the spacer bar for the sealing stage.
- ◆ **Text:** Is the code of the text to be printed on the spacer bar. Some spacer bar bending machines in fact, have a table with numbered positions. Each position corresponds to a fixed text that can be printed. If you enter 1, for example, this code is automatically recognized and the corresponding text string (e.g. the name of the company) is printed.
- ◆ **Hole:** Activates the spacer bar drilling management function in the automatic bending systems that support such a function.

Entering a Triple Glazing Unit

A standard Triple Glazing or IG Unit is a product composed of three glass panes hold apart by two spacer bars.

When creating a New Triple Glazing Unit, the window shown below opens:

The screenshot shows a software window titled "PRODUCTION ORDER" for order ST10000040, dated 03/08/2010, for customer Optima S.r.l. - Optima S.r.l. The window is divided into several sections:

- Header:** Displays the order ID (ST10000040), date (03/08/2010), and customer name (Optima S.r.l. - Optima S.r.l.).
- Navigation:** Includes buttons for "Item List" and "Prices".
- Main Data Section:**
 - Line:** Piece ID 1.
 - Product:** IGT - Triple Insulating Glass.
 - Q.ty:** Quantity field with a unit dropdown.
 - Material Code:** Multiple dropdown menus.
 - Dimensions:** Fields for "0.0 mm" and "0.0 mm" with checkboxes.
 - Total Length:** 0.0 mm.
- Options Section:**
 - Labels:** 0 Rack.
 - Prior:** 0.
 - Pref.:** 0.
 - Rct.:** YES.
 - Total Bars:** Field.
 - Border Dist.:** 0.0 mm.
 - Text:** Field.
 - Hole:** Field.
- Delivery Dates:** Delivery Date (31/08/2010), Scheduled Start Date, and Scheduled End Date.

Here you need to fill in the following further specific fields:

- ◆ **Fourth Material:** Second spacer bar in the insulating glass unit.
- ◆ **Fifth Material:** Third glass pane of the insulating glass unit.

Entering a Structural Glazing Unit

A Structural Glazing Unit is a particular type of Double Glazing Unit, in which, however, the two glass panes have a different size and are thus "stepped".

When you activate the structural glazing unit entry feature, the following window opens:

In addition to the standard double glazing unit fields, this window has four further value fields.

They indicate the values by which the dimensions of the second glass pane of the insulating glass unit must be stepped with respect to the first glass pane. Calculated values are shown in the grid underneath, which identifies every single element composing the finished product:

Item Code	Use in Descr.	Description	Lev.	Seq.	Line	Q.ty	Multipl.	X Dim.	Y Dim.	Total Length
STG	<input type="checkbox"/>	Structural Glass	0	1	0	1	1	1500.0 mm	1400.0 mm	5800.0 mm
FL6	<input checked="" type="checkbox"/>	Float 6mm	1	1	1	1	1	1500.0 mm	1400.0 mm	5800.0 mm
Cut	<input checked="" type="checkbox"/>	Cut	2	1	1	1	1	1500.0 mm	1400.0 mm	5800.0 mm
10ALU	<input checked="" type="checkbox"/>	10mm Aluminum	1	2	2	1	1	1500.0 mm	1400.0 mm	5800.0 mm
Bend	<input type="checkbox"/>	Bend	2	1	2	1	1	1500.0 mm	1400.0 mm	5800.0 mm
FL6	<input checked="" type="checkbox"/>	Float 6mm	1	3	3	1	1	1550.0 mm	1450.0 mm	6000.0 mm
Cut	<input type="checkbox"/>	Cut	2	1	3	1	1	1550.0 mm	1450.0 mm	6000.0 mm
Polyureth...	<input type="checkbox"/>	Polyurethane	1	4	0	1	1	1500.0 mm	1400.0 mm	5800.0 mm

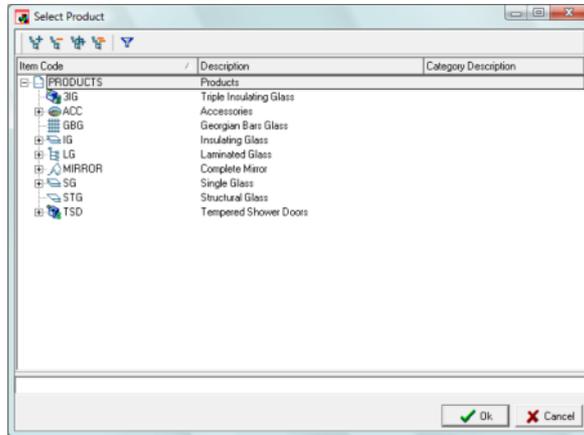
As illustrated in the example, the second glass pane has been increased by 50 both on the left and bottom side.

Spacer bar dimensions, instead, are the minimum dimensions of the overlapping glass surface areas.

For the rest, Structural Glazing Unit settings are the same as for standard IG units.

Entering a General Product

Entering a General product means entering any of the products previously coded in the BOMs.



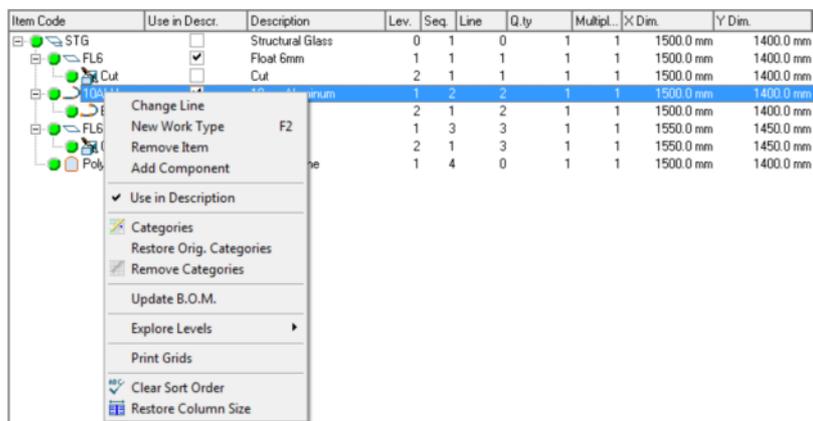
Like any other standard product, you can modify its original structure as required.

Modifying a standard BOM

The different types of products entered in the order management are loaded and exploded along with their work cycle, based on what you specified in the BOMs Main Data archive (refer to the corresponding section of this guide for further information).

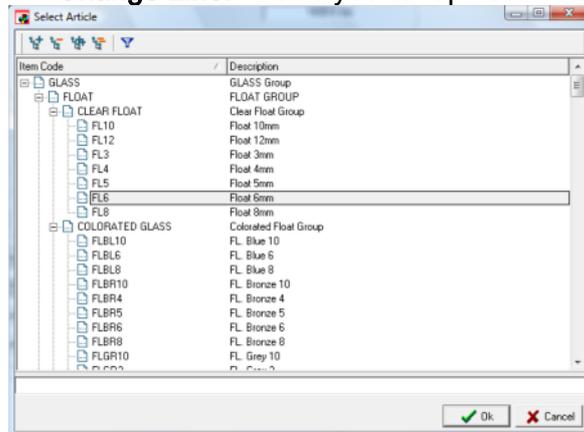
For the maximum flexibility of use, Opty-Way Enterprise allows you to make modifications to the selected product, i.e. both to the materials that compose it and the Work Types to be performed to the materials, as well as to any Categories.

Modifying or even integrating a BOM is possible via the menus that appear when you click the right mouse button (see the image below) on the BOM shown in the bottom part of the line entry window.

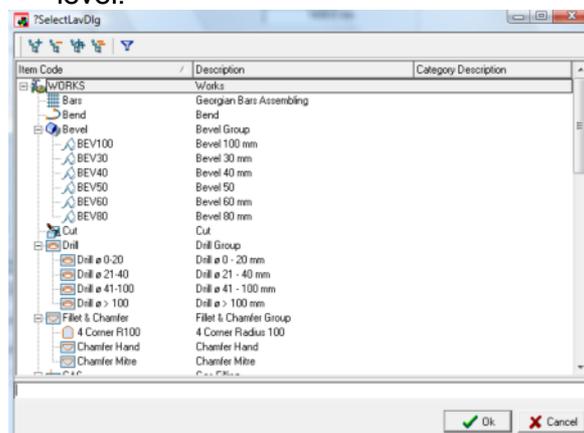


The following menu options are available:

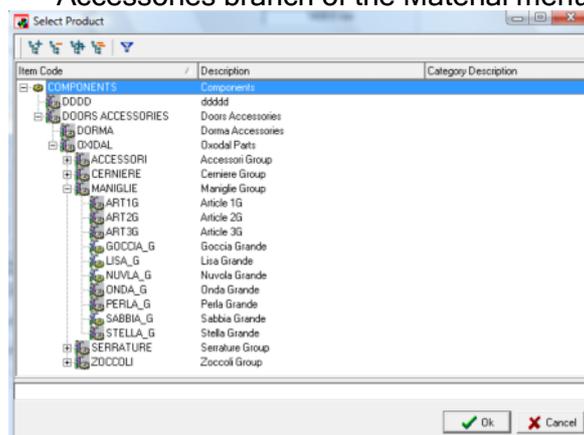
- ◆ **Change Line:** Allows you to replace the selected BOM item with another.



- ◆ **Add Work Type:** Allows you to add a Work Type under the selected BOM level.



- ◆ **Remove Line:** Allows you to remove the selected BOM level.
- ◆ **Add Accessories:** Allows you to add Main Data from the special Accessories branch of the Material menu.



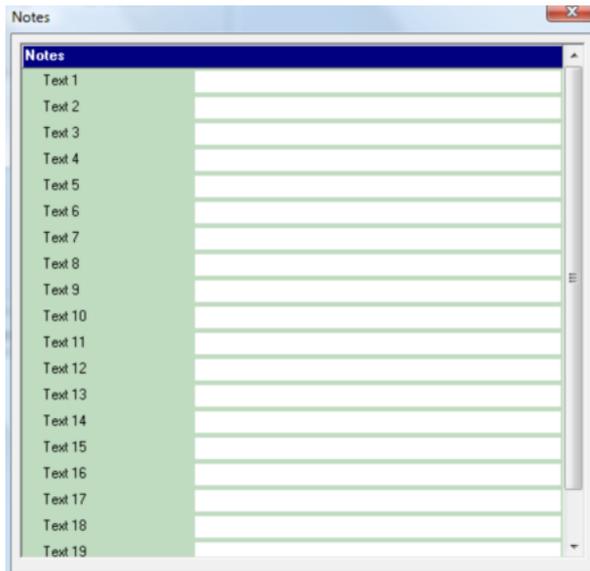
- ◆ **Use in Description:** Allows you to add to or remove from the different printouts the description assigned in the corresponding Main Data to the Product in use.
- ◆ **Categories:** Allows you to manually modify the List of assigned Categories.
- ◆ **Restore Original Categories:** Allows you to restore the Categories to those originally taken from the various Main Data archives in use.
- ◆ **Remove Categories:** Allows you to remove all Assigned Categories.

- ◆ **Update BOM:** Allows you to update the originally used BOM with the currently displayed structure.

Notes Field Management

Within the order management, Enterprise offers the manual or automatic management of 20 note fields of 32 characters each. This management option is activated by the  icon in the reference window.

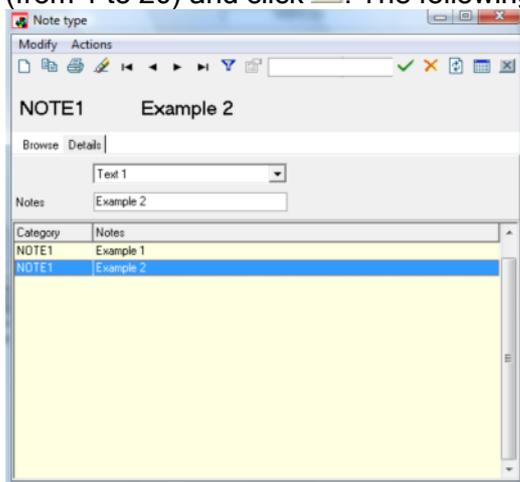
After pressing , the following window opens:



Here you can act in two ways:

- ◆ You can either type a free text in the desired fields or
- ◆ recall  a table that contains predefined note field descriptions.

To recall these predefined notes, position the cursor on the desired note line (from 1 to 20) and click . The following window opens:

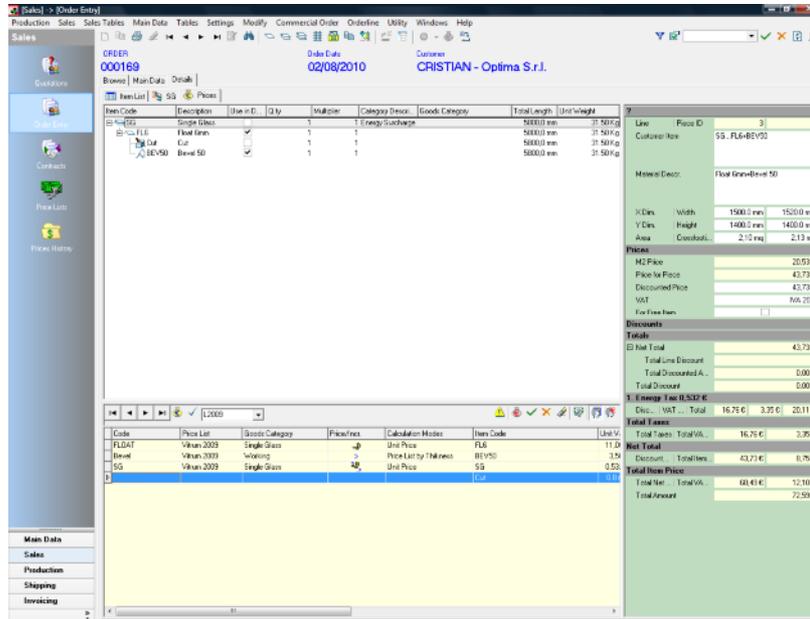


Here you can store an unlimited number of descriptions to be associated to one of the 20 available note fields.

NOTE: To position the cursor on the desired note line, you can also use the F1/F20 keys on the keyboard. This speeds up order line data entry.

Prices

The Prices tab allows you to display, calculate and, if needed, modify a price calculated based on the price list and conditions in use.



The center part of the window shows the BOM tree structure. Also from within the Prices tab you can modify or integrate, if required, the BOM using the menus that appear when you click on the right mouse button.

Enterprise automatically calculates the price of a product when:

- you enter a new order line.
- You duplicate an existing order line.
- You Save manually.
- You Refresh the window.

The price calculation can be forced using the corresponding Calculate Price  button in the Price grid.

The price is calculated based on the price list selected when the order is created and shown in the corresponding combo box of the Price grid.

If the order line has no price, a special pop-up window prompts you to enter the price manually or to activate the special "free gift" flag.

The Inspectors on the right show the values for the order line totals, taxes and discounts applied. Price calculation details are indicated in the Price grid.

Price Grid

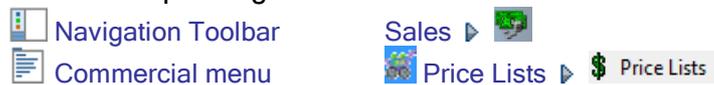
The bottom part of the window shows the price calculation grid.

- ◆ **Calculate Price** : Allows you to apply prices from the selected Price List.
- ◆ **Keep Price List Items** : Allows you to "freeze" previously applied prices.
- ◆ **Price List** : Allows you to select the Price List from which prices are to be taken. By default, it shows the price list you selected in

Code	Description	Validity Date
L2009	Vitrum 2009	03/04/2012
G2008	Glastec 2008	03/04/2011
B2009	BIG5 2009	03/04/2011
U2009	Glass Build America 2009	03/04/2011
Andrea	Andrea	31/12/9999

the order header.

Open the combo box to select a price list among those defined in the corresponding form.



- ◆ **Manual Price** : Allows you to activate the manual price mode: in the Prices Inspector you can set the Price per Piece, Price per Area or define the product as a "free gift".
- ◆ **Show Price List References** : Allows you to display the Price List section from which the price was taken.
- ◆ **Save Price List Items** : Allows you to save the changes you made manually.
- ◆ **Cancel Changes** : Allows you to cancel the changes you made manually.
- ◆ **Delete Price List Item** : Allows you to delete the selected item taken from the Price List.
- ◆ **Price History** : Allows you to view the prices you previously applied to the same selected item.
- ◆ **Check Price from Contract** : Activates the priority search for the Price from Contract you set in the Order header.
- ◆ **Price from Contract** : Managed by the program. If selected, it indicates that the price was taken from the contract. If not, the price comes from the selected Price List.

Product Inspector

Shows the geometric data pertaining to the product.

- ◆ **Customer Item:** Product Code...Material Codes + Working Code
- ◆ **Material Description:** Shows the Product Description of the Details tab.
- ◆ **X Dim., Y Dim., Area:** Actual piece dimensions and area.
- ◆ **Width, Height, Crossfooting:** "Commercial" dimensions used to calculate the price. These values differ from the previous ones due to Customer Conditions:
 - Roundings off
 - Minimum invoice values
 defined in the corresponding menu.

Prices Inspector

Shows the data pertaining to the product price.

- ◆ **Price:** Taxable value of the product per unit of area.
- ◆ **Price per Piece:** Taxable value of a single product.
- ◆ **Discounted Price:** Taxable value of the product after applying discounts.
- ◆ **VAT:** Type of VAT applied to the Order Line. It can be selected among those previously coded in the Payments Table.
- ◆ **Free Gift:** It can be selected only if the Manual Price mode is active. It allows you to leave the line price blank.

When the Manual Price mode is active, you can modify the value in these fields manually. In particular, if you set a Price per Area, the program automatically calculates the Price per Piece and vice versa.

You can also activate the Free Gift check box to leave the line price blank and thus prevent Manual Price pop-up windows from opening.

Discounts Inspector

Shows the data pertaining to the discounts applied.

- ◆ **1st, 2nd, 3rd Discount, Additional Discount:** Allows you to specify 4 cascading discount levels on the value of a single line. The discount value set in these fields affects the selected line only. There are no Default values for filling. Discounts are propagated only in case of line duplication.
- ◆ **1st, 2nd, 3rd Basic Discount, Unconditional Discount:** Show the discount percentages defined in the order header (by Default, they are the same as those defined in the company master data archive).
- ◆ **Payment Discount:** Discount percentage provided for by the form of payment defined for the order.

Discounts are applied one after the other: If you set 10% as a primary discount and 5% as a secondary discount, this does not mean that the discount is 15%, because the primary discount is applied first, and then the secondary discount is applied on the already discounted amount.

Totals Inspector

Shows the totals (unchangeable) pertaining to the line amount and relevant taxes.

- ◆ **Total**
 - **Total Tax Value:** Total taxable value for the line (price per piece multiplied by the ordered quantity).
 - **Total Line Discount:** Total discount applied to the Order line.
 - **Total Discounted Document Value:**
 - **Total Discount:** Total discount applied.
- ◆ **Total Taxes**
 - **Total Taxes:** Taxes applied to the line.
 - **Total VAT on Taxes:** Total increase due to the VAT applied to taxes.
- ◆ **Total Goods Value**
 - **Total Discounted Tax Value:** Final Value for the product, discounts included, Taxes excluded.

- **Total Goods VAT:** Total increase due to the VAT applied to the discounted product, taxes excluded.
- ◆ **Total Line Value**
 - **Total Tax Value:** Total taxable value for the product, discounts and taxes included (Taxable Value for the Line).
 - **Total VAT Value:** Total increase due to the VAT applied to the discounted product, taxes included (Line VAT).
 - **Total Value:** Total value for the line, taxes, VAT and discounts included.

NOTE: Totals Inspector data is calculated and refreshed only after saving  or refreshing .

Modifying prices manually

With Enterprise, you can modify an automatically calculated price or enter a price from scratch at any time.

Use the Manual Price  button to modify the line price or the single items in the Price grid. After selecting the Manual Price mode, you can modify:

- ◆ **Price per Area:** Use the Prices Inspector to define a price per unit of area for a product. The program will automatically calculate the price per piece.

Area	Crossfooti...	2,10 mq	2,13 mq
Prices			
M2 Price		20,53 €	
Price for Piece			43,73 €
Discounted Price			43,73 €

- ◆ **Price per Line:** Use the Prices Inspector to define the price for a product. The program will automatically calculate the price per unit of area of the price entered for the product.

Area	Crossfooti...	2,10 mq	2,13 mq
Prices			
M2 Price		20,53 €	
Price for Piece			43,73 €
Discounted Price		45,00 €	

- ◆ **Grid Details:** You can modify the unit value and/or the factor of each line having a value in the price grid.

Code	Price List	Goods Category	Price/Incr.	Calculation Modes	Item Code	Unit Va...	Factor	Total
▶ FLOAT	Vitrum 2009	Single Glass		Unit Price	FL6	11,00 €	2,13 mq	
Bevel	Vitrum 2009	Working	>	Price List by Thickness	BEV50	3,50 €	5,8 m	
SG	Vitrum 2009	Single Glass	>	Unit Price	SG	0,532 €	31,50 Kg	
▪				Cut		0,0 mm	1,0 mm	

Line Editing Features

Two ways of entering new order lines - i.e. through the selection of a standard product and by means of the window containing the products coded in the BOM - have been described so far.

However, Enterprise offers additional features to manage data entry within the Order management. These are:

Duplicate Line



Toolbar



F9



Shortcut Key

Copies the selected detail line.

Pressing the Duplicate button or the F9 shortcut key creates a new order line and automatically opens the Details window.

Enterprise copies the entire line, with regard to selected materials and geometric parameters (Details tab), as well as data pertaining to the price. In the Details tab, you can modify the desired fields. You can modify quantity and/or dimension fields only and leave selected materials and workings unchanged. In this way, the number of operations to perform to enter an order line can be reduced when the product composition is the same.

Duplicating a line also affects the Prices tab: in case of manual pricing, Enterprise copies the values per unit of area (price) and the unit values defined in the Price grid and calculates the price of the product based on the geometric data (areas and lengths) or the new order line.

Remove Line



Toolbar



Removes the selected line from the order.

It is recommended that you use this feature very carefully since you are not further prompted to confirm.

Line Production Status - Manual Management

From the Sales Orders and Production Orders menus, you can "manually" change the processing status of each line by selecting a status among those available.



Order Management

Entering an order in Enterprise and filling in its details has already been explained above.

In this section of the guide, instead, all other features to maintain and release an order are described, divided into macro-categories.

Displaying and Finding Orders

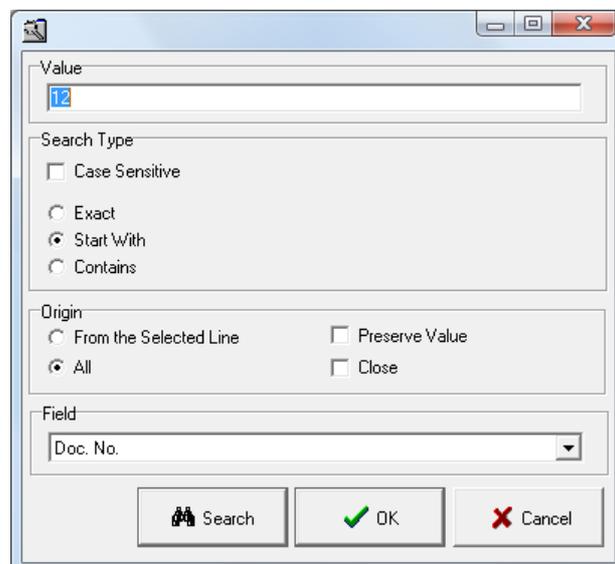
In Enterprise, and in particular in the Order management, various data search modes are available for a targeted search for data, while interacting with on-screen data display.

Some features allow you to mass-select data, while others allow for a targeted search within a single order or a selection based on the order processing or shipping status.

More details about the various features and how they act are provided below:

Single Order Search

 Standard search system that can be activated by pressing Ctrl-F. This option will search for a specific record and position the cursor on it once found. The data in the order browsing window remains the same.



Using Filters

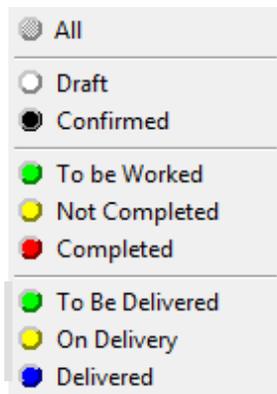
 Last 30 days Enterprise's customizable search system (refer to the corresponding section of this guide for further information). Being a very powerful tool, this option allows you to refine your search and reduce visible data to the required amount.

This is very useful because it offers a much clearer display of available information, reduces the quantity of data to be processed and thus increases the performance of the entire system.

NOTE: It is thus recommended that you keep selection filters always active and that you even set default filters to speed up system working.

Quick Filter

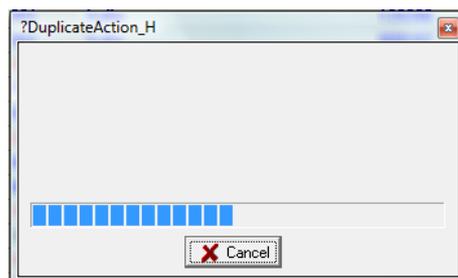
In addition to the two data search and positioning systems, Enterprise also offers the user "quick filter" features under the  menu option, which allows for a multiple selection. (You activate more statuses, for example, to view the orders being worked as well as executed orders.) From the selection menu you can activate the following statuses:



NOTE: A peculiarity of these quick filters is the fact they are "added" to the main selection system. If you set a filter to show all orders of the last 30 days, for instance, you can use quick filters to show the orders of the last 30 days that are still to be worked, by activating . Thus, these filters must be used very carefully to prevent the entire system from malfunctioning.

Order Copy

 Allows you to copy an entire order. The order is "photographed" in all its parts, including order and single line pricing. When you activate this feature, the system shows the activity in progress.



Once copy is complete, Enterprise positions the cursor on the newly-created order, inside its header, to allow you to make any necessary changes.

Import Orders

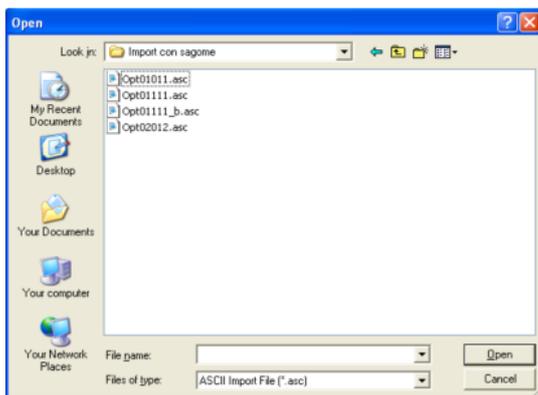
The Enterprise software system relies on SQL databases, but it also has features that make it capable of dialoguing with other software applications, not only via SQL, but also using special data structures. Currently, the following data can be managed:

- ◆ ASCII: Standard text.
- ◆ XML: Classic .NET data structure.

 The import feature allows you to acquire order data from external (to Enterprise) systems directly by observing the limits set by the system and the data scheme required by the software.

NOTE: Contact Optima S.r.l. for technical information on the file tracks to be used, by indicating the software serial number and release you find on the label of the installation CD supplied.

When you activate the Import Data feature, the following window opens and prompts you to select the ASCII file to be imported.

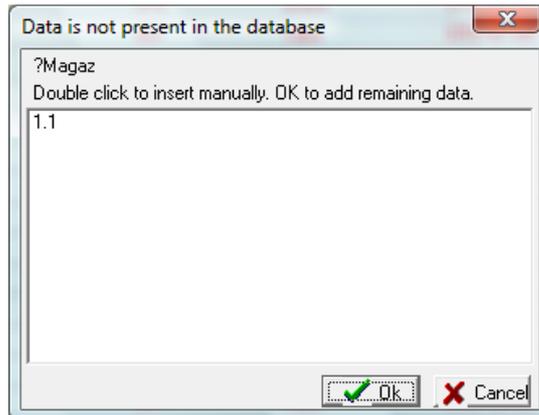


The system will then load the selected file and check the congruence of the data structure in the file. If incorrect data is detected, the error window opens and shows the line that contains errors. If the file contains errors, the entire transaction is canceled.



NOTE: If the file contains errors, the entire transaction is canceled. This means that no partial data is loaded and no duplications occur.

If the file has no structural problems, Enterprise starts importing order data, while checking for the basic data pertaining to the materials in the Main Data archive. If codes are detected that do not exist, the following window opens



and prompts you to "authorize" the system to automatically load the required code into the material Main Data archive. Obviously, code and description fields are filled in only. You will be able to manually complete data entry into the Main Data archive at a later stage.

NOTE: Automatic loading is very handy for synchronizing the different company's systems.

The same occurs for customer code data. Only code and trade name data is loaded automatically.

If you reply "Cancel" when you are prompted to confirm (material or customer) data entry, the system will terminate the order data loading transaction correctly, without entering the specific Main Data.

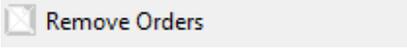
NOTE: No sheet size is loaded automatically. You need to enter sheet sizes manually prior to optimizing.

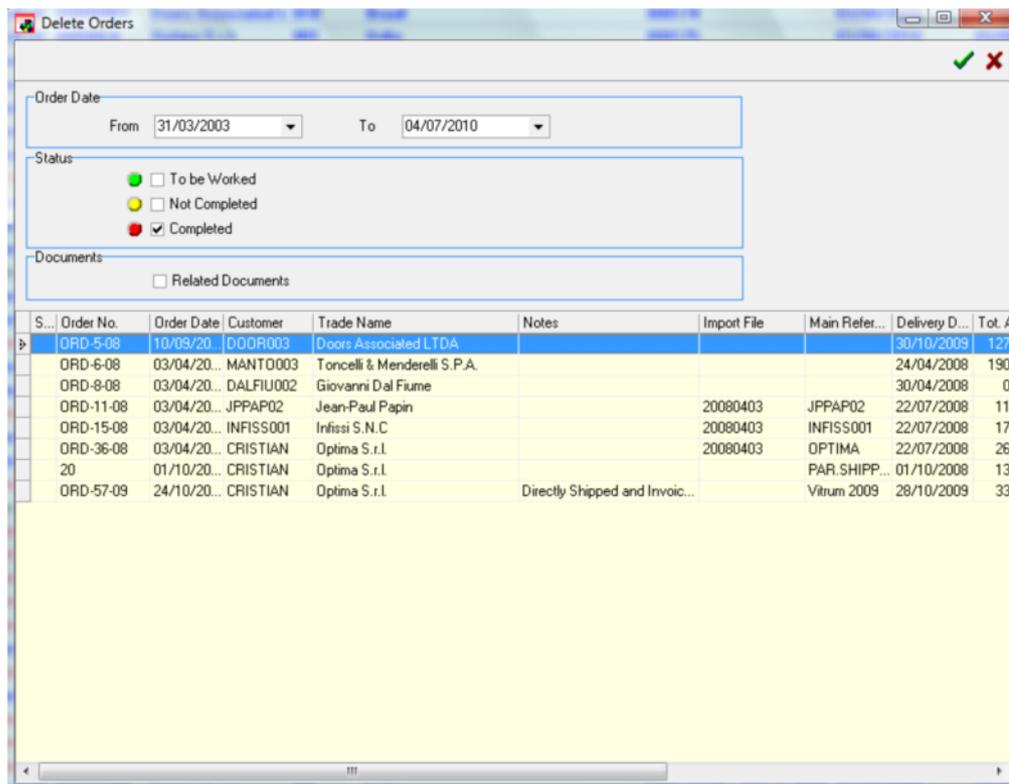
Delete Orders

Enterprise offers two ways to delete Orders:

For Orders that have never been released (To Be Worked status), you can use the classic Delete Orders  option. After pressing this button, Enterprise prompts you to confirm before deleting the record permanently.

For all the orders (and in particular for those Being Worked or Completed), Enterprise offers a special feature to mass-delete specific order data that exists in the company's database.

From the Sales Orders and Production Orders menus - when the List tab is active - you can select the  option. After selecting this option, the following window opens:

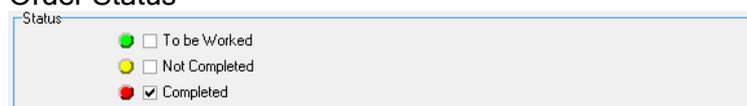


Here you can choose what data is to be displayed using the following limit fields:

- Order Date

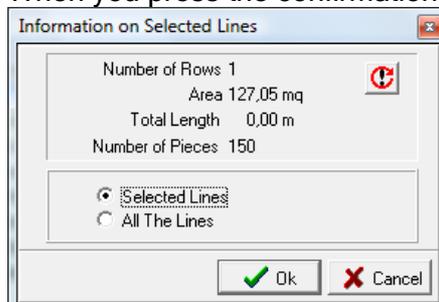


- Order Status



After setting date and status, you can refine your search by selecting only the records you wish to delete.

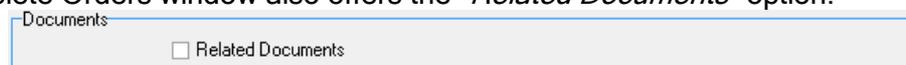
When you press the confirmation button, the following window opens.



Here you can delete all on-screen lines or only the selected ones.

NOTE: Because this phase is very critical, it is recommended that you use this feature very carefully to prevent severe loss of data.

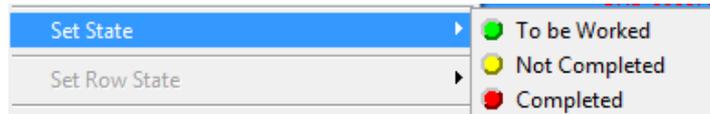
The Delete Orders window also offers the "Related Documents" option.



If this option is active, the delete action will also affect all documents related to the selected orders. So, you can select an order and delete it along with all the related shipping and invoicing documents, as well as production records.

Order Production Status - Manual Management

From the Sales Orders and Production Orders menus, you can "manually" change the processing status of an Order by selecting a status among those available.



Release Orders

From within Enterprise's Order management, orders can be released without having to go through the corresponding feature of the Production module.

The  **Work** feature from the Sales Orders and Production Orders menus allows you to manage the release of selected orders and activate the specific feature. Refer to the corresponding section of this guide for a detailed description on how to release orders.

Create Transport Documents

From within Enterprise's Sales Order management, transport documents or invoices can be created immediately by selecting one or more orders from the List tab. In this way, the created documents will contain all (and only those) lines that are included in the selected orders without having to go through the corresponding feature of the Shipping module.

The  **Create Document** feature from the Sales Orders menu allows you to create the fiscal documents set in the customer master data archive. Refer to the corresponding section of this guide for a detailed description on how to create fiscal documents.

Other Order-related features

Print

 Standard feature to select and maintain print reports (refer to the corresponding section or separate guide for further information).

Print Labels

 Standard feature to select and maintain labels (refer to the corresponding section or user's guide to Label-Way for further information).

Confirm with Bar Code

 **Confirm with Barcode Reader** Production progress management (refer to the corresponding section or specific guide for further information).

Importing/Exporting Orders

The Enterprise software system relies on SQL databases, but it also has features that make it capable of dialoguing with other software applications, not only via SQL, but also using special data structures.

Enterprise can import data from external files in different formats and can also generate export files in the format required by various software applications. When this user's guide was drawn up, Enterprise was able to import data in the following formats:

- ◆ ASCII → Production Orders only
- ◆ EXCEL → Production Orders only
- ◆ XML → Sales and Production Orders

The export feature can be divided into two macro-categories:

- Export to other Optima's software applications.
- Export to other programs that support import.

To export to other Optima's software applications, an easy-to use Export feature is available. To export any other program, you need to define the format and structure of the files that Enterprise must generate.

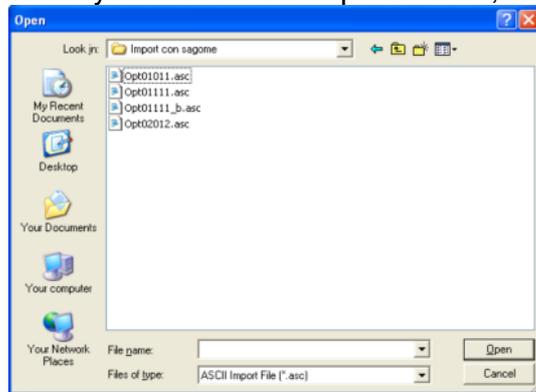
NOTE: Contact Optima S.r.l. for technical information on the file tracks to be used, by indicating the software serial number and release you find on the label of the installation CD supplied.

Import/Export Orders



The import  feature allows you to acquire order data from external (to Enterprise) systems directly, by observing the limits set by the system and the data scheme required by the software.

When you activate the Import feature, the following window opens.



The system will then load the selected file and check the congruence of the data structure in the file.

So that importing is correct, **import files must contain the same codes as in Enterprise**. The import file must include the same codes pertaining to customers, materials and workings as they were coded in Enterprise. If codes are detected that do not exist, depending on the format type in use, the import procedure is stopped or a window opens to add non-existing codes to the master data archive automatically.

If the file has no structural problems, Enterprise starts importing order data, while checking for the basic data pertaining to the materials in the master data archive.

If you reply "Cancel" when you are prompted to confirm (material or customer) data entry, the system will terminate the order data loading transaction correctly, without entering the specific master data.

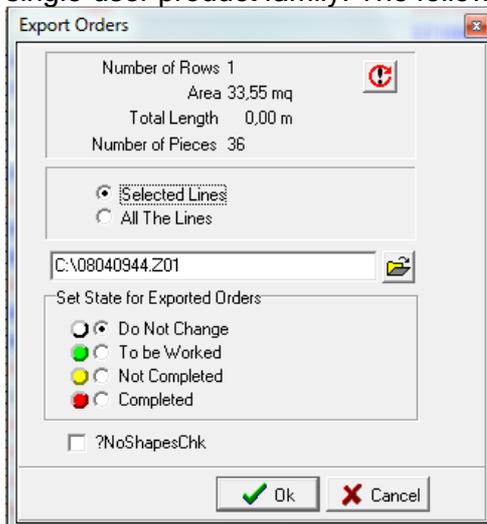
Export Orders



Enterprise has been designed and configured to work in various modes. The classic mode is the "integrated" mode, in which all functions are executed internally for the highest system performance possible.

At times, however, "less integrated" modes may be required to adapt to the company's size or user's organizational needs. For this reason, the system offers an "Off-Line" mode to export production data in the Optima format.

The exports feature allows you to create a file in the Optima format, which can be read and interpreted by Optima optimization systems that belong to the single-user product family. The following window opens.



Here you find data for the selected lines and you can define what data you wish to export, where you wish to put the file that will be created and if and how you wish to change the status of the orders that will be exported.

NOTE: The user is given the opportunity to manually change the order status to meet the company's specific organizational needs.

NOTE: Obviously, there will be no congruence between commercial and production data in this mode. Thus, the user will have to work without the integrated production progress module, although available.

6 - Sales

Introduction

The structure of Enterprise's Sales module is based on some fundamental elements, i.e.:

- ◆ Offers
- ◆ Sales Orders
- ◆ Contracts
- ◆ Price Lists
- ◆ Price History

These elements interact with each other to let the user quickly define and price any product of the glass sector, considering - in the price calculation - the myriad of salient features that characterize this special production field.

Thanks to the various features the program offers, the user can enter Quotations and Sales Orders and price items manually or automatically: either from the Price List or from the Contract.

Offers



Introduction

In Enterprise, Offers structure and management "mirror" those of the Sales Orders module. Please refer to the Orders section for a detailed description.

It should be noted that the main difference between the two types of order lies in the fact that an offer CANNOT be passed to Production without previously being converted into a sales order. This conversion can be made using the "Create Order from Quotation" feature from the Offers menu.

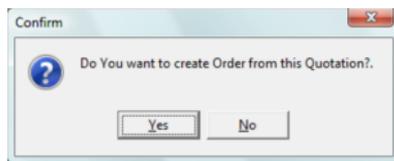
Create Order from Quotation

Enterprise lets you automatically create a Sales Order starting from an Offer that you have previously drawn up and submitted to the customer.

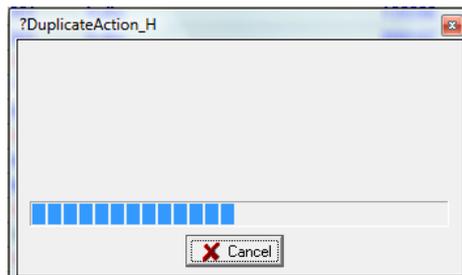
To do so, however, the Offer must have been confirmed. The Offer must be Final and have a special number.

Once the Offer has been confirmed, Enterprise lets you automatically create a Sales Order using the corresponding  **Make Order from Quotation** menu option. This is possible only when the offer is selected from the List tab.

When you activate the feature, the system prompts you to confirm the action.



If you reply "Yes", Enterprise makes an exact copy of the offer.



Once copy is complete, the offer status is changed (the black text becomes red) and a new Sales Order is created under the Sales Orders menu.

NOTE: Naturally, the created order is "unconfirmed" because it is supposed that the user wishes to adapt the order by changing, for instance, delivery dates and other values.

NOTE: The created order will include the references of the source offer.

Sales Orders



The Sales Order management module is one of Enterprise's key elements. This module allows you to:

- ◆ Rapidly and schematically define any type of product relating to glass-processing.
- ◆ Manage all the technical data needed to recognize and process a specific product.
- ◆ Manage shapes.
- ◆ Automatically calculate the various workings and components of a glass product based on the associated BOM and work cycle.
- ◆ Automatically calculate prices based on the criteria set in Enterprise's Price List.
- ◆ Manually modify calculated prices, if needed.
- ◆ Release a product and check its production status.

As you can see, the Orders module offers a variety of complex features. It is thus recommended that the user pay the greatest attention when trained about this module and how it works.

Correctly setting the Orders module, as well as Price Lists, is fundamental to the proper functioning of the entire Enterprise system.

Price List



Navigation Toolbar

Commercial menu



Price Lists ▶



Price Lists

Introduction

The Price List is used to calculate the price of every Product that has been inserted in a commercial document (offer, sales order, invoice, etc.). In Enterprise, building up a price list is one of the most "complex" actions and implies that the user knows and has a good command of all the data presented so far (and described in the previous sections of this user's guide).

When a Price List is created, in fact, it is essential that at least Material Master Data, Work Types and Product BOMs are already coded and the correct Goods Category is assigned to each BOM.

A sine qua non for the correct creation and configuration of a price list is the prior definition of products, materials, workings and accessories with attribution of the relevant Goods Categories.

The method used for entering data in the various Enterprise's Master Data archives considerably affects the way in which a price list is designed and used. Therefore, it is very important that you keep this issue in mind when you start-up the program to avoid having to re-code data.

For a versatile calculation of a product price, Enterprise offers various tools to catalog the following data:

- ◆ Products (BOM Master Data Archive)
- ◆ Materials (Material Master Data Archive)
- ◆ Accessories (Material Master Data Archive)
- ◆ Workings (Working Operation Master Data Archive).

These elements - along with other factors such as the Customers' Conditions or Contracts (that can be anyway configured at any time) - are essential requirements for a finished product to be correctly priced and thus sold to the customer.

NOTE: With Enterprise, you can modify an automatically calculated price or enter a price from scratch at any time.

This section of the user's guide does not refer to this option, but to automatic price calculation only.

General Concepts

The importance of the Goods Category

In Enterprise, the search of a Price is based on the Goods Category of a product and its composition elements. When valuing, it is very important that you classify every element properly, both in terms of hierarchical structure of individual elements and, above all, in terms of attribution of Goods Categories.

NOTE: For this reason, coding is extremely important, because product codes considerably affect the product valuing structure and the features offered by the price list.

In Enterprise, the **Goods Category** is the tool used to identify the context for an element to be priced: a material may have a certain price if it belongs to a Single Glazing Unit product and another price if it belongs to an Insulating Glass Unit. Price differentiation is achieved in this case by assigning a different goods category to the single glazing IG unit products. The same concept can be applied to workings. You can define a price for a general working or specify a particular price if the same working s carried out on an IG unit (or more generally on a product with a specific goods category).

Basic Price List Structure

Price List items are graphically displayed in a tree structure whose main elements are Goods Categories. Branches linked to every material, product or working item can be added to them.

Each time you create a new Price List, Goods Categories - to which prices are to be linked - are created automatically. Likewise, when you delete a Goods Category, it is automatically removed from all Price Lists and when you add one, it is added to all Price Lists.

Item	Description
[-] Vitrum 2009	
[-] Georgian Bars Glass	
[-] Hardware	
[-] Insulating Glass	
[-] GBG - Georgian Bars Glass	
[-] IG - Insulating Glass	
[-] Shapes - Shapes Category	IG Shape Surcharge
[-] IG - Insulating Glass	
[-] IG - Insulating Glass	IG Basic Price
[+] FLOAT - FLOAT GROUP	IG Float Surcharge
[+] LAMINATED - LAMINATED GROUP	IG Laminated Surcharge
[+] SATIN - Satin Group	IG Satin Surcharge
[+] IG - Insulating Glass	IG Side Surcharge
[-] Laminated Glass	
[-] Other Products	
[-] Single Glass	
[-] SG - Single Glass	
[-] Shapes - Shapes Category	Shape Surcharge
[+] FLOAT - FLOAT GROUP	Float Glass Group
[+] LAMINATED - LAMINATED GROUP	Laminated Glass Group
[+] MIRROR - MIRROR GROUP	Mirror Glass Group
[+] PRINTED - PRINTED GROUP	Printed
[+] SATIN - Satin Group	Satin
[+] SG - Single Glass	Side Surcharge
[+] SG - Single Glass	1. Energy Tax
[-] Spacer	
[-] Working	

In the Price List, Goods Categories are shown in red. The tree structure with the + and - signs allows you to define prices for products, materials, Workings or accessories based on the different goods categories.

In the example illustrated in the picture, some price items have been defined for different material types: float glass (i.e. materials coded in the "Float" group of the material master data archive) is included both in the Insulating Glass goods category and in the Single Glazing Unit goods category. The price for this type of materials will be taken from the upper table for all those products to which the Insulating Glass goods category and from the lower table for all those products to which the Single Glazing Unit goods category is assigned.

It should be noted that you cannot restrict items to be inserted in a price list to a specific Good Category, because it is not specified what a Goods Category

refers to (whether to a product, an accessory, a component, etc.) and thus you cannot set limits/attribution filters.

Valuing types

As already stated, the first element that the system uses to differentiate the utilization area of a product is the Goods Category assigned to specific product when building up the BOM (refer to the corresponding section of this guide for further information).

When creating an Order for a specific product, the price or the surcharge indicated in the Goods Category to which the product belongs. However, the final price of a product (and associate workings) is not the simple list price, but the result of the price and the surcharges of every single element composing the product.

Opty-Way Enterprise's price list is not a simple list of prices, but - as for most of the valuing systems - it is an advanced tool capable of pricing a product in different ways to adapt to the company's needs.

Depending on how it was configured and on the database, Enterprise's price list can manage numerous combinations of product valuing types. To reduce the number of possible combinations, valuing types can be divided into two macro-categories:

- **"All Inclusive" Price** for a specific product (i.e. materials as well as Workings.)
- **Composition Price**, every single item composing the product is valued.

To better explain how Enterprise's Price List works, some examples are given below to illustrate the details of the different ways to value a product.

The examples refer to two commonly used products:

- Single glazing unit with workings
 - Float glass 4mm + Beveling + Grinding + Tempering
- Simple IG unit composed of
 - Float glass 4mm
 - Spacer bar 12mm
 - Float glass 4mm

All Inclusive Price

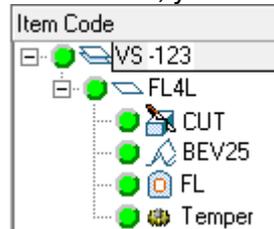
Allows you to assign a specific price to every specific code (product). It includes ALL, i.e. the ENTIRE product as defined in the relevant BOM. The price entered in the price list refers to all the materials and workings that compose the product.

Pros: easy-to-understand and read.

Cons: you need to code in the BOM all the products you wish to sell. For this reason, this method is used only to price accessories or single glazing units (pricing IG units following this procedure, for instance, would mean for you to enter into the BOM all the possible IG unit combinations that your company can produce!).

Example of Single Glazing Unit

In the BOM, you create the VS-123 product composed as follows:

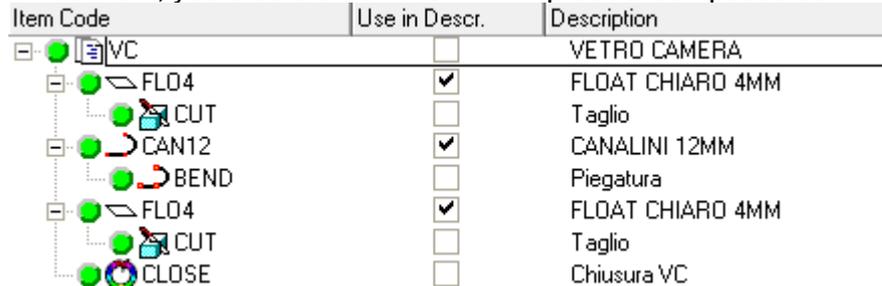


In the Price List, you enter an item for the specific VS-123 product in the line pertaining to the Single Glazing Unit Goods Category. During order entry, the price entered for that product will be taken from the price list and the line valued:

Calculation Modes	Item Code	Unit Value
Prezzo	VS - 123	46,42 €

Example of IG Unit

In the BOM, you create a new VC 4-12-4 product composed as in the picture:



In the Price List, you enter an item for the specific 4-12-4 product in the line pertaining to the IG Unit Goods Category. During order entry, the price entered for that product will be taken from the price list and the line valued:

Item Code	Unit Value
VC 4-12-4	30,00 €

Composition Price

Allows you to price a product by adding up the prices of the single elements (materials and workings) that compose the product.

As for simple valuing, you can enter the following linked to this item:

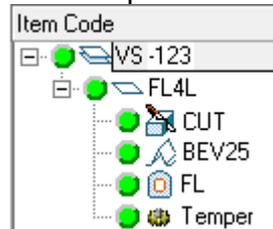
- ◆ changes in price or surcharges for the products derived from this product.
- ◆ surcharges for materials/workings/categories.

Pros: You can create general BOMs and modify them when entering an Order. This method is easy-to-understand and immediate to a good extent.

Cons: This method is even too articulated and flexible.

Example of Single Glazing Unit

Starting from the BOM of a Single Glazing Unit, you create the same product as in the previous example:



The price list has a price for every element composing the product.

Item Code	Unit Value	Fattore	Total Value
Glass	28 €	1,00 m2	28,00 €
Bevel	2,1 €	4,0 m	8,40 €
Polishing	1,03 €	4,0 m	4,12 €
Temper	5,9 €	1,00 m2	5,90 €

The total Price is given by adding up the single prices of the various elements that compose the product.

Example of IG Unit

Starting from the BOM of an IG Unit, you create the same VC 4-12-4 product as in the previous picture:

In the price list, every element - both material and working - has its own unit price. During order entry, the price entered for every single element will be taken from the price list and the line valued:

Item Code	Unit Value	Fattore	Total Value
GLASS	9,8 €	1,02 m2	10,00 €
SPACER	9,8 €	1,02 m2	10,00 €
GLASS	9,8 €	1,02 m2	10,00 €

All these possible ways to price a product may lead to duplicates, because a user can enter an all inclusive price for a kind of product and then re-enter it as a composition price.

Therefore, you must be very careful when entering a product in an order line. In the previous examples of single glazing unit and IG unit the product "composition" is the same both for the all inclusive price and for the composition price. Using the "All Inclusive" feature implies using the specific product during order entry: entering a specific product or making the same composition starting from a standard BOM is practically the same from the point of view of production, but the two actions lead to potentially opposite

results as far as valuing from price list is concerned. On the contrary, using the "composition" price does not have such a constraint: the price of the finished product is calculated as the sum of its single elements both in case the product comes from the relevant BOM and in case the product has been created from a standard BOM.

It should be noted that you can specify different prices for the same material depending on the product they refer to.

Following the price search method, the system will first search for the price in the Commercial Grade of the product and then within the Commercial Grade of the elements composing the product. In this way, some components may be priced **in their own** Commercial Grade **only**, thus reducing price list management time and having the same price for both products.

With reference to the examples illustrated for the composition price, the same FL4 material has two different values, 28.00 €/sqm for the single glazing unit and 9.80 €/sqm for the IG unit. This was achieved by assigning two different values to the same material, one for the IG Unit goods category and one for the Single Glazing Unit goods category.

In the special case of an IG unit with a composition price, the price search is carried out first of all within the Goods Category of the product (i.e. IG Unit). When the search in this Grade is complete, for all those elements for which no "Price" item was found, the search is repeated within the goods category assigned to every element. If no value for the Float4 is found within the IG Unit goods category, the search is repeated within the Single Glazing Unit goods category.

To have only one price for the FL4 regardless of the product in which the material is used, its value must be entered into the Single Glazing Unit Goods Category only.

Item Code	Description	Goods Category
IG	Insulating Glass	Insulating Glass
FL4	Float 4mm	
Cut	Cut	
10ALU	10mm Aluminum Spacer	
Bend	Bend	
FL4	Float 4mm	
Cut	Cut	

This part will become clearer in the following pages, where Enterprise's price search features are described.

Enterprise's Price Search

For a better understanding of how the rules to value a product are built up and defined, the method used by Enterprise to calculate a price must be explained.

Below you will find an introduction of the price search criteria used to define the sales price list structure.

Using Contracts

When valuing an order line, the first search is for the product within a Customer's Contract. If a contract was set for the order and/or offer and the product entered in the line is included in that contract, the valuing process stops immediately and the product price as in the contract is applied.

NOTE: The product defined in the contract must exactly match the product entered in the order line. If a price for the FL4+Grinding product is set in the contract, that price will be valid only for products composed of that material and working. If other workings or materials are added, contract conditions do not apply (in case of FL4+Grinding+Hole, for instance, the contract does not apply).

Price Search Flowchart

The search system is structured on two levels or execution phases.

- ◆ **1st Phase:** Search for the basic price of the product.
- ◆ **2nd Phase:** Search for surcharges and taxed to be applied to the product.

During the first phase, the real price of elements and products is searched for. This search is aimed at finding at least one "Price" item in the price list. During the second phase, the different surcharges or taxes applied to the product are searched for.

NOTE: The two search methods are not alternative to each other, but they are both used by the Price Search engine in the same hierarchical order.

NOTE: The 2nd phase takes place **only if** the 1st phase finds a price item.

Basic rules of price search

Enterprise's price calculation engine observes the following basic rules:

- ◆ **Price List:** The Price List is identified from which prices are to be taken. The following is a list of price lists in the order they are selected when the price search is performed in various price lists.
 - **Order Line:** Price list set in the order line.
 - **Order:** Price list set in the order header.
 - **Customer:** Price list assigned to the customer in the customer master data archive.
 - **Active:** Price list selected as Active.The search for the price list to be used stops when at least a price item is found. The search for surcharges and taxes does not imply changing the price list.
- ◆ **Goods Category:** The Goods Category of a product is ALWAYS the starting node for searching, because every single element composing the product structure may have a different value if used in different contexts.
 - **Product**

- **Materials**
- **Workings**
- ◆ **Type of Price:** The search engine always stops at the first "node" of the price list that returns a valid value (not null).
 - **Price:** When the price search finds a valid value, the search stops.
 - **Surcharges:** The search for surcharges, instead, takes into account all existing surcharges, since there may be more than one.
 - **Taxes:** The search for Taxes takes into account all existing taxes, as well as all existing costs and discounts. Taxes can be applied to an entire order, instead of to each order line.

The following page contains a flowchart that shows the details of the various price search phases. The following conventions are used in the flowchart:

- ◆ **Yellow Box** → Price List Selection
- ◆ **Orange Box** → Goods Category Selection
- ◆ **Blue Box** → Part that affects the final price of a product.
- ◆ **Green Box** → Pricing performed successfully
- ◆ **Red Box** → Pricing NOT performed

In the flowchart, dash line boxes identify the two phases described above, i.e. the first fundamental and mandatory Price search phase and the second Surcharge search phase. If no "Price" item is found, the price search stops and the line will have no price.

1st Phase: Search for the basic price of the product

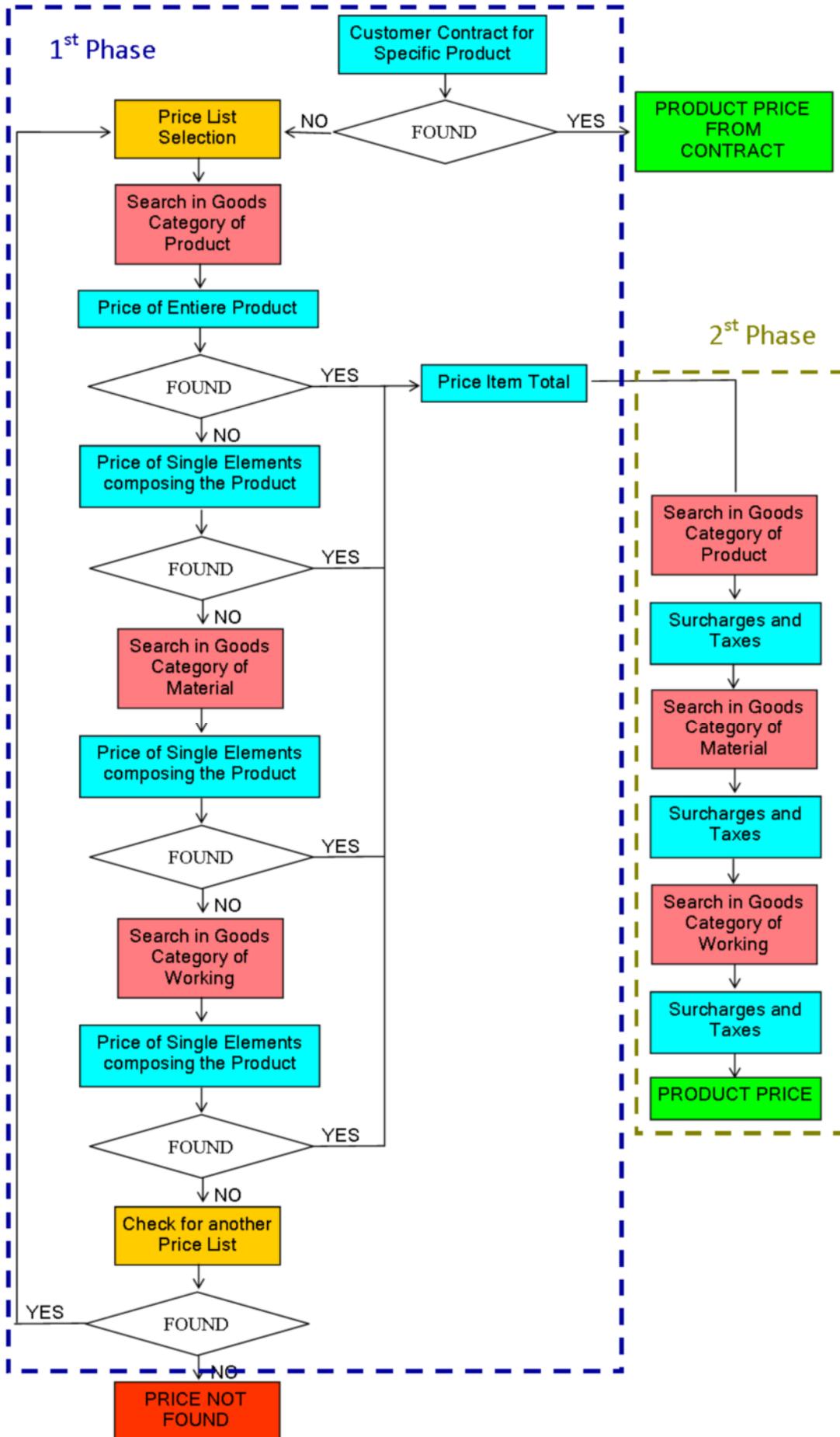
The price search cycle that determines a specific value for the product is as follows:

1. Check for an active contract and, if any, search for the product within the contract.
2. Identification of the Price List → Price List defined in the order line.
3. Identification of the Goods Category for the Product.
4. Search for the Product price within the Goods Category for the product.

If the search under Point 3 returns a price item for the selected product ("All Inclusive" price search), the first price search phase stops and the second surcharge search phase starts. If the search returns no price, the algorithm carries on searching and uses the composition price method:

5. Search for the price of Materials and/or workings within the Goods Category of the product.

If the search under Point 5 returns **at least** one price item for a material and/or working, the algorithm starts the second phase for valuing surcharges. If the search returns no price, the algorithm carries on searching for Price items within the Goods Category of the Material.



6. Identification of the Goods Categories for the Materials.
7. Search for the price of Materials and workings within the Goods Category of the Materials.

If the search under Point 7 returns **at least** one price item for a material and/or working, the algorithm starts the second phase for valuing surcharges. If the search returns no price, the algorithm carries on searching for Price items within the Goods Categories of workings.

8. Identification of the Goods Categories for the workings.
9. Search for the price of Materials and/or workings within the Goods Category of the workings.

If the search under Point 9 returns **at least** one price item for a material and/or working, the algorithm starts the second phase for valuing surcharges. If the search returns no price, the search is repeated in another price list.

Enterprise's price search algorithm repeats steps from 3 to 9 in all active price lists available. Price list scanning is performed in the following order:

- a. Line
- b. Order Header
- c. Customer Master Data Archive
- d. Company Master Data Archive
- e. Active Price List

Unless manual changes are made during order entry, the price list indicated under points a), b) and c) is the same.

When a search is performed in all available price lists and no Price item is found, the price search algorithm stops (price not found condition).

2nd Phase: Search for Surcharges

The second phase starts only if the first phase finds at least one price item. Surcharge valuing only concerns the price list used during the first phase (it is the only price list to be taken into account during the second phase).

The surcharge search algorithm is simpler than the previous one, because there are no conditions that cause interruptions or an early termination: the search is always performed in all goods categories and for all surcharges and taxes.

1. Identification of the Goods Category for the Product.
2. Search for Surcharges and Taxes of products, materials, workings and accessories.
3. Identification of the Goods Category for the Materials.
4. Search for Surcharges and Taxes of products, materials, workings and accessories
5. Identification of the Goods Category for the workings.
6. Search for Surcharges and Taxes of products, materials, workings and accessories.

NOTE: If this "verticalization" of the process of adding workings is an advantage on the one hand, because all changes made are scanned, on the other hand, you must be very careful when you define a price list, because various surcharges may be added to the same item. At times, you may wish to have various surcharges for the same item, on other occasions, this may be a

side-effect due to this type of vertical scanning and a non-perfect coding of Surcharges and taxes in the price list.

Relationship between calculation method and Master Data

Prior to illustrating how items are entered into a price list, one of the most important features of Enterprise's price list-based offer valuing procedure must be described. The previous pages focused on the criteria used for scanning the items entered in a price list and not on the search for a single price item in the corresponding tables. The final branch of the scanning algorithm is the one that uses the interdependence between the Sales Price List and the Master Data structure (material, workings and accessories) more extensively than any other branch.

Enterprise's price list structure is designed to allow for climbing up in a data tree that has the same hierarchy as defined in the master data.

When searching for a price - if no price is specified for a leaf - the system climbs up to the parent or previous nodes. This applies to every master data archive, product, material and working.

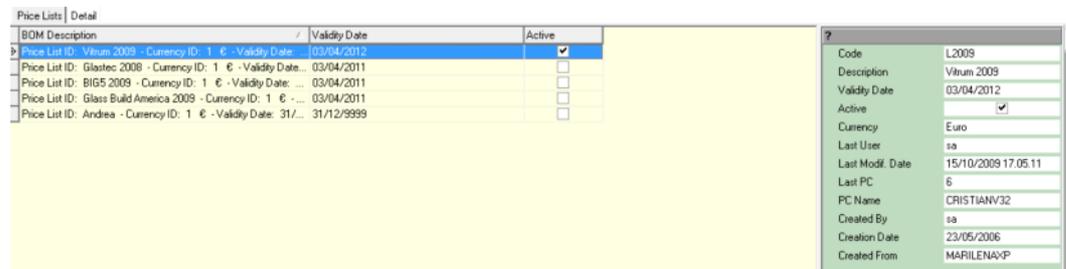
In the case illustrated below, for instance, for the FL3 glass type for which no price was specified the general price for the "CLEAR FLOAT" glass will be applied.

Price Lists Detail		Price List Details	
Item	Description	Item Code	Unit Price x Crossfooting
Vitrum 2009		FLOAT	
+	Georgon Bars Glass	CLEAR FLOAT	30,00 €
+	Hardware	FL10	25,00 €
+	Insulating Glass	FL12	28,00 €
+	Laminated Glass	FL3	
+	Other Products	FL4	
+	Single Glass	FL5	9,50 €
+	SG - Single Glass	FL6	11,00 €
+	FLOAT - FLOAT GROUP	FL8	16,00 €
+	LAMINATED - LAMINATED GROUP	FL10	25,00 €
+	MIRROR - MIRROR GROUP	FL12	28,00 €
+	PRINTED - PRINTED GROUP	FL3	
+	SATIN - Satin Group	FL4	
+	SG - Single Glass	FL5	9,50 €
+	SG - Single Glass	FL6	11,00 €
+	Spacer	FL8	16,00 €
+	Working	FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €
		FL10	25,00 €
		FL12	28,00 €
		FL3	
		FL4	
		FL5	9,50 €
		FL6	11,00 €
		FL8	16,00 €

Price List Management

In Enterprise, the Price List data entry and management window has the classic layout and the List and Details tabs.

The List tab shows the various price lists in browse mode.

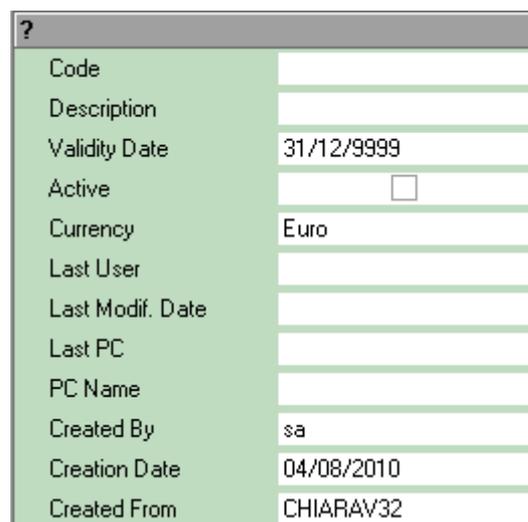


The Inspector on the right shows the data of every price list such as code, description, validity date, price list status (active), currency and other information related to the change history.

The List tab allows you to manage the individual price lists using the corresponding creation and editing features.

Creating a New Price List

The New Price List  option allows you to create a new Price List from inside Enterprise's management. When you press this button, a new line is added to the list and you can enter/keep the main price list data in the Inspector on the right.



- ◆ **Code:** Unique alphanumeric code identifying the Price List (visible in the Price Lists tab under Orders and Offers).
- ◆ **Description:** Description field used to better identify the price list (visible in the Inspector on the right pertaining to the main data of an order).
- ◆ **Validity Date:** Date within which prices must be considered valid by the price search system.

- ◆ **Active Price List:** Flag that determines which price list among the existing ones is active (or default price list).
- ◆ **Currency:** Currency in which prices are expressed (can be selected from the Currency table).
- ◆ **Last User, Last Modif. Date, Last PC, PC Name, Created by, Creation Date, Created by the PC** are "reserved" fields, i.e. fields that are automatically managed by Enterprise to log user and date after any change.

NOTE: If the **active price list** flag is activated for various price lists, when you exit the Price Lists window, a warning message is issued to indicate that various price lists are active in the system.

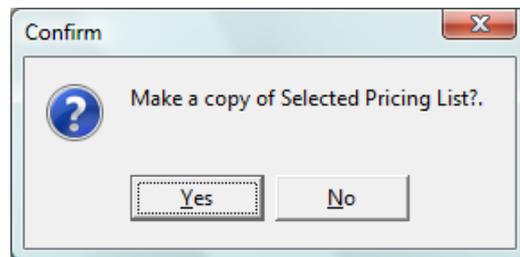
Deleting a Price List

The Delete Price List  option allows you to delete a price list completely, including its details.

NOTE: Because referential integrity is not enforced on this data, price lists can be deleted without any constraints. However, because this data is very important, this option must be activated very carefully and by dedicated personnel only.

Duplicating a Price List

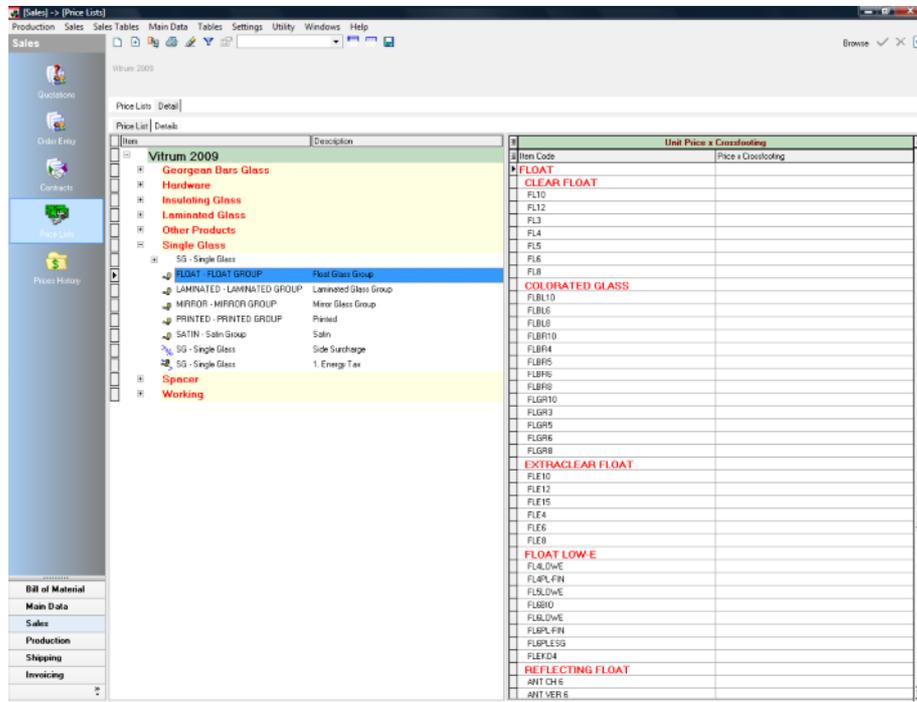
The Duplicate Price List  option allows you to copy an entire price list, including all its details. Pressing the Duplicate button opens the following confirmation pop-up window.



When a price list is duplicated, the Active flag is automatically deactivated. The duplicate action also copies header data to the new price list, in particular the code and the description are the same as in the original price list. Enterprise will not allow you to save until you edit these fields.

Price List Detail Management

Enterprise's Price List Details window is as follows:



Price list Details contain the "tables" in which the various product elements are valued.

As already stated, a price list is displayed in the so-called tree structure, and the main level is represented by the coded Goods Categories.

NOTE: Each time you create a new Price List, Commercial Grades - to which prices are to be linked - are created automatically. When you delete a Commercial Grade, it is automatically removed from all Price Lists. When you add a new Commercial Grade, it is added to all existing Price Lists.

The right part of the window that contains the price or prices is displayed only after you select the corresponding item in the display tree.

Adding a Price List Item

To add a new item to a Price List you can use the following two methods:

- ◆ You can click with the right mouse button on the name of the Goods Category.

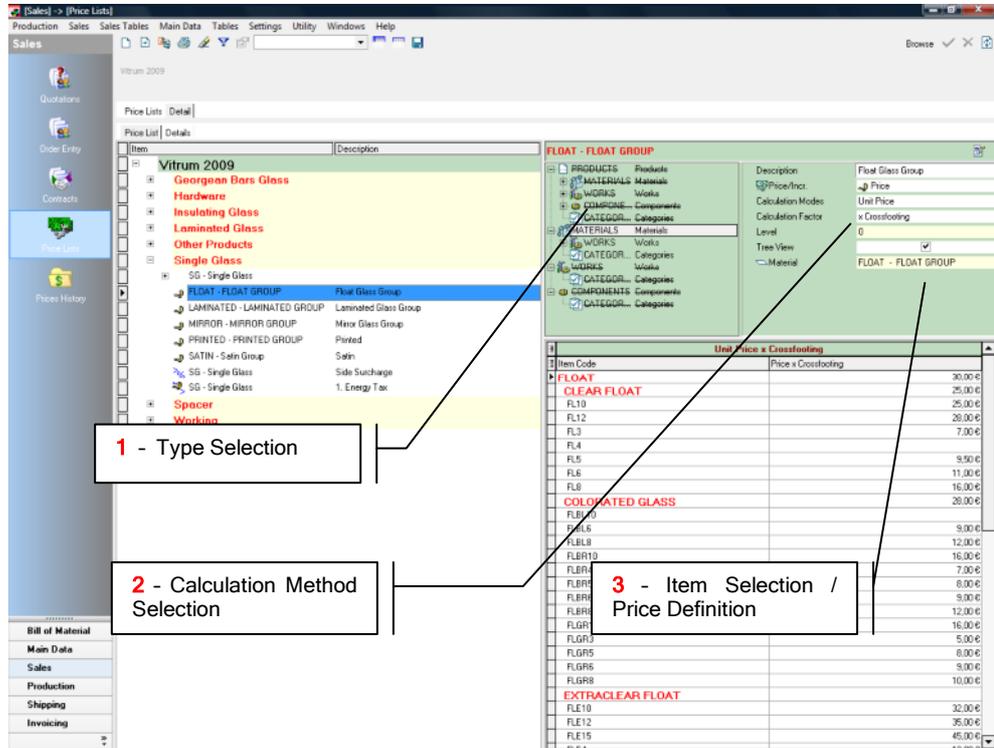


- ◆ You can select a Goods Category and use the ,  buttons on the window toolbar.

In both cases, you can decide whether to add a new item or a "parent" node to the tree.

NOTE: Because the coding system is quite complicated, it is suggested that you keep the price list as packed and compact as possible (fewer possible levels) for a better understanding.

Once the desired item "type" has been selected, the following window opens:



The right side of the window has three macro-areas:

- Type Selection
- Calculation Method Selection
- Item Selection/Price Definition

These three macro-areas are **logically dependent of each other** and above all they require following a well-defined “**sequence**” for a quick, easy and efficient data entry.

The following pages will describe the step-by-step procedure to create a new Price List item.

STEP 1 - Selecting the type of relationship or dependence of items

Each time you add a new item to a price list, the top right part of the window used to edit price list items displays an image similar to the one shown below:



This window - structured like a BOM - includes the four logical or dependence groups typical of Enterprise's basic master data archives.

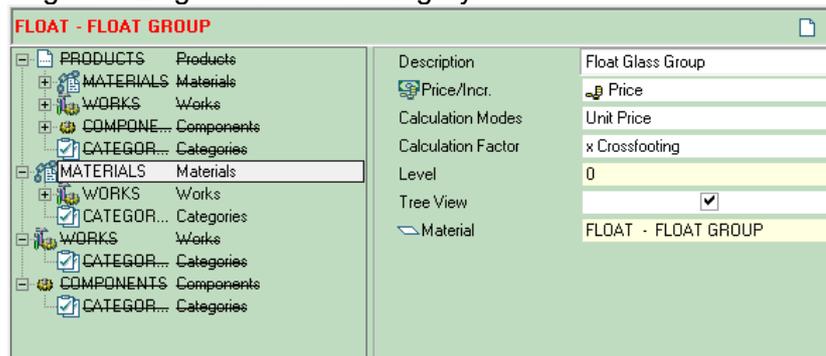
This structure is used to identify the type of element/component that you wish to value. Possible combinations are numerous, some of them even superimposable in terms of results.

When you are about to create a new "price list item", you must know very well what kind of relationship you wish to define between Products/Materials/Workings and Categories.

To better understand the selection logics, some examples of possible relationships are illustrated below. The examples refer to the Single Glazing Unit Goods Category (what follows, however, may apply to all the goods categories coded in the system).

Direct Material selection

The following window shows an example of a new price item entered into the Single Glazing Unit Goods Category.



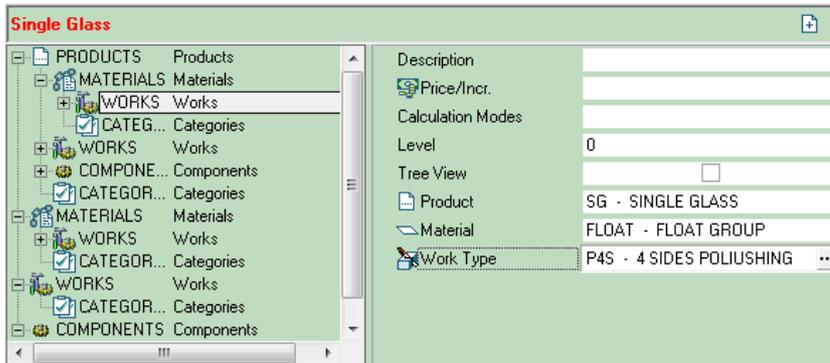
In the example illustrated in the picture, the selection refers to the MATERIALS branch. Through this selection, the price item refers to all the materials entered in a product of the Single Glazing Unit Goods Category (or products that belong to other Goods Categories in case no price has been defined for this group of materials).

NOTE: You select the types of material (in the example the Float glass types have been selected only) using the corresponding fields in the right part of the window (Step 2).

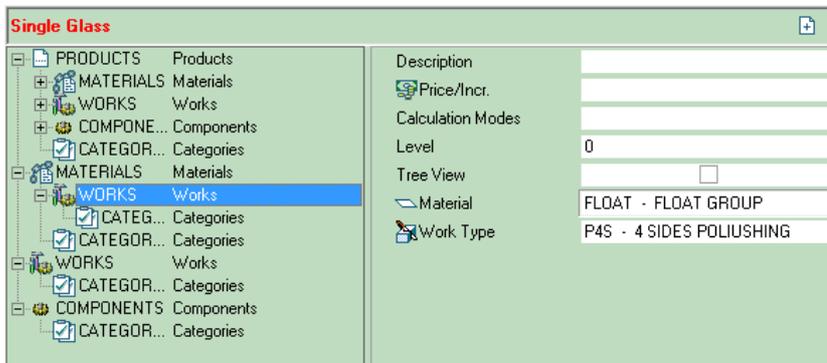
Workings selection

The following windows show three different selections to price the same working.

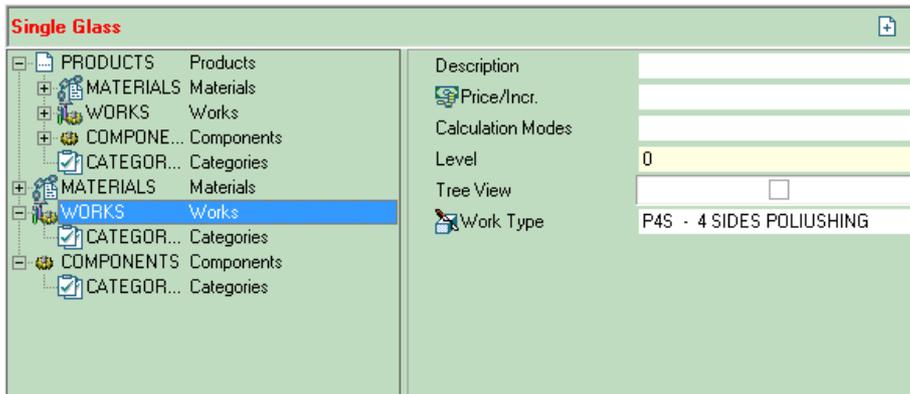
1) *Product → Materials → Workings*



2) *Materials → Workings*



3) *Workings*

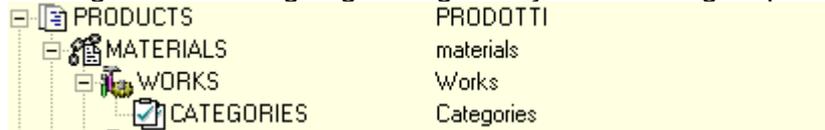


The difference among the three cases, although not immediate, is significant:

- 1) The selection refers to a working that is applied ONLY to the specified materials and ONLY to the indicated products. In the (first) example, the price is applied to rough grinding only in the case of a float glass item belonging to a single glazing unit (ATTENTION: single glazing unit product, not goods category!). The same working applied to a float glass item belonging to an IG unit is not priced. The same applies when the working is applied to a single glazing unit, but the material is not the specified material.
- 2) The selection refers to a working that is applied ONLY to the specified materials. In the (second) example, the price is applied to rough grinding

- only in the case of a float glass item (for all the products of the single glazing unit goods category).
- 3) The selection refers to a working. In the (third) example, the price is applied only to a working, for all the products of the Single Glazing Unit goods category (the same working applied to a product of a different goods category is not valued).
To assign a price to a working independently of the goods category, create a new item in the Workings Goods Category and use method no. 3.

The highest branching degree is given by the following sequence:



in which the price is assigned to those workings that have certain categories, only for the materials entered into the products specified in the right part of the window.

The first thing to do to "understand" how a price must be assigned is defining these dependence levels.

Depending on the selection, you can create a logical relationship among the product, the material you are about to enter/identify and workings. Product, material and work types are defined in Step 3.

STEP 2 - Selecting the price calculation method

Once the relationships among Product, Material, workings and Category levels have been defined, you define how the line or price item of a Price List must be calculated.

The right part (section 2) of Enterprise's editing window shows the following variables.

Description	Float Glass Group
Price/Incr.	Price
Calculation Modes	Unit Price
Calculation Factor	x Crossfooting
Level	0
Tree View	<input checked="" type="checkbox"/>
Material	FLOAT - FLOAT GROUP

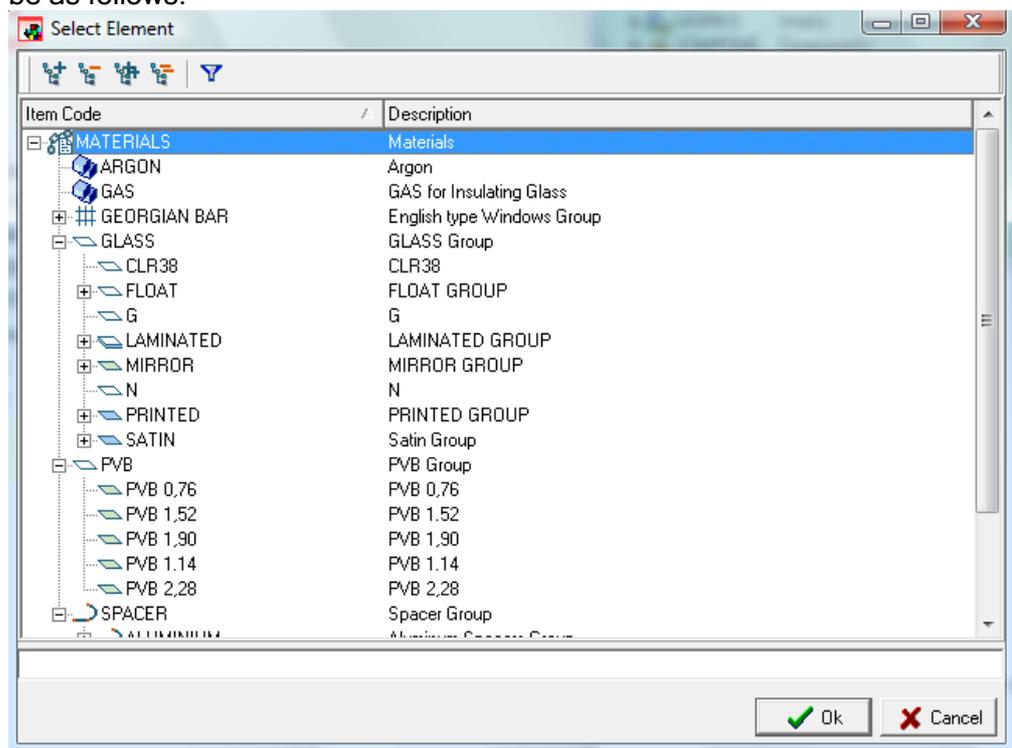
The fields mean the following:

- ◆ **Description:** Description field used to better identify the price item (used on documents!).
- ◆ **Calculation Modes:** Calculation Modes table (see the following section).
- ◆ **Price/Surcharge:** Item type selection among price/surcharge and Taxes (see the following section).
- ◆ **Calculation Factor:** Available only in case of prices or value surcharges. It allows you to choose the factor to be used for calculating prices (area, length, etc.).
- ◆ **Level:** Indicates the level within the BOM.
- ◆ **Tree Explosion:** Activates/deactivates the master data structure explosion.
- ◆ **Products, Materials, Workings, Categories:** Available depending on the selection made in step 1. They allow you to select the element to which the price is to be applied (Step 3).

STEP 3 - Selecting the item to be priced

After selecting the basic elements of the price search system, i.e. the item type and the corresponding calculation method, you need to select the "code" to be calculated. The selection can be made among the types available depending on the selection made in Step 1: products, materials, workings or categories. To open the element selection window, position the cursor on the field you wish to fill in and click on the  symbol.

Depending on the selected element, a window will open and show the data available in the master data archives. If you select a material, the window may be as follows:



To confirm the selection, **double click** on the desired item or group.

NOTE: As you can see in the picture, the element selection window has the same coded structure as the Master Data menu. It is thus recommended that you pay the greatest attention when coding master data.

Price Item Types

Enterprise offers three basic price item categories:

- ◆ **Price:** Basic value for each element. For valuing a product, each element of a BOM can have only one "price" item.
- ◆ **Surcharge:** Valuing element additional to the basic price. Unlike Price, an unlimited number of Surcharges may be present.
- ◆ **Tax:** Special valuing category, separated from the price and surcharge items. Tax amounts do NOT appear in the price calculation details, but they are shown in the corresponding tax totals window.

In detail, the following options are available:

☞ Price

>% % Surcharge

> Value Surcharge

>% % Surcharge on Parent

>% % Surch. on Price incl. Value Surcharge

>% % Surcharge on Parent incl. Value Surch.

☞ % Tax

☞ Fixed Value Tax

>% % Tax Base Price

>% % Surcharge on Product

>% Final % Surcharge

- ◆ **Price:** Basic value for the defined element. The entered value is multiplied by the factor determined by the calculation mode.
- ◆ **% Surcharge:** Percentage surcharge calculated on the sum of the various list prices.
- ◆ **Value Surcharge:** Value surcharge added to the total of price items. The surcharge value does not depend on the price.
- ◆ **% Surcharge on Parent:** Percentage surcharge calculated on the price of an element of the product BOM. It is used to increase the price of a material depending on its thickness or in case a certain working is carried out. The surcharge is applied only to price elements.
- ◆ **% Surcharge on Price incl. Value Surch.:** Percentage surcharge calculated on the sum of price items and value surcharges.
- ◆ **% Surcharge on Parent incl. Value Surch.:** Percentage surcharge calculated on the price of an element of the product BOM, also including the corresponding value surcharges.
- ◆ **% Tax on Total:** Percentage tax calculated on the total after valuing (price + surcharges).
- ◆ **Value Tax on Total:** Value tax added to price items.
- ◆ **% Tax on Basic Price:** Percentage tax calculated on price items related to the original elements of the BOM master data archive (excluding workings, materials, accessories added after loading the order line).
- ◆ **% Surcharge on Product:** Percentage surcharge calculated on the elements of the product structure.
- ◆ **% Surcharge on Total:** Percentage surcharge calculated on the total after valuing.

Price List Calculation Modes

Enterprise allows you to identify the price (or surcharge) of an element depending on certain product or element characteristics. To do so, the following modes are available:

- ◆ **Unit Price:** Allows you to specify the unit value for an element directly.
- ◆ **Lists:** The unit value is defined depending on an element or product parameter.
- ◆ **Cube-Grids:** The unit value is defined depending on two or three (for grids and cube modes respectively) geometric parameters of the element or product.

Independently of the selected mode, all valuing types are possible: prices, lists and grids can be used for prices, surcharges and taxes without distinction.

When a "List" and/or "Cube" mode is selected, it is the user who must define the parameter change intervals (refer to the "Multiple List Entry" section of this guide for further information).

Enterprise's Price List offers the following modes:

- ◆ **Master Data Combination:** Unit price calculated as the combination (two or three-dimension table) of two or more master data archives. This mode is used to define prices or surcharges based on the categories assigned to elements or customers. In the example below, the price per sqm of glass items is determined depending on the category assigned to customers (and indicated in the products).

Combinazione Anagrafiche x Area Comm.						
Item Code	Cat_Fascia	Fascia1	Fascia2	Fascia3	Fascia4	
▶ FLOAT						
FL10						
FL12						
FL15						
FL3						
FL4						

- ◆ **Price:** Unit price for the single element.

FLOAT - FLOAT GROUP

- PRODUCTS Products
- + MATERIALS Materials
- + WORKS Works
- + COMPONE... Components
- [-] CATEGOR... Categories
- + MATERIALS Materials
- + WORKS Works
- [-] CATEGOR... Categories
- + WORKS Works
- [-] CATEGOR... Categories
- + COMPONENTS Components
- [-] CATEGOR... Categories

Description: Float Glass Group

Price/Incr.: Price

Calculation Modes: Unit Price

Calculation Factor: x Crossfooting

Level: 0

Tree View:

Material: FLOAT - FLOAT GROUP

Unit Price x Crossfooting		
Item Code	Description	Price x Crossfooting
FLOAT	FLOAT GROUP	30,00 €
CLEAR FLOAT	Clear Float Group	25,00 €
FL10	Float 10mm	25,00 €
FL12	Float 12mm	28,00 €
FL3	Float 3mm	7,00 €
FL4	Float 4mm	
FL5	Float 5mm	9,50 €
FL6	Float 6mm	11,00 €
FL8	Float 8mm	16,00 €
COLORATED GLASS	Colorated Float Group	28,00 €
FLBL10	FL. Blue 10	25,00 €
FLBL6	FL. Blue 6	9,00 €
FLBL8	FL. Blue 8	12,00 €
FLBR10	FL. Bronze 10	16,00 €
FLBR4	FL. Bronze 4	7,00 €

- ◆ **Price Grid - X-Y Dim.:** Allows you to identify the unit value in a two-dimension table based on the glass item dimensions. The figure below illustrates an example in which the % surcharge on product is identified depending on the X and Y dimensions of the piece.

IG - Insulating Glass

- PRODUCTS Products
- + MATERIALS Materials
- + WORKS Works
- + COMPONE... Components
- [-] CATEGOR... Categories
- + MATERIALS Materials
- + WORKS Works
- [-] CATEGOR... Categories
- + WORKS Works
- [-] CATEGOR... Categories
- + COMPONENTS Components
- [-] CATEGOR... Categories

Description: IG Basic Price

Price/Incr.: % Surcharge on Product

Calculation Modes: Price Grid X - Y

Level: 0

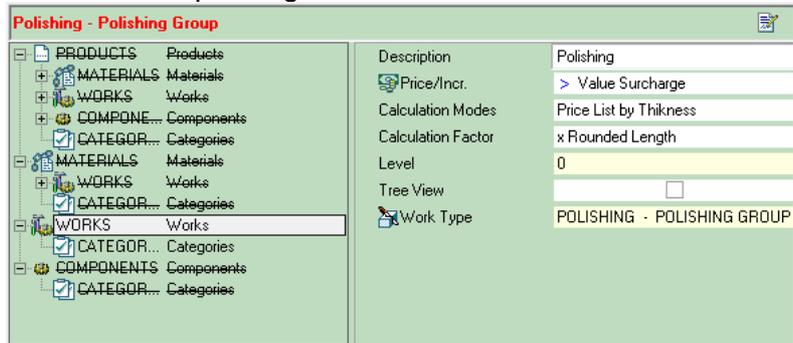
Tree View:

Product: IG - INSULATING GLASS

Price Grid X - Y x Barre x Lati					
Item Code	Lunghezza Pezzo	2200,0 mm	2400,0 mm	3210,0 mm	Greater Values
IG	2200,0 mm	0,00 %	0,00 %	0,00 %	50,00 %
	2400,0 mm	0,00 %	0,00 %	30,00 %	50,00 %
	3210,0 mm	0,00 %	30,00 %	30,00 %	50,00 %

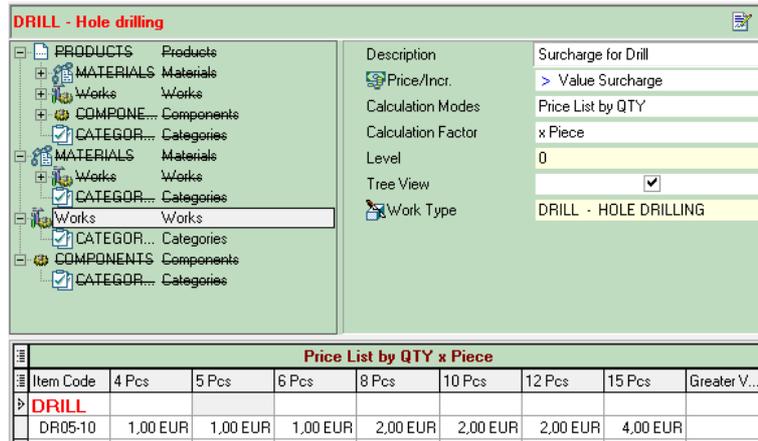
- ◆ **Price Grid - Area, Working Length:** Allows you to identify the unit value in a two-dimension table based on the glass item area and working length.
- ◆ **Cube - Area, Length, Thickness:** Allows you to identify the unit value in a three-dimension table depending on the glass item area, working length and thickness.

- ◆ **Bar List:** Allows you to identify the unit value depending on the number of bars existing in the Georgian grid modules.
- ◆ **Thickness List:** Allows you to identify the unit value depending on the material thickness. This mode is specially used to determine the prices for workings in which valuing depends on the material thickness. The figure below illustrates an example in which the unit value for grinding is determined depending on the material thickness.



Price List by Thickness x Lunghezza Comm									
Item Code	3,0 mm	4,0 mm	5,0 mm	6,0 mm	8,0 mm	10,0 mm	12,0 mm	15,0 mm	19,0 mm
Polishing									
Polishi...									
FRESACNC	0,01 €	13,00 €	13,00 €	13,00 €	13,00 €	13,00 €	13,00 €	13,00 €	13,00 €
FRESACO...	0,01 €	0,10 €	0,10 €	0,10 €	0,10 €	0,10 €	0,10 €	0,10 €	0,10 €
FRESALUC	0,01 €	20,00 €	20,00 €	20,00 €	20,00 €	20,00 €	20,00 €	20,00 €	20,00 €
Polishi...									
FGSAGCNC	0,01 €	3,00 €	3,00 €	3,00 €	3,00 €	3,50 €	15,00 €	20,00 €	20,00 €
FLCNC	0,01 €	3,00 €	3,00 €	3,00 €	3,00 €	3,50 €	15,00 €	20,00 €	20,00 €
FLSAGCNC	0,01 €	3,00 €	3,00 €	3,00 €	3,00 €	3,50 €	15,00 €	20,00 €	20,00 €
Polishi...									
FG	1,03 €	1,03 €	1,03 €	1,03 €	1,45 €	2,35 €	3,00 €	10,00 €	10,00 €
FGSAG	0,10 €	1,00 €	0,10 €	0,10 €	0,10 €	0,10 €	0,10 €	0,10 €	0,10 €
FL	1,03 €	1,03 €	1,03 €	1,03 €	1,45 €	2,35 €	3,00 €	10,00 €	10,00 €
FL SU 3+3	0,01 €	0,01 €	0,01 €	1,55 €	0,01 €	0,01 €	0,01 €	0,01 €	0,01 €
FL SU 4+4	0,01 €	0,01 €	0,01 €	0,01 €	0,01 €	2,33 €	0,01 €	0,01 €	0,01 €
FL SU 5+5	0,01 €	0,01 €	0,01 €	0,01 €	0,01 €	5,00 €	0,01 €	0,01 €	0,01 €
FLSAG	0,10 €	0,10 €	0,10 €	0,10 €	0,10 €	0,10 €	0,10 €	0,10 €	0,10 €
POLSH	0,01 €	0,01 €	0,01 €	0,01 €	0,01 €	0,01 €	0,01 €	0,01 €	0,01 €

- ◆ **Working Length List** Allows you to identify the unit value depending on the working length.
- ◆ **Rounded-off Shorter Side Price List:** Allows you to identify the unit value depending on the shorter side dimension calculated based on the roundings off set in the Customer Conditions (crossfooting value).
- ◆ **Rounded-off Longer Side Price List:** Allows you to identify the unit value depending on the longer side dimension calculated based on the roundings off set in the Customer Conditions (crossfooting value).
- ◆ **Area List:** Allows you to identify the unit value depending on the piece area.
- ◆ **Cube - Thickness, X Dim., Y Dim.:** Allows you to identify the unit value in a three-dimension table depending on the material thickness and piece dimensions.
- ◆ **Structural Glazing Unit Step List:** Allows you to identify the unit value depending on the glass steps between the glass items of a structural glazing unit.
- ◆ **Shorter Side Price List:** Allows you to identify the unit value depending on the actual shorter side.
- ◆ **Longer Side Price List:** Allows you to identify the unit value depending on the actual longer side.
- ◆ **Quantity Price List:** Allows you to identify the unit value depending on the piece number (quantity by utilization coefficient).



- ◆ **Price Grid - Quantity, Area:** Allows you to identify the unit value in a two-dimension table based on quantities and the glass item area.
- ◆ **Perimeter List:** Allows you to identify the unit value depending on the piece perimeter.
- ◆ **Coefficient List:** Allows you to identify the unit value depending on the utilization coefficient set for the BOM element.

Calculation Factors

In case of Price or Value Surcharge valuing, the editing window of the Price List option also shows the line pertaining to the Calculation Factor. Within this line, you must select the factor by which the price unit value specified in the selected line will be multiplied.

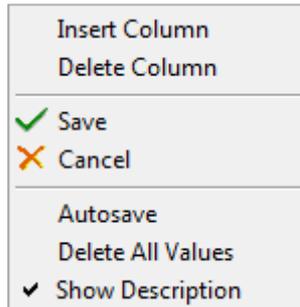
Enterprise offers the following factors:

- ◆ **By Pieces:** Multiplies the price unit value by the number of ordered pieces (ordered quantity).
- ◆ **By Rounded-off Area:** Multiplies the price unit value by the commercial area of the piece, i.e. the area calculated based on the roundings off set in the Customer Conditions (crossfooting value).
- ◆ **By Working Length:** Multiplies the price unit value by the length of the selected working.
- ◆ **By Weight:** Multiplies the price unit value by the element weight.
- ◆ **By Thickness:** Multiplies the price unit value by the material thickness.
- ◆ **By Area:** Multiplies the price unit value by the actual area of the piece (value for the finished piece without crossfooting).
- ◆ **By No. of Cells:** Multiplies the price unit value by the number of cells in an IG unit with Georgian bars.
- ◆ **By No. of Crossings:** Multiplies the price unit value by the number of crossings in an IG unit with Georgian bars.
- ◆ **By No. of Bars:** Multiplies the price unit value by the number of bars in an IG unit with Georgian bars.
- ◆ **By Rounded-off Perimeter:** Multiplies the price unit value by the commercial perimeter of the piece, i.e. the perimeter calculated based on the roundings off set in the Customer Conditions.
- ◆ **By Rounded-off Length:** Multiplies the price unit value by the commercial length of the working, i.e. the length calculated based on the roundings off set in the Customer Conditions.
- ◆ **By Quantity:** Multiplies the price unit value by the value contained in the Total Bars field.
- ◆ **By Bars, By Sides:** Multiplies the price unit value by the number of bars and then by the number of sides.

Entering multiple lists and/or CUBES

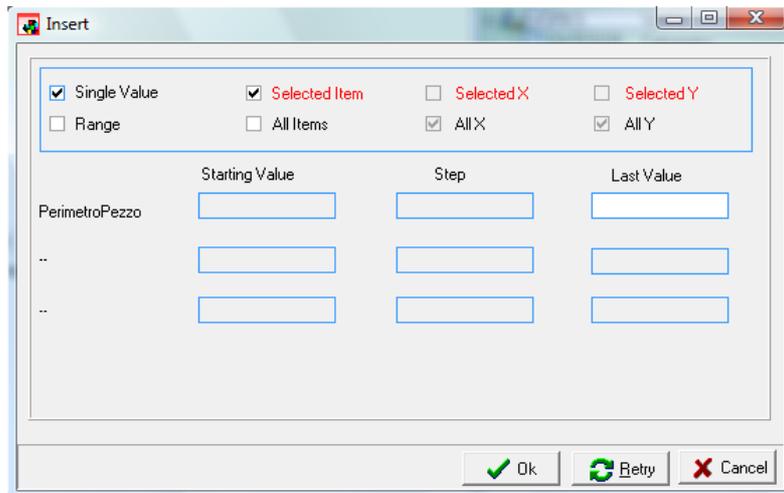
In addition to fixed prices, Enterprise offers other calculation modes, the so-called "Lists", which allow you to enter more prices in a single price item depending on some parameters of the elements existing in the BOM (e.g. thickness, area, number of pieces).

To do so, Enterprise offers a special data entry feature, which can be activated by pressing the right mouse button when the cursor is on the price grid label. A menu similar to the one shown below opens:



The pop-up window includes the options to insert or remove columns in/from the desired list.

If you choose to insert columns, the following window opens:



The Insert window includes different kinds of information. This window is independent of the previously selected price calculation method and no consistency checks are performed on the values entered. It is the user who must enter consistent values, i.e. thickness values in case a thickness list was selected.

The following types of information are available:

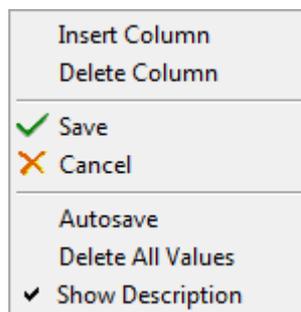
- ◆ **Single Value:** You need to enter one value only (in this case, you can use the Retry icon to enter data more easily).
- ◆ **Range:** You need to enter the starting value, the step size and the ending value for the range.

- ◆ **Selected Element/All Elements:** You need to enter price values only for the line you selected at the beginning or for all the lines available in the branch.
- ◆ **Selected X/Y, All X/Y:** You need to enter price values only for the line you selected at the beginning or for all the lines available in the branch.

NOTE: This method improves price list data entry and maintenance and makes price lists easier to read and consult.

Other available features

For entering prices, other features become available by clicking the right mouse button on the price grid label:



These features are:

- ◆ **Save:** Saves data.
- ◆ **Cancel:** Cancels changes made.
- ◆ **Autosave:** Saves entered data automatically.
- ◆ **Clear Values:** Clears values in price columns.
- ◆ **Show Description:** Shows the master data description column.

Editing a Price List Item

From within the details of a Price List you can access the details of the single price list items.

Click on the single items to display the price definition table, in which you can specify the unit value for the element.

Double click on the single items to access the price list item edit mode. Alternatively, you can click with the right mouse button on the

 **Modify Tree** menu option.

Duplicating a Price List Item

To duplicate a Price List item you can use the following two methods:

You can click with the right mouse button on .

You can use the  button on the window toolbar.

The Duplicate feature creates an exact copy of the selected item and places this "copy" in the last position of the price list from which the Duplicate command was invoked.

Removing a Price List Item

To remove a Price List item you can use the following two methods:

You can click with the right mouse button on .

You can use the  button on the window toolbar.

Printing - Exporting price list items in Excel format

Along with the Print  option available in all the forms, Enterprise's Price List menu offers features to print and export data in Excel format.

NOTE: Because possible combinations are numerous, Enterprise's Price List section is not equipped with specific reports. Contact Optima's technical support department for information or custom-made reports.

The export features allow you to obtain tables in Excel-like format, which contain the same data you can view from within Enterprise.

The table creation features are in the window toolbar next to the combo box for the selection of filters. They are: .

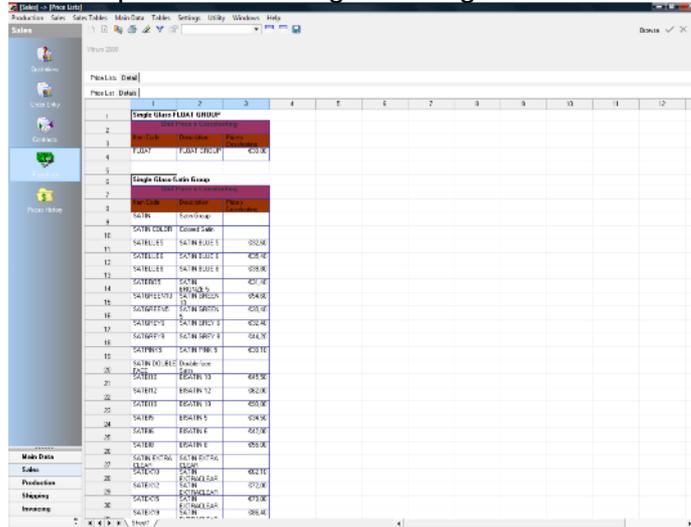
The first button is used to export an entire price list, the second to export only the selected item.

Exporting a Table in Excel format

To export a price table in a format that is compatible with Excel, simply

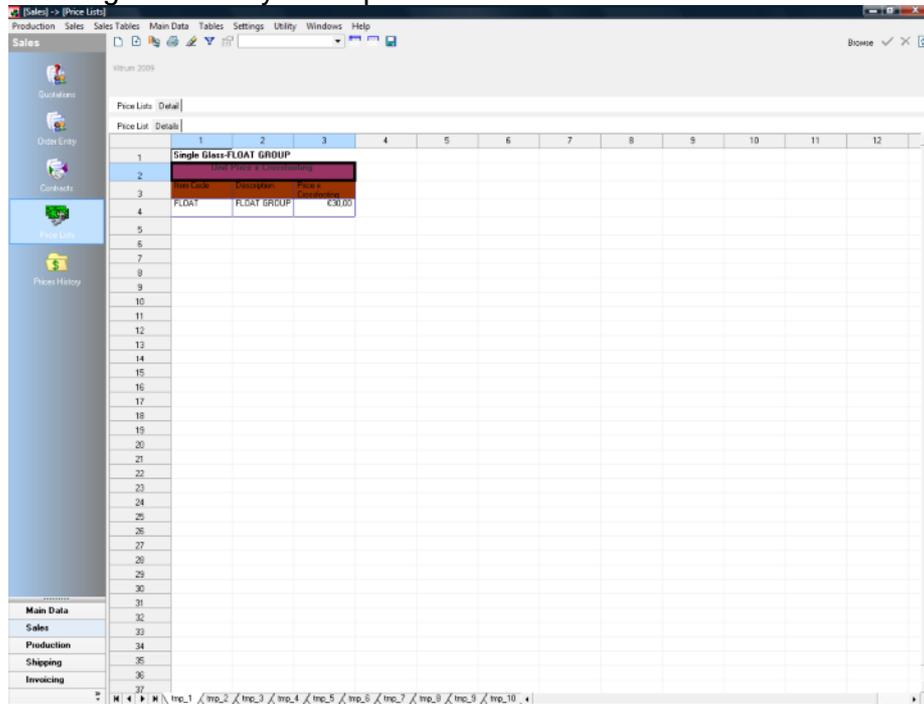
- ◆ select the item you wish to export.
- ◆ Click on the Export Table in Excel format  button (the middle button).

Pressing the Export button creates a table containing the same items of the price list (both priced and non-priced values). The table is created in the Details tab of the Price Lists window and automatically activated after creation. The figure below illustrates an example in which a table has been exported with the prices of the Single Glazing Unit materials.



Exporting All in Excel format

Pressing the Export All in Excel format button creates a table for each price list value. You can switch from one table to the other by scrolling the sheets generated by the export feature.



Customers' Contracts

Introduction

The "Contracts" feature allows you to "define" special prices for special products for certain customers at specified time intervals.

In Enterprise, Customers' Contracts are configured and managed following the same procedure used to define any standard order line.

This lets you save resources when learning how to use the system and reduce system start-up errors.

How Contracts work

Contract configuration "faithfully" follows the work pattern of the entire customer order management. A contract is defined in the same way an order is entered, using the manual price option. Please refer to the corresponding section of this guide for additional details on how orders are entered and the Manual Price option is activated.

A Customer Contract matches any Sales Order or Offer exactly, except for:

- ◆ the concept of time validity of the contract.
- ◆ The utilization of the manual price option (to be always activated in the Contract).

In the Contract header, you can define a start and an end date for the validity of the specific contract conditions. This validity range is then used for the orders released for that specific customer to check whether contract conditions must be applied or not.

Start Validity	01/07/2010 ▼
End Validity	31/08/2010 ▼

The customer order management (like the offer management) will check and activate the price search for the single item, first in the contract database, and then in the price list management.

NOTE: Contract conditions are presented on the order line, but you can always decide whether to use or not these conditions when valuing each line.

Special reports are available for Customer Contracts to present the contract conditions defined with the customer.

Price History

Introduction

One of the requirements of the glass industry - and in general of competitive businesses - is the continuing need by the sales structure to "monitor" prices. In Enterprise, a series of tools is available to display and consult the prices applied to a customer.

Price History Database

The database Enterprise considers and uses as price "History" is the portfolio of the orders existing in the system. Deleting an order automatically deletes all the data pertaining to the price history of the deleted order. Therefore, it is very important that you keep data stored in the database to be able to consult the price history.

NOTE: Some Enterprise versions allow you to consult the price history also considering the actual price stored in the invoicing archives, and not only that of the Customer Order archives.

Consulting the Price History

In Enterprise, you can consult the price history in two ways:

- ◆ using the corresponding window from the Sales module.
- ◆ Using the corresponding option under the Prices tab of the order line.

Price History Menu

The Price History display window shows one line for each order line. Along with price history details, each line displays all the data pertaining to the order line to which the line refers (dimensions, product composition, etc.).

In the price history window - like in any other Enterprise's window - the displayed data can be grouped and/or sorted according to user-defined criteria. You can organize and display the data, for instance, grouped by customer or date, you can define filters and print customer comparison printouts etc.

The following figure illustrates an example of the Price History window as it appears the first time you open it (there are no groupings).

Order No.	Doc. No.	M2 Price	Price for Pl.	Discounted...	Width	Height	Q.ty	Price List	Order Date
21	21	12,00€	8,88€	8,88€	1370 mm	900 mm	10	Vitium 2009	07/10/2009
21	21	12,00€	8,88€	8,88€	1470 mm	900 mm	4	Vitium 2009	
21	21	12,00€	8,88€	8,88€	1470 mm	1000 mm	1	Vitium 2009	
21	21	12,00€	1,96€	1,96€	1480 mm	945 mm	2	Vitium 2009	
SP1	SP1	33,00€	23,00€	23,00€	1000 mm	1000 mm	1	Vitium 2009	
SP1	SP1	90,00€	90,00€	90,00€	1000 mm	1000 mm	1	Vitium 2009	
SP1	SP1	70,00€	70,00€	70,00€	1000 mm	1000 mm	1	Vitium 2009	
SP1	SP1	100,00€	100,00€	100,00€	1000 mm	1000 mm	1	Vitium 2009	
CRD-44-03	CRD-44-03	25,00€	22,75€	22,75€	1140 mm	800 mm	8	Vitium 2009	
CRD-44-03	CRD-44-03	33,00€	30,00€	30,00€	1000 mm	1000 mm	4	Vitium 2009	
CRD-44-03	CRD-44-03	37,50€	30,00€	30,00€	800 mm	1000 mm	4	Vitium 2009	
CRD-44-03	CRD-44-03	25,00€	13,25€	13,25€	800 mm	800 mm	12	Vitium 2009	
CRD-44-03	CRD-44-03	27,11€	25,70€	25,70€	700 mm	1150 mm	4	Vitium 2009	
CRD-44-03	CRD-44-03	27,12€	21,82€	21,82€	500 mm	725 mm	4	Vitium 2009	
CRD-44-03	CRD-44-03	26,04€	20,74€	20,74€	1700 mm	800 mm	6	Vitium 2009	
CRD-45-03	CRD-45-03	32,31€	32,18€	32,18€	700 mm	900 mm	4	Vitium 2009	
CRD-45-03	CRD-45-03	39,15€	15,36€	15,36€	1145 mm	400 mm	4	Vitium 2009	
CRD-45-03	CRD-45-03	30,15€	22,32€	22,32€	1000 mm	450 mm	4	Vitium 2009	
CRD-45-03	CRD-45-03	75,35€	37,57€	37,57€	480 mm	1100 mm	4	Vitium 2009	
CRD-45-03	CRD-45-03	66,50€	45,27€	45,27€	1000 mm	800 mm	2	Vitium 2009	
CRD-45-03	CRD-45-03	32,7€	30,58€	30,58€	1000 mm	400 mm	4	Vitium 2009	
CRD-45-03	CRD-45-03	77,04€	51,69€	51,69€	1000 mm	900 mm	4	Vitium 2009	
CRD-45-03	CRD-45-03	36,90€	36,62€	36,62€	870 mm	1140 mm	12	Vitium 2009	
CRD-45-03	CRD-45-03	26,34€	26,34€	26,34€	780 mm	1180 mm	8	Vitium 2009	
CRD-45-03	CRD-45-03	33,36€	23,90€	23,90€	1400 mm	200 mm	12	Vitium 2009	
CRD-45-03	CRD-45-03	29,64€	20,36€	20,36€	700 mm	900 mm	6	Vitium 2009	
CRD-45-03	CRD-45-03	27,24€	21,40€	21,40€	800 mm	800 mm	12	Vitium 2009	
CRD-45-03	CRD-45-03	30,52€	28,19€	28,19€	700 mm	900 mm	10	Vitium 2009	
CRD-45-03	CRD-45-03	30,95€	25,97€	25,97€	700 mm	870 mm	4	Vitium 2009	
CRD-45-03	CRD-45-03	40,31€	49,42€	49,42€	1000 mm	74 mm	14	Vitium 2009	
CRD-45-03	CRD-45-03	30,84€	37,85€	37,85€	1400 mm	700 mm	4	Vitium 2009	
CRD-45-03	CRD-45-03	41,85€	32,25€	32,25€	1400 mm	800 mm	6	Vitium 2009	
CRD-45-03	CRD-45-03	36,29€	37,31€	37,31€	1000 mm	380 mm	4	Vitium 2009	
CRD-45-03	CRD-45-03	41,61€	31,75€	31,75€	800 mm	700 mm	2	Vitium 2009	
CRD-45-03	CRD-45-03	41,82€	31,75€	31,75€	800 mm	700 mm	2	Vitium 2009	
CRD-45-03	CRD-45-03	22,74€	43,86€	43,86€	1000 mm	780 mm	6	Vitium 2009	
CRD-45-03	CRD-45-03	30,74€	19,65€	19,65€	1000 mm	500 mm	4	Vitium 2009	
CRD-45-03	CRD-45-03	27,96€	19,07€	19,07€	500 mm	780 mm	6	Vitium 2009	
CRD-45-03	CRD-45-03	32,71€	19,71€	19,71€	1000 mm	800 mm	4	Vitium 2009	
CRD-45-03	CRD-45-03	23,88€	30,70€	30,70€	1400 mm	800 mm	8	Vitium 2009	
CRD-45-03	CRD-45-03	31,94€	34,46€	34,46€	1000 mm	1000 mm	4	Vitium 2009	
CRD-45-03	CRD-45-03	23,84€	26,96€	26,96€	1000 mm	400 mm	4	Vitium 2009	
CRD-45-03	CRD-45-03	32,64€	40,71€	40,71€	1000 mm	1010 mm	4	Vitium 2009	
CRD-45-03	CRD-45-03	30,00€	26,24€	26,24€	800 mm	800 mm	4	Vitium 2009	
CRD-45-03	CRD-45-03	41,93€	117,12€	117,12€	2000 mm	800 mm	4	Vitium 2009	
CRD-45-03	CRD-45-03	40,24€	28,07€	28,07€	1100 mm	1100 mm	4	Vitium 2009	
Production	CRD-45-03	46,50€	44,72€	44,72€	1200 mm	800 mm	8	Vitium 2009	
Sales	CRD-45-03	36,32€	40,24€	40,24€	1200 mm	800 mm	4	Vitium 2009	
Shipping	CRD-45-03	36,37€	24,00€	24,00€	1400 mm	700 mm	4	Vitium 2009	
Invicing	CRD-45-03	34,44€	35,41€	35,41€	1400 mm	746 mm	2	Vitium 2009	
SP1-03-04	SP1-03-04	19,14€	26,46€	26,46€	1400 mm	800 mm	4	Vitium 2009	

Consulting from within Orders

The second method Enterprise offers to consult the price history is from within the order management. Obviously, it is very important for the user - when defining prices - to be able to rely on a powerful search system to find previously defined prices.

From within the order management (but also from within offers), you can activate a special Price History search form by pressing the  button in the Prices tab.

A display window mirroring the main history feature window opens. Here, the user can consult the entire list of the prices applied to that customer and for the specified item.

Order No.	Doc. No.	M2 Price	Price for Pl.	Discounted...	Width	Height	Q.ty
ORD-46-09	ORD-46-09	36,99€	36,62€	36,62€	870.0 mm	1140.0 mm	1
ORD-46-09	ORD-46-09	39,32€	29,19€	29,19€	750.0 mm	998.0 mm	1
ORD-46-09	ORD-46-09	39,35€	25,97€	25,97€	750.0 mm	870.0 mm	1
ORD-46-09	ORD-46-09	35,61€	49,42€	49,42€	1980.0 mm	680.0 mm	1

At the end of consultation, the system prompts you to confirm whether the price found must be applied or not. If you confirm, the order management will use the price found in the price history for the line you are entering.

7 - Production Management

Introduction

The structure of Enterprise's Production module is based on some fundamental elements, i.e.:

- ◆ Production Orders
- ◆ Production
- ◆ Work Types
- ◆ Order Progress
- ◆ Rack Progress

These modules allow you to:

- ◆ Enter production orders that are not linked to the sales system and are typically used for re-processing (e.g. in case of glass breakage).

NOTE: If you do not have the sales system, you will need to enter all orders in this way as if they were simple Production Orders. No Work Tickets/Shipping Documents or Invoices will be created.

- ◆ Release portfolio orders while interacting with the shipping rack management system.
- ◆ Control the production of the different work orders, manage data optimization and generation for automated processing systems (cutting tables, automatic bending machines, etc.).
- ◆ Monitor the production progress, the material ready for shipping and manage shipping.
- ◆ Monitor the shipping rack status.

The following is a description of the different features the program offers and the various stages the user must follow to proceed with the production cycle and monitor it.

Production Management Modes

Enterprise manages glass production activities organizing production into Batches. Batches are groups of Work Orders, i.e. groups of manufacturing orders that contain the list of the pieces to be worked.

When a batch is created, order lines are split and re-grouped by type of working inside work orders. Thus, a work order may be seen as the group of all workings of the same kind or to be carried out on the same working center (depending on how workings were configured inside the working master data archive). In a work order, orders, customers or lines are not important. What counts are the pieces to be worked regardless of the other variables (sometimes even independently of the material).

Another very significant concept related to production is production status. Enterprise offers a simple, but comprehensive and advanced system to efficiently manage production progress control in the various working centers. The detail level varies from the status of a single working of a single piece to the status of a work order and production (sales) order from which you started. The status of a single working (on a piece) affects:

- ◆ the work order status. A work order changes from "Being Worked" to "Completed" when all the "pieces" in it have been completed.
- ◆ the position status. A position is completed when all the workings composing it have been completed.
- ◆ the status of a single product. A product is completed when all the workings composing it (regardless of work orders) have been completed.

The status of a single product and the position status affect:

- ◆ the order line status. An order line is completed when all the products in the line have been completed (if the quantity of the completed products is lower than the total quantity, the line is "Being Worked") or when all the positions have been completed.

The order line status affects:

- ◆ the order status. An order is "Completed" when all the lines belonging to it have been completed.

The following pages illustrate how to create and manage batches and work orders.

Production Batches

In Enterprise, Batches are used to group different work orders (corresponding to production orders in a traditional management software program).

Thus, a Batch includes as many work orders as the Work Types to be performed that existed in the cycle of the product entered.

When releasing orders, batches are always created either automatically or manually by the user, who can customize them as required and assign them the desired code and description. There aren't rules or limits that overview batches creation: a batch can be created from a set of orders without care for materials and workings. Anyway it's possible to create batches using orders with particular materials and/or workings (e.g. select only rows with laminated materials).

Users can create batch in full autonomy, assigning to it a user defined code and description.

Work Orders

Work Orders are the smallest units of Enterprise's production system. Work Orders include the data of the single details and allow you to:

- ◆ Optimize flat and linear material cutting.
- ◆ Generate data for automated systems.
- ◆ Produce documents for the various product processing stages.
- ◆ Control production.

In Enterprise, work order management is integrated with order management. Deleting an order means automatically deleting the work orders that are related to it.

Work orders are automatically numbered by Enterprise as follows:

Work Type Code + Batch Number + Progressive Number.

The following is an example:

Work Order Code	Work Type Type	Batch	Progr. No.
M0267304	M (Cutting)	02673	04
P0267301	P (Bending)	02673	01

Production Orders



Enterprise has a specific module to manage and process production orders. This module allows you to:

- ◆ Enter and manage all Orders, if you do not have Enterprise's Sales module.
- ◆ Create production orders that are totally unlinked to the sales system.
- ◆ Create orders for re-processing. These can be generated and controlled by Enterprise's re-processing system automatically (if active).
- ◆ Manage orders to restore stocks, i.e. orders that do not refer to any customer order.
- ◆ Follow the progress of the entire company's order portfolio.

The Production Order system structure is similar to the Sales Orders module structure. Therefore you should refer to the Order chapter to have detailed instructions on how to create, edit and manage a Production Order.

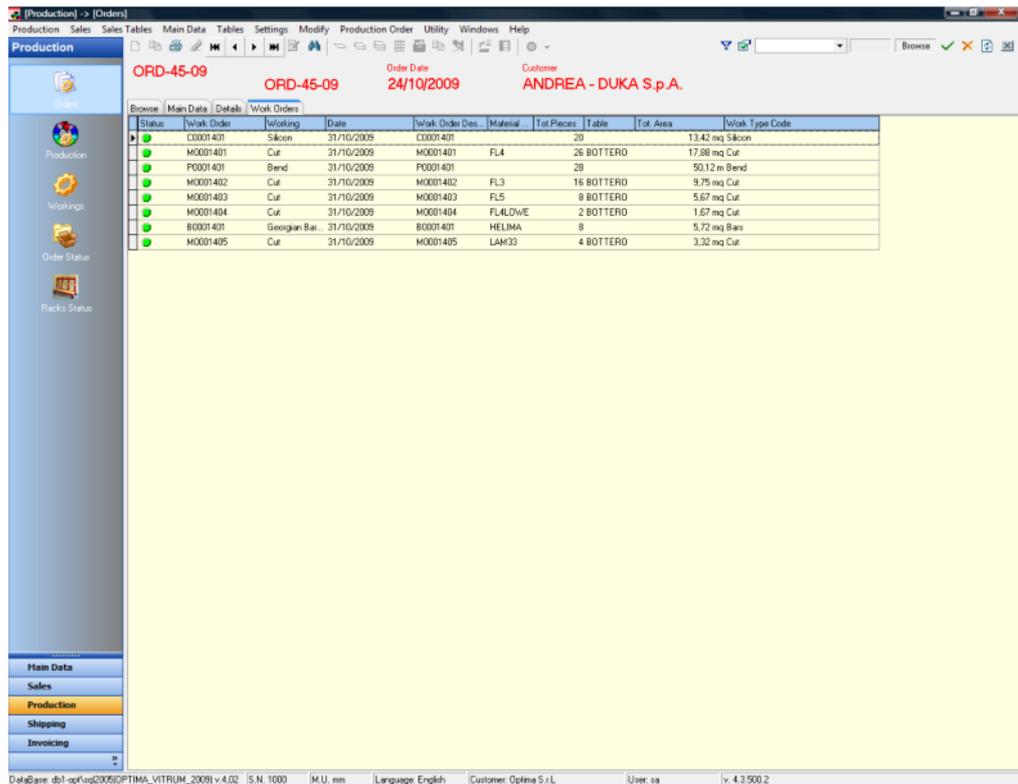
N.B.: In the Production Order Module, all commercial data have been disabled.

Work Orders

The Production Orders module has a tab called **Work Orders** to display work order data including the details of the on-screen order.

NOTE: Work Orders displayed on screen are "global" compared to the detail lines that exist in the order. Thus, you will find a list of work orders, but no order line linkage to the work order.

Using the browse option available, you can view the status of the various work orders, as illustrated in the image below:



From within the Work Orders window you can also activate the feature to open the selected work order, by clicking the right mouse button.

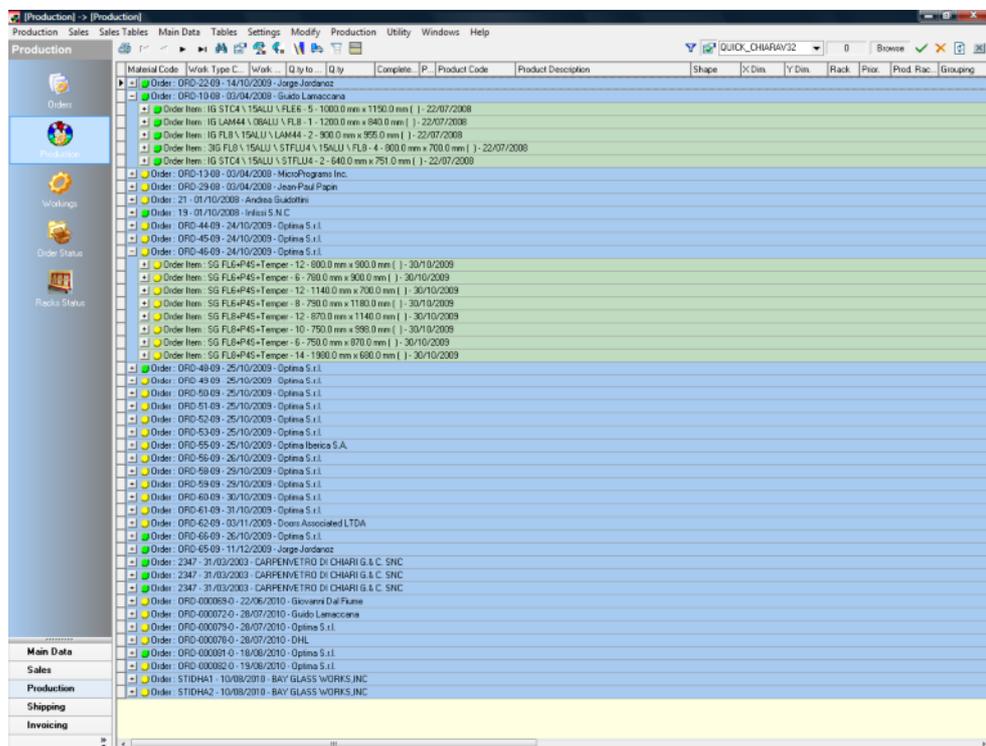


Clicking on this option will be opened Working menu as pop-up and the selected work order will be highlighted in the new window. To go back to the Production Orders module, you will need to close this window.

Production Release

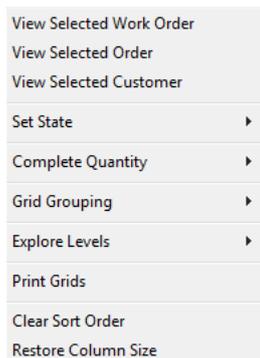
In Enterprise, Production Release is certainly one of the most important phases of the entire software system. Through this feature and the sophisticated selection tools it offers, the user can browse the order portfolio and perform the following actions:

- ◆ View the order status.
- ◆ Select the data items to be released.
- ◆ Calculate the shipping rack cycle.
- ◆ Release portfolio orders.
- ◆ Print the documentation for the different shop floors.
- ◆ Check the order status.
- ◆ Manage the order progress manually.



NOTE: The first time the Production window opens, it is empty for the user to define what he/she wishes to display.

Thanks to customizable grids, the user can also filter and view data inside the window in the way he/she deems it best for the action he/she has to perform. Along with the features that can be activated by clicking the right mouse button, these features



allow the user to browse through data easily, rapidly and precisely.

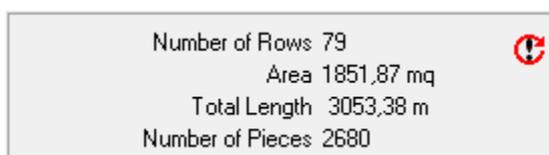
Selecting Data

To browse the order portfolio, Enterprise offers the user, along with   customizable dynamic filters, also a predefined filter to select data in a very precise and targeted way.

The filter is activated via the  icon. The filter has two selection levels, one depending on the other:

- ◆ **First Level:** Data selected on the first level controls subsequent data.
- ◆ **Second Level:** Second level selections contain only the data specified by the previous or first level selection.

Along with selection limits, the filter lets you display the totals for the selected lines. They refer to the values for:



- Number of selected lines.
- Surface area of pieces.
- Total length, i.e. perimeter.
- Number of pieces.

The  icon allows you to recalculate data after refreshing the filter or resetting the selection with the corresponding button.

NOTE: It is recommended that you use the reset feature when you make a lot of and different changes to the filter or when you move from one window to another.

When you confirm the filter, you also activate it, which opens the main window.

First Level Selection

The first level selection under the General tab offers the following selection limits:

- ◆ **Order Date From/To:** Selection limit for the order date.
- ◆ **Delivery Date From/To:** Selection limit for the delivery date.
- ◆ **Scheduled Production Start Date From/To:** Selection limit for the scheduled production start date.
- ◆ **Scheduled Production End Date From/To:** Selection limit for the scheduled production end date.
- ◆ **Material Type:** Product Type selection (refer to the Product Type table for further information).
- ◆ **Piece Status:** To select order lines having the desired status.
- ◆ **Work Type Status:** To select Work Type lines having the desired status.

NOTE: The piece status may differ from the Work Type status, because the work order may have been closed although "a piece" was missing. For this reason, the two statuses may differ.

Conditions defined in the General tab will be used to filter visible data on the other tabs of the filter.

Second Level Selection

The second level selection window offers various tabs corresponding to various operation modes. In detail, the following modes are currently available:

- ◆ **Import File:** Name of the file used to import data from external systems (in the predefined ASCII format).
- ◆ **Material Code:** Selection by Glass code.
- ◆ **Spacer Bar:** Selection by Spacer Bar code.
- ◆ **Customer:** Selection by Customer code.
- ◆ **Order:** Selection by Order Number.
- ◆ **Batch:** Selection by Batch (when you wish to select data items that have already been released).
- ◆ **Work Order:** Selection by Work Order Number (when you wish to select data items that have already been released).
- ◆ **Composite Material Description:** Selection by finished product code.
- ◆ **Work Types:** Selection by Work Type Type.
- ◆ **Areas:** Selection by Area code assigned to the customer.

Each of these limits displays, for each item falling into the limits set by level 1, the totals pertaining to the following data:

- ◆ Number of pieces.
- ◆ Number of lines.
- ◆ Number of orders.
- ◆ Area.
- ◆ Surface Area.

NOTE: Data displayed depends on the type of selected limit.

Once you have defined the type of selection you wish to make, select the desired tab. The specific feature offers different modes to "search for" data and select it. These are:

- ◆ **Search for Code:** Once the field is filled in, the system will position on the desired code for selection.
- ◆ **All:** The feature activates the automatic selection of all on-screen records.
- ◆ **Double Click:** Allows you to actually select a record.
- ◆ **Ctrl + Selection:** Selects, in Windows mode, the records within the activated range.

It should be noted that once a selection has been activated, Enterprise shows the general totals of the selections you made in the bottom part of the screen.

Within this selection level, the different limits you set are "at the same level", so they may conflict with each other. Conditions set on the General tab are immediately applied on second level selection tabs; conditions set on second level tabs are not spread on tab of the same level even if they act as AND-like condition.

A practical example is given below to better describe this operating mode.

Let suppose that your portfolio includes your customers and the relevant orders:

Customers	Orders
XY Carpenter & Sons Ltd.	OR-3425/10
	OR-3426/10
	OR-3478/10
Z Doors & Shutters Ltd.	OR-3485/10
	OR-3475/10
XXX Glaziers Ltd.	OR-3521/10
	OR-3466/10
	OR-3256/10
	OR-3125/10
	OR-3099/10

If you select the following orders: OR-3425/10, OR-3485/10, OR-3475/10, and then, from within the Customers tab, you select XXX Glaziers Ltd. as the customer, your filter

will return no line.

That is because the two activated limits are not dependent one on the other, but they are both at the same level.

NOTE: To avoid this problem, it is recommended that you make selections hierarchically, i.e. that you first activate the most important limits, and then the others in descending order.

Production Features

As previously described, the Production window is always empty when it first opens, independently of whether data exists or not within the order portfolio.

That is because it is supposed that the user has to define what he/she wishes to view, each time he/she opens this window. Loading data into the window would thus be useless.

NOTE: Furthermore, when the window is empty, data entry is much faster.

Once you have chosen the selection technique among those available, the window is loaded with the desired data.

The Toolbar at the top will show, along with the standard options, the special features:

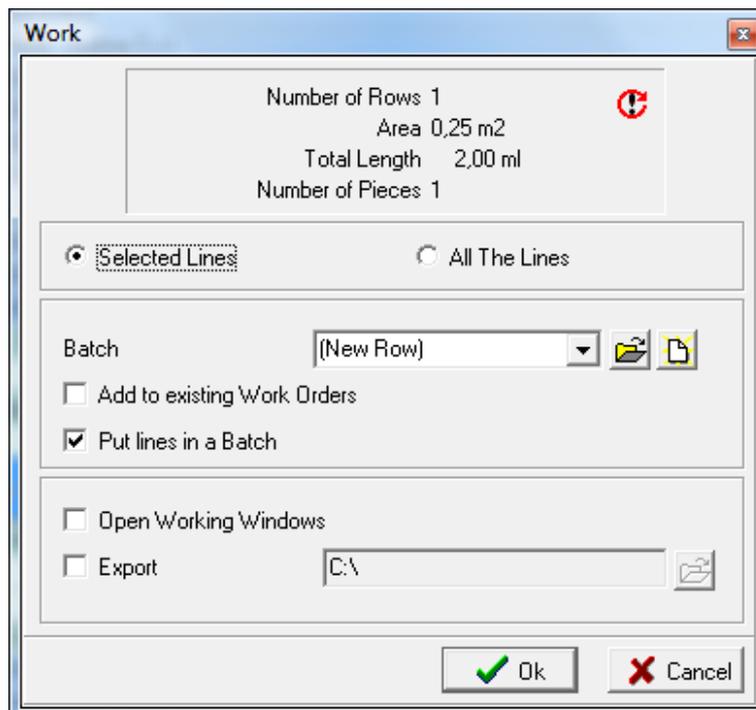
- ◆ **Work:**  Releases order lines.
- ◆ **Undo Work:**  Cancels the release of order lines.
- ◆ **Production Rack Cycle:**  Rack calculation system for production (refer to the corresponding section of this guide for further information).
- ◆ **Delivery Rack Cycle:**  Rack calculation system for delivery (refer to the corresponding section of this guide for further information).

Release Orders

You activate the order release feature (work) with the corresponding  icon on the toolbar.

NOTE: When you activate this feature, you will notice a system slowdown, because Enterprise will explode all on-screen lines before opening the corresponding window. Therefore, it is recommended that you activate this feature when you are sure you have selected only the desired lines, so as not to slow down the system.

When you activate this feature, the following window opens:



Here you can carry out a variety of actions to set up and organize your company's production system. These are in detail:

- ◆ **Selected Lines/All The Lines:** Allows you to define rows that have to be worked: only selected lines or all displayed ones
- ◆ **Batch:** Allows you to add the selection to an existing batch or to create a new batch (default).
- ◆ **Add to existing Work Orders:** If enabled, this option allows you to add the selection to one or more previously created work order(s).
- ◆ **Insert Lines in a Batch:** Allows you to insert order lines in a batch.
- ◆ **Open Work Types Window:** The Work Types window is opened automatically once you have completed releasing orders. The created or order line destination batch is active.
- ◆ **Export File:** Allows you to define the name and the destination path of the file used to export data in the Optima format.

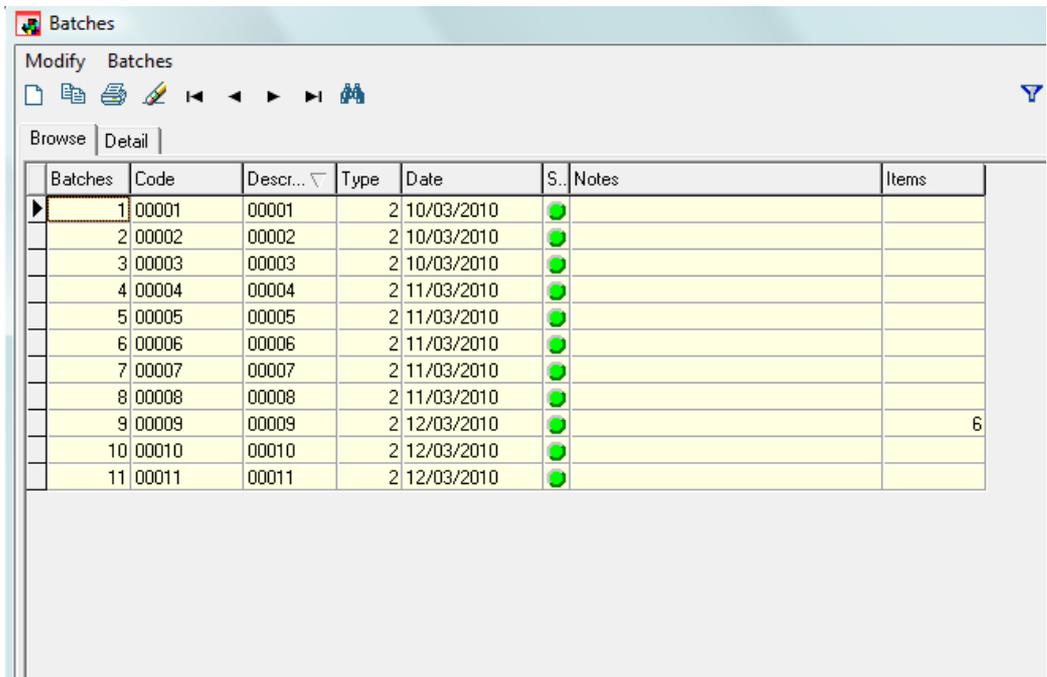
Because this is a complex feature and in order to avoid misunderstanding, the feature will be described below, step-by-step and in full detail.

Batch

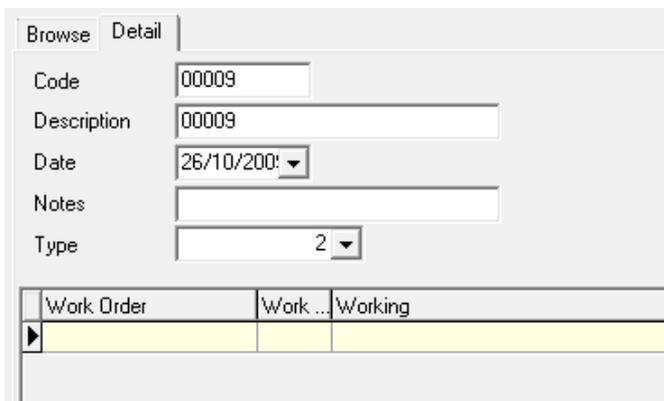
You can enter the destination batch in different ways:

By typing in the  combo box that appears on screen. A batch is automatically created with the name you typed in, without having to go through the specific window.

You can press . The Batches window opens and allows you to select one batch among those on the list or create a new one. The window presented is similar to the one shown below:



You can also use . This feature operates in the same way as the previous one, with the only difference that the system automatically skips to the data entry for the new batch.



When the window is closed, the name of the newly-created batch is presented and order lines are inserted in this batch.

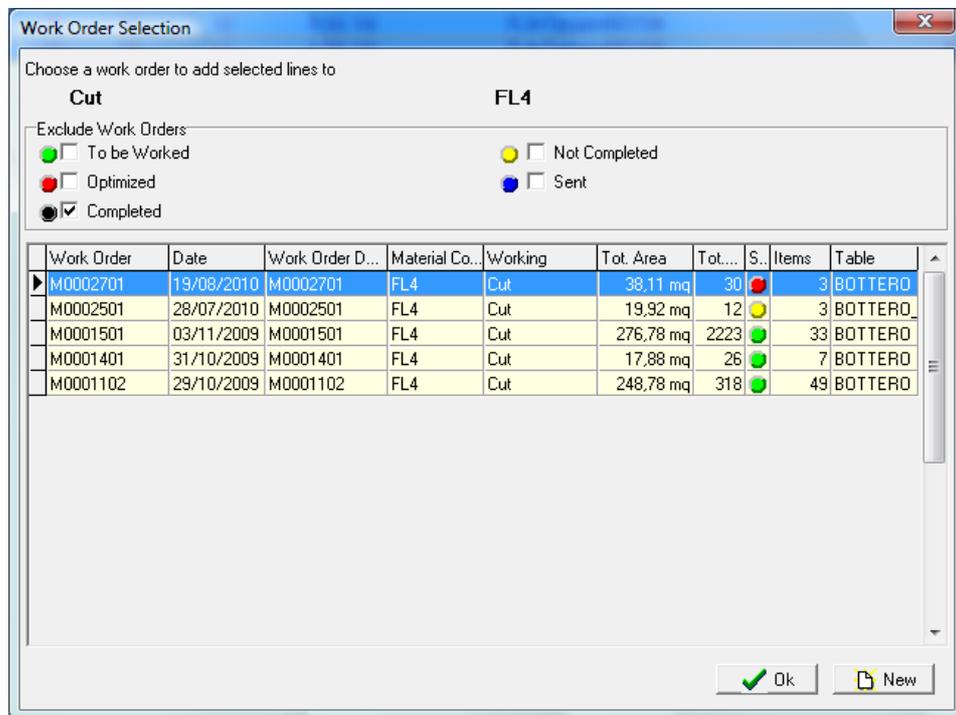
Add to existing Work Orders

This feature has been implemented to allow the user to integrate previously created work orders with data from new orders. In detail, this feature has the following execution cycle:

Once you have activated the feature and confirmed the release of order lines, Enterprise prompts you to select, from within the corresponding window, the actual work order to which you wish to add the data of the orders you are releasing.

NOTE: This feature may be quite dangerous. It is thus recommended that you use it very carefully and only if you are certain of the destination of data.

A window similar to the one shown below opens.



Here you can filter existing work orders quickly and dynamically, using the quick filters available in the top part of the window.

NOTE: Selection is automatic, based on the type of Work Type and, if required, also on the type of raw material.

Once the "destination work order" has been identified:

Ok Materials are inserted in the selected work order.

New A "new" work order is automatically created.

The entire release cycle is interrupted.

NOTE: Furthermore, this "phase" is **repeated as many times** as the number of materials that exists in the release cycle.

Open Work Types Window

If selected, this feature opens the Work Types window automatically at the end of the execution of the release cycle.

NOTE: This window is opened in reserved mode, thus it must be closed prior to skipping to other application features.

Export Data in the Optima Format

The Export Data in the Optima Format feature is handy when you wish to connect different systems of the "Optima type" or allow Enterprise to work in "deferred" mode.

Thanks to this feature you can create data that can be read by compatible single-user systems of the Opty-Way® line (depending on versions).

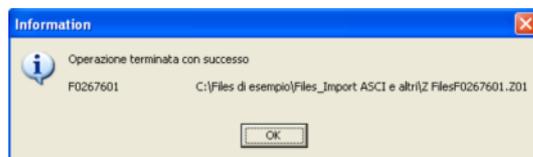
File di Export By activating this feature, a file in the Optima format is created in the destination you define and with the name you indicate.

C:\Files di esempio\Files_Import AS 

To look for a special destination, you can use the  icon. This will open the standard Windows screen.



Here you can choose the destination to which the created file will be saved. At the end of the release cycle and if the data export phase has been successful, a window similar to the one shown below opens and displays the filename and the file destination.



NOTE: The window will display as many files as the work orders created by the system. The export file, instead, will be unique.

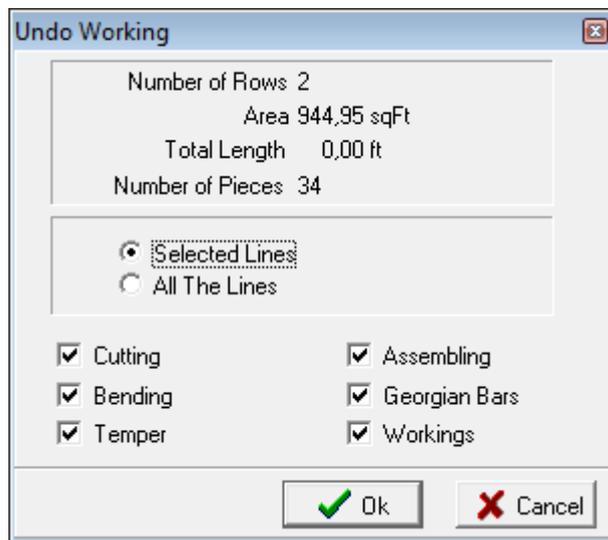
Unwork

When you unwork a set of work orders or batches, it implies:

- ◆ Restoring the order line status to "To Be Worked". ●
- ◆ Deleting work order details.

Furthermore, it should be noted that the system "automatically" cancels work orders, if canceling release has led to deleting all work order details. Batches, instead, continue to exist.

You Cancel Release with the corresponding  icon on the toolbar. When you activate this feature, the following window will open:



Here you can choose the type of selection you wish to consider, as well as the actual Work Types whose release you wish to cancel.

NOTE: The window allows you to set the Work Types to be "canceled". Also in this case, it is recommended that you execute the feature very carefully, controlling every phase.

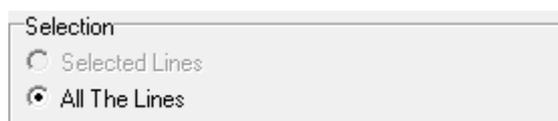
Production and Shipping Rack Management

Refer to the corresponding description in this guide or in the specific guide to the Rack-Way module for further information.

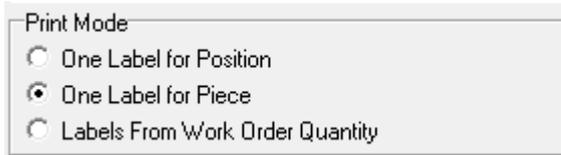
Label Printing (Label-Way module)

Labels are printed using the features offered by the Label-Way module. Refer to the corresponding guide to the module for a detailed description.

Launching the  label print feature opens Label-Way's standard window, which offers the following options:



These allow you to define what to print, whether All Lines or only the manually Selected Lines. The part underneath allows you



The image shows a dialog box titled "Print Mode" with three radio button options:

- One Label for Position
- One Label for Piece
- Labels From Work Order Quantity

to select the number of labels to be printed. Available options are:

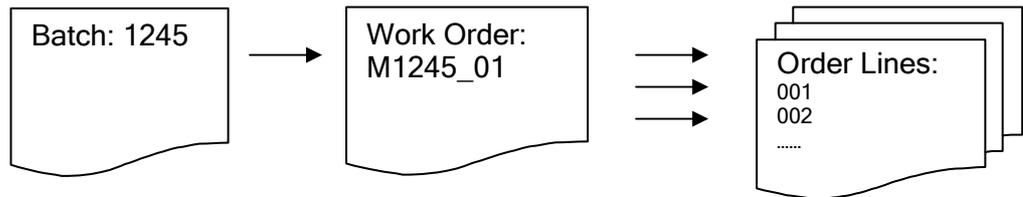
- ◆ **One Label per Position:** One label is printed for each work order line.
- ◆ **One Label per Piece:** One label is printed for each piece.
- ◆ **Labels as per Work Order:** As many labels are printed as the number specified in the order line.

To define the label delivery sequence you can modify the sort order of detail grids. Refer to the corresponding section of the proper guide for further information.

Work Orders

Releasing leads to creating Production Batches and Work Orders that contain the details of the single released pieces.

The following is a representation of the relevant data structure.



Within the single work orders you can thus execute the specific features available for every type of Work Type. Available features vary depending on the Work Type, as illustrated in the examples below.

For glass cutting work orders they are:

- ◆ Cutting optimization.
- ◆ Data transmission to NC systems.
- ◆ Cutting plan printing.

For spacer bar bending orders:

- ◆ Linear cutting optimization for spacers.
- ◆ Data transmission to NC systems.

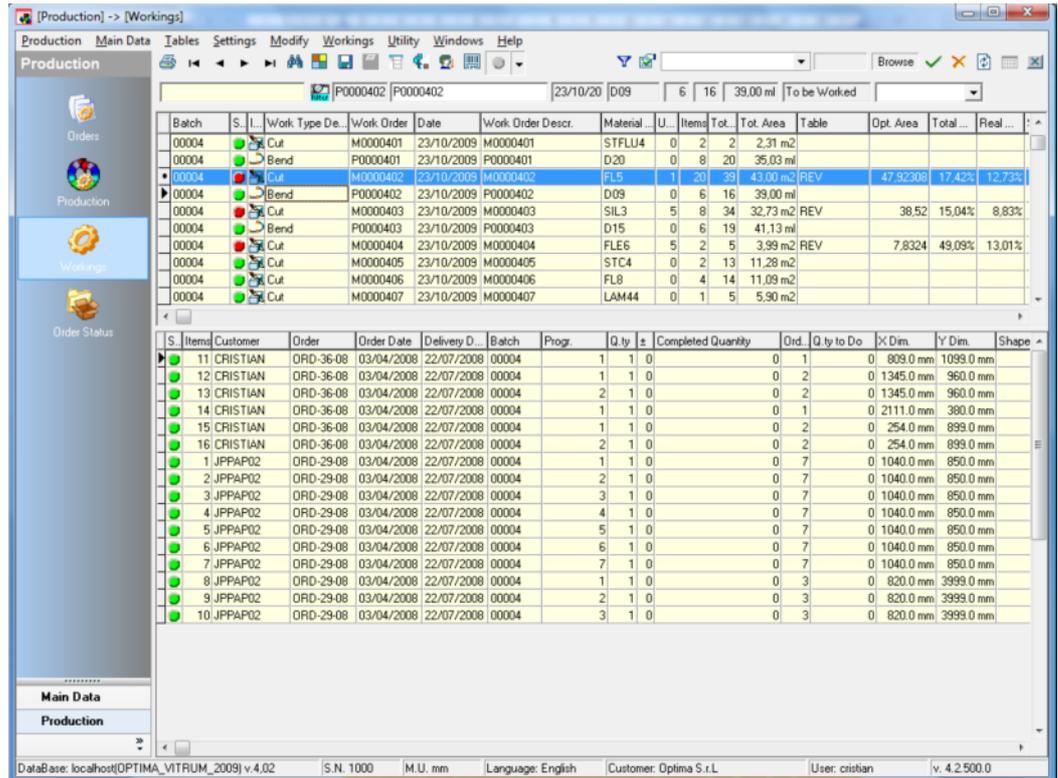
For all the other Work Types, reports are normally produced for printers or labeling systems for pieces/piece lots.

The Work Order Window

In Enterprise, each work order is identified by:

- A Code made from an automatic numbering system (unchangeable)
- An alphanumeric description of 32 characters that reports the work type name or the parent name as defined in the work type main data.

Once opened, the Work Types window looks as follows:



The window structure differs from the structure of the other system's windows and is divided into two well-defined areas: The top part shows the list of all work orders, while the bottom part shows the details of the selected work order.

Selecting a Batch

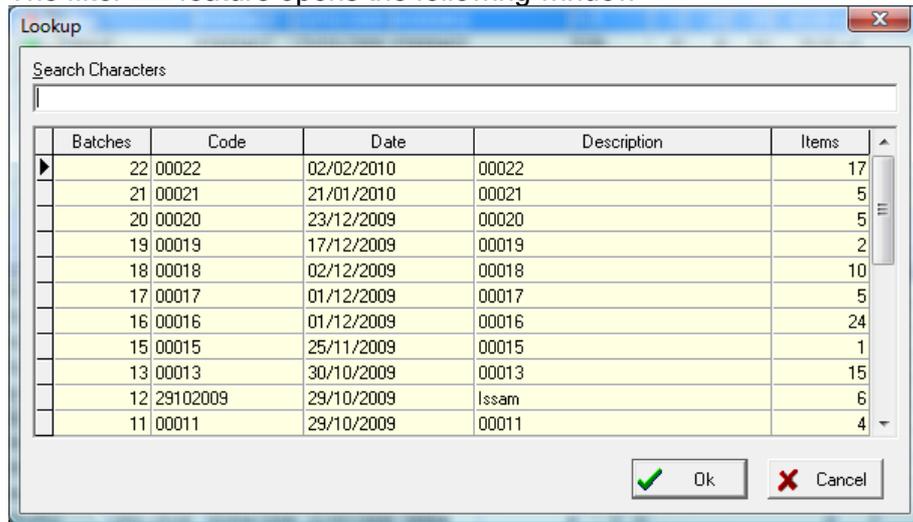
The first time the window opens, it gets "populated" with all existing work orders.

To select data, three selection modes are available:

1. Standard system of  customizable filters.
2. Selection by status .
3. Selection of a single batch .

The first two modes have already been illustrated earlier in this guide. The third mode, specific of this window only, allows you to filter work orders according to the batch in which it is contained.

The filter  feature opens the following window



on which you can:

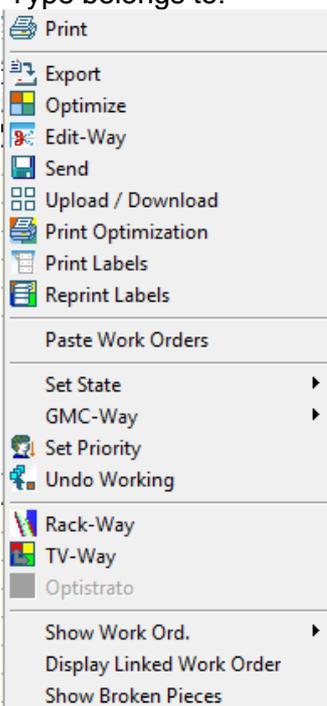
- ◆ Search for data in the list of available batches.
- ◆ Select one or more batches simultaneously using the standard Windows multiple selection.

When you confirm the feature, the work orders window opens again and shows only the selected data.

NOTE: Always pay the greatest attention to how quick filters  on the Toolbar are set to be certain of the accuracy of data within the batch you are browsing.

Work Orders Window Features

The Toolbar in the Work Orders window offers various features depending on the Work Type category (refer to the Work Type Main Data archive) the Work Type belongs to.



Therefore, both the features available on the Toolbar and those available on the menu will vary according to the Work Type type.

The image on the left shows "all" the features that can be executed from within the work orders window. These features are analytically described below.

Cutting Work Orders

Glass cutting work orders are certainly the most important for glass processors and revolve around the optimization of cutting plans.

Below is a description of all the features available in Enterprise for glass cutting.

Optimization

 **Optimize** Starts optimization procedure based on the parameters set by the user. Due to the complexity of this feature, a detailed description of the “optimization” phase has been put in a separate section of the manual.

Edit-Way

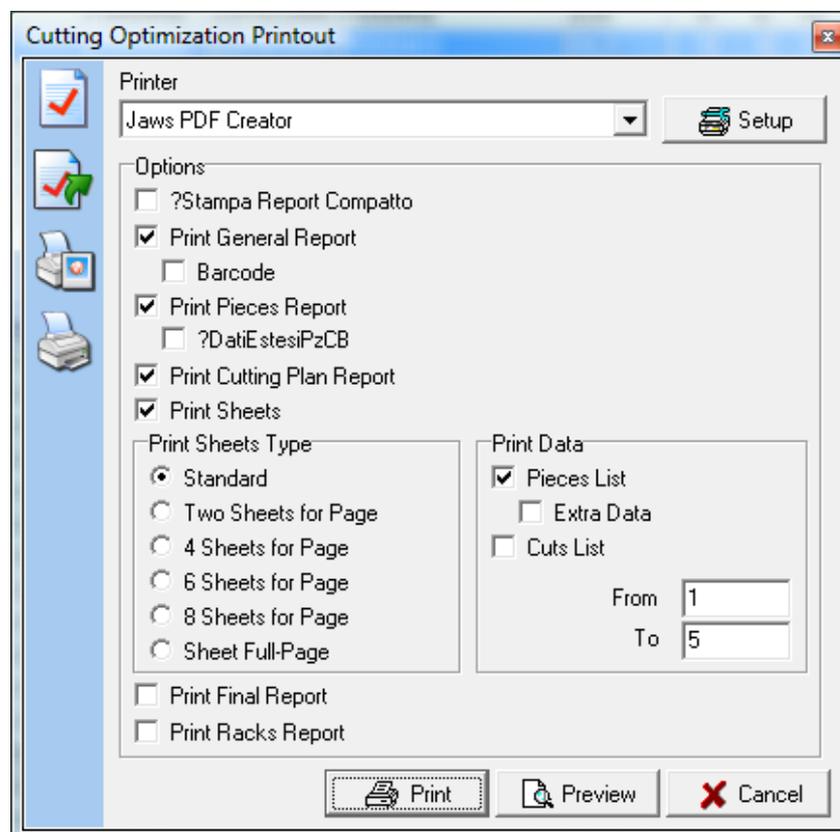
 **Edit-Way**

At the end of the optimization you can view how pieces have been arranged on sheets by pressing the "Edit-Way"  icon.

NOTE: If you start the editor from here you can view sheets, but you can't modify them.

Print Optimization

Click on the "Print Optimization"  icon. A window opens in which you can set print options.



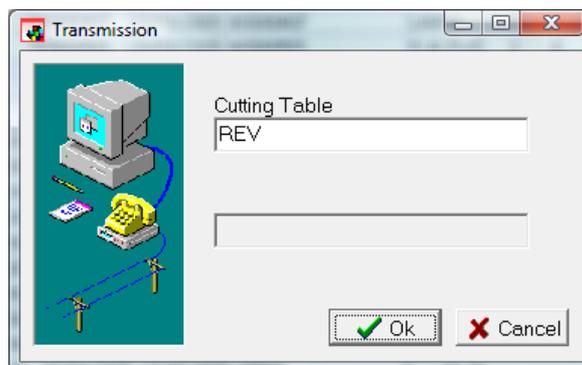
- ◆ **Print General Report:** Enables / disables printing the first page of the report that contains all optimization data.
 - **Barcode:** Allows you to print the barcode pertaining to the work order.
- ◆ **Print Pieces Report:** Enables/disables printing of the list of the pieces entered in the work order as well as the relevant fields/data.
 - **Extended Data:** Allows you to print complementary data for pieces
- ◆ **Print Cutting Plan Report:** Enables/disables printing of the report containing the cutting plans generated as well as all relevant information.
- ◆ **Print Sheets:** Allows you to enable/disable printing of the cutting plans.
Sheet Print Mode: Allows you to decide how to print cutting plans:
 - **Standard:** Prints the cutting plan and the relevant data on the same page.
 - **2 Sheets per Page:** Prints two sheets on the same page. The cutting plan data (if you wish to print any) is printed on another page.
 - **Sheet Full-Page:** Prints every sheet on a full page. The cutting plan data (if you wish to print any) is printed on another page.
 - **Sheets From/To:** Allows you to define the interval of sheets to be printed. If no value is set, all layouts are printed (default).
- ◆ **Print Data**
 - **Pieces List:** Prints pieces data together with cut lay-out
 - **Cuts List:** Prints the list of the cuts needed to complete the sheet.
- ◆ **Print Final Report:** Enables / disables printing the final report that contains the table with the position of pieces inside the various optimized sheets.
- ◆ **Print Racks Report:** Allows you to enable printing of the pieces and the relevant racks.

Transmission Data Send



Transmit cutting data (post processor) to the cutting table set during optimization.

Click on the "Send"  icon. The transmission window opens.



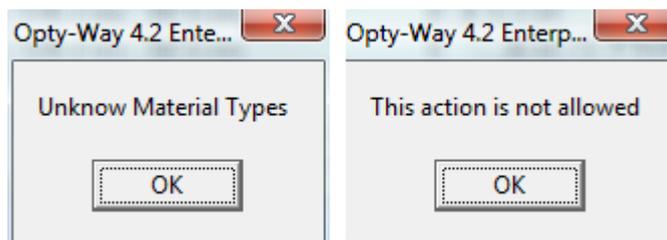
You can generate the Post-Processor of the displayed work order and send it to the Output device selected in the Setup.

Paste Work Orders

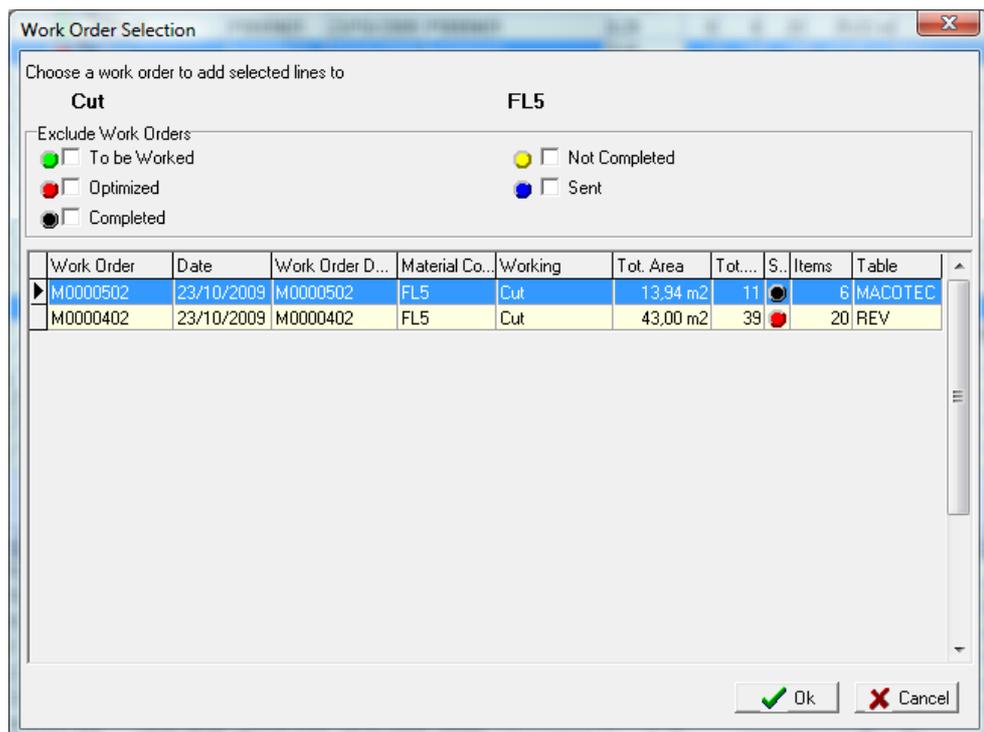
This feature allows you to "merge" work orders that share the same working process.

NOTE: work orders have to refer to the same type of Work Type and the same type of raw material.

This feature is activated by the multiple selection of two or more work orders. If the system detects fundamental incongruities, the corresponding error message appears, such as:



This will cancel the entire transaction and the work order status is not changed. In the absence of problems, the following window opens:



Here you are prompted to manually select the work order you wish to keep.

NOTE: When you confirm, the work orders window opens again and refreshes. The list of available work orders will no longer display the work order(s) you did not select.

Upload/Download Sheets

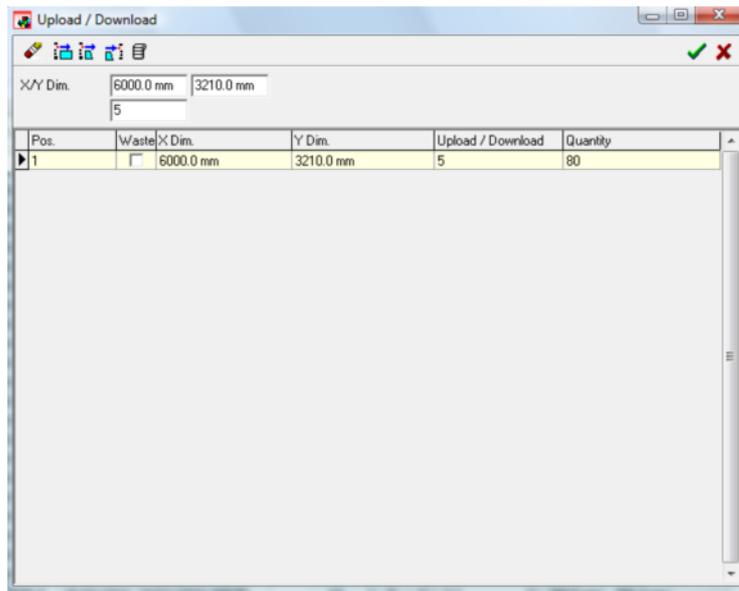
 Upload / Download

To access this page, click on the "Upload/Download Sheets"  icon.

A window opens that allows you to update the stock after an optimization.

NOTE: This icon is active only after a work order has been sent.

The page opens on the last section that was displayed. In fact, the window has three sections.



 Download Sheets

Click on the "Download Sheets"  icon to remove the sheets from stock. The number of stock sheets is decreased automatically.

 Download Offcuts

Click on the "Download Offcuts"  icon to remove from stock the offcut sheets used by the optimization program.

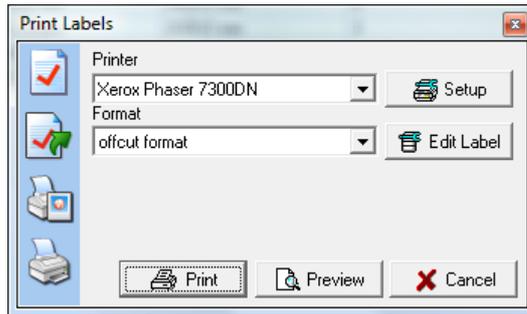
 Upload Offcuts

Click on the "Upload Offcuts"  icon to upload to the stock the offcut size existing in the optimization and recognized as a "reusable" piece. This feature increases stocks.

You can also delete  single items using the corresponding feature.

From within the Upload/Download Sheet Sizes window you can also activate label printing . This feature is normally used to produce specific labels for offcut sizes. Labels speed up piece "recognition" for reuse.

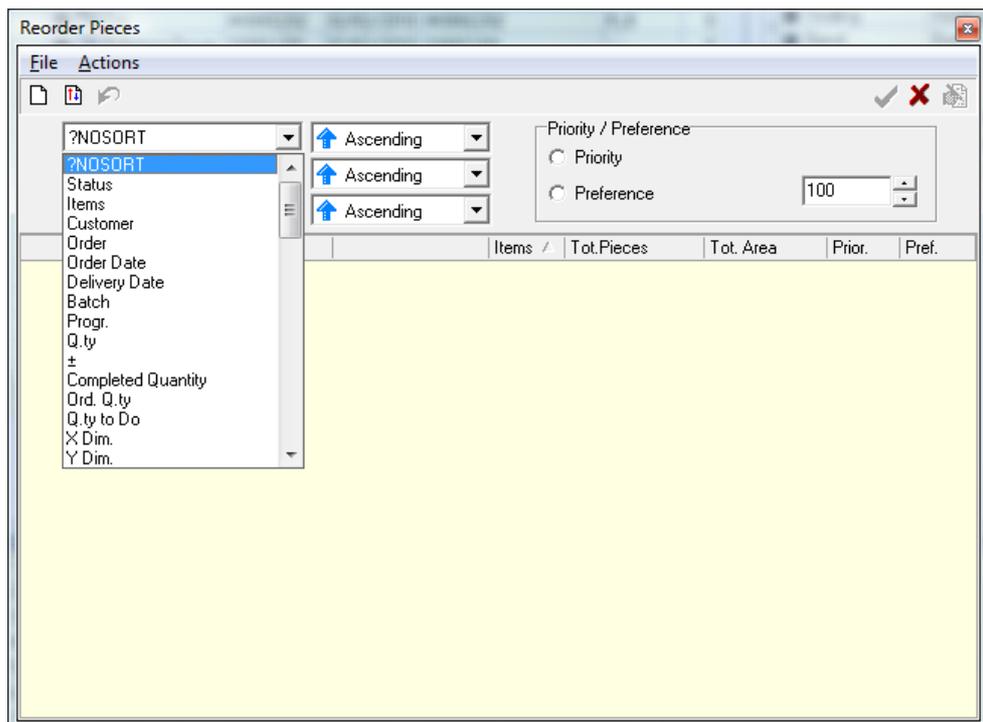
When you activate the feature,



you can select the label format (the corresponding format is automatically selected) and activate the line number option.

Set Priority

This feature allows you to associate an autonomous priority based on the value of some fields. This feature is activated by using the  icon.

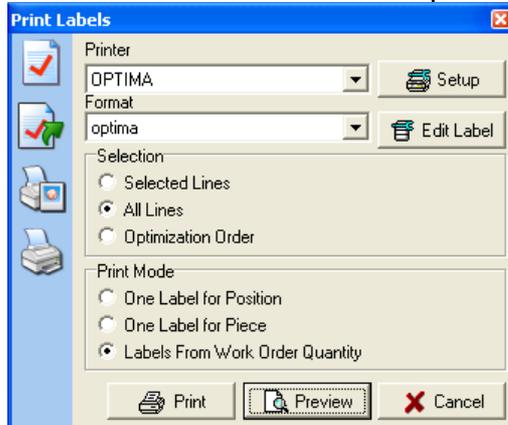


Pieces can be sorted using three different methods. If, for example, you sort pieces first by Customer and then by Order, all pieces referring to the same Customer and divided based on the Order field will be arranged first. The grid will be filled up depending on the selected fields

Print Labels



Click on the  icon. A window opens in which you can set print options.

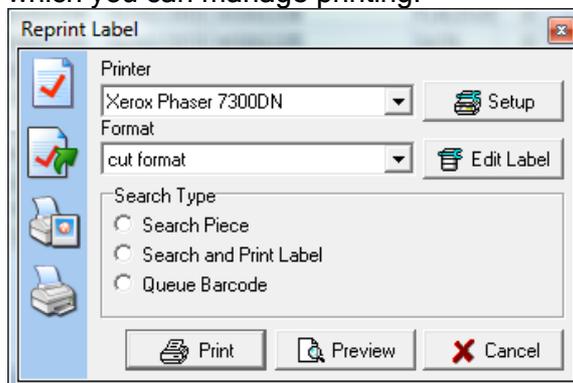


- ◆ **Format:** Allows you to select the format in which to print labels. You can modify an existing label format by clicking on "Edit Label". To know how, refer to the "Label-Way" chapter.
- ◆ **Selection:** Indicates if labels are to be printed for selected lines only or for all lines. If you select "Optimization Order", labels are printed following the piece break-out order.
- ◆ **Print Mode:** Allows you to decide which labels to print and in what order.
 - ◆ **One Label Per Position:** Allows you to print one label per each order line.
 - ◆ **One Label Per Piece:** Prints as many labels as optimized pieces.
 - ◆ **Labels As Per Work Order:** Allows you to print as many labels as the value specified in the "Labels" field of the Work Order.

Reprint Labels

This special feature allows you to print specific labels (refer to the corresponding section of this guide or the guide to the Label-Way module for further information) through Bar Code reading.

This feature's operating mode is set up by means of the following window, in which you can manage printing:



- ◆ By Piece in deferred mode.
- ◆ By Piece in real-time mode.
- ◆ By Multiple Pieces in deferred mode.

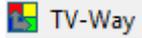
NOTE: Bar Code management varies from module to module and may be optional.

Rack-Way (Optional)



To order pieces on racks you can use the "Rack-Way" feature, as described in the corresponding section.

TV-Way (Optional)



Click on the "Start TV-Way" icon. The program TV-Way will start and the selected work order will be displayed.

For this feature to be active, it must be enabled in the machine parameters. To know how, refer to the "Setup" chapter.

Bending Work Orders

A Bending Order includes a list of sizes of rectangles and shapes deriving from the Orders menu. This list contains all selected lines available for the generation of the Post-Processor and the transmission to the bending equipment.

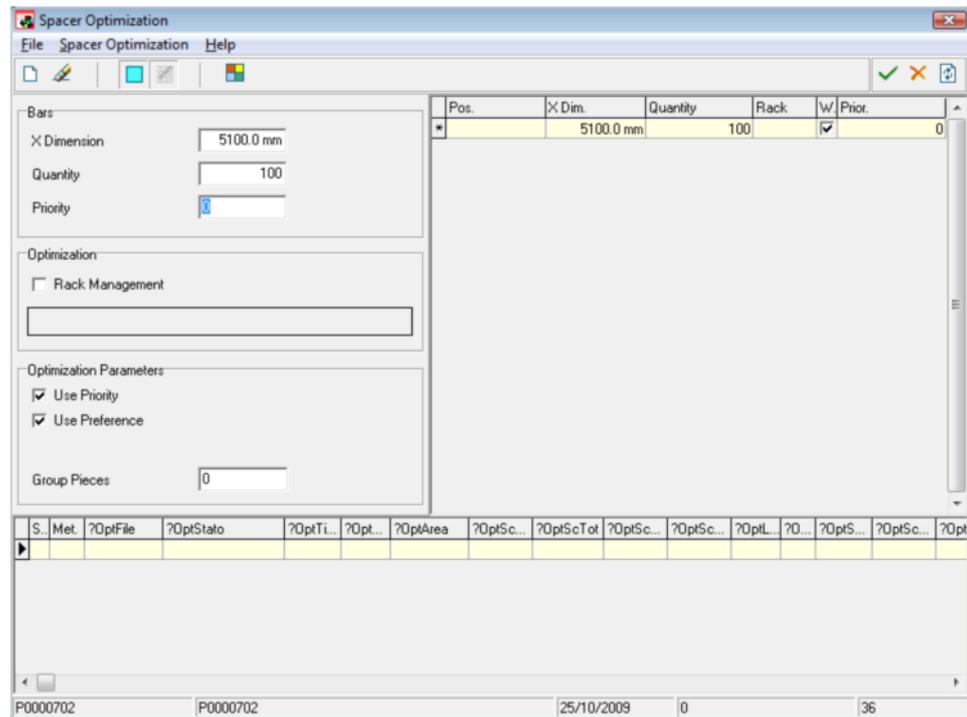
Sizes listed in each work order may contain different spacer bar thickness values. The program, however, sorts spacer bars by thickness, from the smallest to the biggest, without mixing them, independently of the entry sequence followed when creating Orders.

If the work order contains spacer bars of one single type you can optimize the spacer bar cutting operation.

Spacers Optimization

To start a work order optimization simply select a work order and click on the "Optimization"  icon.

The following window opens:



Selecting Bar Sizes

The program will then automatically choose the existing size(s) that generate(s) smaller waste based on the dimensions of the pieces entered.

You can quickly decide whether to use standard bars or not by using the "Standard Bars"  icon

Likewise, you can activate or deactivate the use of offcut bars by clicking on the "Offcut Bars"  button.

The bar size table shows some data pertaining to each bar. For further details on fields refer to the "Stock Menu" chapter.

Optimization Parameters

This tab allows you to select various options the optimizer must take into account during optimization.

- ◆ **Rack Management:** Allows you to activate the optimization calculation system called Rack-Way - described in its own section of this handbook - which determines a delivery sequence for the pieces based on the racks available/selected.
- ◆ **Use Priority:** Enables the use of the Priority assigned to pieces.
- ◆ **Use Preference:** Enables the use of the Preference assigned to the pieces.

Status of a Work Order

Work orders can be easily identified by their Status.

Cutting work orders can have five types of status:

 **To Be Worked:** This means that the work order has been entered but no working has been performed on it.

As far as these work orders are concerned you can: Optimize, Print, Print Labels and insert new pieces.

 **Not Completed:** The work order has been optimized and subsequently modified. A work order is marked as Not Completed in the following cases:

- ◆ When a sheet is modified using the editor after optimization. In this case, the transmission file contains the data modified by the user.
- ◆ Data pertaining to pieces or to the material to use is modified after optimizing the work order.
- ◆ The work order has been partially optimized, since some data was not consistent with the set optimization parameters, the sheet number was not high enough to optimize the entire work order or the sheet size was not compatible with some pieces in the work order.

As far as these work orders are concerned you can perform the same operations as for Work Orders to be Worked. In addition, you can Print Optimization, Send, use the Editor, Start TV-Way and Start Optistrato. Functions are all performed based on the changes made after the optimization.

 **Optimized:** The work order has been optimized but not yet sent. As far as these work orders are concerned you can perform the same operations as for Not Completed work orders.

 **Sent:** This means that the work order has been sent to the cutting table or bending system (via serial transmission or floppy disk depending on the machine for which it was optimized) and is being cut. As far as these work orders are concerned you can perform the same operations as for Optimized work orders. You can also Upload/Download sheets.

 **Completed:** At this point sheets have been downloaded from stock. This means that the work order has been completely cut. As far as these work orders are concerned you can perform the same operations as for Sent work orders. Re-sending the work order allows you to download sheets again.

NOTE: If the "Automatic Uploading/Downloading" is active, the upload/download form is automatically displayed when transmission is completed.

Show Work Order Status

You can show work orders with a specific status and hide all the others. You can do this by using the "Show Work Order Status" feature on the menu.

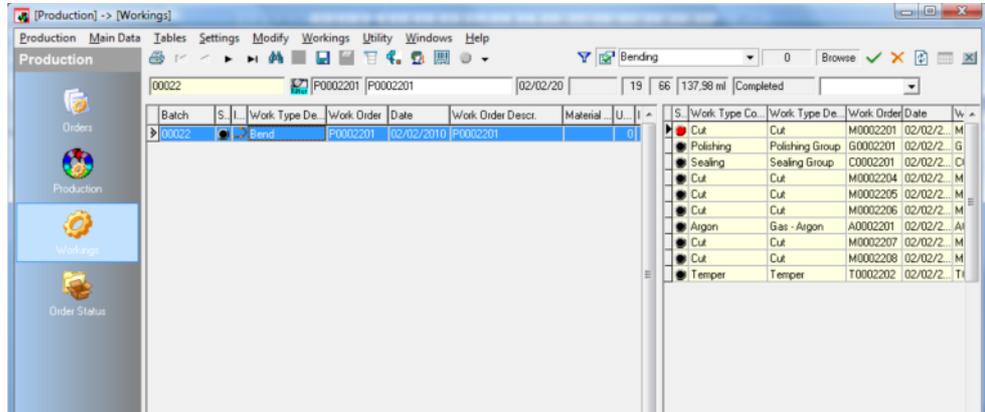
As you can see from the picture, you have to click on the statuses you wish to activate or deactivate (depending on whether they are selected or not). This may be useful, for example, to hide Completed work orders, as they do not need any further working, thus reducing the number of work orders on the screen.



The display selection feature is the same as the  option on the Toolbar.

Show Related Work Orders

The Show Related Work Orders feature allows you to view the relationship between the various work orders. As you can see from the picture below,

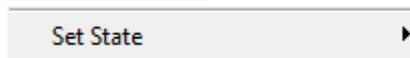


the work order selected in the left part of the window (in blue) is in correspondence with the 10 work orders on the right (top part). This means that the pieces in work order **P0002201** are related to the other work orders.

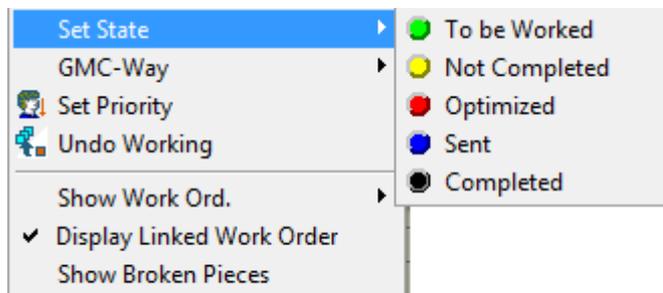
S..	Work Type Co...	Work Type De...	Work Order	Date	Work Order C
●	Cut	Cut	M0000701	25/10/2...	M0000701
▶	Sealing	Sealing Group	C0000701	25/10/2...	C0000701
●	Cut	Cut	M0000703	25/10/2...	M0000703

NOTE: You can close the "Related Work Orders" window by deactivating the feature from the menu.

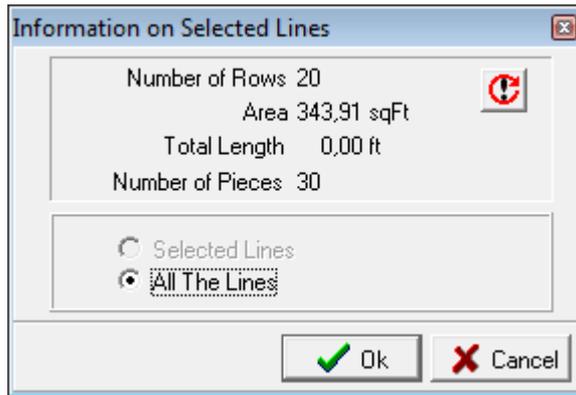
Change Work Order Status



The Change Work Order Status feature allows you to "manually" change the progress status for work orders. When you select the desired status by means of the pull-down menu,



the selection type confirmation window (similar to the one shown below) opens.



Here you are prompted to select the desired selection level. If you confirm the command execution, the window closes, reopens and refreshes with updated data.

Undo Working

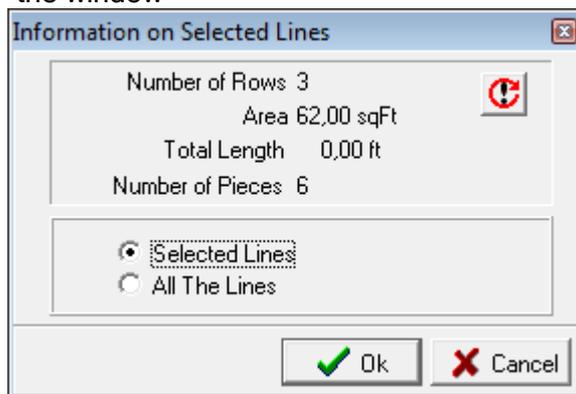
Canceling release (Undo Working) is a very delicate phase, thus it must be carried out by keeping in mind the consequences it has on the entire database.

When you execute this feature:

- ◆ the pieces in the work order whose release you specified to cancel will be restored to their original To Be Worked ● status.
- ◆ The work order will be physically deleted.
- ◆ If you cancel the release of all the work orders in a batch, the batch "does not disappear", but it can be reused in a subsequent Release phase.

NOTE: The Batch continues to exist, but the relationship with work order numbering is lost (refer to the corresponding section for further information).

Like in all similar phases, pressing the Cancel Release  button will open the window



that prompts you to confirm the selection level.

NOTE: The required selection level refers to the single lines in the "Work Order" and not to the selected lines. If you select several work orders, release is canceled for the first work order on the list.

To cancel release more widely, use the corresponding feature (very similar to this feature) from within the Production window.

Gmc-Way - Production progress control via barcode

Enterprise is equipped with a sophisticated system to manage barcodes and thus work order or piece production progress.

The GMC-Way module is used to manage and monitor the production progress of the entire company. Thanks to this module, all Opty-Way Enterprise users can monitor the piece, work order and/or batch status in real time through the different working centers (Check Points). This module allows you to:

- ◆ Confirm workings piece by piece.
- ◆ Confirm an entire product.
- ◆ Confirm workings of an entire position (line).
- ◆ Confirm an entire work order.
- ◆ Manage piece breakage.
- ◆ Change the name of the user that performs an operation.

Nomenclature and definitions

The following definitions apply to the current document:

- ◆ **Piece:** Identifies a single material object corresponding to a part of a product (for instance the first material of an IG unit). It is characterized by the BOM ID and the line progressive value (from 1 to QTAPZ).
- ◆ **Position:** Identifies all semi-finished products belonging to the same order line. Every "position" contains QTAPZ pieces. In case of IG, it identifies QTAPZ elements of one BOM line (one piece only).
- ◆ **Product:** Identifies the set of pieces and workings composing the product in the order line. Its quantity is always 1.

NOTE: In case of Single Glazing Unit only, Product and Piece coincide.

- ◆ **Working:** Identifies the single working to be performed on a semi-finished product (for instance cutting, grinding, etc.).
- ◆ **Work Order:** Identifies the set of semi-finished products to which the working or the set of workings giving the name to it apply. It includes, for instance, all the semi-finished products to be cut out of a particular material or all the semi-finished products that must be ground (in this case, independently of the material).
- ◆ **Batch:** Set of work orders.
- ◆ **Working Center:** Used in GMC-Way to identify the set of workings that must be carried out and completed by a particular working center (Check Point/working confirmation post).

NOTES FOR INSULATING GLASS (IG)

Complete Position

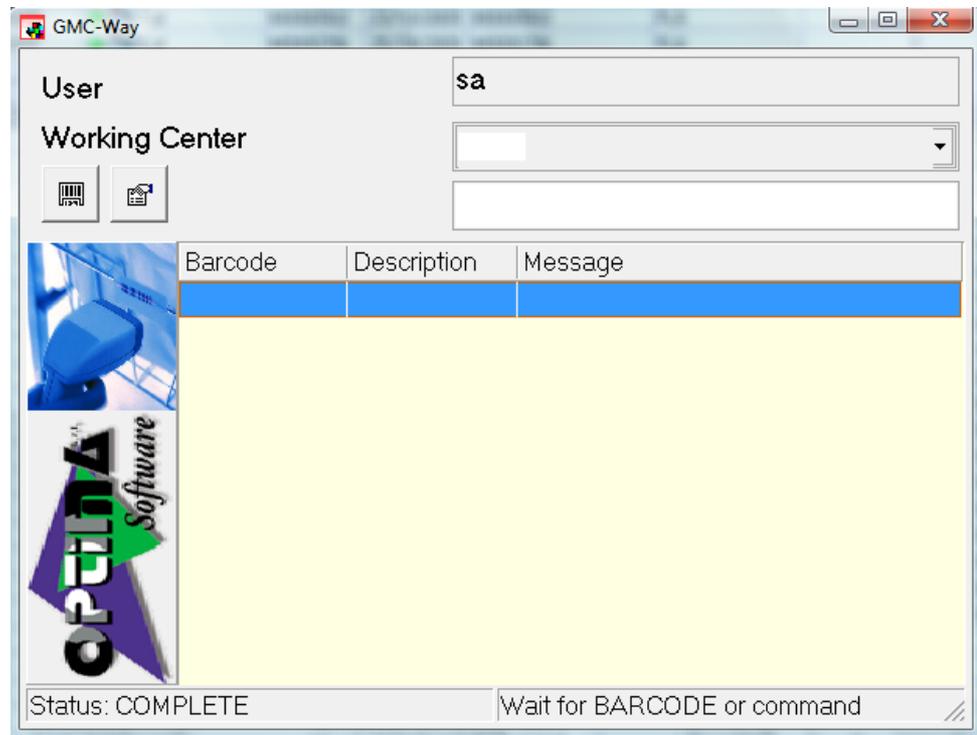
Completes the position, that is all the quantities set for the order line, of the selected glass item only. Manually, you can only complete all the pieces referring to the first glass item or those referring to the second glass item, but you cannot complete the entire IG product (both materials).

IG Breakage

Breaking a glass item of an IG unit implies breaking both glass items of the product.

Starting GMC-Way

To start GMC-Way, click on the corresponding  button. The window shown below will open.



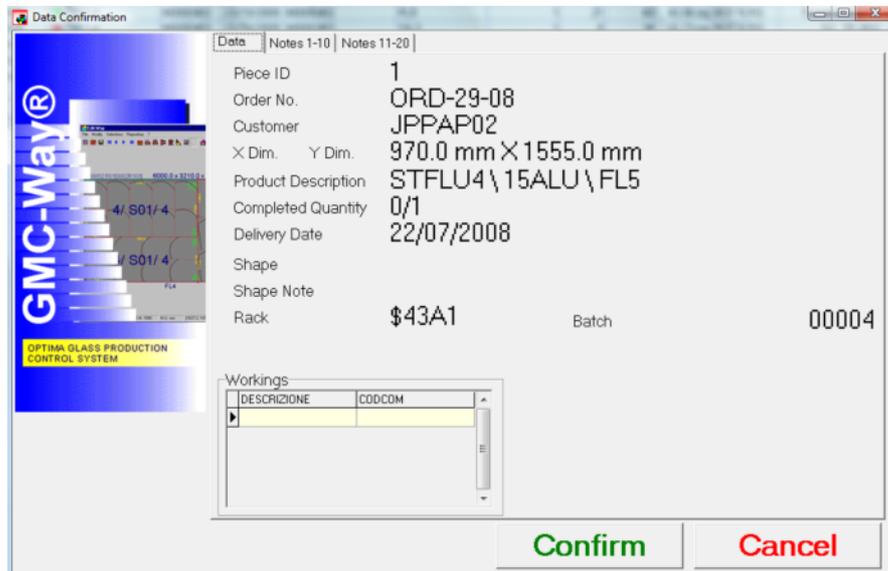
The basic window has 3 fields:

- ◆ **User** → Contains the name of the user performing operations. By default, the first time GMC-Way is started, the name of the user who logged into the program is shown. This username can be changed at any time. There are no restrictions on the text to enter into this field: It can contain characters and numbers and has no relation to the names used to access the program.
 - To change the content of the user field, type in USER, and then the new name.
- ◆ **Working Centers** → Pull-down menu used to select the working center ("Check Point") on which the Complete operations must be performed. Selecting the working center is mandatory, and is used to identify the working or the set of workings to be completed. When reading a code, all the workings associated with the currently selected working center are set to "Completed".
- ◆ **Code Field** → Use this field to enter the desired GMC-Way code. This code can be read via barcode reader or it can be simply typed into this field.

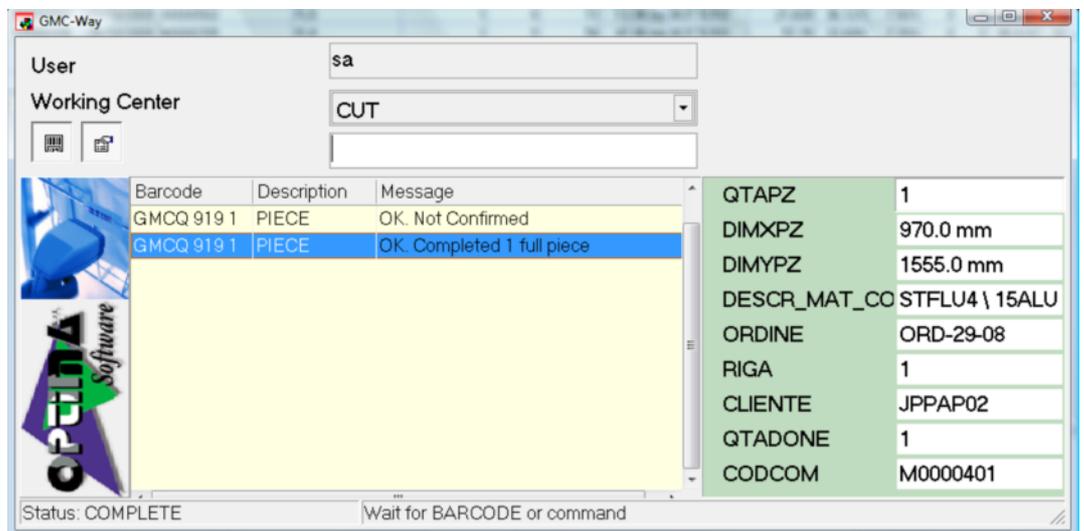


The two buttons, “Confirm” and “Inspector” respectively, are used to activate two further features that are available when GMC-Way is in use.

- ◆  **Confirm** → If active, the confirm button must be pressed before any Complete operation.



- ◆  **Inspector** → If active, a further window opens and shows the data of the piece to which the read code refers.



Completing Workings

After setting the username (optional) and the working center (mandatory), you can start completing workings.

Except when pre-defined commands are read (break, user, etc.), the system always waits for a code to perform completion actions. Each time a code is read without a pre-defined command being read first, the system completes the piece, position or work order depending on the code type read.

Command	Parameters	Actions
GMCB	<id_lotti>	Completes: The first uncompleted work order (that with the lowest priority) in the specified batch and all the workings included in the work order.
GMCC	<id_commesse>	Completes 1 work order and all the workings associated with the working center.
GMCP	<id_ordmast><id_dett>	Completes: 1 position AND the first working associated with the working center.
GMCQ	<id_ordmast><progr>	Completes: 1 product (finished piece) and all the machining operations associated with it regardless of the working center.
GMCW	<id_orddett><progr>	Completes 1 semi-finished product and all the working associated with the working center.
USER	<text>	Changes the username
COMPLETE		Completes the piece, position, etc.
BREAK		Break a piece or position <ul style="list-style-type: none"> - GMCW breaks one piece - GMCP breaks one position and one working

The GMCW code is usually contained in the label that is assigned to every piece (semi-finished) during cutting.

The GMCP and GMCQ codes are usually included in the position and product labels that can be printed from both the Production and the workings form.

The GMCC and GMCB codes are usually included in the work sheets, in which you can also enter all the codes pertaining to pieces, positions and products.

Each time a code is read, it is stored along with the type of action completed. In particular, each time you confirm, the following is stored:

- ◆ **Barcode** → Read code.
- ◆ **Description** → Indicates whether a piece (Piece), a position (ROW), a work order (WRKORD), etc. is concerned.
- ◆ **Message** → Action result.

When the code of an already completed piece is read, the system does not perform any action on the working status and shows the message: "OK. Pieces already Completed".

When a code of a piece that does not exist in the batch selected when starting GMC-Way is read, the system returns a red message: "Not Found: GMC.....". After reading this code, the system waits for a code to be confirmed.

Barcode	Description	Message
GMCW 196802 2	PIECE	OK. Completed 1 pieces
GMCW 196802 2	PIECE	OK. Pieces already completed
GMCP 196777 1	ROW	OK. Completed all pieces
GMCC 10292	WRKORD	OK. Completed
GMCW 123456 7		Not Found: GMCW 123456 7

Using GMC-Way to manage Production Progress

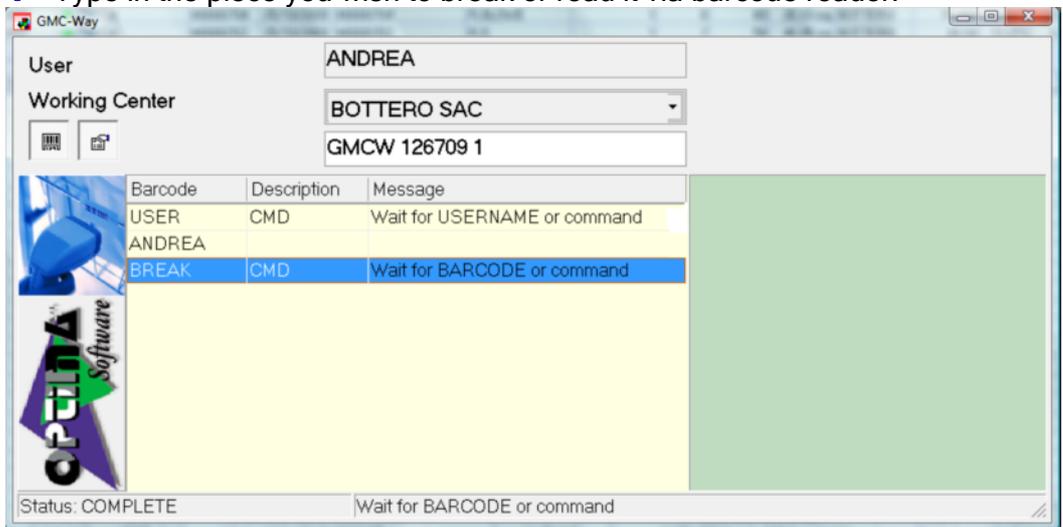
Except GMCQ, which completes all the workings set for a product regardless of the working center, all the other codes are used to complete the workings associated with the working center selected through the corresponding field.

Codes related to pieces, positions and products (GMCW, GMCP, and GMCQ) act on the workings associated with the selected working center. By reading the same code at different working centers ("Check Points") in the factory, you can complete the various workings pertaining to a particular product. As the workings set for a product are completed, the line status and the order status are automatically updated.

"Breaking" pieces through GMC-Way

Each time you wish to "break" a piece, use the BREAK command before reading every code related to a broken piece.

- ◆ Open the GMC-Way window by clicking on the corresponding  button.
- ◆ Type in the BREAK keyword or read it via barcode reader.
- ◆ Type in the piece you wish to break or read it via barcode reader.



After "breaking" a piece, the system switches back to completion mode.

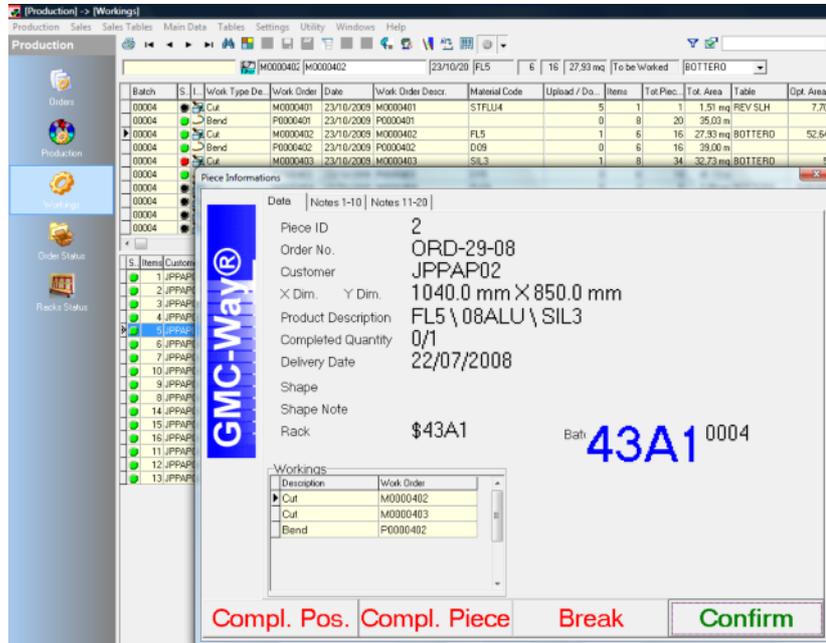
Breaking a piece affects all the work orders: A broken piece is removed from all the work orders in which it existed (not only from the one related to the working center!).

Manual Mode

Modifying the status of a single element

- ◆ To manually change the processing status of a piece or a set of pieces:
- ◆ Select the batch and the work order.
- ◆ Double click on the line containing the desired piece.

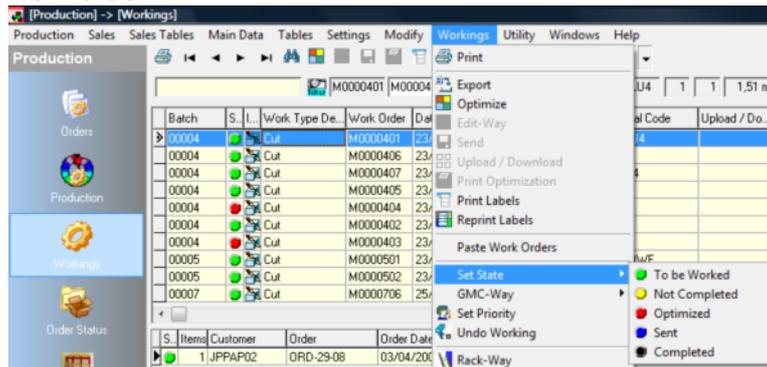
- ◆ Click on the desired action:
 - Compl. Pos → Completes all the pieces belonging to the order line that contains the selected piece (i.e. the entire position).
 - Compl. Pc. → Completes the selected piece only.
 - Break → Breaks the selected piece.
- ◆ Click on OK to exit the form.



Completion actions only affect the working set in the selected work order. Break actions, instead, affect all: The broken piece is removed from all the work orders in which it existed.

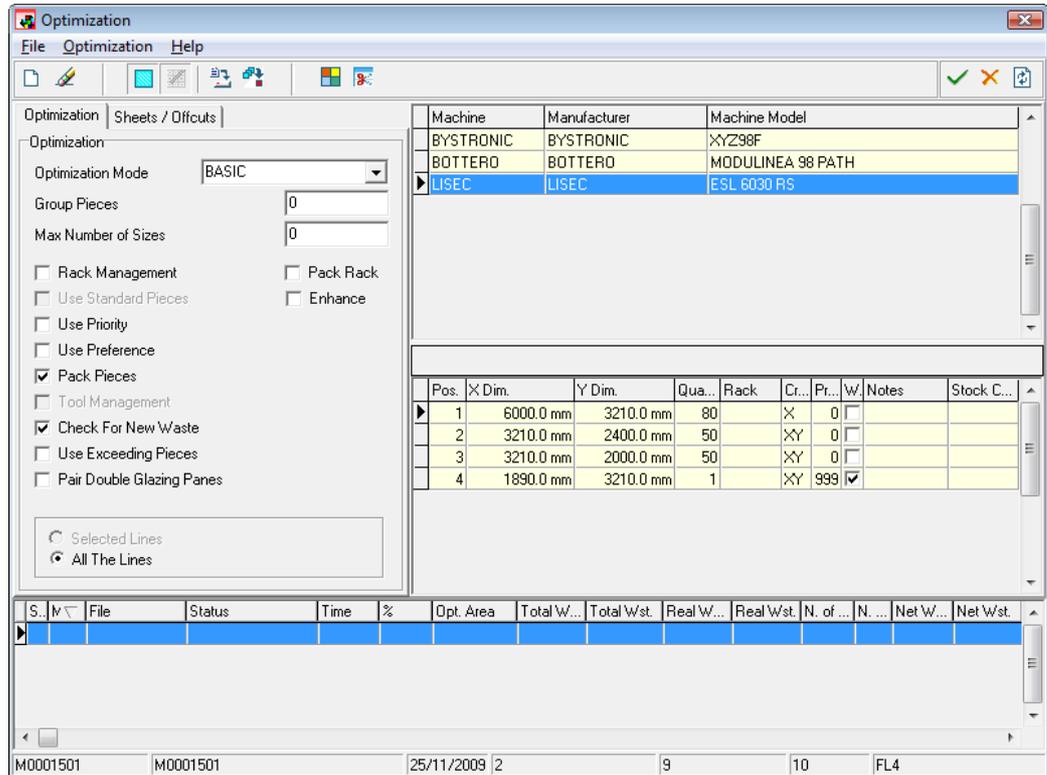
Modifying the status of an entire work order

Select the batch and the desired work order. From the workings menu, select the "Set Status" option. Choose the status you wish to assign to the selected work order.



Cutting Optimization

To start a work order optimization just select a work order and click on the "Optimization"  icon. The following window opens:



Cutting Table Window

The program you acquired, unique in its kind, supports different types of cutting tables (old and new).

This window allows you to select the type of cutting table to be used for the current optimization among those previously enabled from the Setup menu. To find out how to enter a Cutting Table, refer to the "Setup" chapter.

To generate cutting plans compatible with the selected table the optimization program works in different ways depending on the selection performed (it may even achieve optimizations with different waste percentages).

The cutting program thus generated is specific for the cutting table selected in the optimization procedure and the type of data transmission to the CNC is automatically set based on the technical features of the selected machine (floppy disk, serial line, punched tape or cassette).

For further details about table fields, refer to the "Setup" chapter.

Selecting Sheet Sizes

The program will then automatically choose the existing size(s) that generate(s) smaller waste based on the dimensions of the pieces entered.

To use only specific sheet sizes select those required through a multiple sheet selection. If the number of sheets available is not enough to complete the optimization, the optimization is not completed or the program uses other sheet sizes among those selected.

You can quickly decide whether or not to use standard sheets by unselecting the "Standard Sheets"  icon.

Likewise, you can activate or deactivate the use of offcut sheets by clicking on the "Offcut"  button.

The sheet size table shows some data pertaining to each sheet. For additional details about fields refer to the "Stock Menu" chapter.

Optimization Parameters

Optimization

This tab allows you to select various options that the optimizer must take into account during optimizing.

- ◆ **Rack Management:** Allows you to activate the optimization calculation system named Rack-Way, described in a proper paragraph of this handbook, which determines a delivery sequence of pieces depending on racks available/selected.
- ◆ **Group Racks:** Used together with Rack Management, this feature improves the optimization generated by Rack-Way.
- ◆ **Use Standard Pieces:** Enables the use of the Standard Pieces you previously entered. To know how to enter Standard Pieces refer to the corresponding section.
- ◆ **Use Priority:** Enables the use of the Priority assigned to the pieces. Priority is a mandatory condition for the optimization process.
- ◆ **Use Preference:** Enables the use of the Preference assigned to the pieces.
- ◆ **Pack Pieces:** Allows you to reduce the number of cutting levels with consequent reduction of waste; when this option is active, pieces are grouped by dimensions and priority.
- ◆ **Tool Management:** Enables the use of Tool Parameters. For additional details refer to the corresponding section.
- ◆ **Check for New Waste:** Allows you to enable/disable the search for waste areas being greater than the value entered into the sheet parameters in the stock procedure. To find out how to set a value for a reusable waste area, refer to the "Stock Menu" chapter.
- ◆ **Use Excess Pieces:** Enables the use of excessive pieces set in the ± (Exceed) field.
- ◆ **Pair Double Glazing Panes:** Allows you to keep the pieces that refer to the same double glazing unit close to each other for easier production management and flow.
- ◆ **Enhance:** When selected allows you to execute further optimization tests than the one foreseen by the selected method in order to have a further

reduction on final waste. If activated with basic optimization mode it'll force 4 more test, if activated with complete mode it'll force 8 more tests.

Two additional functions are also available. They must have a number in order to be enabled.

- ◆ **Group Positions:** The value for this field can range between 0 and 999. The higher the value, the higher the extent to which positions are grouped. This means that a single position is spread over a smaller number of cutting plans to make identification and breakout easier. Obviously, an excessive increase in this value may increase waste.
- ◆ **Max. No. of Sizes:** If more sheet sizes are selected, this field allows you to decide how many sizes can be used. This means that only two sheet sizes are used if you entered two in this field, even though three sheet sizes were selected. The optimizer combines the various sheet sizes and then chooses the combination that, on the average, generates less waste. Obviously, limiting the number of sheet sizes may increase waste.

Optimization Mode

You can choose among various optimization calculation algorithms.

- ◆ **Basic:** The software system generates 4 different optimizations. At the end of the calculation sequences the system chooses the "best result" automatically.
- ◆ **Complete:** In addition to the 4 algorithms of the automatic method the optimizer also uses 12 other algorithms. Therefore, the system may find combinations of pieces that further decrease waste.
- ◆ **Method 1-4:** The optimization module has four types or optimization algorithms, which allow you to carry out slightly different optimizations. Button 1 to 3 allow you to select the method to use; no. 1 is the fastest and no. 3 the slowest, as it tries a greater number of combinations. Although it is always advisable to try all combinations to be sure to have found the best optimization, we can state that method no. 1 (default) is used in most cases, whereas method no. 2 or 3 is used for small optimizations only. You can also carry out an optimization "by crosscuts" by simply selecting method 4. This generates a greater number of crosscuts (there will be a crosscut per every piece positioned in the bottom part of the sheet), which makes the sheet easy to be broken out. Waste might in this case slightly increase.
- ◆ **Optistrato:** A special algorithm used when the Optistrato module for laminated glass is available.

After setting all the parameters you can start the optimization by clicking on the "Optimization"  icon.

To interrupt an optimization just click on the  icon. The optimization in progress is completed and then the system stops.

Sheets/Offcuts

This window allows you to add new stock sheet sizes to be used in the current optimization. This procedure prevents you from adding to and removing sizes from stock, thus simplifying the entire process. Data entry is performed by simply typing sizes directly in the table. You can also modify the parameters of existing sheets.

NOTE: Added sheets or changes made are active only for the current optimization.

Tool

This tab allows you to set the parameters to manage cutting tool thickness.

- ◆ **Tool Thickness:** Refers to the thickness of the tool to be used to cut the optimized sheet. For a thickness over 0, piece dimensions are increased, so that the material removed during cutting (e.g. by a saw) does not affect the dimensions of the finished piece.
- ◆ **X/Y Tool Exit:** Is useful when disk saws are used to cut the material, in order to take into account the particular type of cutting performed by the tool. Pieces are grouped in "blocks" having a certain distance one from the other so that pieces are not damaged by the tool.

NOTE: To use these options during optimization you have to activate the "Tool Management" flag in the "Optimization" tab.

Summary Table

Because the optimization summary table has numerous fields, a brief description of those fields may be useful:

- ◆ **Status:** Identifies the optimization status.
 - ◆  Indicates that the optimization has been performed but not selected.
 - ◆  Indicates that the optimization has been performed and selected as the best one (this happens only at the end of all optimizations).
 - ◆  Indicates that the optimization is being performed.
- ◆ **Alg.:** Indicates the number of the algorithm used for the optimization.
- ◆ **File:** Identifies the name of the temporary file in which the optimization is saved (files are deleted automatically when quitting the optimization window).
- ◆ **Time:** Value of the time taken to calculate the optimization.
- ◆ **Opt. Area:** Total area of the pieces used in the optimization (if Exceeding Pieces and/or Standard Pieces are not used, this value is the same for all algorithms).
- ◆ **Real Waste %:** Real waste percentage.
- ◆ **Real Waste:** Real waste area.
- ◆ **Total Waste %:** Total waste percentage.
- ◆ **Total Waste:** Total waste area.
- ◆ **Net Waste %:** Net waste percentage.
- ◆ **Net Waste:** Net waste area.
- ◆ **Trim Waste %:** Trim waste percentage.
- ◆ **Trim Waste:** Trim waste area.
- ◆ **Est. No. of Sheets:** Number of sheets the system estimates to use (useful in case of large optimizations).
- ◆ **Number of Sheets:** Number of sheets used by the system (all sheet sizes are considered).
- ◆ **Est. No. of Cutting Plans:** Number of cutting plans the system estimates to generate.
- ◆ **Number of Cutting plans:** Number of Cutting plans generated.
- ◆ **Min. No. of Sheets:** Theoretical value indicating the minimum number of sheets needed to arrange all work order pieces when waste equals 0. Obviously, waste never equals 0 (due, for example, to trims). Therefore, this value is merely indicative.

- ◆ **Pieces:** Number of pieces used in the optimization (if Exceeding Pieces and/or Standard Pieces are not used, this value is the same for all algorithms).
- ◆ **Positions:** Number of positions used in the optimization.
- ◆ **Stock Quantity:** Total number of stock sheets for the corresponding material.
- ◆ **Sheet Sizes:** Number of the various sheet sizes used.
- ◆ **Min. Dist.:** Minimum distance used on sheets during optimization.
- ◆ **Trim X1-Y2:** Trim values used on sheets.
- ◆ **Max. No. of X/Y Crosscuts:** Maximum number of crosscuts that can be made on a sheet.
- ◆ **Max. Crosscut Dim.:** Values within which at least one crosscut must be made.
- ◆ **X/Y Tool Exit:** Values for the tool exit.
- ◆ **Tool:** Thickness of the tool used.
- ◆ **No. of Cutting Levels:** Maximum number of cutting levels for which the machine is set.

NOTE: You can decide whether to activate or deactivate the view of each field. To know how, refer to the "Customizing Grids" section.

NOTE: Because you can customize the field order, it may be different from the order illustrated above.

Toolbar Functions

Optimization

After pressing the  button the optimization procedure starts based on the parameters set by the user.

Edit-Way

At the end of the optimization you can view how pieces have been arranged on sheets by pressing the "Edit-Way"  button.

NOTE: If you start the editor from here you can view sheets, but you can't modify them.

Edit-Way Autostart

This function in the "Optimization" menu allows you to activate the editor automatically when closing the optimization window. Since this editor is started in the full mode, you can modify sheets.

Automatic Exit

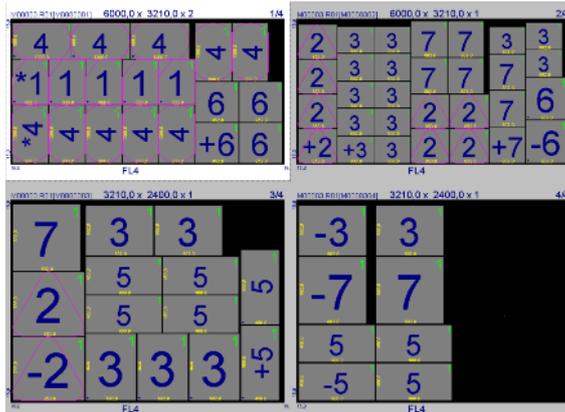
If you select this option from the "Optimization" menu, the optimization window is closed automatically at the end of the calculation. The system also selects the best algorithm automatically.

Waste Calculation

Because the program utilizes different types of waste, a brief description of those types may be useful.

Total Waste

This waste includes all those glass areas not occupied by the work order pieces.



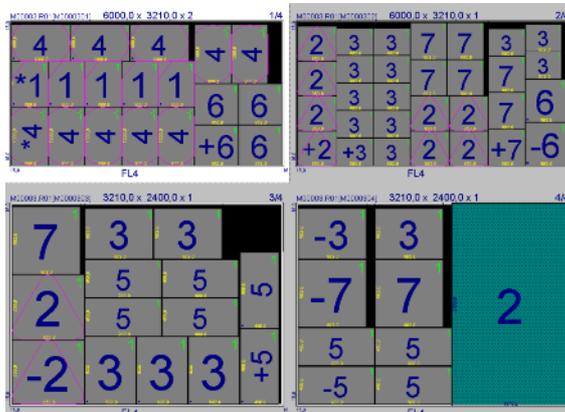
Therefore, this waste includes:

- ◆ Waste between pieces;
- ◆ Trims;
- ◆ Area between pieces for tool cutting;
- ◆ Offcut areas;
- ◆ Waste area beyond the last crosscut.

No waste type is excluded.

Real Waste

Glass area that cannot be reused and thus real waste.



This value includes the following types of waste:

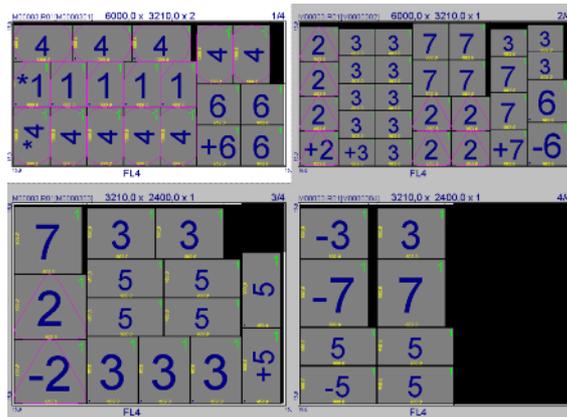
- ◆ Waste between pieces;
- ◆ Area between pieces for tool cutting;
- ◆ Offcut areas.

The following types of waste are not included:

- ◆ Trims;
- ◆ Waste area beyond the last crosscut.

Net Waste

Total glass area not used in the optimization.



It includes:

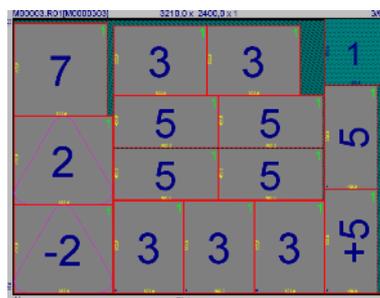
- ◆ Waste between pieces;
- ◆ Area between pieces for tool cutting;
- ◆ Offcut areas;
- ◆ Waste area beyond the last crosscut.

It does not include:

- ◆ Trims.

Trim Waste

This includes glass areas not used because of the trims set for the sheet.



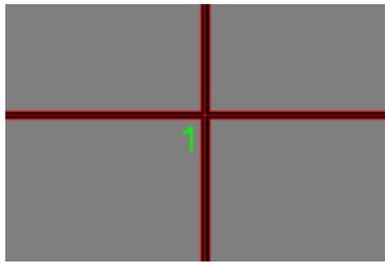
Last Sheet Waste

This is the waste in the last sheet of the optimization. This value is useful since the last sheet usually has the largest waste area. You can delete the last sheet if its waste area is too large and enter the pieces thus deleted in the subsequent work order or in the order list.

All waste areas included in the total waste are taken into account.

Tool Waste

Glass area lost during optimization to ensure proper cutting of pieces by means of a tool - such as a saw - with a thickness other than 0.



As you can see from the picture, tool cutting generates waste between one piece and another.

Final Waste

Total waste without trims. This waste thus includes:

- ◆ Waste between pieces;
- ◆ Area between pieces for tool cutting;
- ◆ Waste area beyond the last crosscut.

It does not include:

- ◆ Offcut areas;
- ◆ Trims.

Reusable Waste

This value is the sum of offcut areas generated by the optimization.

Order Progress

In Enterprise's production module, the final part of the order processing cycle is called Order Progress. From within the Order Progress window you can:

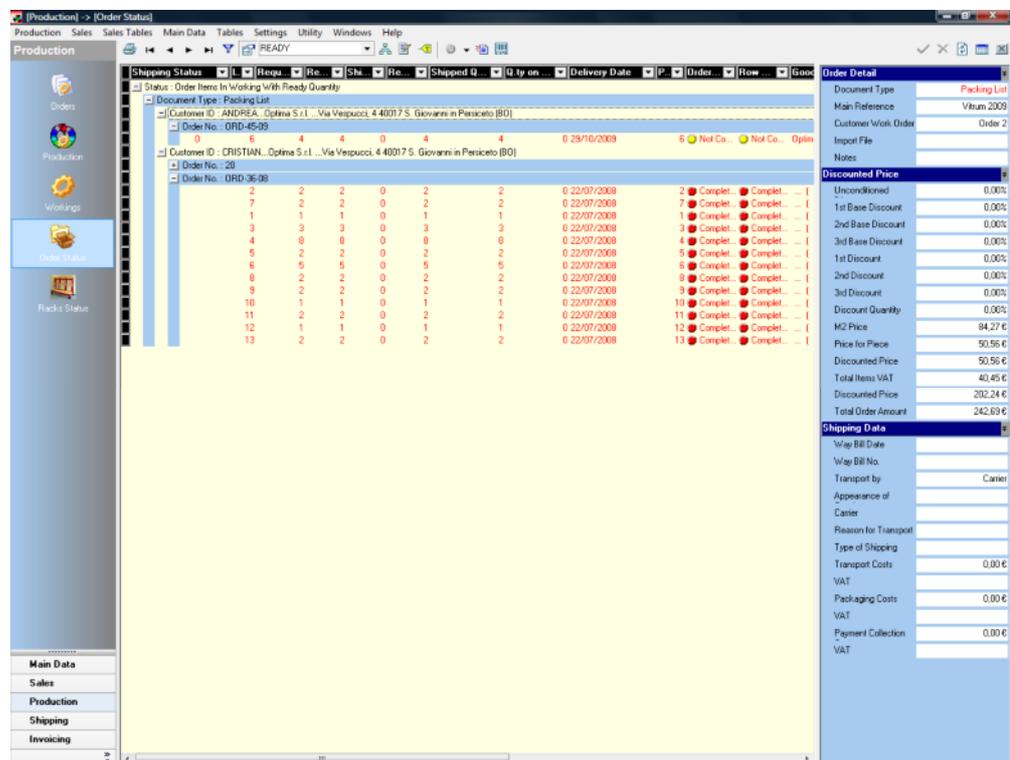
- ◆ Control the production status of each order line.
- ◆ Create documents related to transport or invoicing of the order line.
- ◆ Close the production process and pass manufactured products to the stock (refer to the corresponding documentation on Enterprise's passive cycle).

NOTE: The Order Progress window appears both in the Production module and in the Shipments module (refer to the following sections for additional information). Its basic layout is the same in both modules. There may be little differences in graphics depending on some features, which may differ according to their location.

NOTE: The Order Progress window shows the data of those order lines that have not been inserted in any shipping document, yet. The data of order lines that have been "shipped" is not displayed.

Window Structure

The figure below shows a typical Order Progress window.



The Order Progress window may be divided into two areas: The center part of the window displays order details, whereas the Inspector on the right - on

various levels - displays all the data pertaining to commercial and shipping information related to the selected line.

Order line grid

The center part of the window shows a grid with the data pertaining to the lines of the various orders. Like in any other Enterprise's window, the grid can be personalized using Enterprise's display and customization capabilities to perfectly meet the user's requirements.

By Default, the grid shows data grouped according to the following criteria:

- ◆ Order line status
 - Document type
 - Order no.
 - Order line details

The grid looks like the one in the figure below:

Shipping Status	L.	Requ...	Re...	Customer ID	Shi...	Re...
- Status : Order Items To Be Worked						
- Document Type : Factura Directa						
- Order No. : A-3642-09						
+ Row Status : To be Worked						
- Status : Order Items In Working Without Ready Quantity						
- Document Type : Factura Directa						
+ Order No. : A-3639-09						
- Order No. : A-3640-09						
- Row Status : Not Completed						
	0	1	1	0 0008...PLANICER ...	0	1
+ Status : Order Items In Working With Ready Quantity						

You can use Enterprise's grid customization features to group data according to criteria other than the Default ones. In the figure below, for instance, the data table has been grouped by batch

Shipping Status	L.	Requ...	Document T...	Re...	Order ...
- Status : Order Items To Be Worked					
+ Batch Code :					
- Status : Order Items In Working Without Ready Quantity					
- Batch Code : 00005					
	0	1	1 Factura Directa	0 A-3639-09	
	0	2	1 Factura Directa	0 A-3639-09	
- Batch Code : 00006					
	0	1	1 Factura Directa	0 A-3640-09	
+ Status : Order Items In Working With Ready Quantity					

and the following sorting has been applied:

- ◆ Order line status
 - Batch no.
 - Order line details

NOTE: You can also personalize the set of displayed fields using the corresponding feature.

Progress Data Inspector

The Inspector on the right allows you for an analytical view of the data pertaining to the currently selected line. The subdivision of the structure depends on the "type" of information to be displayed.

Structures can be opened/closed with the corresponding  button located on the side. In this way, you can display only that part of data you are interested in.

The following "types" of information are displayed:

Order Details

Order Detail 	
Document Type	Packing List
Main Reference	Vitrum 2009
Customer Work Order	Order 6
Import File	
Notes	

Total Discounted Tax Value

Discounted Price 	
Unconditioned Discount	0,00%
1st Base Discount	0,00%
2nd Base Discount	0,00%
3rd Base Discount	0,00%
1st Discount	0,00%
2nd Discount	0,00%
3rd Discount	0,00%
Discount Quantity	0,00%
M2 Price	66,96 €
Price for Piece	48,21 €
Discounted Price	48,21 €
Total Items VAT	-111,74 €
Discounted Price	-558,70 €
Total Order Amount	-670,44 €

Shipping Data

Shipping Data	
Way Bill Date	
Way Bill No.	
Transport by	Carrier
Appearance of Goods	
Carrier	
Reason for Transport	
Type of Shipping	
Transport Costs	0,00 €
VAT	
Packaging Costs	0,00 €
VAT	
Payment Collection Costs	0,00 €
VAT	

NOTE: Enterprise does not store whether data structures are open or closed. It is the user who must open/close structures each time he/she opens the window.

The Inspector's display structure allows you to enlarge and reduce the data display area (white area with data). To enlarge the data area, position the cursor on the "border" between the data area (white background) and the field labels. The cursor will change and you will be able to move the data area horizontally.

NOTE: This is very useful when you use certain types of monitor or particular screen settings. You can also enlarge the data area vertically, which is useful when you wish to display a very long data field on various lines.

Order Progress commands

After locating the desired orders and/or order lines, you can modify the selected data to "force" the status of one or more workings and to start the shipping document creation procedure.

Selecting Data

You can select on-screen and available data (which is displayed and available depending on the filters you set. Refer to the Customizable Filters section for more information):

- ◆ Manually
- ◆ By clicking with the right mouse button to open the special menu, and then selecting the Select All / Unselect All menu option.

NOTE: If you use the "Select All" option, the tree structure of on-screen lines is "exploded" completely.

NOTE: To the Order Progress window the Default **READY** filter applies. This filter displays in the grid only that data pertaining to lines with completed quantities (and thus ready for shipping).

Creating a document

In the Order Progress window, the Create Document option is certainly one of the most important. This feature allows you to create the "type of document" (transport document or accompanying invoice) set when you created the order.

NOTE: You can change the type of document only by modifying the content of the corresponding field in the Customer master data window!

To activate the feature, use the  icon or click with the right mouse button to open the special menu, and then select the **Crea Documento** option.

NOTE: The Create Document option is available **only for order lines with completed quantities!**

When you press the button, the following window opens.

Summary of Selected Lines	
Number of Rows	5 Qty
Shipped Quantity	5
Area	2,91 mq
Perimeter	-3,79 m
Unit Weight	42.02 Kg
Discounted Price	39,40 €
Total Items VAT	0,00 €
Total Order Amount	39,40 €

First sort by: Goods Recipient
 Second sort by:
 Third sort by:
 Split Doc. x Order Open Document
 Confirm Document Print Document

Document Date: 04/08/2010
 Shipping Date: 04/08/2010 12.41.02

Here you can activate the desired selection mode as well as view the values for the selected lines. For additional information about the features offered in this window and indications on how to create documents, refer to the chapter concerning the creation of shipping documents.

NOTE: If you selected lines pertaining to "various customers", the system will automatically retrieve and create the required documents. Furthermore, Enterprise can create different "types of document" in a single run.

Once the document(s) has/have been created, the order progress window opens again and is updated according to the new order line status.

If a shipping document is created in "Draft" mode, processed order lines will be in the "**Being Shipped**" status. Lines will keep this status until the document is "Confirmed".

Complete Quantities

From within the Order Progress window you can "force" the progress status of one or more order lines and set it to "Completed".

First select the desired lines, and then click with the right mouse button to activate the special menu and select the **Complete Quantity** option. In this way, the workings pertaining to the products that are contained in the selected lines are set to Completed and the lines can now be inserted into a shipping document.

8 - SETUP

Basic Notions

This chapter explains the supplementary functions of the optimization program, such as, for example, language selection, default unit of measurement setting, cutting table setting and link, parameter modification and much more.

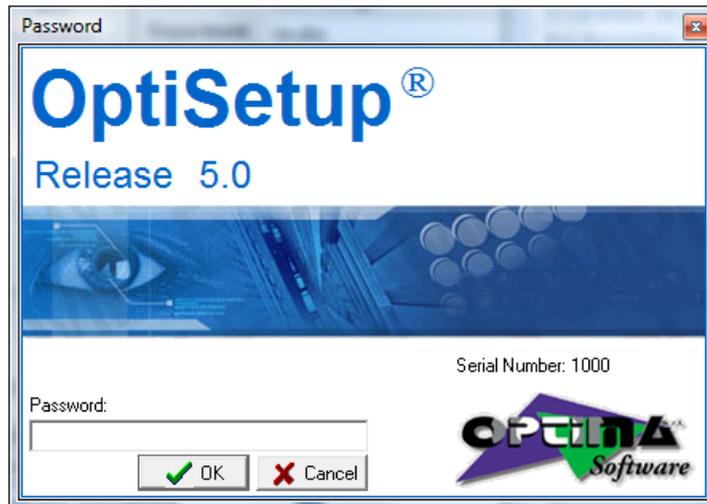
These functions are obviously not essential for a proper program working, but, if correctly used, they can facilitate it. Please read what follows carefully. It will allow you to make the most of all functions of your program.

Should any of the information given not be clear to you, please contact our Technical Support Department for assistance with your registration card (properly filled-in) at hand, before making any change.

NOTE: The improper use of the parameter setting may lead to a malfunction of the optimization program. Read the following pages carefully and, should you have any doubt about the function performed by any parameter, please contact our offices for further details and explanations.

Open set-up menu

The access to the "Setup" menu is protected by means of a password to avoid an improper use of it. If you omit the password, you can only display the configuration, but you cannot make changes. If you enter the correct password you can modify the configuration.



The password to this menu corresponds to your hardware security key number (you'll find this number in the password request screen next to the Serial No.) preceded by the number 10. For instance, if the number indicated on your hardware security key is 1000, your password will be **101000**.

The setup has 4 different sections that can be activated by using the menu on the left.

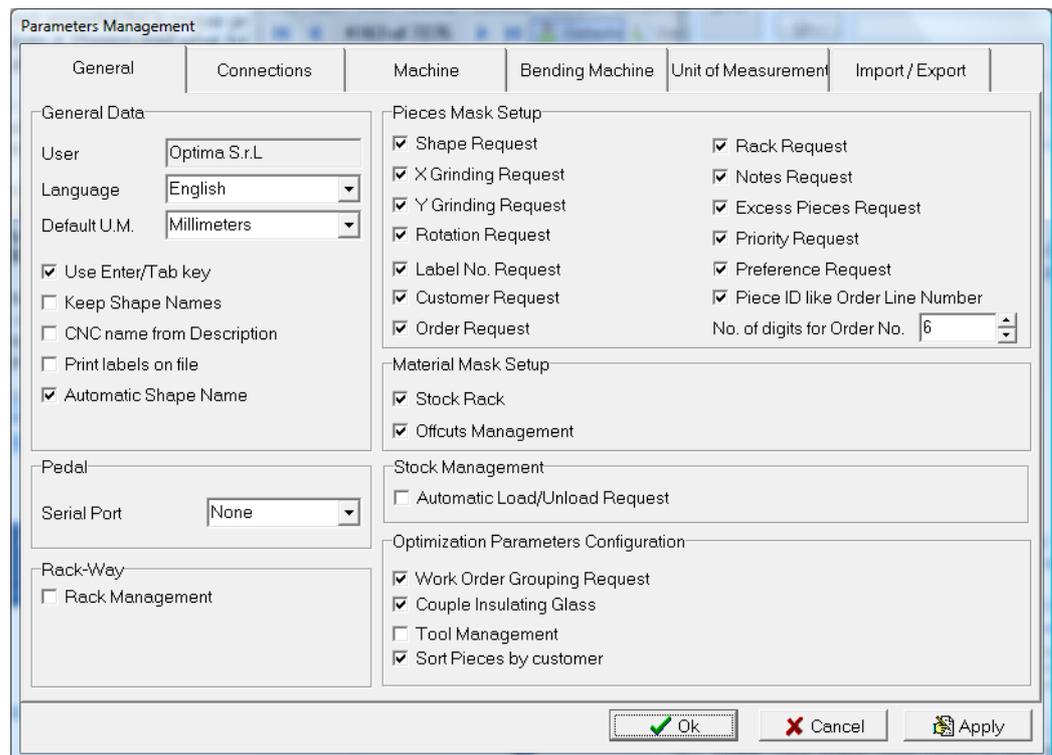
The four sections are:

- ◆ General
- ◆ Cutting Table
- ◆ Other Machines
- ◆ Unit Of Measurement

General

This menu allows you to configure the work environment of the program. You can change the language and the unit of measurement, and you can enable all the desired features (provided they can be used with the software version you purchased). Likewise, you can also deactivate the unwanted features.

Disabled fields and features are not requested in the various program procedures.



General Data

This window allows you to set the general program parameters.

- ◆ **Language:** Allows you to choose the program language. All programs supplied by Optima S.r.l. will use the language set in this field.

Languages available are:

- ◆ Italian
- ◆ English
- ◆ French
- ◆ Spanish
- ◆ German
- ◆ Portuguese
- ◆ Russian

To select a language, simply click on the button that displays the list of languages, select the desired language and press "Apply" .

NOTE: After choosing the desired language, restart the program so that all fields will be correctly displayed.

NOTE: You can also change the language very quickly by selecting the one you want from the Language menu in the File menu. Here you can choose any of the six main languages, and namely: Italian, English, French, Spanish, German and Portuguese.

- ◆ **Default U.M.:** Allows you to set the default unit of measurement. Units of measurement available are:

- ◆ Millimeters
- ◆ Centimeters
- ◆ US Inches
- ◆ Taiwan Foot
- ◆ US Inches Fractions
- ◆ Tenth of millimeters
- ◆ Taiwan Inches
- ◆ US Inches CNC
- ◆ CNC Taiwan Inches
- ◆ 1/1000 of U.S. Inches
- ◆ Hundredth of Millimeters

Please note that you can create new units of measurement, if required. Press the "Apply"  button to set the desired unit of measurement.

- ◆ **Use Enter/Tab key:** Allows you to enable the use of the "Enter" key to confirm the value entered and to go to the next field.
- ◆ **Keep Shape Name:** Exclusive function for some cutting systems. It allows you to keep the number assigned as the name of the shape. If inactive, shapes in the cutting work order are numbered automatically and progressively.
- ◆ **CNC Name from Description:** Allows you to use the content of the description field, if entered between square brackets, as the name of the optimization.

This function disables the Opty-Way automatic numbering and it is compatible with all supported machines. For this reason, you must enter names that can be accepted by the operating system and the CNC

- ◆ **Print Labels on File:** Allows you to generate a file with the label data and the label print order based on the setting in the Opty-Way print menu.
- ◆ **Automatic Shape Name:** When a shape is saved from the program Geo-Way, a shape name, i.e. a number incremented by one with each save operation, is presented automatically.

Pieces Mask Setup

This window allows you to disable the request for those values that are not necessary to create a work order or an order. Fields you can enable/disable are:

- ◆ **Shape Request:** Allows you to enable/disable the shape code field. Enable it only in case you are using the program Opty-Way® G or CAD.
- ◆ **Single Grinding Request:** Allows you to enable/disable the grinding field.
- ◆ **4-Side Grinding Request:** Enables/disables the 4 grinding fields.
- ◆ **Piece Rotation Request:** Allows you to enable/disable the piece rotation management.
- ◆ **Labels No. Request:** Enables/disables the entry of the number of labels to be printed for each position.
- ◆ **Customer Request:** Enables/disables the customer field.
- ◆ **Order Request:** Enables/disables the customer code field. If disabled, the field is not printed on the optimization printout.
- ◆ **Rack Request:** Enables/disables the Rack field (the rack code, if entered, is printed on the optimization printout).
- ◆ **Notes Request:** Enables/disables the Notes field.
- ◆ **Exceed Request:** Enables/disables the Exceed field.
- ◆ **Priority Request:** Enables/disables the Priority field.
- ◆ **Preference Request:** Enables /disables the Preference field.

Material Mask Setup

This window allows you to disable the request for those values that are not necessary when you enter materials into the Stock. Fields you can enable/disable are:

- ◆ **Stock Rack:** Enables/disables the rack field of the Sheet Sizes window.
- ◆ **Offcut Management:** Enables/disables the request for offcut data in the Stock, in the optimization and Uploading/Downloading procedure.

Stock Management

This section is used to activate or deactivate some of the features of the automatic work order and sheet management. The fields you can enable/disable are:

- ◆ **Work Order Generation Request:** Allows you to activate the window for creating a new work order that contains the pieces removed with the editor or the pieces excluded from the optimization (because, for example, there were not enough sheets or dimensions were incorrect).
- ◆ **Automatic Uploading/Downloading:** The selected data is uploaded and/or downloaded automatically right after its transmission.

Optimization Parameters Configuration

You can decide which features to use or not to use (features that must be unselectable) in the optimization stage.

- ◆ **Work Order Grouping Request:** Enables/disables the request for the value that determines to what extent work order pieces must be grouped.
- ◆ **Rack Management:** Allows you to enable/disable the automatic rack management in the Pieces menu if the relevant module is present in the program.
- ◆ **Pair Double Glazing Panes:** Allows you to keep the pieces that refer to the same double glazing unit close to each other for easier production management and flow.
- ◆ **Tool Management:** Enables/disables the Tool Parameters Management in the Optimization Parameters window of the optimization procedure.
- ◆ **Re-order pieces:** Allows you to assign a piece a processing priority based on the selected parameter. Each piece can be automatically assigned a priority value according to which the optimization system will create the cutting plan.

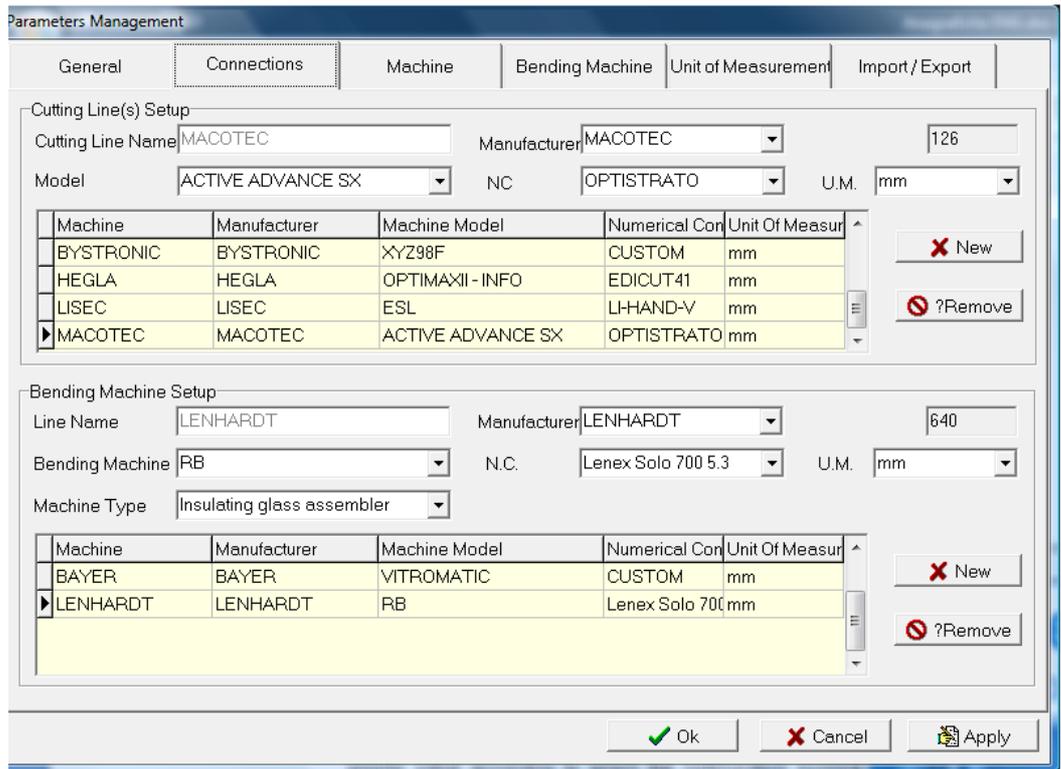
Cutting Table Setup

Connections

This menu allows you to configure the link to the cutting tables available. The program can work with all machines available on the market, provided the hardware security key you have is enabled to do that.

A correct configuration of the Cutting Table you wish to use is essential for the proper working of the program. If the cutting table is not configured properly, you cannot send data to the Numerical Control.

After selecting this menu, the following window appears:



Adding a Cutting Table

Press "New"  to add a new type of cutting table. You can select one among those listed in the database.

You are required to indicate:

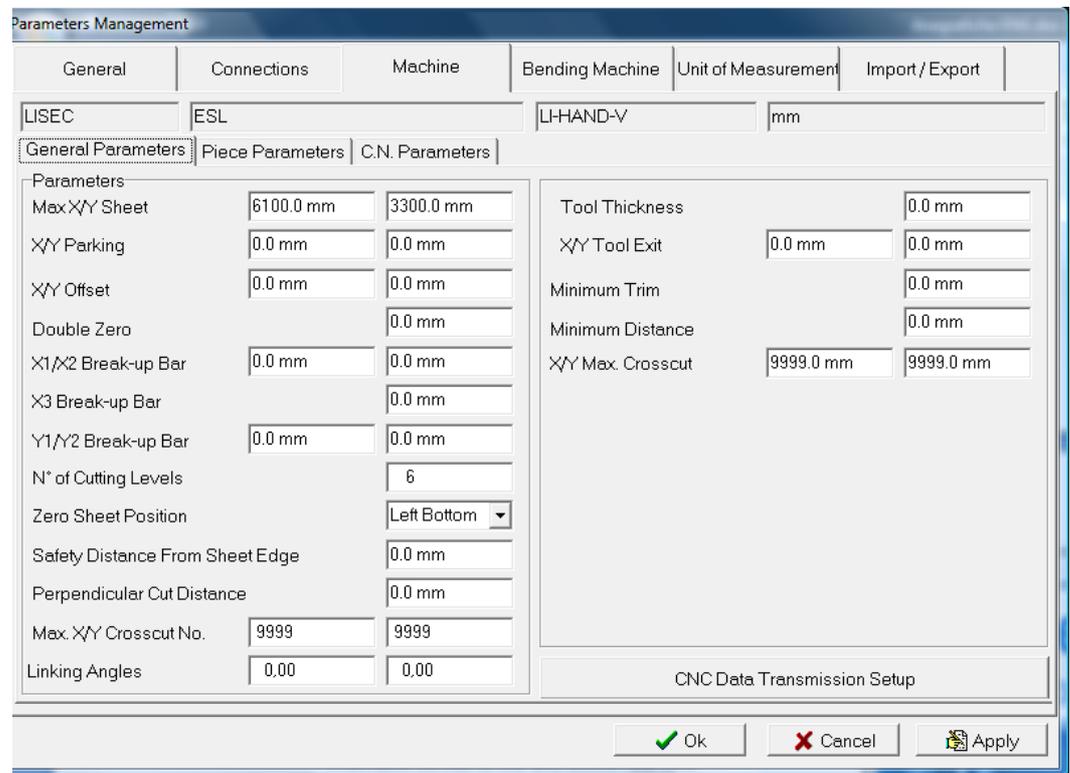
- ◆ **Cutting Line:** This description is very important, as it identifies the cutting line the optimization is intended for. It can accept up to 32 alphanumeric characters. You cannot enter the same description for different cutting lines.
- ◆ **Manufacturer:** Identifies the manufacturer of the cutting table. Click on the list box to display the list of the manufacturers supported.
- ◆ **Model:** Allows you to select the desired cutting table model among those of the manufacturer you selected.
- ◆ **NC:** Allows you to select the Numerical Control installed on your machine, in case more NCs are listed.
- ◆ **U.M.:** Allows you to set the unit of measurement used by your numerical control.

Removing a Cutting Table

Press "Remove"  to delete the desired cutting line from the list, after selecting it by means of the cursor (when selected it is highlighted in BLUE).

Machine Parameters

This menu allows you to set the parameters of the selected type of machine. A window similar to the one below appears:



Parameters

- ◆ **Max Sheet X/Y Dimensions:** Max. sheet dimensions allowed when entering data into the stock or pieces.
- ◆ **X/Y Parking:** Refers to the parking value, if required, to which the cutting head is to be moved after cutting a sheet.
- ◆ **X/Y Offset:** Indicates the translation of the cutting dimensions by a certain value (it translates the zero point by the desired value).
- ◆ **Double Zero:** Allows you to indicate the second reference for the Cutting Table used when mirroring the sheet in the laminated glass cutting.
- ◆ **X1, X2, X3 Break-up Bars:** Allows you to enter up to max. 3 dimensions along X, corresponding to the positions of the breakout bars of the machine. These bars are displayed when using the editor functions and allow the operator to move pieces or groups of pieces so as to make them coincide with the position of the machine bars, and thus to facilitate breakout. Set the value to 0 so as not to display them.
- ◆ **Y1, Y2 Break-up Bars:** The same as X1, X2, X3 Break-up Bars, but referred to the positions of breakout bars along Y.
- ◆ **No. of Cutting Levels:** Each cut generated by the optimization program has its own well-defined features. The program can manage up to 5 different types of cuts, namely:
 - ◆ **X Cut:** Vertical cut dividing a sheet into two halves along the short side (usually called Crosscut).
 - ◆ **Y Cut:** Horizontal cut defined by 2 X Cuts, i.e., passing between two X cuts.
 - ◆ **Z Cut:** Vertical cut passing between two Y cuts.

- ◆ **V Cut:** Horizontal cut passing between two Z cuts.
- ◆ **W Cut:** Vertical cut passing between two V cuts.
- ◆ **Q Cut:** Horizontal cut passing between two W cuts.
- ◆ **R Cut:** Vertical cut passing between two Q cuts.
- ◆ **Sheet Zero Position:** Indicates where the zero point of the sheet is to be located on the cutting table and thus where the cut is to be started.
- ◆ **Safety Distance From Sheet Edge:** Distance kept by the head during positioning on the sheet edge. It is used to prevent the head from exiting the glass during cutting if the glass edge is damaged.
- ◆ **Perpendicular Cut Distance:** Refers to the safety dimension for cuts. Each cut is automatically started after and stopped before another cut by the value set for this parameter, so as to prevent the cut from going beyond or touching the next perpendicular one in case of mechanical compensations.
- ◆ **Max. No. of X/Y Crosscuts:** Refers to the max. number of crosscuts that can be generated in a cutting plan during optimization.
- ◆ **Linking Angles:** Values between the angles allowed to using the connection function on the shape.

Tool Parameters

- ◆ **Tool Thickness:** Refers to the thickness of the tool to be used to cut the optimized sheet. For a thickness over 0, piece dimensions are increased, so that the material removed during cutting (e.g. by a saw) does not affect the dimensions of the finished piece.
- ◆ **X/Y Tool Exit:** Is useful when disk saws are used to cut the material, in order to take into account the particular type of cutting performed by the tool. Pieces are grouped in "blocks" having a certain distance one from the other so that pieces are not damaged by the tool. This field is displayed by default in the tools table of the optimization procedure.

Piece Data

- ◆ **Minimum Box X/Y:** Minimum dimension allowed for the X and Y sides.
- ◆ **Maximum Box X/Y:** Maximum dimension allowed for the X and Y sides.
- ◆ **Minimum Length:** Minimum length of the profile.
- ◆ **Maximum Length:** Maximum length of the profile.
- ◆ **Minimum Angle:** Minimum working angle allowed by the machine.
- ◆ **Maximum Angle:** Maximum working angle allowed by the machine.
- ◆ **Minimum Radius:** Minimum bending radius allowed by the machine.
- ◆ **Maximum Radius:** Maximum bending radius allowed by the machine.

Numeric Control Setup

- ◆ **Number of Decimals:** Allows you to set the number of decimals to be saved in the file generated by the optimization program and sent to the Numerical Control.
- ◆ **Max SP - Max. Cutting Speed:** is the maximum cutting speed of the table.
- ◆ **MAXSSP - Max Shape Cutting Speed:** is the maximum shape cutting speed of the table.

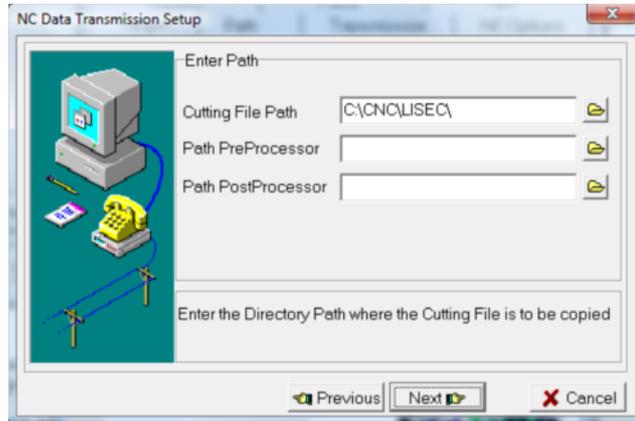
Setup

Click on the "Setup"  icon. A window opens in which you can modify the machine transmission parameters.

NOTE: Not all the machines that can be used with our program support all the features described on the following pages. Some of the fields may be deactivated or, although activated, may not produce the results described.

Path

This tab is used to define the file transmission path. The default path is A:\ but you can change it with a path on the local HD or a remote computer.

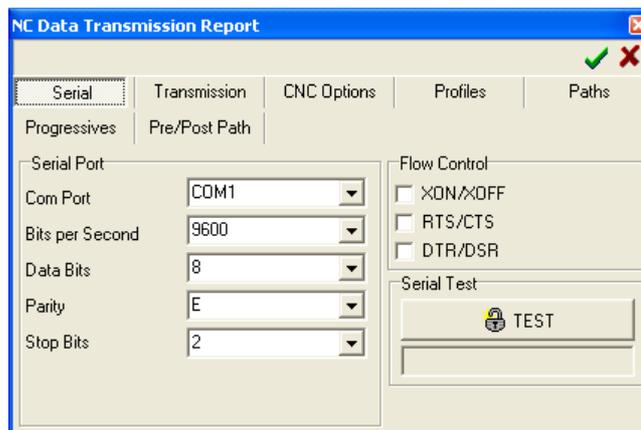


The Pre-Processor and Post-Processor paths are used for some special machines that require external working to be properly optimized and transmitted.

You need to enter the paths for an executable that performs this function.

Serial

This tab is used for a serial port transmission. Here you can set the values necessary for a correct transmission.



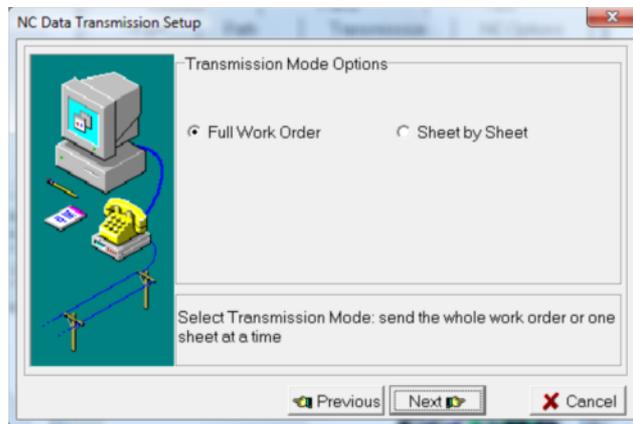
Select the machine you wish to use. Even though all the values are set automatically based on the specifications supplied by the machine manufacturer, you can modify them at any time.

The “Test” feature allows you to check if the PC serial port and the corresponding cable are working properly. To perform the test, connect a Loopback to the serial port or to the end of the cable.

Transmission

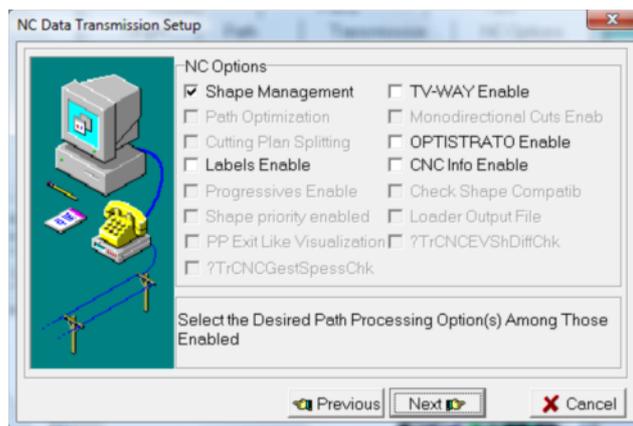
Allows you to define how to send optimized work orders.

The "Full Work Order" option sends the entire file necessary to cut the entire optimization at one time. Instead, the "Sheet by Sheet" option sends one sheet at a time.



CNC Options

Used to activate the post-processor parameters described below.



Enable Shapes: If enabled, shapes and cuts (if possible) are sent to the machine.

Join Offcuts: If enabled, offcut areas are joined automatically (when possible). In a grid of pieces, only the last piece goes out upwards. All other crosscuts are not made. This makes cutting more complex but quicker.

Enable Cutting Plan Splitting: Not available.

Enable Labels: Allows you to send to the cutting table the data pertaining to the labels that are printed and applied onto glass items automatically. This option is active only for some special machines. Use Label-Way to select the type of label to use for each work order.

Enable Progressives: Activates the use of progressive file names for the transmission to special machines.

Cuts as Displayed: If the table zero point is not the "Bottom left" corner you can save the dimensions of cuts in the same way as they are displayed on the screen. This feature is active only for some machine models. Normally, this is managed by the Numerical Control of the cutting table.

Shape Cutting Priority: If enabled, shapes (if present) are cut before the corresponding bounding boxes.

Glass Thickness Management: Enables or disables the transmission of the glass thickness value.

Enable TV-Way/Opty-One: If active, the file necessary to control the cutting table is sent together with the Z01 file required by the add-on modules TV-Way/Opty-One.

Enable Monodirectional Cuts: If active, cuts are all made in one direction. This slows down the cutting operation, but reduces the error caused by the rotation of the head. It also increases the cutting performance of systems equipped with a PVB or vinyl cutting blade.

Enable Optistrato: Activates the icon to open an optimized work order from within Optistrato (if the hardware security key allows the program to do so).

Enable CNC Info: Creates a text file with the information about the optimization results.

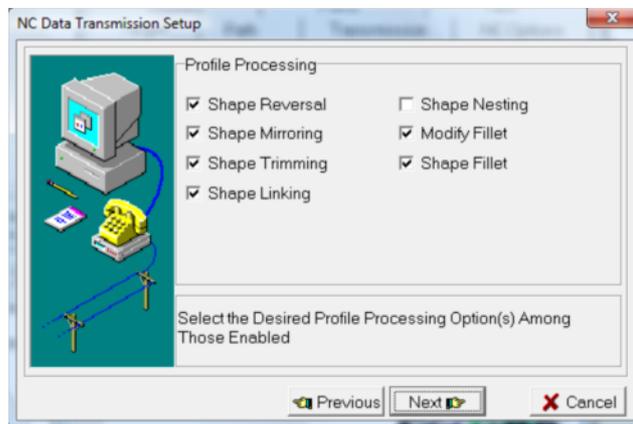
Check Piece Compatibility: Checks work order input data and compares it with the data in "Piece Data" for compatibility with the set limits.

Loader Management: This feature is available only for some systems. It creates an additional file with the sequence of sheets and the corresponding positions on the rack the automatic loader must load to.

Enable Cutting Velocity Management: Enables the machine speed changes when changing from straight to shape cutting or vice versa.

Profiles

This tab is used to define the operations to perform on optimized shapes.



Reverse Shape: Allows you to reverse the cutting path of a shape to improve linking.

Mirror Shape: Allows you to mirror a shape vertically or horizontally. This option also can be used to improve linking.

Trim Shape: Allows you to set a safety distance from the sheet edge to prevent the glass from being damaged. This means that each cut starts at a certain distance from the sheet edge.

Link Shapes: Enables shape linking. This means that two nearby shapes are cut as if they were one single shape (if possible). This reduces the number of cuts and speeds up the cutting operation.

Nest Shapes: Not available.

Modify Fillets: Allows fillets to be modified if no final changes are made to the shape in Geo-Way. Refer to the "Geo-Way" section for additional information.

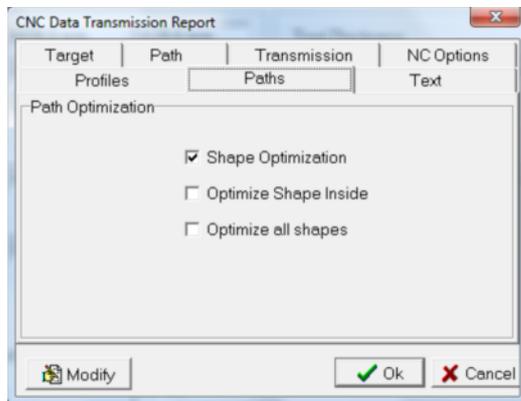
Fillet Shape: Enables the shape fillet for those shapes for which no final changes were made in Geo-Way. Refer to the corresponding section for additional information.

Paths

Optimize Shapes: Calculates the best tool path to speed up the cutting operation.

Optimize Shapes Inside: Calculates the best head path for shapes and thus for any holes inside them and the corresponding head up movements.

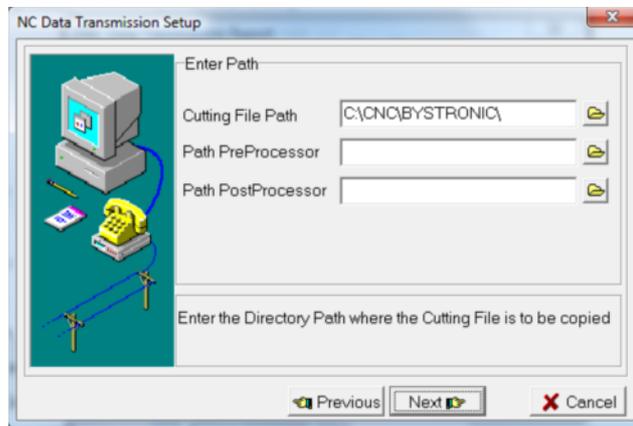
Optimize All Shapes: Calculates the best head movement between one shape and the other to speed up the cutting operation.



Pre/Post-Path

Allows you to define the previously described Pre-Processor and Post-Processor paths.

This window is displayed only in case of Serial machines.



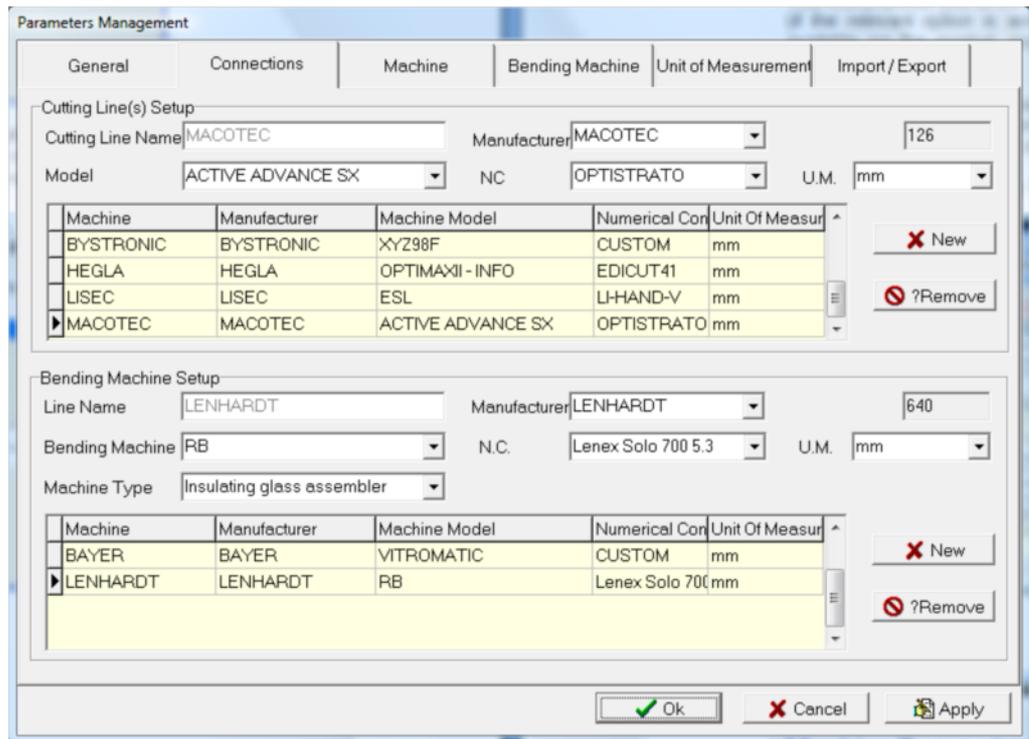
Bending Machines Setup

Connections

This menu allows you to configure the link to the available bending machines (if the relevant option is active). The program can work with all machines available on the market, provided the hardware security key you have is enabled to do that.

The Bending Machine you wish to use must be properly configured in order for the program to operate correctly. If the bending machine is not properly configured, you cannot send data to the Numerical Control.

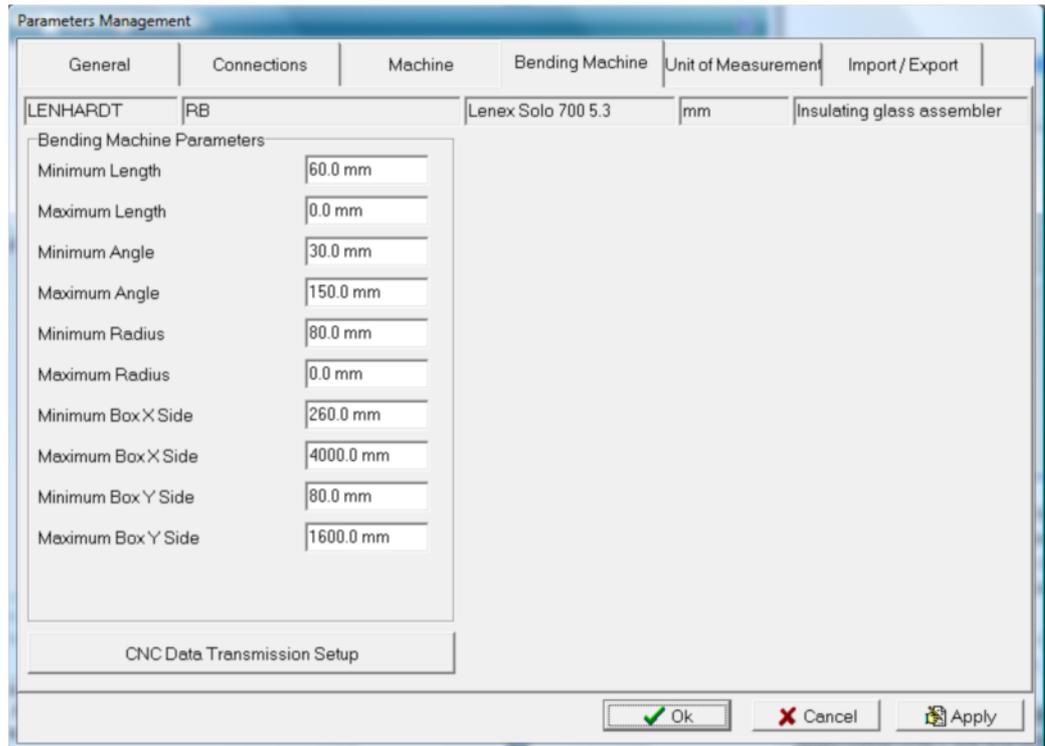
After selecting this menu, the following window appears:



Machine Parameters

This window allows you to display/modify the configuration of the parameters of the desired machine type, namely:

- ◆ **Minimum/Maximum Length:** Minimum and maximum length of the profile.
- ◆ **Minimum/Maximum Angle:** Minimum and maximum angle allowed by the type of equipment in use.
- ◆ **Minimum/Maximum Radius:** Minimum and maximum bending radius allowed by the type of equipment in use.
- ◆ **Minimum/Maximum Box X Side:** Minimum and maximum dimension of the X side.
- ◆ **Minimum/Maximum Box Y Side:** Minimum and maximum dimension of the Y side.



Generate One Work Order per Material: This check box allows you to enable/disable the creation of a separate bending order for each type of spacer bar. If this flag is deactivated, only one work order is created for all types of spacer bars. If this flag is active, a separate work order is created for each material.

Setup

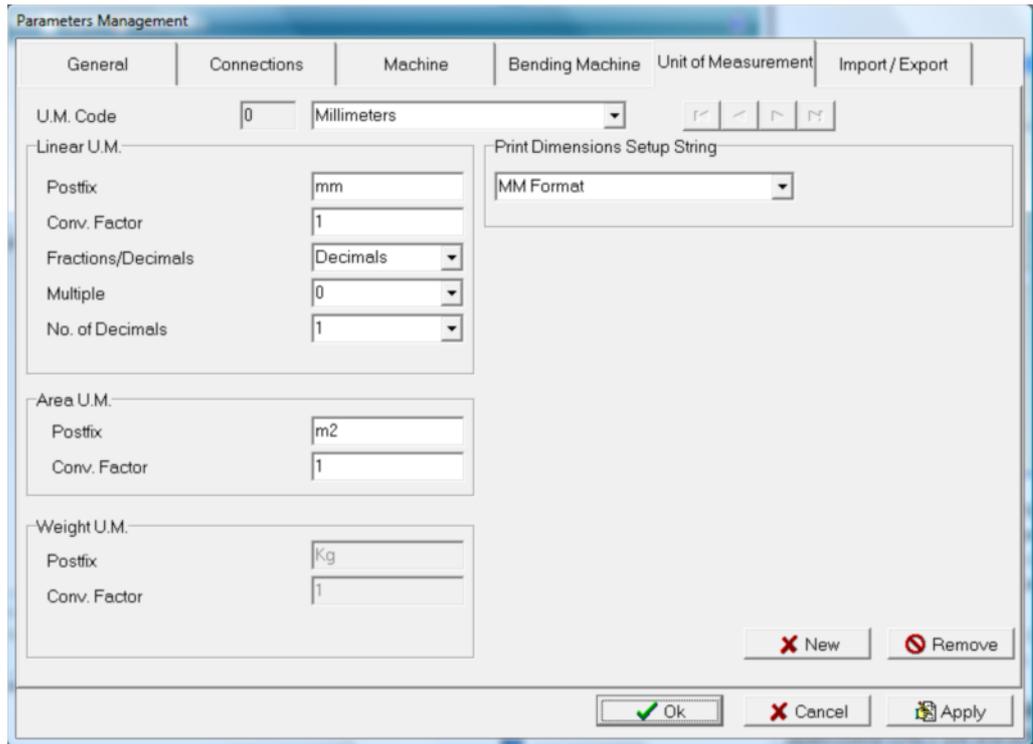
Click on the "Setup"  icon. A window opens in which you can modify the machine transmission parameters.

For additional information about the various fields of this window refer to the "Setup" section of the cutting tables. The windows are the same except for the "CNC Options" section, in which fewer options are available.

Unit of Measurement

This menu allows you to modify and add units of measurement.

When you select the "Units of Measurement" menu the following window is displayed:



The pull-down menu in the top left part of the screen is used to select the unit of measurement to be changed (which will appear in the fields below). This change has no effect on the program. To change the unit of measurement of the program, refer to the General section under Setup.

The second pull-down menu (on the right) is used to define the internal unit of measurement of the program.

IMPORTANT: You must modify the unit of measurement from this second pull-down menu **ONLY** the first time you start the program. Modifying this parameter later leads to a malfunctioning of the program, which will not be able to recognize all the previously entered data.

NOTE: Choosing one option or the other will not compromise the use of any of the units of measurements of the program. You will be able to use millimeters and inches (as well as their multiples and submultiples) regardless of the option you chose. However, it should be noted that using the internal unit of measurement and the default unit of measurement associatively avoids approximation errors.

U.M. Code

It corresponds to the value (unchangeable) used by the program for the various conversions. Each unit of measurement available is automatically associated with a progressive number. The Description of the selected U.M.

code is displayed next to it. You can select the different units of measurement by opening the lookup box with the relevant button (the down arrow). When you select the various units of measurement, the interactive windows with the different conversion factors are automatically filled in.

Linear U.M.

It displays the data necessary for configuring the selected unit of measurement to be used for the cutting data entry from the various program menus.

- ◆ **Postfix:** Is a code, necessary for identifying the unit of measurement used. This code is automatically added when the values you enter refer to the default unit of measurement. It is instead to be specified when the value you enter refers to a different unit of measurement.
- ◆ **Conversion Factor:** Is the conversion factor, with respect to the unit of measurement adopted by the optimization program, that is millimeters, necessary to convert the input data and to make it usable by the optimization program.
- ◆ **Fractions/Decimals:** Allows you to specify whether decimal or fractional values are used after the integer in the unit of measurement you enter.
- ◆ **Multiple:** Allows you to specify the highest denominator accepted, if fractions were selected.
- ◆ **No. of Decimals:** Allows you to specify the required maximum number of decimals. It is active only if you set Decimals in the Fractions/Decimals field.

Print Dimension Setup String

Allows you to select the unit of measurement in which data is printed.

Area U.M.

Allows you to display or modify the data for calculating surface areas.

- ◆ **Postfix:** Is a code, necessary for identifying the unit of measurement used for calculating surface areas.
- ◆ **Conversion Factor:** Is the conversion factor, with respect to the unit of measurement adopted by the optimization program, that is square meters, necessary to convert input data and to print calculated surface areas correctly.

Weight U.M.

Allows you to display the postfix and the conversion factor for calculating weight.

Using different units of measurement

The program automatically uses the unit of measurement you set in the Setup. You can, however, specify a different unit of measurement for each entry, by indicating the relevant postfix, if required.

A postfix is a code that defines the unit of measurement to be used and is to be entered right after the piece dimensions. When the desired unit of measurement is different from the default postfix, it is to be specified in all fields requiring it.

Postfixes and thus units of measurement available are as follows:

- ◆ **mm** = Millimeters
- ◆ **cm** = Centimeters
- ◆ **dmm** = Tenth of millimeters
- ◆ **cmm** = Hundredth of Millimeters
- ◆ **in** = US Inches
- ◆ **inf** = US Inches Fractions
- ◆ **inB** = US Inches CNC
- ◆ **tin** = 1/1000 of U.S. Inches
- ◆ **tf** = Taiwan Foot
- ◆ **ti** = Taiwan Inches
- ◆ **tiB** = CNC Taiwan Inches

You can even create new units of measurement and thus postfixes.