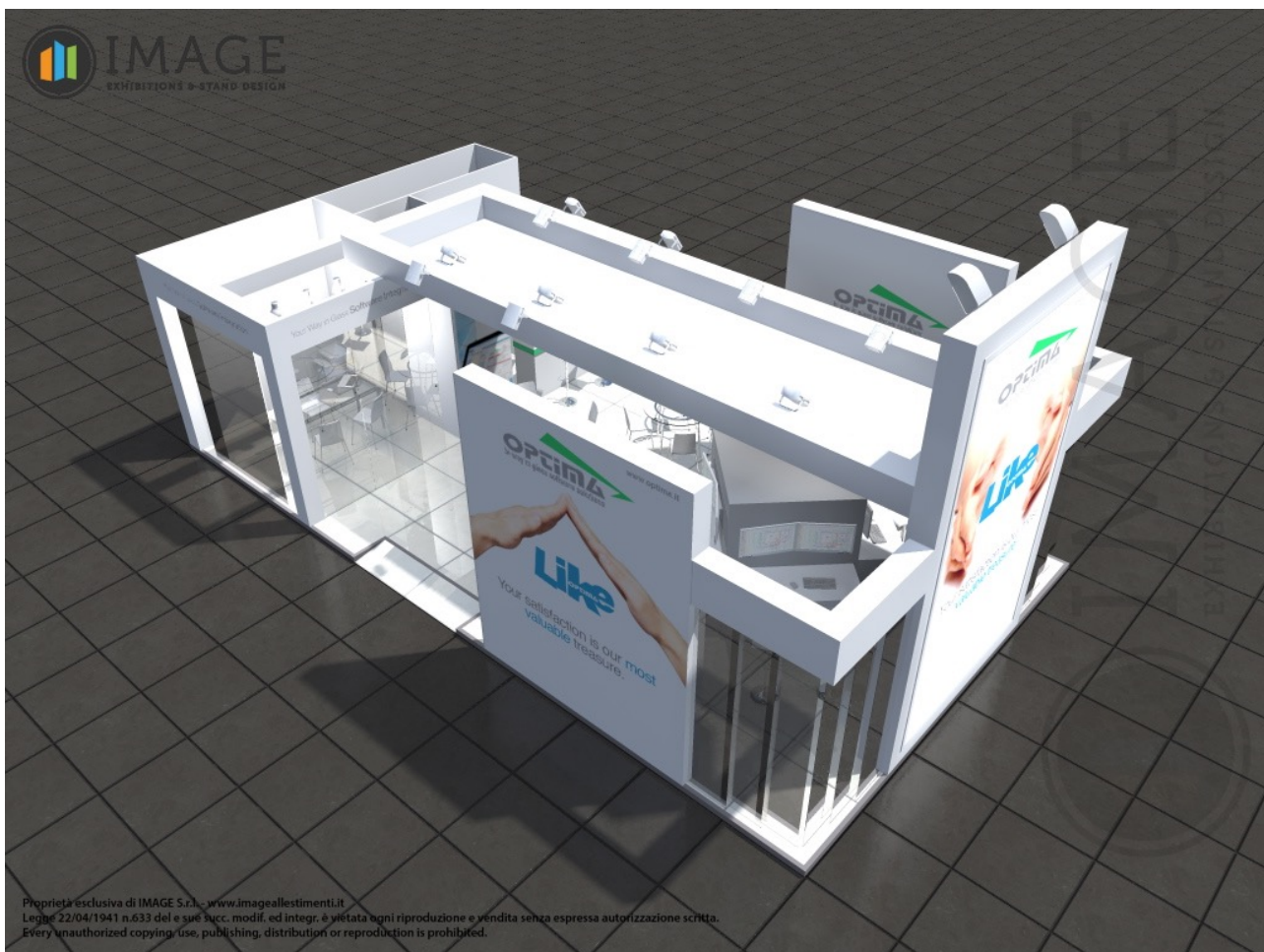


## Vitrum 2015 News

One year ago, at Glasstec 2014, we've celebrated our 20th anniversary; this year in Milan, the year of EXPO and of Microsoft Windows 10, OPTIMA will present to the market an important series of innovations and developments of its products solutions. Optima's ERP and single-user systems product lines have been renovated with significant improvement, as well as it's been guaranteed the full compatibility of all applications with the new operating systems.

ERP Opty-Way Enterprise has been further strengthened with the definitive release of the Stock and Purchase Module, a new GMC-Way Tracking Module and an improved and enhanced version of the Production Planning system and of Doors-Way. Going on exploring client / server aspects, Line Manager is more and more the 'operating arm' of Enterprise in the workshop and becomes now a truly "online" and independent system with fully automatic re-optimization functionalities.

Regarding single-user applications, Opty-Way® has now a new and more powerful optimization that helps Optima to keep the reputation as one of the most high performing and established optimization system at worldwide level.



## Opty-Way Enterprise 6.4 New Features

### New GMC-Way 2.0 Tracking Module

GMC-Way 2.0 has been specifically designed to supervise and detect pieces flowing into and from a working center. The mixed use of barcode readers and fixed transition sensors can be configured to detect the presence of pieces, calculate process time, raise error messages when a piece has not been detected in the output chain and so on. By simply changing the sensor configuration, the new GMC-way can be used to manage many different kinds of production: single piece production where every item has its own barcode (barcode readers allow exact time detection), series production where there is only one barcode for a group of pieces (presence sensors can be used to count pieces and estimate process time). GMC-Way can be also used to display list of expected items in production, grouping data for each batch and machine, and with the dynamic list update according to the validation of previous operation.

ID	Machine code	piece type	date	reason type	reason desc	suspect state
16	GMCW 9442	TR	2009/2012 11:02	C	OK	
15	GMCW 9442	TR	2009/2012 11:02	E	OK	
14	GMCW 9442	TR	2009/2012 11:02	E	OK	
13	GMCW 9442	TR	2009/2012 11:01	E	OK	
11	GMCW 9442	TR	2009/2012 10:43	E	Problema inaspettato	
10	GMCW 9442	TR	2009/2012 10:43	E	OK	
9	GMCW 9442	TR	2009/2012 10:43	E	OK	
7	GMCW 9442	TR	2009/2012 10:39	E	OK	

New version 2.0 now allows to manage these new features:

- 1) **Time Record:** Record of processing time of each manufacturing (scan in / scan out)
- 2) **Batches List:** We can now display expected production data for every working center
- 3) **Fabrication Status:** Once previous operation is completed item change color on the production list
- 4) **Rack Assignment:** It's now possible to assign a Production Rack position to each item that is going to be validated
- 5) **Rack View:** Status of the rack and rack assignment can be managed directly by the operator from GMC-Way and displayed on the Batch List
- 6) **Item Dashboard:** A new detailed dashboard that display the Item Preview and all production information about selected item.

## Stock & Purchase Module

Opty-Way Enterprise Professional Stock and Purchase module is an additional tool that allows to manage all phases from to the creation of purchase orders of raw material up to the stock load operations when the ordered goods arrive at the factory. With this module it's also possible to create orders for outsource operation directly from the sales/production order and to manage the production status of the outsourced operation. Minimum stock availability thresholds as well as usual supplier can be defined for each item.

The screenshot displays the 'Purchase' module interface for a purchase order. The main data section includes the following information:

- Document Type: ORDINE ACQUISTO LASTRE
- Customer: SGGI - Saint Gobain Glass Italia
- Order Date: 17/10/2012
- Shipping Address: Via Ponte a Piglietti, 2, Pisa, Italy
- Goods Recipient: Saint Gobain Glass Italia
- Order Date: 17/10/2012
- Delivery Date: 01/11/2012
- Urgency: 0
- Confirmed Doc. checkbox is checked.

The summary table on the right shows the following totals:

Category	Sub-category	Value	VAT
Totals	Total Order Lines	26162,00 €	
	Header Discount	0,00 €	
	Total Discount	2616,20 €	
	Total Taxes	0,00 €	
	Total Costs	0,00 €	
	Discounted Price	23545,80 €	0,00 €
	Total Amount	23545,80 €	0,00 €
	Total Income		
	Total Order Amount		23545,80 €

New Purchase Module inside the new Opty-Way Enterprise version 6.4 allows to manage these features:

- 1) Supplier's Data Management
- 2) Purchase Order Creation and Management
- 3) Purchase Price List Management
- 4) Purchase Price History for each item
- 5) Pack, Kg, Liters, and other UM Management
- 6) Minimum inventory thresholds
- 7) Complete traceability of the purchased items
- 8) Load List creation for stock load operation
- 9) Stock load by means of barcode
- 10) Orders for outsource operation created directly from the sales order
- 11) Outsource Operation Production Status Management
- 12) Items consumption management for consumable goods

## Production Cost & Income

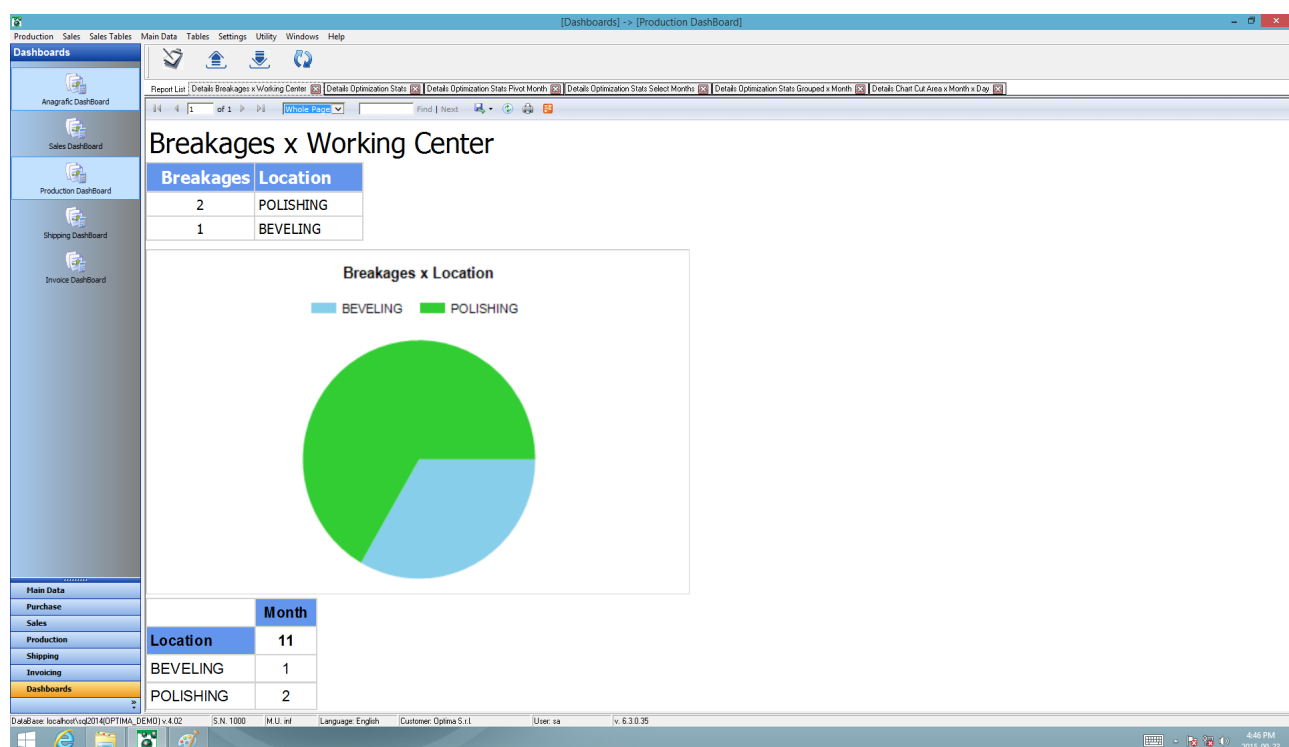
Opty-Way Enterprise Professional Costs and Income is an additional tool that allows the operator to estimate in real-time the cost and the income of each item. A cost price list can be run in parallel to the sales one or even used as base price list for sales to estimate the production and/or overall cost of each item. Using this add-on the operator can immediately evaluate the cost and the income of each order line and change prices according to the desired income.

New Production & Income inside the new Opty-Way Enterprise version 6.4 allows to manage these features:

- 1) Production costs price list Management
- 2) Production costs can have different price calculation modes from those used from the sales one
- 3) Immediate estimation of costs and incomes of each item and operation
- 4) Final Price to the customer can be defined accordingly to the desired overall income
- 5) Final Price to the customer can be defined accordingly to the desired income of each operation
- 6) Costs Price List can be used as Base Price for the sales price calculation
- 7) Costs and Income Price History Statistic

## Reporting Services Dashboards

Reporting Service Dashboards Module is an additional optional module of Opty-Way Enterprise Standard and Professional that allows a full integration of our ERP with the Microsoft Reporting Services Application. Advantages of this integration are the wide range of statistic reports already created by Optima Staff, the possibility to have Optima's support service to create new reports; furthermore the integration of the component "inside" Opty-Way Enterprise allow to lock reports according to User Name and Passwords of our ERP and to use some Optima built-in function to manage translation and UM conversion.

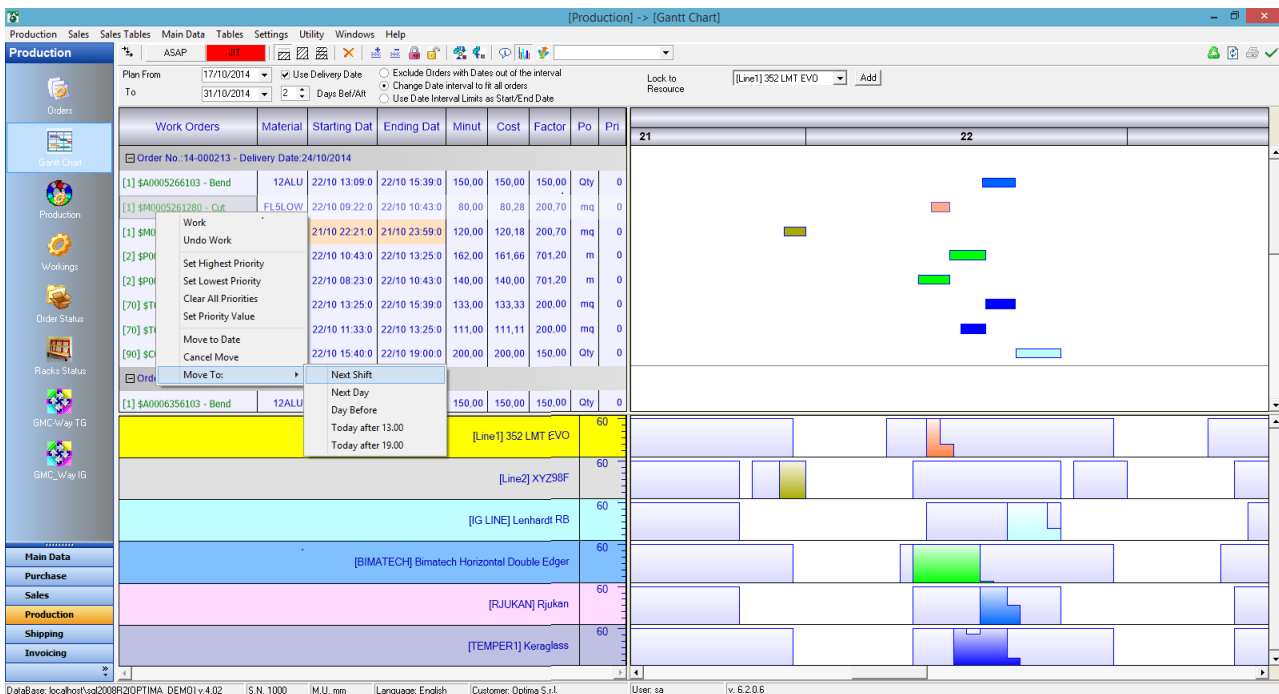


New Production & Income inside the new Opty-Way Enterprise version 6.4 allows to manage these features:

- 1) Fully integrated with Microsoft SQL Reporting Services
- 2) Reports available directly inside the Opty-Way Enterprise program
- 3) Reports are organized according to the pertinence area
- 4) Graphics Dashboards with "Microsoft Excel Style" graphs that can be applied to any statistic data of Opty-Way Enterprise
- 5) Automatic Translations of reports according to Opty-Way Enterprise User Language
- 6) Automatic conversion of the measurement unit according to the measurement unit used in Opty-Way Enterprise
- 7) Possibility to create new report from Optima Staff
- 8) User Access Control based on the Enterprise User Permission
- 9) Microsoft scheduler can be used to run the report automatically every day, hour and so on

## Production Planning Module 1.2

The Production Planning module is fully integrated into the Enterprise ERP database to provide users with an overall view of machine loads in order to plan and assign work orders to a specific machining center, optimizing the load of each machine. Customizable visualization of machine loads, machine assignment modification, forcing of start and end dates, rules definition and period/calendar-based machine activation and assignment are just some of the many tools that the system offers at the disposal of the user. With the Optima scheduler, the operator can easily check production plans, evaluate performance data having a real-time overview of the scheduled jobs versus the real processed ones, adjust the plan in order to nest urgent requests and exceptional cases that may arise from production as well as reprocess breakages and delayed items.



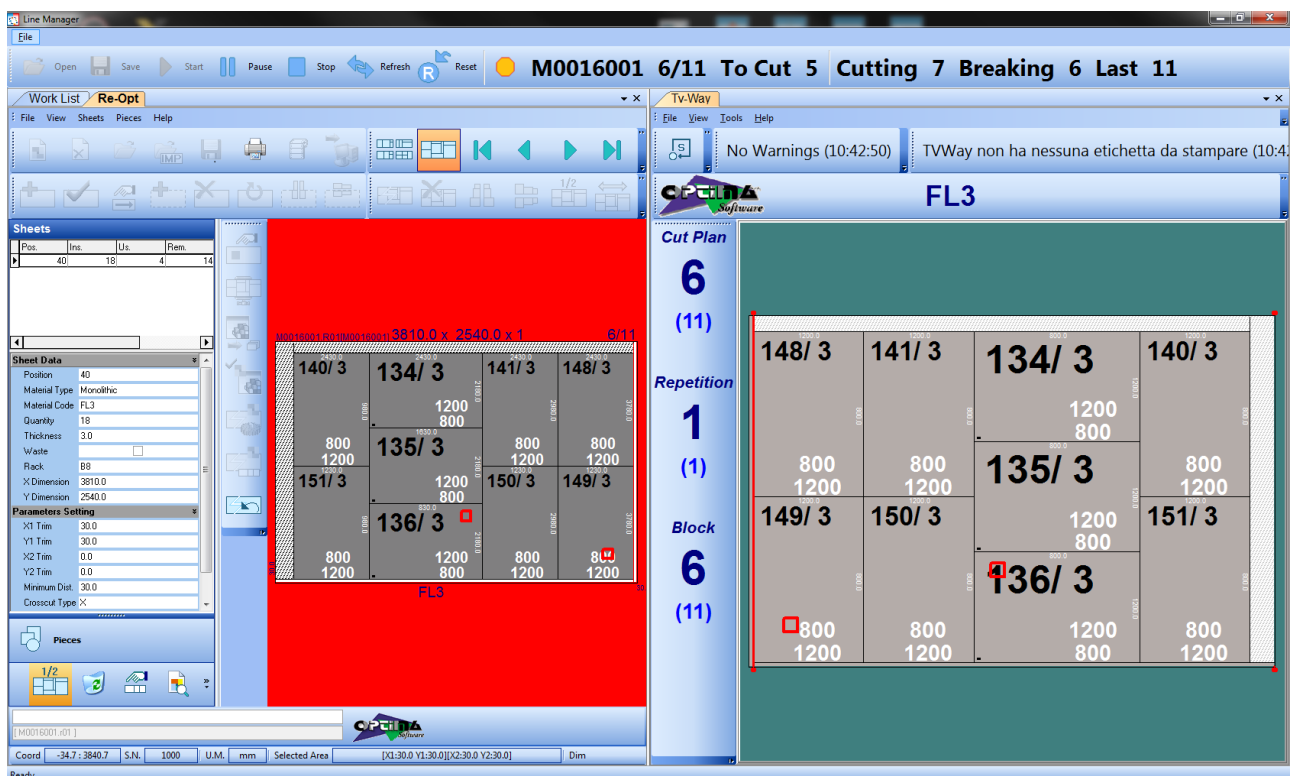
New Production Planning inside the new Opty-Way Enterprise version 6.4 allows to manage these features:

- 1) **Lock to Resource:** Possibility to assign a specific machine to a Material or to Work Order
- 2) **Move Allocation to:** Manually definition of a specific Shift or Fabrication Date
- 3) **Priority Management:** It's now possible to Assign a Priority while Scheduling of a Work Order
- 4) **Batch Creation:** Allow to create a Batch of selected Order directly form Scheduler
- 5) **Improved Calendar View:** It's now possible to plan only orders from a specific time frame
- 6) **Batch Info:** Possibility to display orders list assigned to a batch
- 7) **Lock Dates:** Once Planning applied we can now lock production date for specifics orders

## Line Manager / Re-OPT New Features

### Defect's Optimization System

Defect-OPT is an online optimization tool, available as optional module for Re-OPT, that allows to exclude specific area where defects are detected by the scanner usually installed between loading table and cutting table. If the scanner detect some defects, Line Manager automatically stop the on-going cutting cycle and automatically re-optimize current cutting pattern avoiding defects areas. Once optimization is done new files are automatically transferred by Line Manager to the numeric control of the cutting table without any manual operator function request. This module allows a big waste reduction and a total automation of the cutting line.



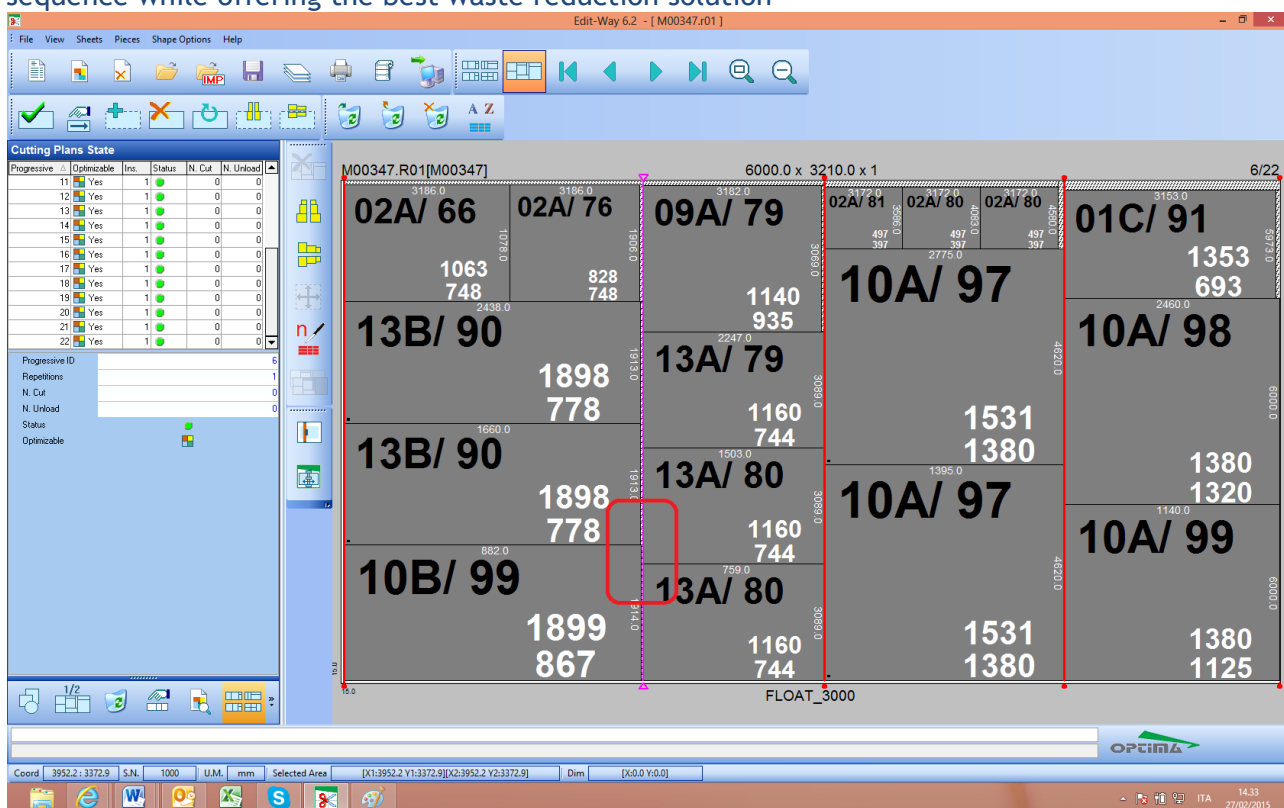
New version of Defect-OPT now allows manage these features:

- 1) **Scanner's Interface:** Can read defects from DELTAMAX, Viproton and Keyence scanners
- 2) **Online Working Mode:** Automatic Stop of cutting Line in case of defects recognition, Online Re-optimization with exclusion of defects area, Automatic transfer of new ISO file to cutting line Numeric Control
- 3) **Increased Optimization Speed:** Approximately 30% faster than previous optimization algorithms
- 4) **Better Overall Yield:** New version of Defect-OPT algorithm allows a significant waste reduction
- 5) **Stock Traceability:** Traceability of defects position on Opty-Way Enterprise Stock Database

# Edit-Way / Opty-Way / Opty-Way Enterprise common modules New Features

## Improved Optimization algorithms

The new release from Opty-Way Optimization system allows to obtain a further and significant reduction of the optimization waste, and therefore increases savings in terms of raw materials, as well as a substantial reduction in optimization times. Significant improvements have been achieved also for the Rack-Way module, where the optimization respect the rack loading sequence while offering the best waste reduction solution



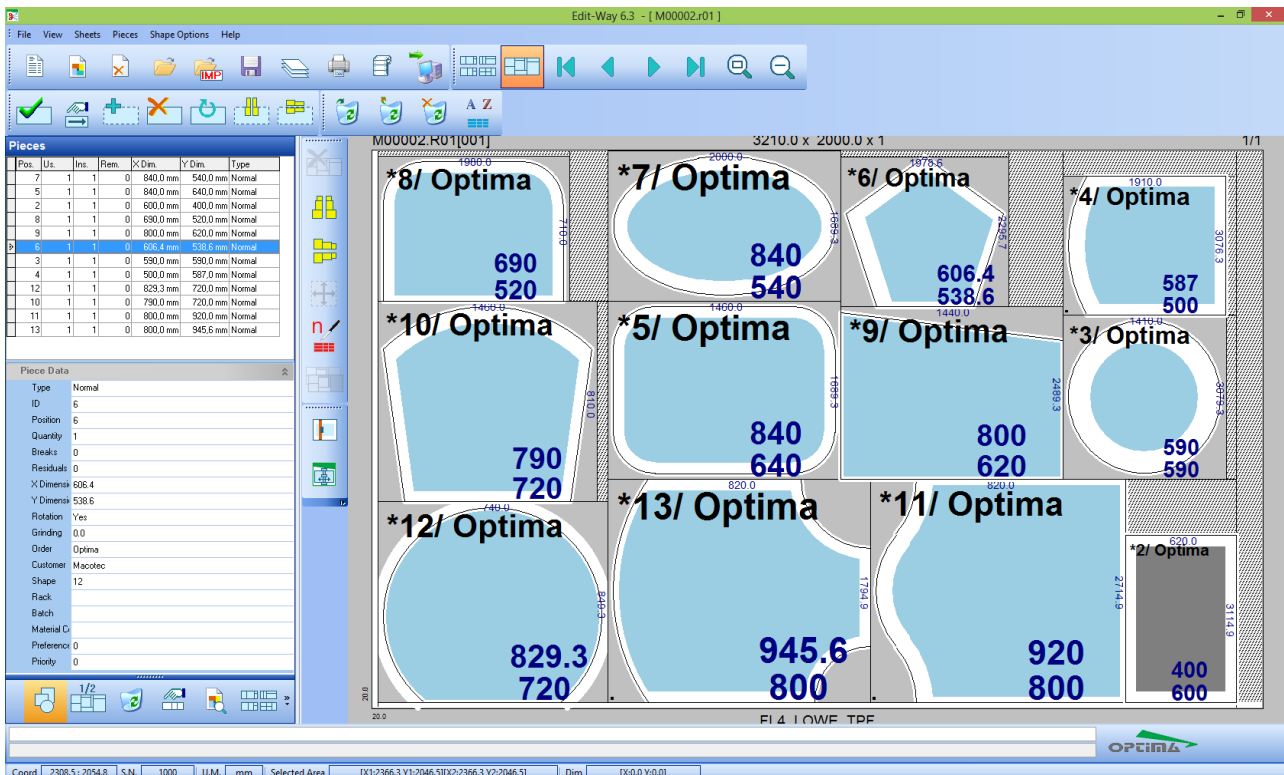
New version of OptyWin and BaseOPT libraries now allow to manage these features:

- 1) **Crosscut Displacement Option:** Automatic displacement of a crosscut in order to create a Minimum Distance Safety Area between two pieces
- 2) **Increased Optimization Speed:** Approximately 30% faster than previous optimization algorithms
- 3) **Better Overall Yield:** New version of Optimization algorithm allows a significant waste reduction that's been calculated, over our samples set, around 0,2% average reduction.
- 4) **Mixed Mode Optimization:** It's now possible to optimize "A" Racks and "Harp" Racks together, Opty-Way can use the sorting criteria applied for "A" racks and use the Harp Racks items to fill the waste with significant waste reduction.
- 5) **Maximum Number of Open Racks:** Rack-Way is now able to handle a maximum number of simultaneously open racks, a very useful features in case of limited space around the breaking table.
- 6) **Sorting of Optimized Pieces:** We are now able to "reorder" the cuts of each plate in order to simplify breakout operations



## Improved Edit-Way Graphic Layout

All Optima programs have been improved to manage the Multistep Low\_E Edge deletion and TPS Film Removal (it's possible via Geo-Way option); a new feature inside Edit-way (available for all machines who are physically able to handle these features) allows to display, with a very clear graphic style and with real scale factor, the portion of the shape that will be involved on the removal of Low\_E film.

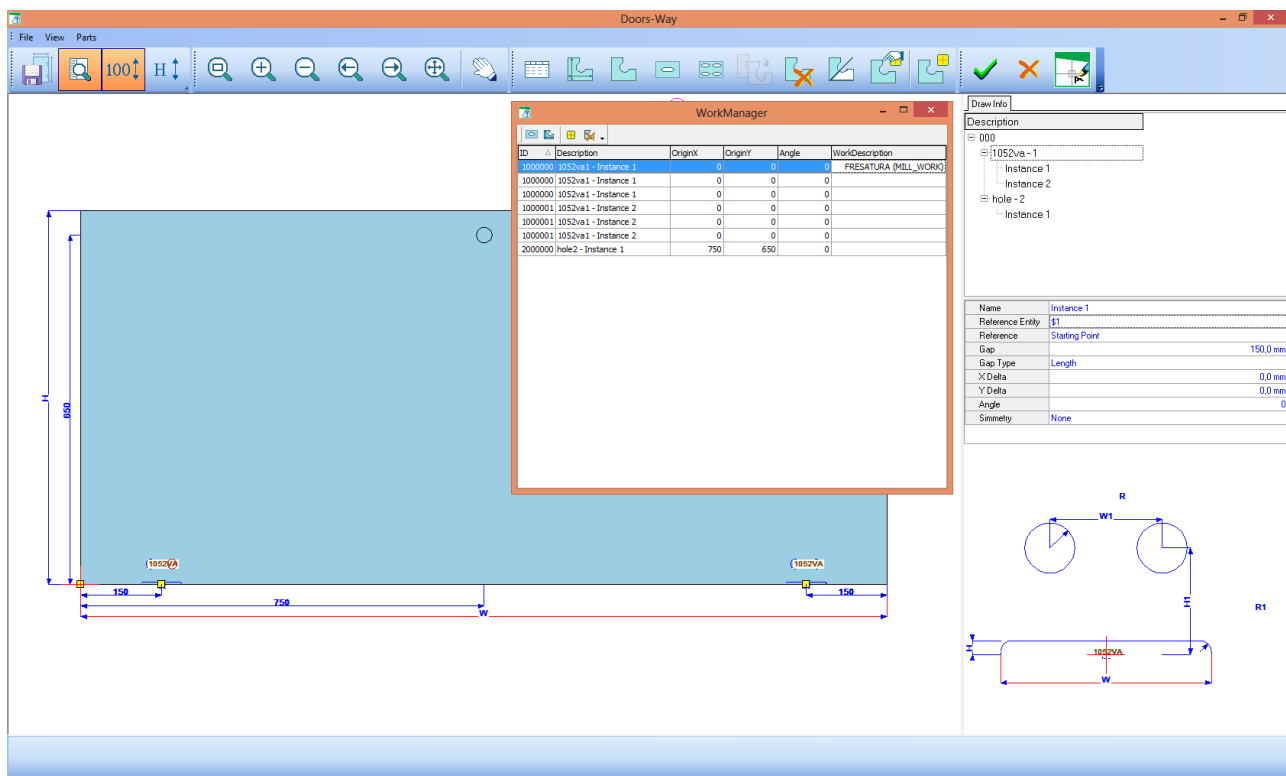


New version 6.4 of Edit-Way allows to manage these new features:

- 1) **Low\_E Edge Deletion** : Display of the Low\_E film removal portion
- 2) **Custom Colors**: Possibility to set the custom colors for Shape Fillet, Shape Waste and Low\_E Edge deletion portion
- 3) **New Colors Layout**: Edit-Way now use a new set of colors that allow to properly manage new features

## Doors-Way Module 2.1

Doors-Way, the software with a pre-defined catalogue of cutouts and notches that has been specifically designed to help and assist the creation of custom door profiles, has now some additional functions that improve and speed up the daily work of its users. The product has been expanded and enhanced, while maintaining the main features of high speed and ease-to-use interface. The integration with a powerful and complete 2D drawing system makes Doors-Way highly efficient and complete.



New version 2.2 now allows managing these new features:

- 1) **Prototype Creation:** Possibility to create a Door Prototype starting from any of Geo-Way's shape
- 2) **Notch Positioning:** Automatic Rotation and X or Y Mirror according to the selected side position
- 3) **DXF / DWG Notch Library:** Is now possible to create a library of notches using DXF or DWG formats
- 4) **Work Assignment:** Possibility to assign a specific Work Type to each Notch or Hole
- 5) **Snap to Object:** Automatic Snap to End or Center of existing entities
- 6) **Distance from Snap Point:** Possibility to assign a specific distance from Snap Point
- 7) **NC Working Center Output:** Automatic Output for Bottero, Forvet, Benteler, CMS & Neptun