The house of best competence in glass.

Monitoring

Optimization Tools

Single User Solutions

Drawing Systems

Erp Systems

General Catalogue
Optima S.r.l. has been working in the field of Information Technology applied to the flat glass processing sector and, in general, to all flat surface tool processing areas since 1994. Thanks to the use of high-level software development and implementation technologies, plus direct contact with technology developers, as well as the use of consultants and technicians who can skillfully interpret company processes, Optima has strengthened its international vocation over the years by opening various foreign offices in order to provide the best solutions for the market’s diverse needs.

Born from experience and professionalism of his founding members as a result of an efficient synthesis of dynamic, competence and motivation, now, a young and prepared staff of professional people always at your disposal, it’s ready to fast actions and in the most efficient way to satisfy customer needs.

We are dynamic by vocation and everything we do is inspired by the willing of reaching our goal without disregard the care and the good quality of the service provided.
A good relationship with your “Customers” simply means a good support service. Our assistance service is provided in several ways according to different specific needs:

- Hot Line
- Technical Support Web Site
- E-mail
- Remote Assistance

Services

More than 10,000 customers worldwide
## The most comprehensive catalog of integrated solutions

<table>
<thead>
<tr>
<th>Module</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>GMC-Monitor Tracking Module</td>
<td>18</td>
</tr>
<tr>
<td>Line Manager</td>
<td>20</td>
</tr>
<tr>
<td>Defect-OPT</td>
<td>21</td>
</tr>
<tr>
<td>Re-OPT</td>
<td>22</td>
</tr>
<tr>
<td>Tv-Way</td>
<td>24</td>
</tr>
</tbody>
</table>

### Erp Systems

- Opty-Way Enterprise Basic: pag. 06
- Opty-Way Enterprise Standard: pag. 08
- Opty-Way Enterprise Professional: pag. 10
- Capacity Planning: pag. 12
- Stock&Purchase: pag. 13
- Production Cost & Income: pag. 14
- WEB Dashboards: pag. 15
- Rack-Way Production and Delivery: pag. 16
Hi-way in glass software solutions

Optimization Tools

Opty-Way
Rack-Way
Nest-Way

Single User Solutions

NC-Way
Optistrato
Edit-Way
Opty-Way

Drawing Systems

Geo-Way
Doors-Way
Bars-Way
Scan-Way
Cad-Way
Cam-Way

www.optima.it
Opty-Way Enterprise Basic

Opty-Way Enterprise Basic is a Network Microsoft SQL based application that supports multiple users for Cutting Optimization and basic production management. This program has been designed for Insulating Glass Manufacturing companies and can easily import data from local/third party ERP software.

When integrated with Rack-Way Sorting system, Re-OPT, TV-Way and Line Manager modules, together with the GMC-Way Monitor Tracking System, become a complete, easy-to-use and affordable solution with high-level integration of Multiple Cutting Tables, Spacer Benders, IG Sealing Lines, Crane Loaders and Offcuts sorting system for all companies that need a flexible and powerful production tool.

- Microsoft SQL-based Application that supports up to 5 simultaneous users
- Full Graphic, Microsoft Windows-based Order Processing System
- Customer's data Management
- Production Order Management with integrated Geometrical Shape Library (Geo-Way)
- Single, Tempered, IG, Triple IG, IG with Georgian, Laminated glass management
- Stepped Insulating Glass Management
- Aluminum, Metal, Superspacer, TPS, Resin Spacer Management for IG with Multiple GAS Type Selection
- Customizable Edge Deletion and Polishing for each side of a Shape
- Multiple orders filter options for definition and creation of a Batch
- Organization for Break-out area using A Racks, L Racks or Harp Racks (Rack-Way Option)
- Organization of IG assembling according to Production Rack Sequence (Rack-Way Option)
- Order, Work Order, Batch, Stock Glass and Item Online Status (GMC-Way Monitor Option)
- Predefined List of Standard Reports
• Customizable Label with Barcode, Datamatrix and QR Code for Production Tracking
• Opty-Way / Rack-Way Optimization Algorithm
• Tempering Line Loading Sequence Optimization Module
• Cutting Table, Spacer Bender, Double Edger and IG Line CNC Connections
• Insulating Glass Aluminum Spacer Linear Optimization
• Standard Pieces Management (Fillers)
• Insulating Glass Pair Optimization
• Optimization Sheet Reduction Function
• High definition Optimization printout
• Stock Sheet and Offcut Management
• Post-Optimization Sheet Editor (Edit-Way)
• External Orders List Import from ASCII, XML, XLS and CSV file formats
Opty-Way Enterprise Standard

Opty-Way Enterprise Standard is a networked Microsoft SQL-based application with a Batch-based production module that can be used to manage any kind of processing operation such as tempering, laminating, screen printing, polishing, beveling, and drilling. While mainly designed for production planning and production tracking, this application can also be integrated with third-party ERP systems.

Opty-Way Enterprise can automatically receive new orders coming from an ERP and provide feedback about production status to the ERP through output file or via direct database connection in case of use of our “Connector” tool that allows both systems to share and synchronize all information.

- Standard version includes all features of the Opty-Way Enterprise Basic Program plus:
- Free Definition of Work Fabrication List
- Customizable management of Work Order creation for each machine or group of machines
- Free Definition of Working Center List
- Customizable B.O.M. (Bill of Materials)
- Custom SQL Filter Designer
- User Account Definition
- Custom Report Designer
- Customizable Company Logo for final product label and reports
- Production Statistic Predefined Reports List
- Delivery Rack Optional Management (Rack-Way Option)
- Order Header and Order Detail Multiple file format Attachments Management
- Shower Doors Doors-Way Module Included
- English Style Windows Bars-Way Module Included
- CAD-Way module directly integrated into the Order Entry (CAD-Way Option)
• GMC-Way Tracking System Optional Support (GMC-Way Monitor Option)
• Order Status Management
• Optional Integration with Local ERP Solution (Connector or XGate Options)
• Production Planning Optional Module (Capacity Planner Module)
• Special management for Series Products
• Possibility to create Production tracking custom Dashboards (Reporting Services Dashboard Option)
• Daily mail can be scheduled to notify operators about daily productions (via Reporting Services)
• Automatic Mail Notification in case of breakages or of other relevant events that may occur in production (via Microsoft Reporting Services)
Opty-Way Enterprise Professional

Opty-Way Enterprise Professional is an ERP Solution with integrated Sales Orders Management specifically designed for Glass Market. It’s based on a B.O.M. structure of products with a very easy to use interface and a wide variety of aids for quick and safe input.

Assists you in making estimates, place orders for customers, establish deliveries, update stock in the warehouse and manage all invoices and the relative phase of collection. Price information is calculated according to customer conditions and, if necessary, can be easily changed. Several reports for sales statistics are also provided. Invoice data can be exported to any local accounting program. Optional modules for Purchase Orders Management and Production Costs allows a direct overview and management of incomes and expenses.

All features of the Opty-Way Enterprise Standard Program plus:
• Multiple Sales Price List Management
• Quotations and Sales Orders Management
• Creation and management of multiple Contracts (projects) per customer
• Sales History Product Prices Management
• Creation of Packing List from Orders & from Delivery Racks (Rack-Way Option)
• Creation of Invoices From Packing List
• Creation of Credit Notes
• Manual Editing of Item Prices (where required)
• Order Header discount and surcharges by value or by percentage
• Customer Articles Discounts Management
• Sales Statistic Generator
• Definition of Energy and Shapes Surcharges
• Customizable Rounding Off Management
• Minimum Order and Invoice Amount Management
• Archiving of Document
• Solar and Acoustic Factors Calculations (Optional Function)
• Payments Date Management
• Easy Export and Connection to external accounting program
• All documents (Sales Order, invoice, etc) can be directly sent to customer by mail
• Automatic Mail Notification when order is ready
• Costs and Incomes visible row by row
• Order Entry operators can easily monitor production status of each order
• Basic and advanced production planning directly integrated and linked with order entry so that delivery date estimation is available since order confirmation
• Very complete document flow from Quotation to invoice passing through orders and packing list with possibility to define different prices and conditions at each stage
• Creation of Immediate Invoice as well as end of the month invoices
Capacity Planning

Capacity Planning is a useful tool for scheduling jobs in order to comply with terms while avoiding an overload of existing resources. Using this tool the production manager is able to automatically allocate and schedule the work on every machine with respect to capacity loads, to standard and/or special routings and other variables. Manual schedule and plan can be carried out as well: by means of a very easy to use Gantt diagram all tasks and operations can be shifted in time or assigned to different machines.

Capacity Planning is directly integrated into Opty-Way Enterprise to allow all users to quickly answer the FAQ (Frequently Asked Question) “when my order would be ready?” Production forecasting and scheduling can be performed since order entry phase with respect to actual, locked, free and up to date schedule.

- Planner defines what it is to be done, where it is to be done, when it is to be done.
- Start and End date of each operation is the result of scheduling.
- Very easy to use interface for production plan overview and edit
- Gantt graph displays the task and the operation below time scale
- Capacity and work loads are shown on the Histogram graph
- Different planning strategies available: ASAP, JIT
- Different loading strategies available: most loaded, least loaded, Sequential
- Capacity loads can be expressed in time as well as production units (m², ml, etc.)
- Machines can be included into group of resources
- Each machine has its own calendar with different timetables
- Possibility to define different capacity for each day/turn
- Possibility to define variable capacity depending on properties of glass and jobs (shapes, mat. Type, etc.)
- Planner can “lock” an operation to a date and to a machine
Opty-Way Enterprise Professional Purchase and Stock Module is an additional tool that allows detailed stock management and purchase. It’s a useful function for all medium-sized companies using external packages e.g. even Microsoft Excel or Word to manage purchase orders.

Purchased items are based on standard Stock Codes, so the program warns the user when items or products are not available in stock during sales order data entry or when the quantity available in stock is under a certain threshold. Starting from the sales order a purchase order is automatically created to the external Suppliers assigned to that specific process or product.

- Supplier List
- Purchase Order Creation and management
- Multiple Purchase Price List Management
- Purchase Order creation starting from the Sales Order
- Purchased Item Price History
- Document Archiving
- Mail and Fax Document Management
- Default Item Supplier
- Inventory Management
- Minimum Inventory Control
- Purchase Order Item Area Allocation
- Optimized Glass Sheet Allocation
- Purchase and Stock Allocation Statistics
- Barcode Stock Loading
- Glass Sheet Code and Supplier Traceability
Opty-Way Enterprise Professional Costs and Income is an additional tool that allows the operator to estimate, in real-time, the costs and the income of each item and for each order. A cost price list, created with different rules than Sales Price list, can be parallel run while the applied sales costs and production costs will be used to calculate and display the net income of the order.

The computed prices can be 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 costs and the income of each order line and change prices according to the desired income.

- Main production costs price list Management
- Production costs can have different price calculation modes from those used from the sales one
- Application of costs by Area, Linear meter & Quantity
- Immediate estimation of costs and income of each item and operation
- Final Price to the customer can be defined according to the desired overall income
- Final Price to the customer can be defined according to the desired income of each operation
- Costs Price List can be used as Base Price for the sales price calculation
- Costs and Income Price History Statistic
WEB Dashboards

WEB Dashboards Module is an additional optional module of Opty-Way Enterprise Basic, Standard and Professional that allows a full integration of our ERP to WEB Based Dashboards. Advantages of this integration is the wide range of statistic reports already created by Optima Support Staff, the possibility of having our service to create new reports directly available on a WEB Browser, tablet, or directly integrated in Opty-Way Enterprise.

- Optima WEB Services created using .NET Core
- Reports available directly inside WEB Browser (PC, Table, Smartphones)
- Reports are organized according to the pertinence area (Production \ Sales \ Shipping)
- Graphics Dashboards can be applied to any statistic data of Opty-Way Enterprise
- Automatic Translations of reports according to Opty-Way Enterprise User Language
- Automatic conversion of the measurement unit according to the measurement unit used in Opty-Way Enterprise
- Possibility to create new report from Optima Staff
- User Access Control based on the Enterprise User Permission
- Microsoft scheduler can be used to run the report automatically every day, hour and so on
Rack-Way Production and Delivery

Rack-Way Production and Delivery is an additional module for Production and for Shipping. Starting from the order indicating what glass items are to be placed on the shipping racks, the Rack-Way Delivery module allows you to organize the entire production by using a set of intermediate racks (called production racks) to obtain the desired results. Used Delivery Racks are included in the Packing List, so the detailed allocation of each rack is known.

Once the main fabrication list is assigned, the Rack-Way specific sequence-maintaining optimization add-on, let you achieve the best optimization results with the smallest amount of “A Racks” or “L Racks” space around the break-out table without any additional manual sorting needs. Rack-Way reduces manual sorting, thus increasing productivity and quality. Highly recommended for IG Manufacturers. Also useful for Harp-Racks.

- Sequence-maintaining optimization algorithm
- Supports different restrictions to optimize without re-sorting on the break-out area
- Management of traditional A-frame, L-frame and Harp Racks
- Definition physical characteristics of each rack type
- Grouping and Sorting criteria function for items listed on the batch
- Ascending or Descending Sorting Directions
- Quantity and Size Exception Management
- IG Assembling sequence creation for Automatic IG Lines
- Spacer bending sequence creation for Spacer Bender
- Maximum quantity or depth value per type of rack
- Printout of Rack List and Detailed Stack List
- Rack No. and Position assignment for Edit-Way, TV-Way and Re-OPT display
- Manual Loading Sequence trough GMC-Way Monitor Tracking Tool (GMC-Way Monitor Option)
- Detailed Rack Status and Real-time Loading Sequence
• Delivery Rack Allocation Overview
• Packing List creation from Delivery Rack
• Delivery Rack assignment to Delivery Note / Invoice
• Delivery Rack Invoicing, according to settings, if racks are not returned
GMC-Monitor Tracking Module

GMC-Monitor Tracking System is a module designed to retrieve current production status relative to prepared Batches or traceability information. GMC-Way can set each single unit and information recorded on the centralized Opty-Way Enterprise database as “completed” so every user of the Opty-Way Enterprise Sales Module or Production Module can see the production status of each Order or Order Line in “Real Time”.

GMC-Monitor is capable to record the fabrication time of each unit, to record the machine equipment and assigned consumables and allow the assignment of the production rack of each unit. In case of breakage, the recuts pool is automatically created with no need for manual typing. Production statistics by Day, Week, Month can also be printed.

- Visualization of Office Prepared Batches Fabrication List for IG line
- Visualization of B.O.M. and Working Process List in Assembling Sequence
- Data Collection of different scanners for each single Working Process
- Support of wired, wireless and fix-mounted scanners
- Allows Reading of Unit, Process or Batch ID from a Label or other Paper Lists
- Graphic visualization of Orders Data with Shapes
- One Shot Validation for Series Productions
- Store all information in one Tracking database table
- Person, Validation Time, Workstation, Access Point data also recorded
- Machine Equipment Storage for Traceability Recording
- Production History for Quality Management
- Online Feedback to Opty-Way Enterprise Database
- Checking, and if needed forced closing of previous Working Process
- Direct Label Reprinting
- Broken Unit Management with Recut Pool List for Re-Opt Online System
- Barcode Assignment of Rack Allocation of completed IG Unit
- Printing of Complete Rack allocation of selected Batch
- Printing of Packing Slips by Batch or Delivery Rack center
- Piece by piece check and validation on loading and unloading chain
- Can track and identify pieces that break inside the working center (get in but not get out)
- Complete trace of all events that occurred on the working center
- Accurate alarm management
- Supports manual actions over recorded data
- Directly connected to the Enterprise Database for data validation and broken piece management
Line Manager

Line Manager is a Cutting Control Station typically installed near the cutting table Numeric Control. Specifically designed to manage complete cutting lines with Crane Loaders, Automatic Break-out and Display Systems, Offcut Storage and Sorting Systems.

Line Manager “offers” coordination, communication, casting, centralized management of application concerning the cutting, but also the applications that perform the working immediately following or preceding that of glass cutting, to create a single complex and thus realizing a more efficient and cost-effective organization of the production cycle. Through its interface organized in TAB with several monitors management and the communication protocols with the HMI applications of the cutting table (including glass loader HMI Interface) it’s possible to coordinate and manage all activities related to the glass cutting directly from the Line Manager interface.

- Centralized Supervisor of all Cutting Line Functions
- Real-Time Control of Crane Loader, CNC Cutting Table
- Offcut Storage and Sorting Systems
- Management of Job Lists according to Production Scheduling coming from the office Opty-Way Enterprise ERP System
- Stop or pause the cutting sequence and may switch to another Work Order
- Plate by Plate CNC code for Cutting Machine
- Online Offcuts Management
- Scanner Interface for defect recognition and visualization
- Real-Time Glass Stock Synchronization Between Crane Loader and Opty-Way Enterprise
- Traceability and Cutting Time Recording
- Production Cutting and Wastage Statistics
Defect-OPT is a dynamic optimization system, available as an additional module of Re-OPT, able to exclude areas recognized as defective by the GlassInspector scanner manufactured by Deltamax and usually placed between the Crane Loader and the Cutting Table.

In case of presence of defects, Line Manager (the supervisor of the cutting line) acquire the map of defects, suspend the cutting of the sheet and thanks to the Re-OPT module, proceeds with its re-optimization excluding the areas defective and send the new plate the cutting table, which will resume the execution of the current program. This module allows a big waste reduction and a total automation of the cutting line.

- Integrated with Line Manager and Optima ERP Opty-Way Enterprise
- Can read defects from VIPROTON and Deltamax scanners
- Graphical display of defects positions
- Automatic Stop of cutting Line in case of defects recognition
- Online Re-optimization with exclusion of defects area
- Take into account eventual sorted rack optimization (Rack-Way)
- Very low yield rate
- Automatic transfer of new ISO file to cutting line Numeric Control
- Traceability of defects position on Opty-Way Enterprise Stock Database
- Avoids treatment of windows already defective
- Real quality control on the product delivered from suppliers
- Historicizes defects into a central SQL database
- Detailed Production Statistics
Re-OPT

Re-OPT is a Cutting Control station typically installed near the cutting table Numeric Control, specifically designed to manage breakage and to avoid last plate wastage. Local breakage can be tagged directly using a touch screen monitor and automatically re-optimized on the next usable plate. Breakages can be declared by the cutting table operator but can be also integrated additional pieces, of the same material of current JOB, declared as broken to any GMC-Monitor tracking station. Re-OPT check the pool list and, if needed, automatically add them to the current batch and re-optimize the reaming sequence.

Re-OPT is very useful when compliance with the production sequence is mandatory, usually for IG manufacturers and when combined with a Rack-Way sorting system and TV-Way monitoring software.

- Graphic Display of Cutting Diagram designed to work with Touch Screen Systems
- Constant material flow without cycle stops
- Minimization of waste and higher yield; considerable raw material savings
- Increased productivity of cutting lines, higher glass availability for the subsequent phases
- Significantly improved management of breakages and consequent reprocessing inside the production cycle
- Automatically Re-Optimization from that particular sheet in case of needs
- Manually edit specific sheets
- Integration of Broken units from other Working Center
- Graphical display of glass defects (spots)
- Integration of Opty-Way Enterprise “Rush Orders” Integration with Crane Loader System
- Last Sheet Offcut Priority Optimization
• Connection to Opty-Way Enterprise SQL Database
• Communication with TV-Way and Line Manager Monitoring Systems
• Printing the label “on the fly” of the executed plate
• Online control of Cutting Table
TV-Way

TV-Way is a display software that show, on a large screen monitor installed in front of the break-out table operator, the graphic optimization display has a true-to-scale format. This product allows the elimination of paper supports, speeding up the step of glass breakout, avoiding downtime.

TV-Way also can be used to support the operation of the combined cutting lines, if integrated with the Optistrato module for the interactive management of the laminated glass cutting

- True Scale Display of Optimization Result on Break-out able
- Graphic Display of Shapes
- Configurable view of data to display (Size, Customer, Order, Rack)
- Configurable color settings
- Full Plate View mode and Crosscut View Mode
- Graphic display of glass defects (spots)
- Manual change of cutting plan via footswitch
- Automatic synchronization with NC cutting table (where available)
- Automatic Sheet by Sheet Label Printing Function
- Automatic Synchronization with Re-OPT (as an Opty-Way Enterprise add-on)
- Automatic confirmation of sheet pieces (as an Opty-Way Enterprise add-on)
Opty-Way

Opty-Way is the end result of more than 20 years of experience and today is the world’s most widely used optimizer for the flat glass industry. Opty-Way, our standard algorithm, is the heart of the Edit-Way, Opty-Way and Opty-Way Enterprise product line. It can be used to optimize unlimited sizes of glass and sheets and, because it guarantees perfect output optimization for small and big batches, it is also useful for automatic cutting of monolithic and laminated glass as well as hand cutting processes.

- More than 90 algorithms for best optimization result
- Basic / Standard / Full optimization Mode for Monolithic Glass
- Specific Optimization Mode for Laminated Glass Cutting Tables
- Priority and Preference Management
- Standard Piece Management (Fillers)
- Automatic Sheet Reduction Function
- IG Spacer Linear Optimization
- Insulating Glass Pair Optimization
- Excess Piece Management
- Glass Pieces Size Tolerance Management
- Order, Customer and Batch Grouping Function
- Tool Thickness Management for cutting with Saw
- Optimization Sheet Reduction Function
- Automatic Offcut Loading and Re-Optimization
- Automatic Shape Nesting
- Automatic Crosscut Displacing Function
Rack-Way

Rack-Way is a sequence-maintaining optimization add-on. Rack-Way lets you achieve the best optimization results with the smallest amount of “A Racks” or “L Racks” space around the break-out table without any additional manual sorting needs. Rack-Way reduces manual sorting, thus increasing productivity and quality: less breakage, defects and scratches. Different glass types are automatically synchronized and spacers are produced accordingly. Highly recommended for IG Manufacturers. Also useful for Harp-Racks.

- Sequence-maintaining optimization
- Supports different restrictions to optimize without re-sorting on the break-out area
- Management of traditional A-frame, L-frame and harp racks
- Definition of rack physical characteristics
- Dynamic stacking mode
- Grouping and Sorting criteria function for items listed on the batch
- Ascending or Descending Sorting Directions
- Quantity and Size Exception Management
- IG Assembling sequence creation for Automatic IG Lines
- Spacer bending sequence creation for Spacer Bender
- Maximum quantity or depth value per type of rack
- Maximum number of simultaneous Racks
- Printout of Rack List and Detailed Stack List
- Rack No. and Position assignment for Edit-Way, TV Way and Re-OPT display
Nest-Way

Nest-Way is a module for the automatic nesting of regular and/or shaped figures with a direct link to automatic cutting systems, like Waterjet NC machines. Thanks to its extreme versatility, Nest-Way can also be used outside the glass sector.

Nest-Way’s calculation algorithm produces optimum results in very short processing times. Nest-Way is a tool that not only significantly reduces waste and the subsequent high disposal cost, but also decreases data entry errors as well as processing and cutting times.

- Stock of fixed-size or CAD drawing-based free-size materials
- Automatic selection of sizes generating the lowest waste
- Size and piece priority and preference
- Piece placement start corner and best direction
- Drawing accuracy tolerance
- Piece rotation and mirror
- Minimum distance between pieces
- Cutting tool thickness
- Placement of pieces inside inner islands
- Piece lead-ins and lead-outs
- Recognition of unusable areas
- Additional parameters to customize cutting management
- Graphics editor to modify cutting plans
- Material waste utilization
- Cutting path generation
- Full result printout
- Integrated with all Optima software programs
NC-Way

NC-Way specifically designed for glass cutting table manufacturers. It’s easy to use powerful and fully integrated with Optima’s other single user applications like Edit-Way, Geo-Way, Cad-Way, TV-Way and office optimizers Opty-Way or Opty-Way Enterprise ERP. It’s basically the HMI of the cutting table user interface where all the necessary basic features, like Parameters Management, PLC / NC Messages Display and Cycles Management, are available. NC-Way is specifically designed for manufacturers of cutting table and can be easily customized according to the customer needs and machine functionality. It can be connected to several types of different numeric controls.

- Loading of optimization made from office (Opty-Way)
- Loading of optimization made from local Edit-Way
- Customizable Machine Cycles Management
- Display of XYZ axis position and cutting table Head position
- Display of Numeric Control Messages and Alarms
- History of previous Warnings and Errors
- Machine Speed Management with automatic change according to radius
- Cutting Head Pressure Management for Straight and Shape Cutting according to glass thickness
- Editing of Numeric Control Parameters
- Display of PLC Inputs and Outputs Status
- Double Zero Management for Laminated Glass Cutting
- Automatic sizing function by Sheet position laser detection (3-point digitalization)
- Shape Scanner function for Template Laser Detection
- Automatic Glass Thickness Detection Function
- Automatic Label Printing and Applying function
- Low-E Tools Management
Optistrato

The Optistrato software solution has been specifically created for the laminated glass cutting and breaking-out systems and usually is installed on a workstation next to the cutting plant NC and integrated with the PLC. This can be used as an interactive control of the cutting sequence, providing a dynamic display of cutting status on the monitor. It includes on board data optimization, re-optimization if sheets break and utilization of sheet pieces on the table. It can also retrieve optimizations from office Opty-Way optimization software and Opty-Way Enterprise ERP.

- Loading of optimization made from office (Opty-Way)
- Loading of optimization made from local Edit-Way
- Re-Optimization from Specific Sheet
- Broken piece re-optimization
- Dynamic Display of Cutting Sequence
- Cutting List Import of ASCII, XLS and CSV file format
- Master Database of Stock Glass Products
- Management of Pressures, Separation and Breaking
- Cycle times Optimization Results Printout
- Label Designer (Label-Way) and Printout
- Link to Cutting Table (creation of NC code)
The Edit-Way program was specifically designed to provide the operator with an easy-to-use and fast optimization system directly on board the machine for exceptional cases or for anything that cannot and must not go through the office for order processing or cutting optimization.

This stand-alone module can be used for manual sheet creation and for optimized pattern editing coming from integrated optimization tools or from office Opty-Way or Opty-Way Enterprise optimization programs.

It’s available for straight and shape cutting.

- Loading and Manual Editing of Optimization Results
- Sheet and Crosscut Mirroring Function
- Copy / Paste functions with clipboard support
- Add / Delete of selected item(s)
- Sheet Sorting and Re-ordering
- Manual Re-Optimization from Specific Sheet
- XYZ Crosscut Mode Sheet Creation
- Master Database of Stock Glass Products
- Cutting List Import of ASCII, XLS and CSV file format
- Master Database of Cutting Glass Products
- High Efficiency Optimization Algorithm designed exclusively for Glass production (Opty-Way Module)
  - More than 90 algorithms for best optimization result
  - Basic / Standard / Full optimization Mode for Monolithic Glass
  - Specific Optimization Mode for Laminated Glass Cutting Tables
  - Priority and Preference Management
  - Standard Piece Management (Fillers)
  - Automatic Sheet Reduction Function
  - IG Spacer Linear Optimization
  - Insulating Glass Pair Optimization
  - Excess Piece Management
  - Glass Pieces Size Tolerance Management
  - Tool Thickness Management for cutting with Saw
  - Optimization Sheet Reduction Function
  - Automatic Crosscut Displacing Function
  - Automatic Crosscut Displacing Function
• Low_Edge deletion and TPF graphical display on Shapes (Geo-Way Option)
• Shape Mirroring and Shape Linking Automatic Functions (Geo-Way Option)
• Approx. 350 standard shapes available on the shape library (Geo-Way Option)
• DXF / DWG Import and Export function (Geo-Way Option)
• High definition and Customizable Optimization Printout
• Label Designer and Printout (Label-Way Module)
• Link to Cutting Table (creation of CNC code)
Opty-Way

Opty-Way is a simple tool for optimization planning usually installed in the office. Opty-Way can import data from external ERP and is optionally capable to drive more than one cutting table from different manufacturers with specific restrictions. It is also capable to drive additional IG Spacer benders.

Opty-Way is mainly designed for optimization of single and IG glass (simple IG organization is possible with Harp Rack system). In combination with Geo-Way or Cad-Way, parametrical or free shapes can be supported too. High quality Optimization and Label printout according to cutting sequence is also available.

- Manual Data Entry with Single, Double or Triple Insulating Glass Management
- Orders Portfolio Management with Optimization selection by customizable filter
- Master Database of Stock Glass Products with Offcut Management
- Master Database of Cutting Glass Products
- Cutting List Import of ASCII, XLS and CSV file format
- Order, Customer and Batch Grouping Function
- High Efficiency Optimization Algorithm designed exclusively for Glass production (Opty-Way Module)
  - More than 90 algorithms for best optimization result
  - Basic / Standard / Full optimization Mode for Monolithic Glass
  - Specific Optimization Mode for Laminated Glass Cutting Tables
  - Priority and Preference Management
  - Standard Piece Management (Fillers)
  - Automatic Sheet Reduction Function
  - IG Spacer Linear Optimization
  - Insulating Glass Pair Optimization
  - Excess Piece Management
  - Glass Pieces Size Tolerance Management
  - Tool Thickness Management for cutting with Saw
  - Optimization Sheet Reduction Function
  - Automatic Crosscut Displacing Function
  - Automatic Crosscut Displacing Function
• Insulating Glass Aluminum Spacer Linear Optimization
• Automatic Offcut Loading and Re-Optimization
  - Automatic Crosscut Displacing Function
• Low_Edge deletion and TPF graphical display on Shapes (Geo-Way Option)
• Shape Mirroring and Shape Linking Automatic Functions (Geo-Way Option)
• Approx. 350 standard shapes available on the shape library (Geo-Way Option)
• Post-Optimization Sheet Editor (Edit-Way Module)
• Label Printing (Label-Way Module)
• High definition Customizable Optimization Printout
• Link to Cutting Table (creation of NC code)
• Link to Spacer bender (creation of bending sequence)
Geo-Way

Geo-Way is the Optima’s powerful parametrical shape library module with more than 400 predefined shapes available. To make a shape using Geo-Way are not needed any special CAD knowledge because every single prototype in the library can be used quite easily as a rectangular part, just select the desired shape model and enter the requested dimensions.

Geo-Way is a true scale display program so every time a parameter is changed the shape at the screen will be automatically adjusted according so it’s easy to see eventual data entry errors. The shape box trims, if and where needed, are calculated according to the glass thickness and automatically added to cutting dimensions.

- Shape library with more than 400 prototypes
- Shape Nesting function (X and Y series)
- Minimum Box fitting function
- Automatic Cutting Path Calculation
- Manual Cutting Path Definition
- Display of Cutting Path and Stop Points
- Delete Entity and Delete Entity Part Functions
- Automatic Trim function
- External Path Offset Function
- Starting Point Display of each continuous profile
- X & Y Scale, Mirroring and Rotation functions
- Outgoing Tangent or Perpendicular Cut management
- Definition of Drill Holes and Notches
- Drawing Entity Information Sidebar
- Fillet and Chamfer trim functions
- DXF and DWG Import and Export
- True Scale Shape Printout
- Creation of CNC code for processing center NC
Doors-Way is an easy-to-use tool for creating and managing shower doors. Doors-Way is typically combined, and fully integrated, with Cad-Way and/or others optimization tools like Edit-Way or Opty-Way and Opty-Way Enterprise ERP and it’s an extension of the Geo-Way shape library module.

Starting from a predefined list of Doors and Notches templates, the user can easily add, remove or move a notch and save the final result as a new template on the library. Notches are automatically snapped to the end, center or a predefined distance from one of these snap points of each entity of the external profile and are automatically adjusted when it changes.

By using this simple and well-known user interface, we can enter programming rapidly to reduce preparation time and increase productivity.

- Basic parametric Door Shapes to draw the rectangular or out-of-square doors
- 100 types of composite doors that can be superimposed on the Doors-Way
- Wide range library of parametrical Notches
- DXF and DWG import file format for Notch Management and Insertion
- Custom Prototypes Library Management
- Bill of Material Connection (when an Opty-Way Enterprise add-on)
- Parameter settings for machining operation positioning
- Hardware insertion, replacement and deletion management
- Automatic Snap to the center and endpoint of any entity
- Mirror and Rotation functions for Notch
- CAM-DXF Output to Working Center NC Equipment
- Creation of CNC code for processing center NC
Bars-Way is a Geo-Way Add-on available only for the Opty-Way Enterprise program. It’s useful for Insulating Glass manufacturer who produces English Style Windows (Georgian Bars). The system can compute all production data such as cutting length of each single bar, spacer drilling position, edge key distance and all pricing calculations according to customer price lists (by Cell number, Crossing Number, Bar Length), with adjustable surcharges in case of complex shapes. Drilling information can be sent to Spacer Bender or Assembling machines.

- 70 type of predefined parametrical shapes
- Adjustable X and Y Grid Division for Bars Positioning
- Fixed Bars Positioning or Equal Cells Calculation Mode
- True Scale Display of Windows, Spacer, Sealant and Bars
- Product Definition with Type of Crossing and Milling Setting Management
- True scale Printout
- B.O.M. List with Price Calculation with Opty-Way Enterprise Professional
- Bar Limit or axis limit bars sizing
- Spacer Sizing for manual cutting
- Symmetrical or asymmetrical grids
- Calculation of cutting angle for shape grids
Scan-Way

Scan-Way is a software designed to acquire a template (up to 4 x 3 m) using a reflex digital camera. It’s very useful in case of cutting of several wood, plastic or paper templates because is much faster and easier than a laser installed on the cutting table or working center machine and doesn’t affect the regular production flow.

Output created is in DXF format so the acquired shapes can be easily exported to other CAD/CAM programs or ERP’s and used for Glass Cutting, Water Jet Cutting, and CNC Grinding / Milling. Thanks to good camera quality and a 3x2 m reference grid, error is usually less than 1 mm.

- Import of BMP, JPEG, and TIF raster formats
- Image movement, scaling, rotation, mirror and zoom operations
- Smooth, contrast and reduction in Black & White
- Management of color images
- Vectorization quality Parameters
- Automatic tracking of the selected profile
- Polyline processing graphic management
- Conversion of polylines into tangent arcs and segments
- Automatic reference point detection for reference size definition
- Orthogonality and circumference recognition
- Removal of lens distortion
- Template thickness correction
- Special commands for calibrating and straightening images
- Direct Acquisition of Image from Digital Camera
- Output in DXF and in several other formats used by Optima modules
Cad-Way

Cad-Way is a complete 2D CAD Drawing System specifically designed for glass sector and can be installed as an additional module of our optimization tools and ERP programs or as a stand-alone program. Even if the Geo-Way parametrical library can cover most regular shapes, Cad-Way could be useful for cutting of irregular shapes (like automotive cutting) or when production is based on various shapes and, frequently, when customers supply the DXF and DWG for which some changes and minor corrections are needed.

If CAD-Way is installed directly onboard of a cutting table equipped with a laser function is also capable to load digitalized points through the Shape Scanner function and create the external profile of the copied template.

- Easy free construction of complex shapes
- Utilization of all graphic primitives
- Access to predefined parametrical catalog (Geo-Way Module)
- Connection to digitizing tables
- Definition of Drill Holes and Notches
- True Type Fonts Management with Outline Conversion
- Management of layers, groups and symbols
- Sizing Management
- Wide range of control, assistance and check tools
- Starting Point Display of each continuous profile
- X & Y Scale, Mirroring and rototranslation functions
- DXF and DWG Input and Output
- Shape Interpolator function from points digitalized by NC machine equipped with Laser Scanner
- Quick processing functions on drawings
- Creation of CNC code for processing center machines
Cam-Way

Cam-Way is a parametric module for 2.5-axis machining operations, specially developed for the glass and marble sector. Through CAM-Way we can fully manage Working Cycles, Machining Operation and Tool master data, Lead-in/Lead-out modes, Machining Kits, Fixing and Positioning Device Management via Database for easy use.

CAM-Way can automatically recognize internal and external profiles and holes inside drawings. The Machining Operation association to the detected profile is very easy, by a simple drag & drop of the cycle to the profile or group of profiles. Geo-Way parametric shape library and Door-Way Libraries are included on the package.

- Grinding, Drilling, Milling and Grooving Management
- Automatic Profile and Drilling Detection
- Manual Editing of Detected Profiles
- Easy application of edgework on existing profiles
- (Drag and Drop)
- Suction cap List and type definition
- Reference List and type definition
- Lead In / Out List and type definition
- Tool List
- Edgework Macro Management
- Parametrical Shape Library with more than 300 parts
- DXF / MDF / DAT / CAL / DRF / DSG / SAG import function
- Customizable Report Designer
- Output of CAM-DXF format
- NC Creation of any kind of 3-axis working center