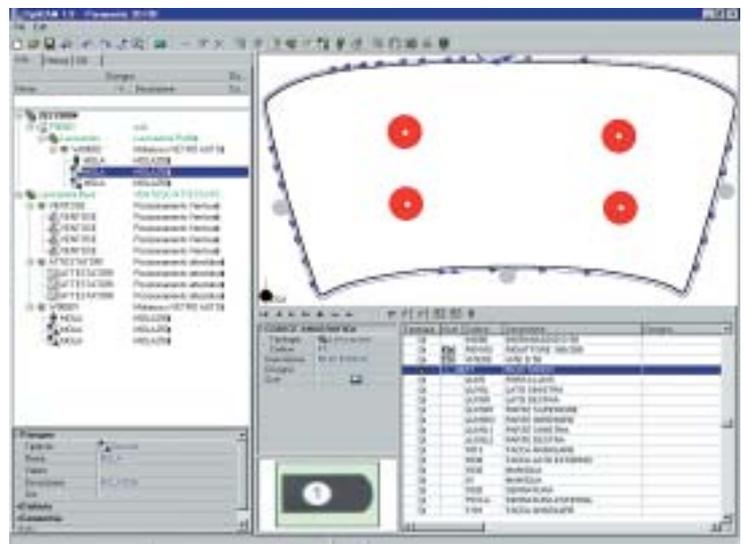# Information solutions for glassmakers

Since 1994, Optima has been working in the field of information technology for the flat glass industry, providing the market with solutions for processors. This year's Vitrum will see yet more innovations of this company's software, updated technologically and graphically, but still aimed primarily at optimizing the work of today's glass processors. This article takes a look at just some of these products.

Opty-Way®Cam 2.0

Cristian Zanca*

OPTIMA Srl

Optima S.r.l., based in the area of Bologna, northern Italy, operates in the field of information technology applied to the flat glass processing sector and, in general, to all flat surface tool processing areas. 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 skilfully interpret company processes, Optima can provide the market with the right solution for end customers.

Optima has strengthened its international vocation over the years by opening various foreign offices in order to provide the best solutions for diverse market needs. Today, the Optima group has branches in France, *Optima Services Sa*, and in Canada, *Optima America Co.* It has a workforce of 15, an annual turnover of around EUR 1.5 million, and generates 60 per cent of its sales outside Italy.

In addition to the branches listed above, the Optima group also utilizes an extensive network of agencies that cover almost the entire world
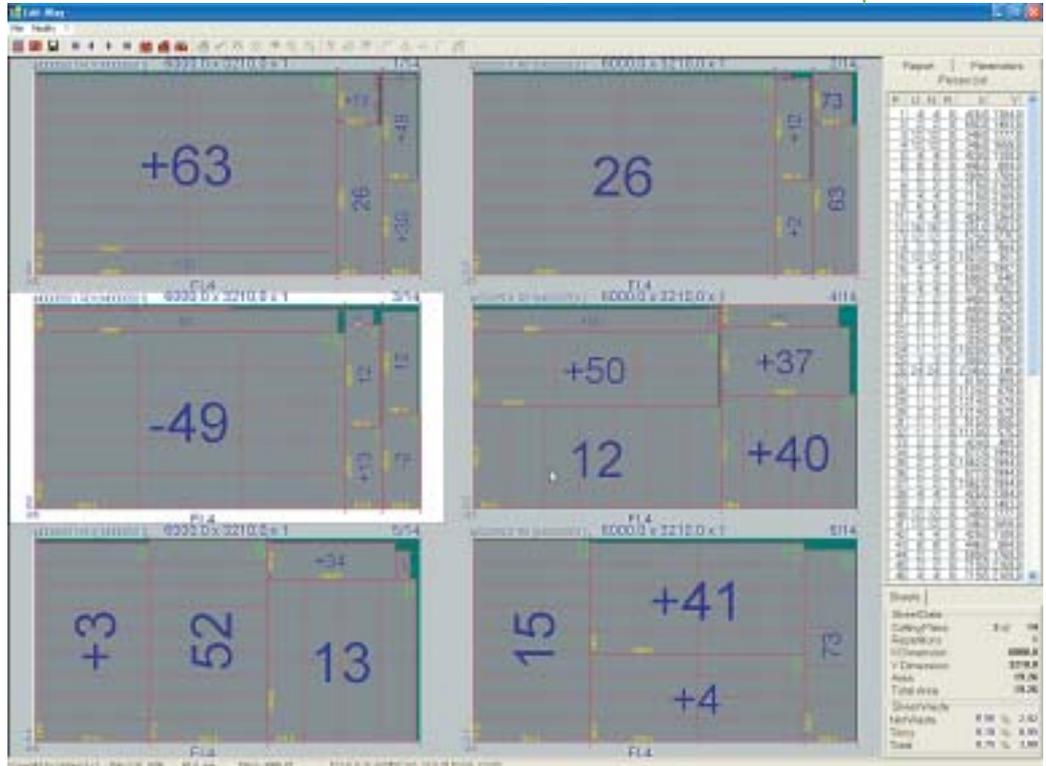
Information solutions for glassmakers

market, thus guaranteeing the end customer an adequate level of technical skills and assistance.

CLIENT-ORIENTED APPROACH

With the know-how it has accumulated, Optima is in a position to supply its clients with the entire IT process for commercialization and production. It supplies both software and hardware; handling installation, integration and personalization - tailor-made projects for the needs of the client. In the first phase of contact with the client, Optima implements a consulting and analysis procedure to find the right solution for that particular client. It also supplies personnel training for installed systems, and assistance via modem and Internet, as well as pre- and post-sales assistance, a telephone "hot line" and product maintenance.
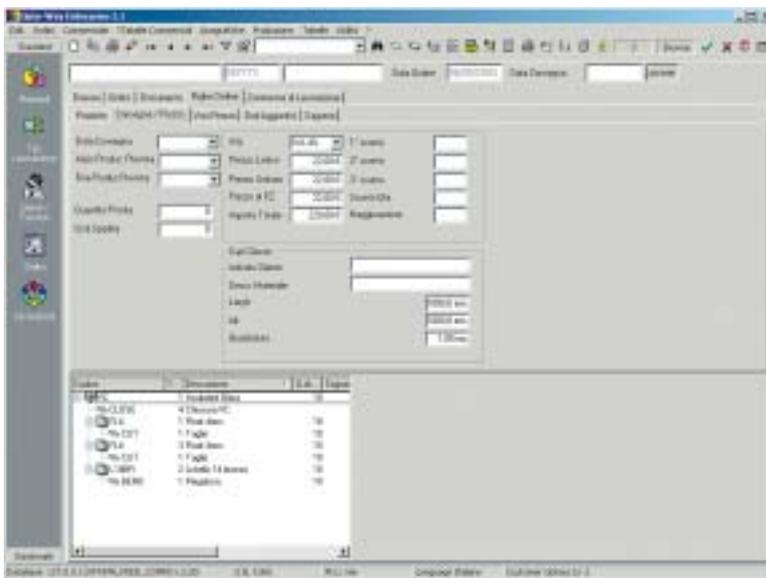
As in the past, the *Vitrum* show in Milan, Italy, will represent the most important showcase for glass sector companies and Optima will be there with a complete range of products.

OPTY-WAY® ENTERPRISE

Opty-Way®Enterprise is a Windows-based system for the integrated management of a glassworks and covers areas such as orders, product lists, shipping, invoicing and warehouse management, as well as advanced product control and management. The system can handle cutting optimization for automatic cutting tables via a direct connection. Design is via CAD and by means of a library of predefined shapes. Glassworks can use the software to control NC workcentres and monitor data via terminals and by barcode.

This is a rapid and synthetic description of Optima's principal product package. In fact, in just a few words, it is not possible to sum up the software contents and, therefore, the "benefits" for the activities of a glassworks. What is certain is that we are speaking about an integrated and totally "vertical" application, able to unite
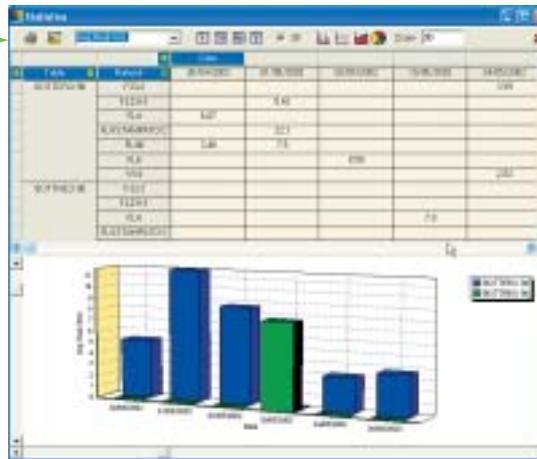
Opty-Way Enterprise 3.0 order entry

and harmonize the diverse functions in the company, to speed up the cycle of definition and handling of an order, from its origin to definitive acceptance, from production to shipping.

Opty-Way® Enterprise enables glassworks to:
- insert an order or an offer and evaluate it;
- manage personalized product lists by client, client category and product type;
- define product structure both as regards material and as regards the work phase to be carried out;
- create shapes both parametrically or free-hand;
- insert client orders directly into production;
- optimize cutting freely or with reference to production stackers and/or transport;
- connect directly all glass cutting machines present on the market;
- control production in its different processing phases, by means of barcodes and/or terminals via radio:
- control material that is ready so as to plan shipping;
- issue a shipping document with reference to material ready;
- issue an invoice conforming to relative shipping documents;
- communicate to the accounts office the data regarding invoices issued.

It can, therefore, be described as a compact and efficient product, without data-redundancy, but able to 'identify' a product right from its creation,

Statistics

Opty-Way® 5.0

by means of a basic work 'docket' that contains the materials and the processes necessary for that specific product, passing through the definition also of the geometry of the processing profiles. With Opty-Way® Enterprise, it is possible to build a network able to cover the various problems of production lines, and to follow the progress of clients' orders in real time It is, therefore, not just a simple system of cutting optimization, but also a company-wide system, able to supply department managers with all data regarding the control of company operations.
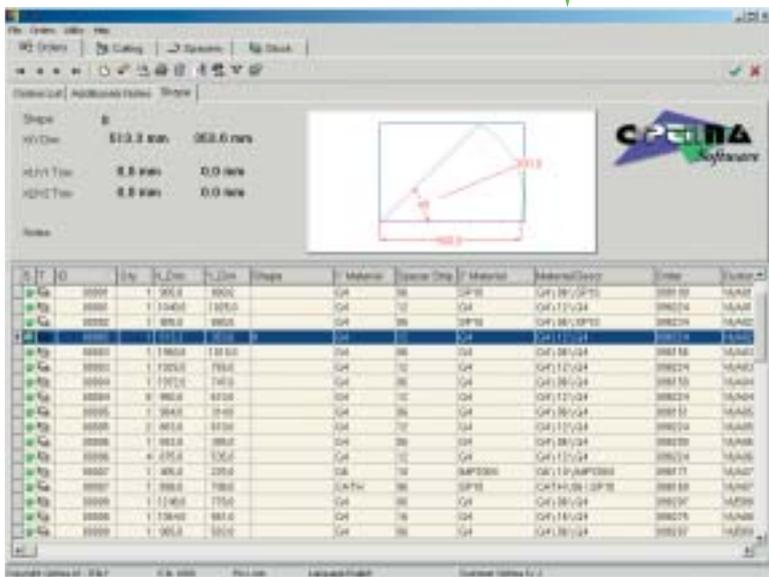
OPTY-WAY® 5.0

Opty-Way® 5.0 is a mono-user software tool for cutting optimization. It can be connected to all kinds of cutting machinery. It is equipped with a CAD design system and a library of predefined parametric shapes. There is an editor for glass sheets and a module for label printing.

This is an updated version of the already well-known system of cutting optimzation. A complete restyling of the product has led to the introduction of significant improvements and new functions. This software, now available in version 5.0, is one of the most widespread systems of optimization used worldwide by producers of cutting equipment. Key features include:
- data input: a new method of inputting cutting data, with a substantial improvement in process times and control. New description fields have also been inserted for clients, which can also be printed on labels.
- optimization: new optimization calculation algorithms mean a considerable reduction in off-cuts in particular situations. It is also
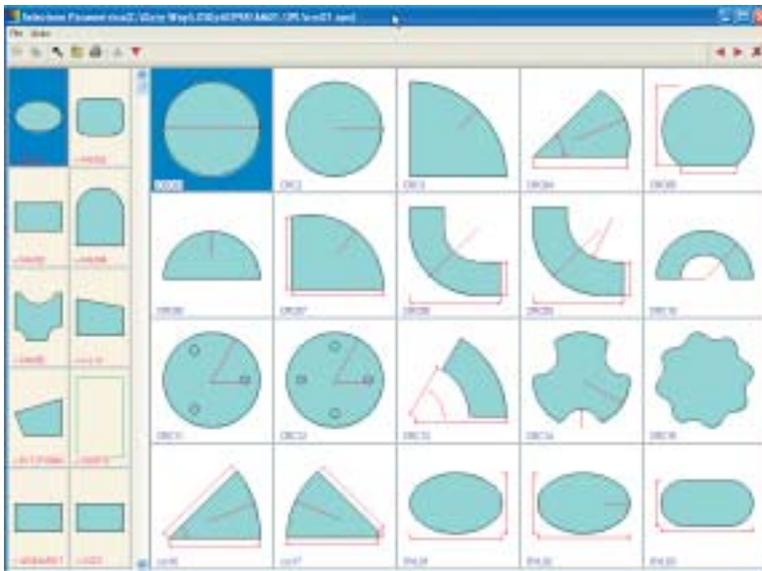
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possible to create cutting optimization with a predefined order (stacker, client, position, and so on). This option is particularly useful for those companies with a strict production flow or with a lack of physical production space.

• parametric shapes: an automatic system of calculating trimming to be applied to single shapes. The system is able to automatically show on the monitor the trimming to be applied based on the characteristics of the material, as well as the structure of the shape. There is also a new set of parameters with the management of finished cuts. For each single shape, it is possible to establish on which profile and in which direction to enable the creation of cuts towards the edge. This function helps to simplify the separation phase of the glass. The system has a complete preview function for the shapes present, in the different formats and graphics available, complete with technological processing parameters (material, trimming, dimensions, and so on). Features also include a design library in DXF format.

OPTY-WAY® CAM

The *Opty-Way®Cam* CAD/CAM software is designed for the generation of 2D/3D designs and processing profiles, in parametric format, with import, creation and modifying of the geometric shapes, and memory storage of the mathematical parameters that define them. The software allows the definition of processing profiles, attachment and positioning points, registration of the tool bay, processing and memory storage of processing kits.

CAM-Way is an advanced CAM system, able to enhance the exploitation of NC tooling machines, enabling the end-user to handle complex projects without encountering high costs. Increased production, utilizing to the full the NC machine, a decrease in dead-times, improved quality of processing compared to traditional methods, and system modularity, make CAM-Way a reference point in the NC glass processing sector. The broad potential of CAM-Way is easily accessible thanks to its graphic interface and a help-line. The entire package has been designed to ensure easier learning and faster use. The structure of the shutter-style menu and the table of parameters

Geo-Way 5.0 Parametric Shape Library

enable rapid personalization by the client.

CAM-Way enables users to follow the work cycle from acquisition to design creation, to the attribution of material characteristics, up to the visualization of the finished piece.

Once the preview of the finished piece has been done, the next step is the definition, by means of a wide range of tools, of the processing characteristics for the NC machine. With CAM-Way, it is possible to choose spheroid, cylindrical or toroidal tools from an extensive tool library (graphically displayed). The system identifies the characteristics of the surface in order to facilitate the choice of tool. The use of on-screen tables containing processing parameters makes it possible to choose the correct set-up. Processing along parametric lines of single surfaces allows the high-speed generation of tool routing and is ideal for single components defined by few entities or surfaces. Last, but not least, CAM-Way is able to generate ISO codes for interfacing with every NC system present on today's market. ∎

Foreign Sales
OPTIMA - ITALY

Information Service no. 110
See Contents for Info Service page