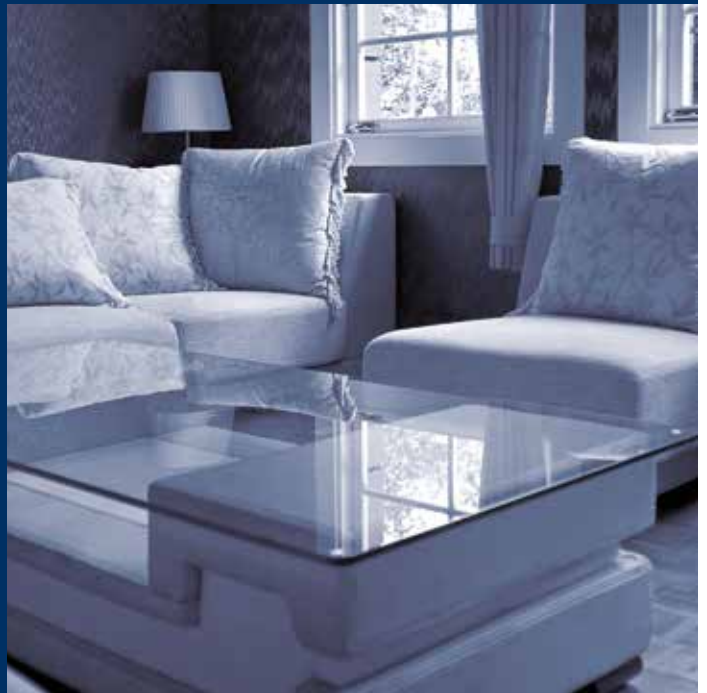


agil / runner

cutting tables



CMS is part of SCM Group, a technological world leader in processing a wide range of materials: wood, plastic, glass, stone, metal and composites. The Group companies, operating throughout the world, are reliable partners of leading manufacturing industries in various market sectors, including the furniture, construction, automotive, aerospace, ship-building and plastic processing industries. SCM Group coordinates, supports and develops a system of industrial excellence in 3 large highly specialized production centers employing more than 4,000 workers and operating in all 5 continents. SCM Group: the most advanced skills and know-how in the fields of industrial machinery and components.

CMS SpA manufactures machinery and systems for the machining of composite materials, carbon fibre, aluminium, light alloys, plastic, glass, stone and metals. It was established in 1969 by Mr Pietro Aceti with the aim of offering customized and state-of-the-art solutions, based on the in-depth understanding of the customer's production needs. Significant technological innovations, originating from substantial investments in research and development and take-overs of premium companies, have enabled constant growth in the various sectors of reference.



CMS Glass Technology is a leader in the field of curved and flat glass working with technologically advanced solutions such as numerically controlled machining centres, cutting benches and water-jet cutting systems. Thanks to the tradition and experience of the historic brands Brembana and Tecnocut, today **CMS Glass Technology** is an absolute protagonist in this sector for the manufacturing of innovative solutions dedicated to architecture and interior decoration.

agil / runner

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APPLICATIONS



stairs | doors | façades and windows | ovens and hob top



mirrors | shower doors enclosures | photovoltaic | tables



AGIL

TECHNOLOGICAL BENEFITS

Agil is a fixed cutting table with loading arms, two interpolated axes and a pivoting head for cutting panes of straight and shaped flat glass with thickness ranging from 3 to 25 mm.

- Y-axis with a gantry system: two synchronized brushless motors with rack and pinion system manage the bridge movements and reduce the positioning errors due to mechanical elasticity.
- Pneumatic arms allow easy loading/unloading of bigger glass sheets, up to 400 kg weight.
- Rectified and tempered cylindrical guides with integrated rack, allow higher cutting speed, up to 160 m/min, with less noise.

KEY BUYER BENEFITS

- + **High cutting speed:** cylindrical guides with rack integrated, adjusted and subjected to tempering process, allow a cutting speed up to 160 m / min.
- + **Constant cuts opening:** worktop made up of panels rectified wood capable of ensuring perfect flatness of less than 1 millimeter, essential for optimal cutting and parting of glass sheets.
- + **Loading at the maximum simplicity:** pneumatically activated arms allow in just 12 " the easy loading/unloading of the largest glass plates, up to a maximum weight of 400 kg.
- + **Complete removal of the low-e:** low-E removal system with a dedicated front grinding wheel. The working strip of 20 mm and fully automated process. The working speed of over 40 m/min.



Cutting head is equipped with pivoting head or controlled C axis with continuous 360° rotation managed by the CN (option). Cutting pressure and cutting head height adjustments are automatically managed in relation to glass thickness



Cylindrical guides with integrated gauge line, rectified and tempered, enable higher cutting speed



Working table is made up of rectified wood structure to ensure long-lasting stability for an optimal cut and break out of glass sheets



AGIL: TECHNICAL DATA

AXES MAXIMUM STROKE X-Y-C *	4400 mm – 2600 mm – 360° / 173 in – 102 in – 360°
USEFUL WORKING AREA	4250 mm – 2560 mm / 167 in – 101 in
WORKABLE THICKNESS	3 - 25 mm / +1/8 - 1 in
ACCURACY AND REPEATIBILITY	± 0,20 mm / ±0,15mm
MAXIMUM SPEED AND ACCELERATION	160 m/min - 5 m/s ² / 530 ft/min - 16 ft/s ²
MAXIMUM ARMS CAPACITY	400 Kg / 882 lb
WEIGHT	3500 Kg / 7700 lb

* Optional

RUNNER

TECHNOLOGICAL BENEFITS

Runner is a tilting cutting table with three interpolated axes for straight and shaped cutting of flat glass plates with thickness ranging from 3 to 25 mm.

- Electrical and electronic equipment are completely integrated in the machine's basement. This solution saves floor space, assures a very easy diagnostic of potential errors, and provides the utmost airconditioning system (air-conditioning system optional)
- Mechanical motorized tilting system of the work table makes it easy to load/unload glass sheets in small spaces and guarantees a long machine life, absolute reduction of maintenance and smooth movement.
- High pressure turbine that generates an air cushion simplifying the handling of glass sheets; the air cushion can be set in two positions, depending on glass dimensions and thickness.
- Cutting head completely engineered by CMS with automatic control of the cutting pressure depending on glass thickness and oil flow according to the cutting speed.
- "C" axis included in the standard supply, guarantees the highest accuracy in shaped cuts.



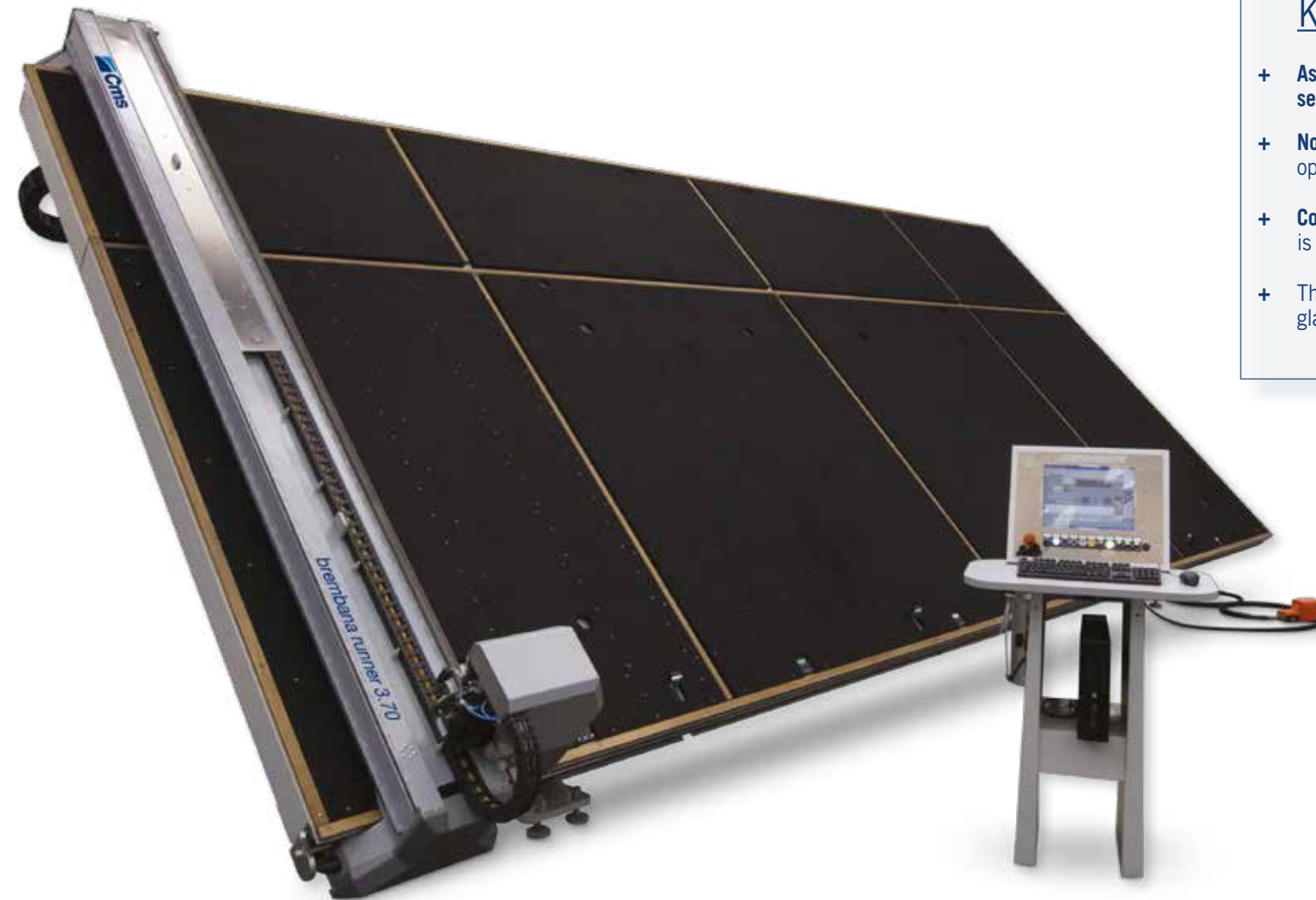
The work table is equipped with an air cushion which can be set in two positions, depending on glass dimensions and thickness



Mechanical tilting system. The automatic exit of loading feet is commanded during the work table tilting



Electrical cabinet integrated into the basement



KEY BUYER BENEFITS

- + **Astest tilting table:** the system for the overturning of type mechanical, with chain transmission, allows **tipping times of less than 20 seconds**. Unlike hydraulic systems, maintenance is zeroed..
- + **No setting time:** thanks to the patented four-head system for automatic management of cutting of different thicknesses, no manual operation is required. Each head carries a wheel that is specific for its thickness, guaranteeing **zero stop times when changing the sheet**.
- + **Complete removal of the low-e:** the peripheral grinding wheel **eliminates the low emissivity layer with speeds up to 80 m / min**. The device is suitable for intensive use to work continuously with all types of Low-E..
- + The double zero function allows the management of the laminated glass cutting. The software generates two mirror programs, the glass is zeroed on two opposite stops with **accuracies lower than 2 tenths of a millimeter**.

RUNNER: TECHNICAL DATA

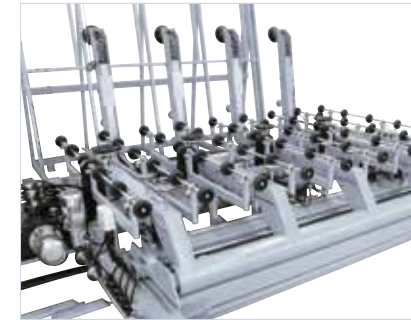
MODEL	3.70	6.20
AXES MAXIMUM STROKE X-Y-C	4400 mm – 2600 mm – 360° / 173 in – 102 in – 360°	6900 mm – 3350 mm – 360° / 272 in – 132 in – 360°
USEFUL WORKING AREA	4250 mm – 2560 mm / 167 in – 101 in	6790 mm – 3310 mm / 267 in – 130 in
WORKABLE THICKNESS	3 - 25 mm / +1/8 - 1 in	3 - 25 mm / +1/8 - 1 in
ACCURACY AND REPEATIBILITY	± 0,20mm / ±0,15mm	± 0,20mm / ±0,15mm
MAXIMUM SPEED AND ACCELERATION	160 m/min - 5 m/s ² / 530 ft/min - 16 ft/s ²	160 m/min - 5 m/s ² / 530 ft/min - 16 ft/s ²
WEIGHT	3500 Kg / 7700 lb	5100 Kg / 11250 lb

RUNNER LINE

TECHNOLOGICAL BENEFITS

Fixed cutting table with glass transport belts, three interpolated axes for cutting panes of straight and shaped flat glass with thickness from 3 to 19 mm, normally in line with loader and cut off bench.

- The system with belts allows the automatic movement of glass sheets for every cycles: in-feeding, positioning, working and out-feeding.
- Wide range of loading configuration and costumization, able to satisfy every customer's request.
- The cutting in-line with loading, cutting and unloading, allow to process higher quantities, avoiding losses of time compared to standalone cutting tables.



Loader fixed or mobile, with single or double station, for automatic loading of the glass sheets placed vertically



Side pneumatic pusher



Belts for glass handling

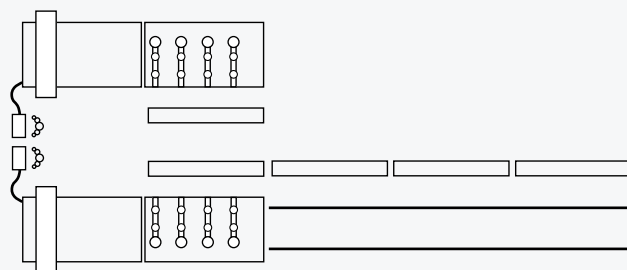


KEY BUYER BENEFITS

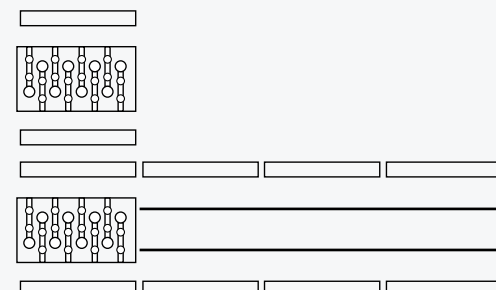
- + **Automatic sheet positioning:** the pneumatic side reference, thanks to the 40mm stroke, allows the zeroing of plates arriving from an upstream machine. The exclusive reference insertion system guarantees superior performance and no routine maintenance.
- + **No setting time:** thanks to the patented four-head system for automatic management of cutting of different thicknesses, no manual operation is required. Each head carries a wheel that is specific for its thickness, guaranteeing zero stop times when changing the sheet.
- + **Complete removal of the low-e:** the peripheral grinding wheel eliminates the low emissivity layer with speeds up to 80 m / min. The device is suitable for intensive use to work continuously with all types of Low-E.
- + **Glassware management:** Runner Line manages the printing of bar codes to trace the cut pieces by integrating with the management of the glassware. Printing is fully integrated into the cutting process, avoiding possible operator errors and leading to time savings of over 31%.

EXAMPLES FOR LOADING

FROM 1 TO 4 STATIONS WITH LEFT OR RIGHT LOADING



FROM 1 TO 4 STATIONS WITH DOUBLE SIDE LOADING



RUNNER LINE: TECHNICAL DATA

MODEL	3.70	6.20
AXES MAXIMUM STROKE X-Y-C	4400 mm – 2600 mm – 360° / 173 in – 102 in – 360°	6900 mm – 3350 mm – 360° / 272 in – 132 in – 360°
USEFUL WORKING AREA	4250 mm – 2560 mm / 167 in – 101 in	6790 mm – 3310 mm / 267 in – 130 in
WORKABLE THICKNESS	3 - 25 mm / +1/8 - 3/4 in	3 - 25 mm / +1/8 - 3/4 in
ACCURACY AND REPEATABILITY	± 0,20mm / ±0,15mm	± 0,20mm / ±0,15mm
MAXIMUM SPEED AND ACCELERATION	160 m/min - 5 m/s ² / 530 ft/min - 16 ft/s ²	160 m/min - 5 m/s ² / 530 ft/min - 16 ft/s ²
WEIGHT	according to the configuration	

ACCESSORIES

Shape reading system mounted at the side of the cutting head with optical shape reader and dedicated software for the translation of arcs and straight lines



Cutting of the vinyl



System for low-e removal with a peripheral wheel



Double-zero function for cutting laminated glass
(Optional available only for Runner)



ACCESSORIES

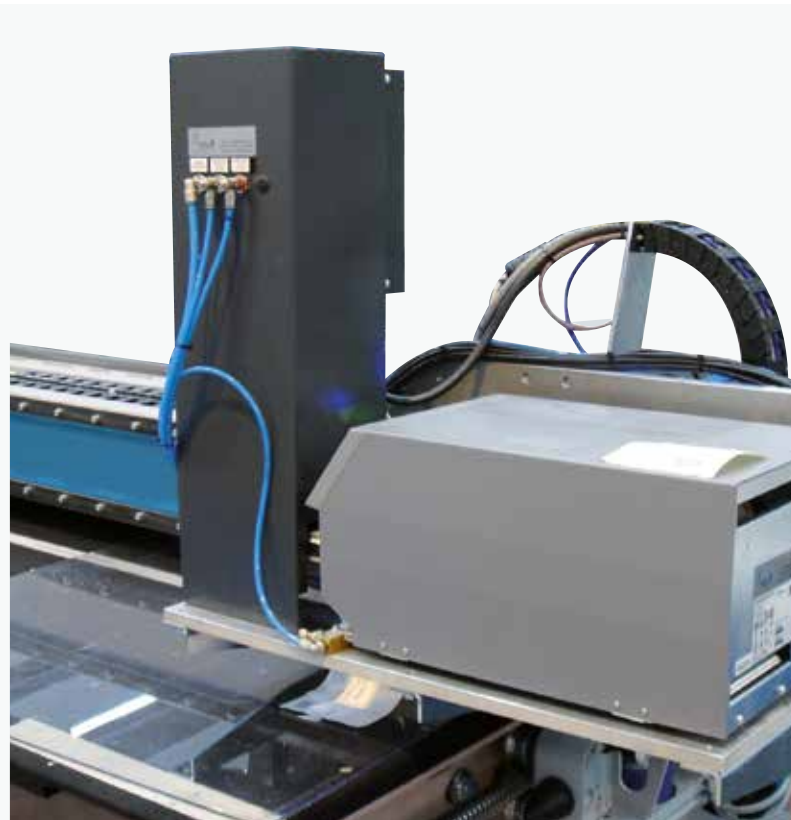
Suction cups for handling glass sheets
(optional available only for Agil / Runner)



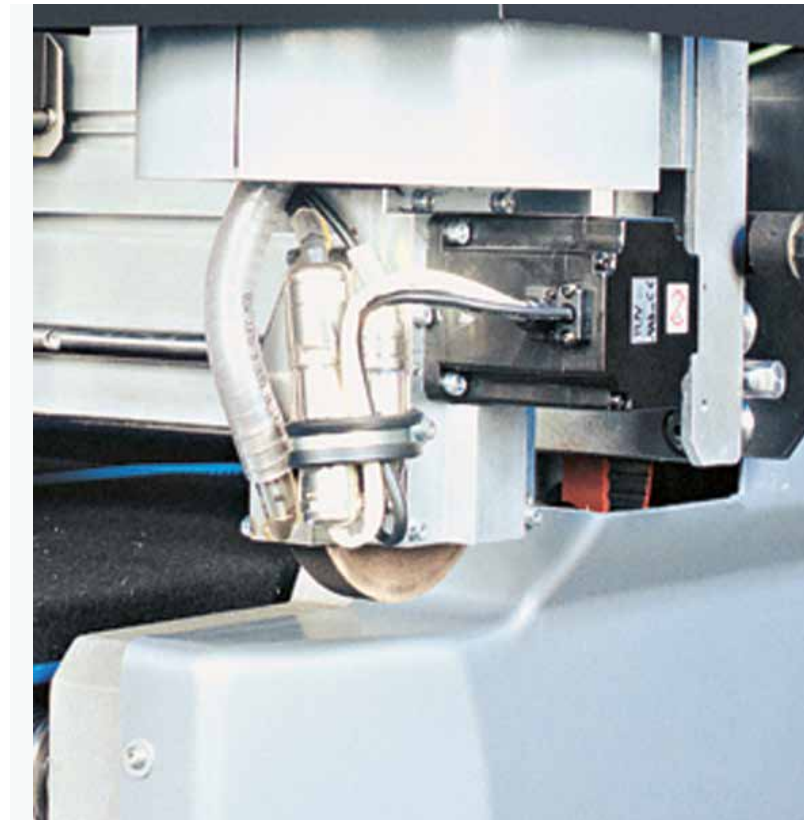
Four heads for automatic management of different
glass thickness cut (optional available
only for Runner / Runner Line)



Labeling machine for printing and fixing on the
single cut pieces a barcode with useful information
for the operator (optional available only for
Runner / Runner Line)



Peripheral wheel for high speed low-e removal
(optional available only for Runner /
Runner Line)



AGIL / RUNNER SOFTWARE

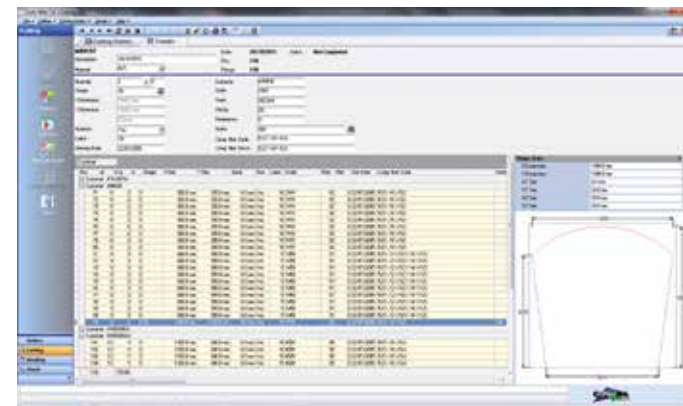


Opti-way CAD

ADVANCED SOFTWARE SYSTEMS FOR THE PROGRAMMING IN OFFICE

The software OPTI-WAY CAD is specifically engineered for the office management of the work and includes:

- one software key OPTI-WAY CAD for the office working
- one software key EDIT-WAY CAD for the working on board the machine

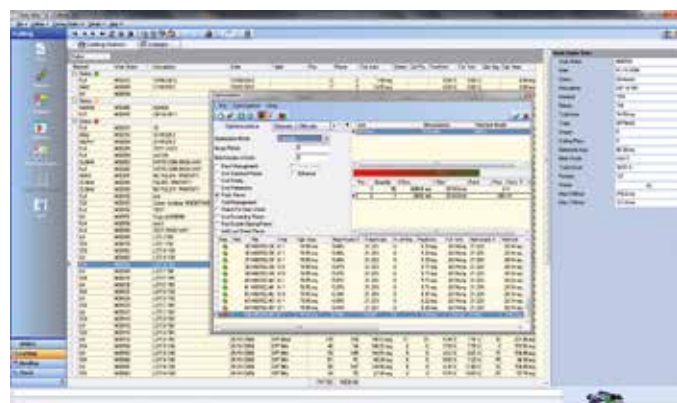


PROGRAMMING SOFTWARE

OPTIMA Software is the most advanced and specialized CAD/CAM software solution for the cut of flat glass with CMS Brembana machines: it offers a complete range of applications to meet any requirements of the glassworks market and to satisfy all end-customer needs.

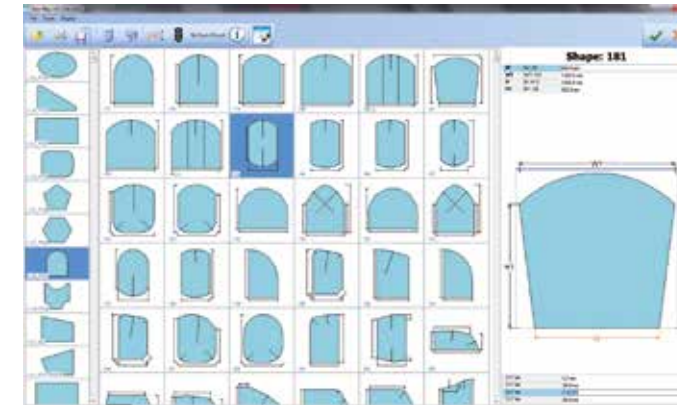
It adds to EDIT-WAY CAD functions the possibility to enter cutting or order portfolio data manually or automatically and to prepare data for production, create labels and bar-codes, manage glass warehouse, etc.

Are furthermore available advanced modules for the office management of the single machine, rolling stock of machines or the complete production.

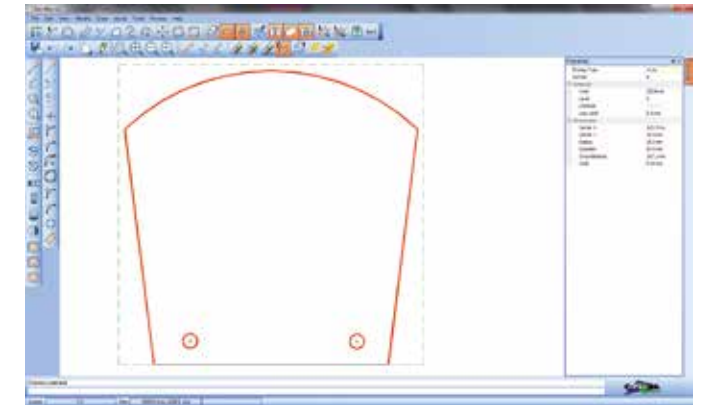


Edit-way CAD

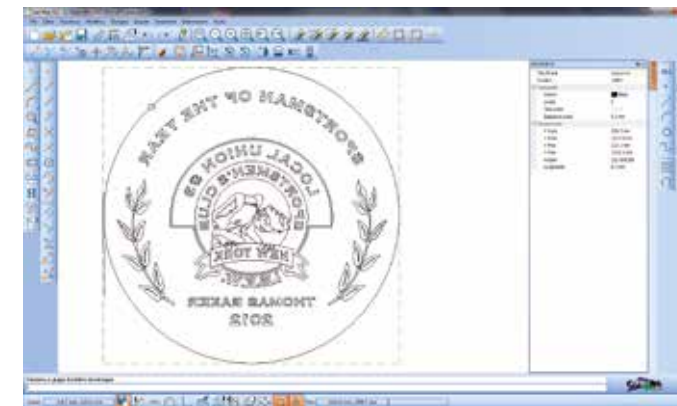
OPTIMIZATION SOFTWARE FOR THE PROGRAMMING ON BOARD THE MACHINE



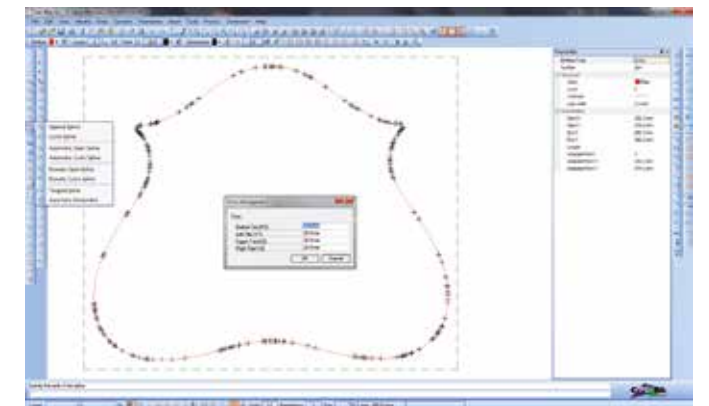
Geo Way module – Is a library of parametrical shapes guarantees quality and fast set up of the production



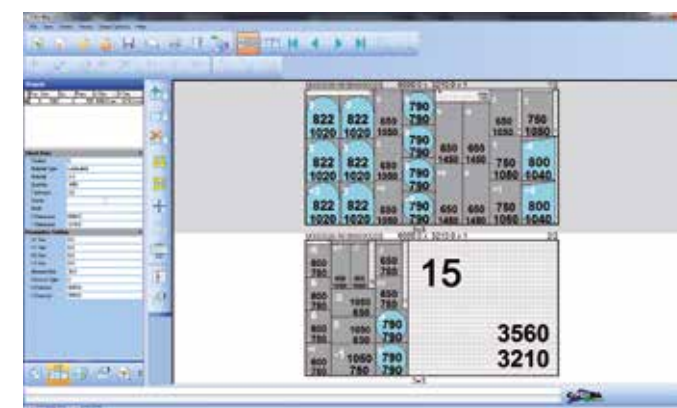
CAD Way module – bi-dimensional CAD for the free shape drawing; import/export of .dxf files and other graphic files prevalent in glass processing



Management of shapes, even complex, for the vinyl cut



Detection of templates edge with shape reading systems and possibility of modification as needed



Creation of optimisations according to the list of glass to be cut and possibility to apply manually every changing needed



Summarizing data monitor consulting like final statement of the optimisation, quantity of scraps for each glass sheet, etc.

THE RANGE OF CMS GLASS TECHNOLOGY

FOR GLASS PROCESSING

HORIZONTAL MACHINING CENTERS



SPEED

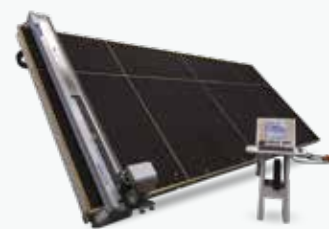


MAXIMA

CUTTING TABLES AND CUTTING LINE



AGIL



RUNNER



RUNNER LINE

CUTTING TABLES AND CUTTING LINE



VERTEC MILL



PROFILE



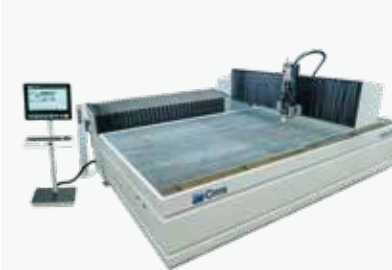
VERTEC MILL + PROFILE

LOADING SYSTEMS



KART

WATERJET CUTTING SYSTEMS AND PRESSURE INTENSIFIERS



EASYLINE



SMARTLINE



MILESTONE S



IDROLINE S



AQUATEC



EASYPUMP



JET POWER EVO



GREENJET EVO



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