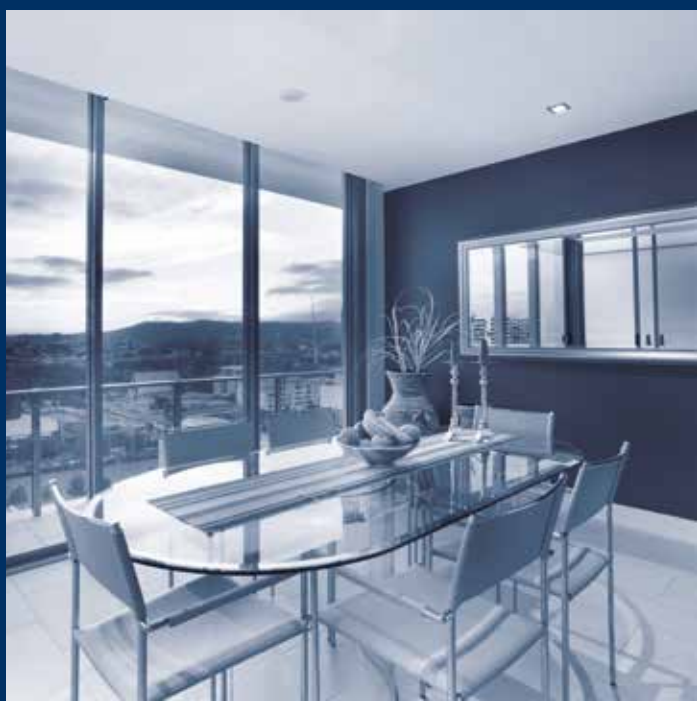
GLASS

electa

horizontal machining centers



Cms
glass technology

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 centres 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

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.

scm group | industrial machinery and components

Cms | your technology partner

electa

a company of scm group

APPLICATIONS






doors | stairs | shower enclosures | façades and windows | vanity tops



mirrors I tables I oven and stove tops I curved, bullet-proof and safety glass

Winning.

Innovative.

Durable.

Efficient solutions.

Our WIDE range for glass processing.

Horizontal machining centers

ELECTA
TECHNOLOGICAL BENEFITS

LEARN MORE

WHICH CMS HORIZONTAL MACHINING CENTER OFFERS THE BEST SPACE SAVING?

CMS electa is the new 3- or 4-axis (optional) CNC machining center for processing flat glass, whether thick, thin, laminated or bulletproof.

CMS electa features **the smallest footprint and the largest work area in its category,** and can perform many types of machining: the 3-axis version performs grinding, edge polishing, drilling and milling, while the 4-axis version can also perform cup wheel polishing, diamond disc cutting, engraving and 5° chamfering.

With a maximum axis speed of 72 m/min, CMS electa guarantees top performance and is the perfect machine to increase productivity since it performs high-speed grinding and can machine multiple workpieces on the same worktable.

Console built into the machine, the 21.5" touch screen takes full advantage of the new operator interface. The operator is constantly guided through the most common steps while operating the machine.

The design of the retractable doors means that the machine footprint does not change even when the doors are open.

Tool magazines are located to the side for better accessibility and to offer the operator a better view of the tools in the magazine.

KEY BUYER BENEFITS

+ **Largest area in its category:** +17% compared to the competitors [FLEXIBILITY].
+ **Smallest footprint in its category due to the retractable doors and the water tanks located under the machine structure:** saving up to 43% space compared to competitors' solutions [SPACE EFFICIENCY].
+ **The highest productivity in its category,** thanks to an axis speed of 72 m/min [PRODUCTIVITY].

ACCESSORIES

QUICK SUCTION CUP POSITIONING

The crosshair laser installed on the operating unit makes it possible to quickly and easily identify where the suction cups have to be positioned in the work area.

A TOOL FOR EVERY NEED

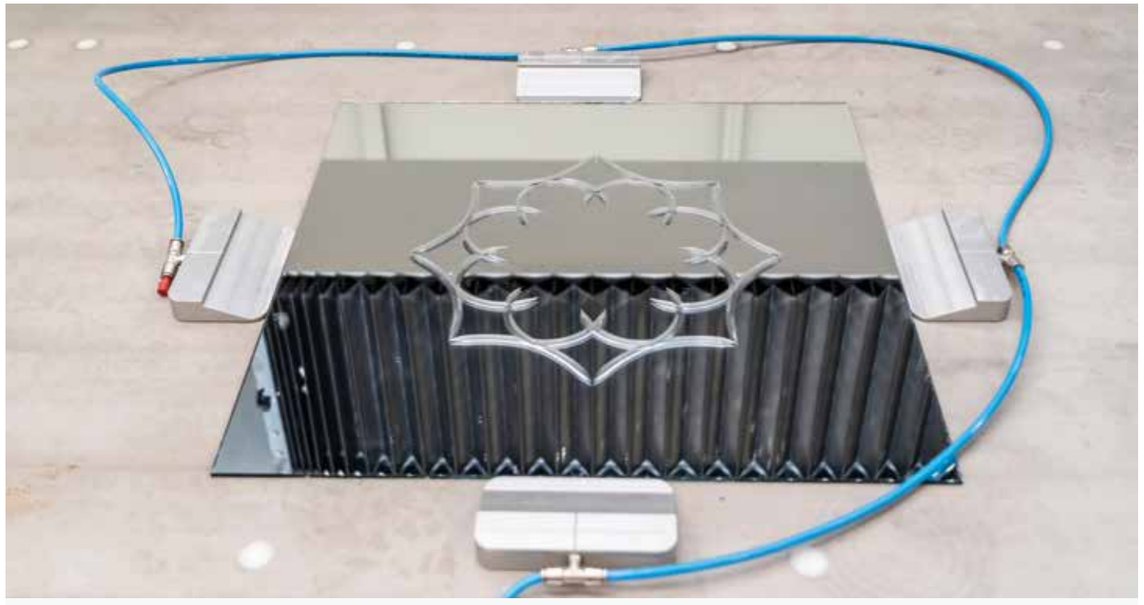
Electa 3-axis features a 13-position linear magazine on the right side of the worktable, whilst Electa 4-axis has one more magazine on the left side of the worktable, featuring 26 positions in total. Each magazine can accommodate angular transmissions or other tools for grinding, drilling and milling. Abrasive and polishing wheels can be stacked on a single tool holder as long as the tool pack is less than 50 mm.

EVERYTHING IN ITS PLACE

The water recirculation tanks and vacuum pumps are located under the machine structure to reduce its footprint.

ALWAYS IN SHAPE

The tool dressing kit can be used to dress grinding wheels and core drill bits fully automatically at a set frequency. This system ensures the tools are working at peak performance.



DEDICATED ENGRAVING KIT

The 4-axis electa can be equipped with an engraving kit that can easily engrave glass and mirrors on the worktable.

SOFTWARE

EASYGLASS

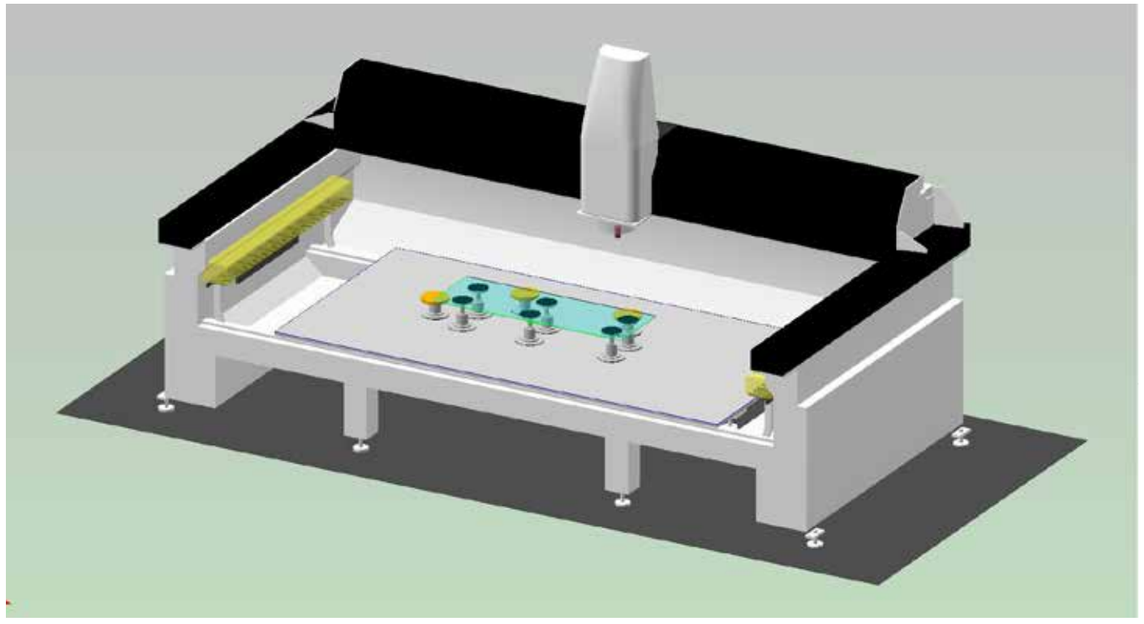
EasyGLASS is a CAD/CAM software package, adapted especially to the CMS Glass Technology machining centers, and dedicated to the glass working industry; it enables 360° management of all CNC-machining related aspects.

Available at different levels, it offers the following functions:

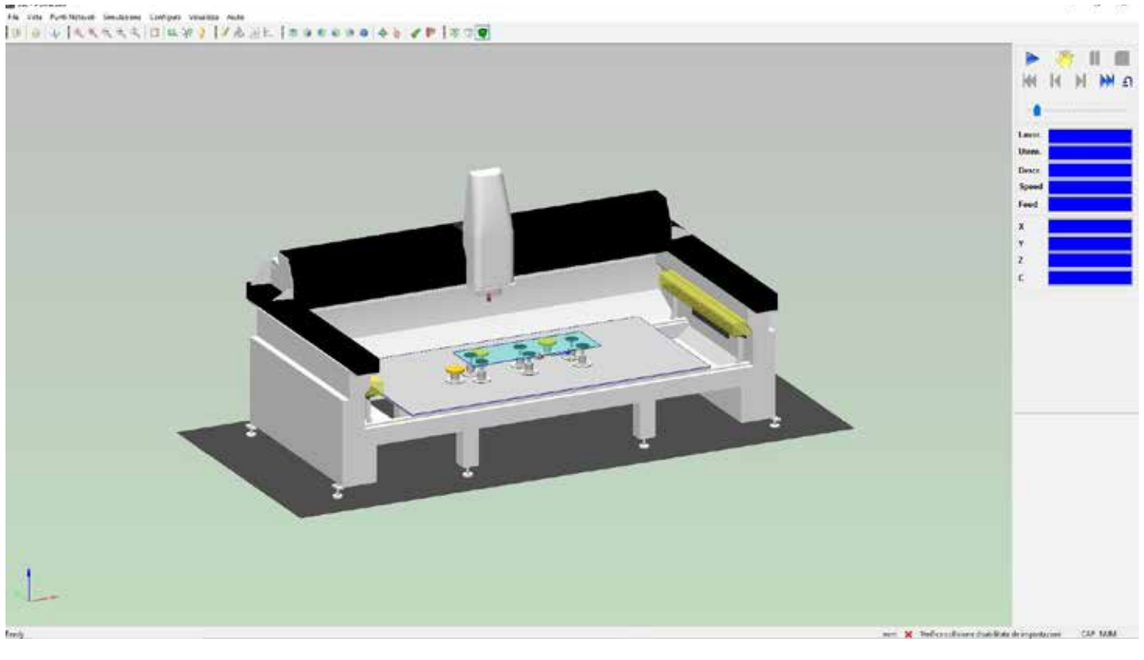
- free drawing of geometric entities (arcs, bi-arcs, straight lines, rectangles, squares, ellipses, circles, regular polygons, radius, fillets, etc) or drawing from parametric predefined models for the surface definition of tables, doors, glass walls, windows, countertops, shower enclosures etc..
- management of tool table and automatic or manual tool change
- guides for suction cup positioning by an interactive graphics layout
- calculation of machining times and costs
- three-dimensional graphic simulation of the machining process

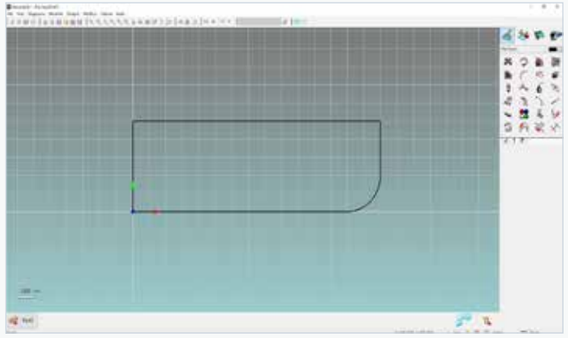
The above-described functions can be integrated by:

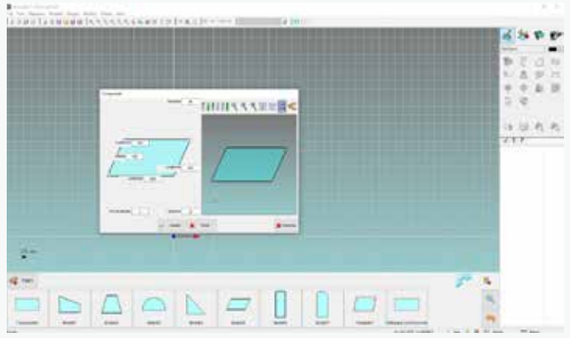
- laser projection of suction cup positioning or tool-path
- automatic and controlled management of polishing pressures
- acquisition of templates through probes

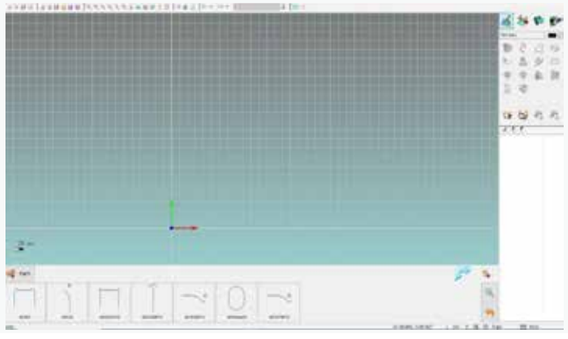


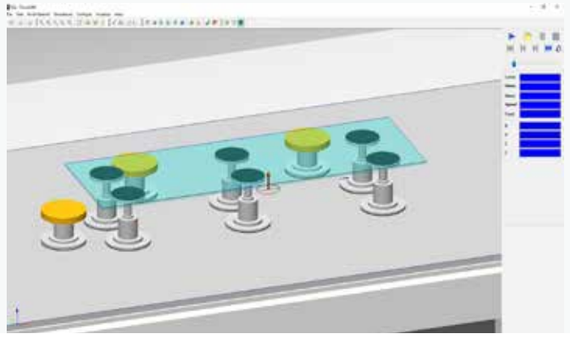
* The machine has to be equipped with the probe



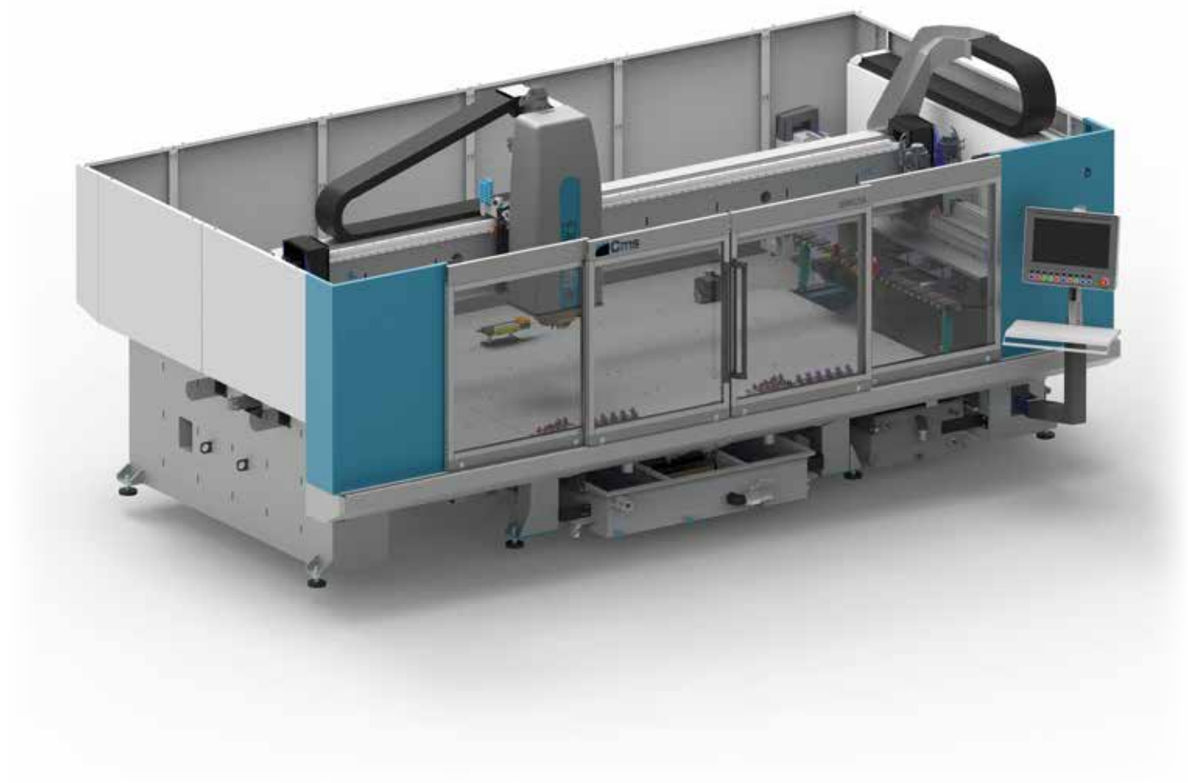








ELECTA
DIMENSIONS & TECHNICAL DATA



ELECTA: TECHNICAL DATA	
X-AXIS STROKE Y-AXIS STROKE Z-AXIS STROKE	3450 mm | 136 in 1800 mm | 71 in 350 mm | 14 in
ROTARY AXIS (OPTIONAL)	360° continuous
TOOL CHANGE POSITIONS	13 + 13
ELECTROSPINDLE POWER ROTATION CONNECTION TORQUE	 11,5 KW | 15 HP 0 ÷ 12000 rpm ISO 40 18.5 Nm 6000 rpm
ELECTRICAL CABINET	built into the base
WEIGHT	4250 kg | 9370 lb
OVERALL DIMENSIONS	6100 x 3690 x 2410 mm | 240 x 145 x 95 in (electrical cabinet doors closed) 6800 x 3690 x 2410 mm | 268 x 145 x 95 in (electrical cabinet doors opened)

CMS connect the IoT platform perfectly integrated with the latest-generation CMS machines

CMS Connect is able to offer customised micro services through the use of IoT Apps that support the daily activities of industry operators - improving the availability and use of machines or systems. The platform displays, analyses and monitors all data from connected machines. The data collected by the machines in real time become useful information to increase machine productivity, reduce operating and maintenance costs and cut energy costs.

APPLICATIONS

SMART MACHINE: Section designed for the continuous monitoring of machine operation, with information on:

Status: machine status overviews. The representations provided allow machine availability to be checked - to identify possible bottle-necks in the production flow.

Monitoring: instantaneous, live display of the operation of the machine and its components, of currently running programs and potentiometers.

Production: list of machine programs run within a given timeframe with best time and average running time.

Alarms: active and historical warnings.

SMART MAINTENANCE

This section provides a first approach to predictive maintenance by sending notifications when machine components indicate a potentially critical state associated with reaching a certain threshold. In this way, it is possible to take action and schedule maintenance services, without any down-time.

SMART MANAGEMENT

Section designed for KPI presentation for all the machines connected to the platform. The indicators provided assess of the availability, productivity and efficiency of the machine and the quality of the product.

MAXIMISED SECURITY

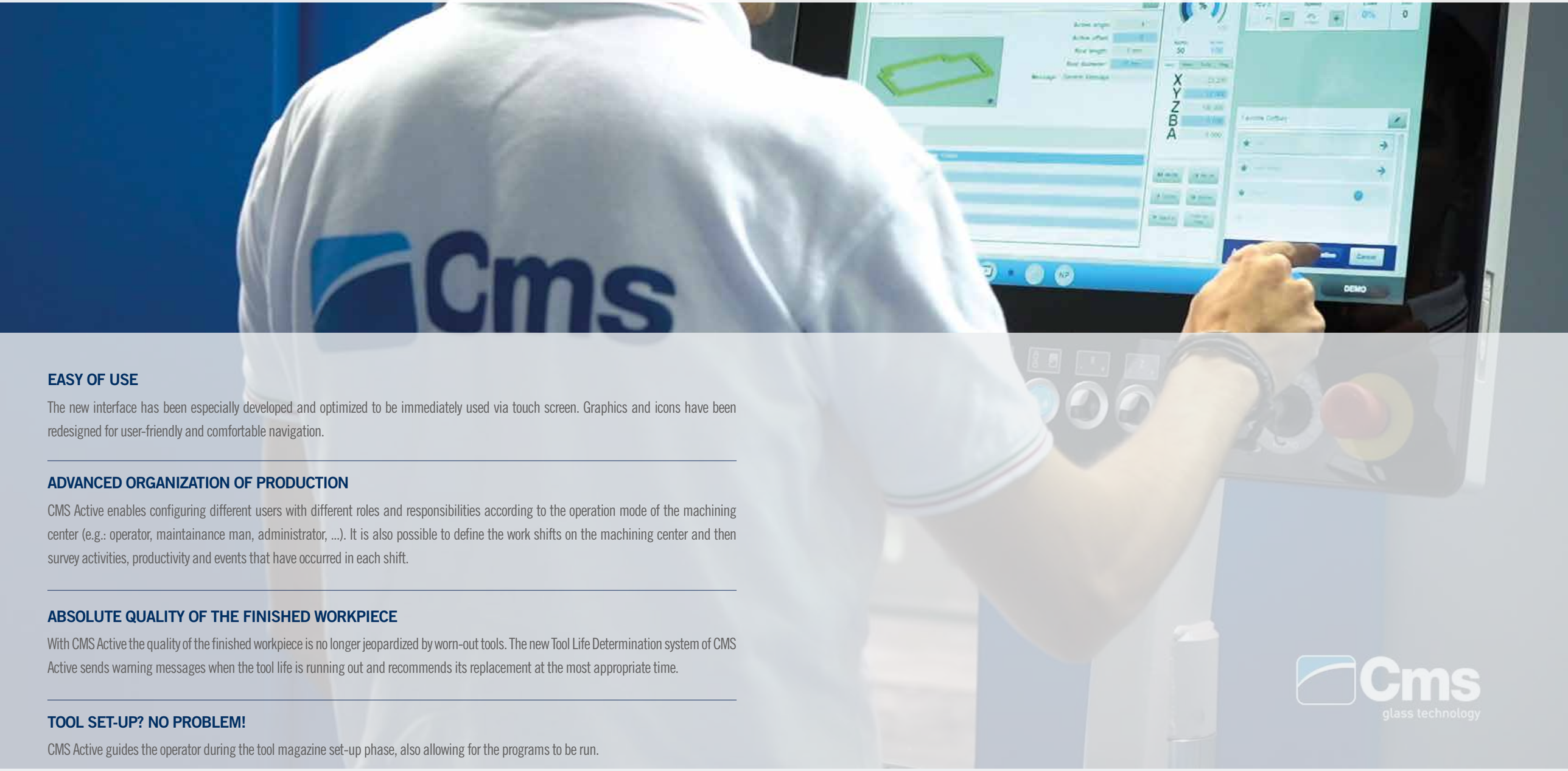
CMS Connect uses the standard OPC-UA communication protocol, which guarantees the encryption of data at Edge interface level.
CMS Connect's Cloud and DataLake levels meet all state-of-theart cyber-security requirements. Customer data are encrypted and authenticated to ensure total protection of sensitive information.

ADVANTAGES

- ✓ Optimisation of production performance
- ✓ Diagnostics to support components warranty optimisation
- ✓ Productivity increase and downtime reduction
- ✓ Improvement of quality control
- ✓ Maintenance costs down

CMS active a revolutionary interaction with your CMS machine

Cms active is our new interface. The same operator can easily control different machines as the CMS Active interfaces maintain the same look&feel, icons and iteration approach.



EASY OF USE

The new interface has been especially developed and optimized to be immediately used via touch screen. Graphics and icons have been redesigned for user-friendly and comfortable navigation.

ADVANCED ORGANIZATION OF PRODUCTION

CMS Active enables configuring different users with different roles and responsibilities according to the operation mode of the machining center (e.g.: operator, maintainance man, administrator, ...). It is also possible to define the work shifts on the machining center and then survey activities, productivity and events that have occurred in each shift.

ABSOLUTE QUALITY OF THE FINISHED WORKPIECE

With CMS Active the quality of the finished workpiece is no longer jeopardized by worn-out tools. The new Tool Life Determination system of CMS Active sends warning messages when the tool life is running out and recommends its replacement at the most appropriate time.

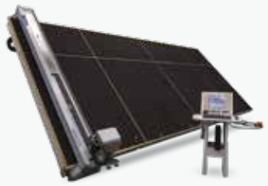
TOOL SET-UP? NO PROBLEM!

CMS Active guides the operator during the tool magazine set-up phase, also allowing for the programs to be run.

THE RANGE OF CMS GLASS TECHNOLOGY FOR GLASS PROCESSING

CUTTING TABLES AND CUTTING LINES

AGIL TR



RUNNER

RUNNER LINE

HORIZONTAL MACHINING CENTERS

ELECTA

SPEED

GEA

MAXIMA

VERTICAL MACHINING CENTERS

TAKTIKA

YPSOS

VERTEC MILL

YPSOS + VERTEC MILL

SEAMING MACHINES

AURA

LOADING SYSTEMS

KART

WATERJET CUTTING AND PRESSURE INTENSIFIER SYSTEMS

EASYLINE

SMARTLINE

PROLINE

AQUATEC

EASYPUMP

JETPOWER EVO

E-PUMP

GCELECT-1025E

Technical data are not binding and may be changed by CMS without prior notice.

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