

2023



# DISCOVER OUR CUTTING-EDGE TECHNOLOGY

**NEW!**



MUCH  
MORE

FICEP  
Almost one century of experience

The secrets of our success  
NEW PRODUCTS

[www.ficepgroup.com](http://www.ficepgroup.com)



FICEP - ALMOST ONE CENTURY OF EXPERIENCE ■

# WHO WE ARE

Through a continuous development which began over 90 years ago, we become the largest producer in the world today of automated systems for the fabrication of structural steel and an one of the most outstanding producers of equipment for the forging industry. Our extensive product range of innovative products and their aggressive penetration of the world market have been achieved by the creation and following consolidation of many subsidiaries all over the world.

## ALMOST A CENTURY OF EXPERIENCE, FORGING OUR WAY INTO THE FUTURE

Our mission is to satisfy the demand of machinery and systems for the high quality processing of metal profiles in the most profitable markets on a global basis, promoting the Ficep brand and trade mark with prestige.

Thanks to our innovative products, attention to service, highly qualified staff and capability to understand the customer processes, we are the leading manufacturer and supplier of complete solutions, providing a complete range of high technology systems for the structural steel construction, metal fabrication and forging industries.

STEEL CONSTRUCTION |

FORGING |



**FICEP** France  
**FICEP** Iberica  
**FICEP** Uk  
**FICEP** Corporation

**FICEP** Hong Kong  
**FICEP** Russia  
**FICEP** Middle East  
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**FICEP** Austria  
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**FICEP** Mexico  
**FICEP** Korea Forge Service

**FICEP** Alger  
**FICEP** Middle East - Dubai Office  
**FICEP** Japan  
**FICEP** India



# MANUFACTURING UNITS

Education, quality and full-service: there are different strategies to become a winner.

## ACADEMY

Ficep Academy represents the tangible symbol of our educational philosophy: we have always been committed to the sharing of competences and know-how, and with this over 3.000 square meters structure can offer a truly unique experience for the users of Ficep's technology.

Ficep Academy aims at providing constant updating in the six training rooms and in the two conference rooms at disposal, where training courses are organized.

## SHOWROOM

Thanks to our permanent show-room of 2.000 m<sup>2</sup> within the Ficep Academy, at our headquarters in Gazzada, we can make machines of all sizes available to all our clients.

To define it dynamic is not just an expression but a real fact: the installed machines, in fact, are fully operating and can execute all the main operations requested by customers in this sector, starting directly from the drawing of the pieces to be produced and carrying out real tests on the machines on show.

It is then possible to perform punching, drilling, marking, scribing, milling, shotblasting, thermal cutting (plasma and oxygen cutting) and shearing operations, all that on the typical workpieces processed in modern structural works, such as angular and flat profiles, plates, beams and tubes.

Located next to the Alps in Varese, Italy, we have dedicated and specialised production facilities. The main location in Gazzada Schianno (Varese, Italy), which comprises over 100.000 square meters, also contains Corporate Headquarters, Research & Development, Academy of Technology, Showroom and the main after sales service departments.

## MANUFACTURING AND ASSEMBLY UNITS

### ANGLE LINES ASSEMBLY PLANT

The Casale Litta plant covers an area of 12.000 square meters and is focused on the assembly of our CNC lines for the processing of angles and plates.

### SAWING LINES ASSEMBLY PLANT

A brand new 6.000 square meters area in Crosio della Valle plant is entirely dedicated to the assembly of sawing equipments.

### WORKING CENTER

In Crosio della Valle, in an area of 6.000 square meters, to which today we added a brand new area of 35.000 square meters, our super modern working centers for the production of small and medium mechanical components are working non-stop seven days a week.



Casale Litta



Crosio della Valle





# REAL AUTOMATION

In today's economy, fabricators are constantly confronted with the limited skilled labor force availability when it comes to the layout and welding required for structural steel fabrication. The FICEP SABRE and E-LEXINGTON, powered by AGT Robotics, in combination addresses the most labor intensive and challenging processes that fabricators are facing in today's market. This powerful combination matches the productivity of 6-8 employees using manual layout and welding.

The SABRE and E-LEXINGTON eliminate manual layout and automate the welding processes of:

- Rolled structural steel shapes
- Fabricated beam sections
- And more

## E-LEXINGTON

For decades the structural steel fabrication industry has been challenged with finding, training and retaining employees to produce accurate layout in a productive manner. The E-LEXINGTON eliminates the need for a layout person to read a drawing, decipher the information, then use a steel tape, square and soap stone to mark the relative surfaces to indicate locations, welding codes and any additional pertinent information.

The E-LEXINGTON in conjunction with CORTEX software, which accepts the CAD data automatically, projects accurately all the required information on the proper surface without manual manipulation of the CAD data. The fitter can then tack weld the appropriate detail on the main member to eliminate all the steps typically associated with manual layout. Material handling is reduced and much of the shop space that was previously required for manual fit-up stations are eliminated enabling enhanced throughput in the existing shop space.

## SABRE

Robotic welding with the SABRE is the second step of this one-two punch to enhanced productivity. The operator of the SABRE is tasked with the loading of the section after the detail has been tack welded at the proper locations into the automated welding positioners. As structural steel is subject to typical rolling tolerances the SABRE automatically senses all the relative surfaces so the robotic welding process can be generated without any manual manipulation.



## KRONOS - AUTOMATION AND DIVERSE PROCESSES INCREASE COMPETITIVENESS

FICEP's gantry style CNC plate processor represents the ideal solution for those firms who want to optimize their productivity and competitive advantage in the market.

The Kronos diverse functionality and automation, with industry leading performance, generates important competitive advantages in terms of:

- The reduction of costs and material handling, since multiple operations are produced on the same work cell
- Total reduction in the complete cycle time and production cost
- Achieving high precision of the final parts and in the reduction of material scrap
- Avoiding errors thanks to the automated scribing

Precision, reliability and a new plasma source allow to obtain the maximum performance, also combined with other models like Gemini.

Kronos is studied to satisfy the requirements of the manufacturers of plates, connection plates, gussets, stiffeners and so on from the raw material to the finished part, executing all cutting processes in a single operation, without handling the material and with the aid of a single operator.

## KRONOS

Structurally, Kronos are heavy-duty gantry lines that offer three different working widths for plates (2,540, 3,100 and 3,600 mm) and a maximum workbench length of 24 metres.

The single-beam gantry can be equipped with different (by number and typology) cutting solutions: depending on the configuration chosen, it is possible to mount up to two plasma torches, two bevel torches or one for each type.

Besides, Kronos can be equipped with a spindle to carry out pre-holes for the successive cutting as well as with up to four oxycutting torches.

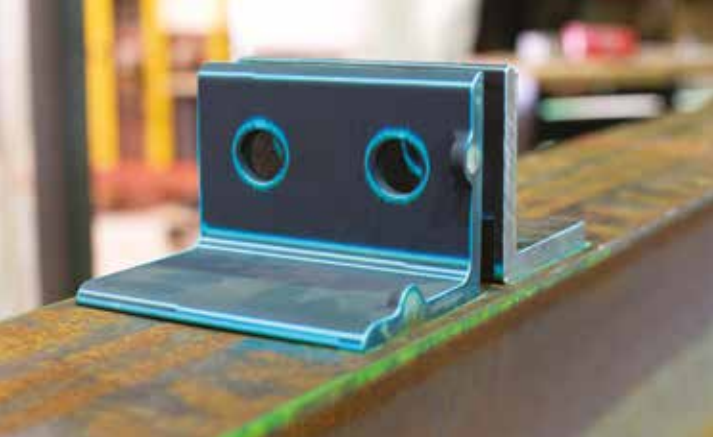


Thanks to the integration between Kronos and Ficep Steel Projects PLM Suite, we can manage the entire production in a fully automatic way, in line with Industry 4.0 concept:

- The piece designed with CAD is automatically imported to generate the CNC program to start the processing
- Steel Projects communicates with the nesting software to optimize the plate processing
- Steel Projects connects the machine with the production office and monitors in real time the production efficiency to constantly optimize the cycle through simple and user-friendly panels.

## POLARIS

The new Polaris HMI developed by FICEP allows the user to optimize the management of the working programs, making this activity easier thanks to the extreme usability of the new dashboards, designed and organized according to the latest and innovative UX logics. The control panel is equipped with a 22" touchscreen flat monitor with innovative design, integrated with main pushbutton and keyboard.





# FICEP NEW TECHNOLOGY

## STEEL CONSTRUCTION

### PLATES



### TIPO G25LGE

#### NEW!

#### AUTOMATIC CNC DRILLING, MILLING AND THERMAL CUTTING SYSTEM FOR LARGE PLATES

The new automatic CNC line TIPO G25LGE for drilling, milling and thermal cutting is a machine designed for the processing of large plates up to 100 mm thick, introducing a number of production innovations and offering a high level of precision and versatility, along with significant ROI optimization:

- New gripper handling system and two carriages to ensure greater precision and capacity for feeding thicker plates.
- New plates contrast base with a vertical sheet metal support that moves transversely to prevent the tool from touching the contrast base, which together with the hold-down, clamps the plates much better than the previous models: less vibration, greater precision, longer tool life.
- Improved kinematics of the unloading table for small parts, that tilts and allows parts separated from the plate to slide underneath the working bench.
- Equipped with the latest Polaris HMI developed by Ficep, which improves machining program management and usability.



### BEAMS



### X3BLADE

#### NEW!

#### AUTOMATIC CNC SINGLE SPINDLE DRILLING, MILLING AND DISC SAWING LINE FOR SECTIONS

The new X3BLADE CNC line for drilling, tapping, milling and cutting with disc blade is capable of processing steel construction beams of different sizes, with sections up to 305x305 on three sides, 450x450 on one side and variable lengths thanks to its modular configuration. It performs complex operations of drilling, countersinking, tapping, milling and cutting with disc blade and is a "universal" machine lending itself also to the machining of light alloy profiles.

The innovative feature of this machine is the ability to perform three-axis machining even on inclined planes, in two different directions. The 5-axis head consisting of two rotating wrists positions the tool virtually anywhere in the working space. In addition, the introduction of the disc blade expands the range of processing that can be carried out without manual intervention: the integration of the blade with the 5-axis head makes it possible to work around the workpiece by intervening on 5 faces.

Through Ficep's Steel Project software, profile nesting can be programmed and optimized, and through the CAM software that generates the ISO program, the working cycle is launched with great ease.

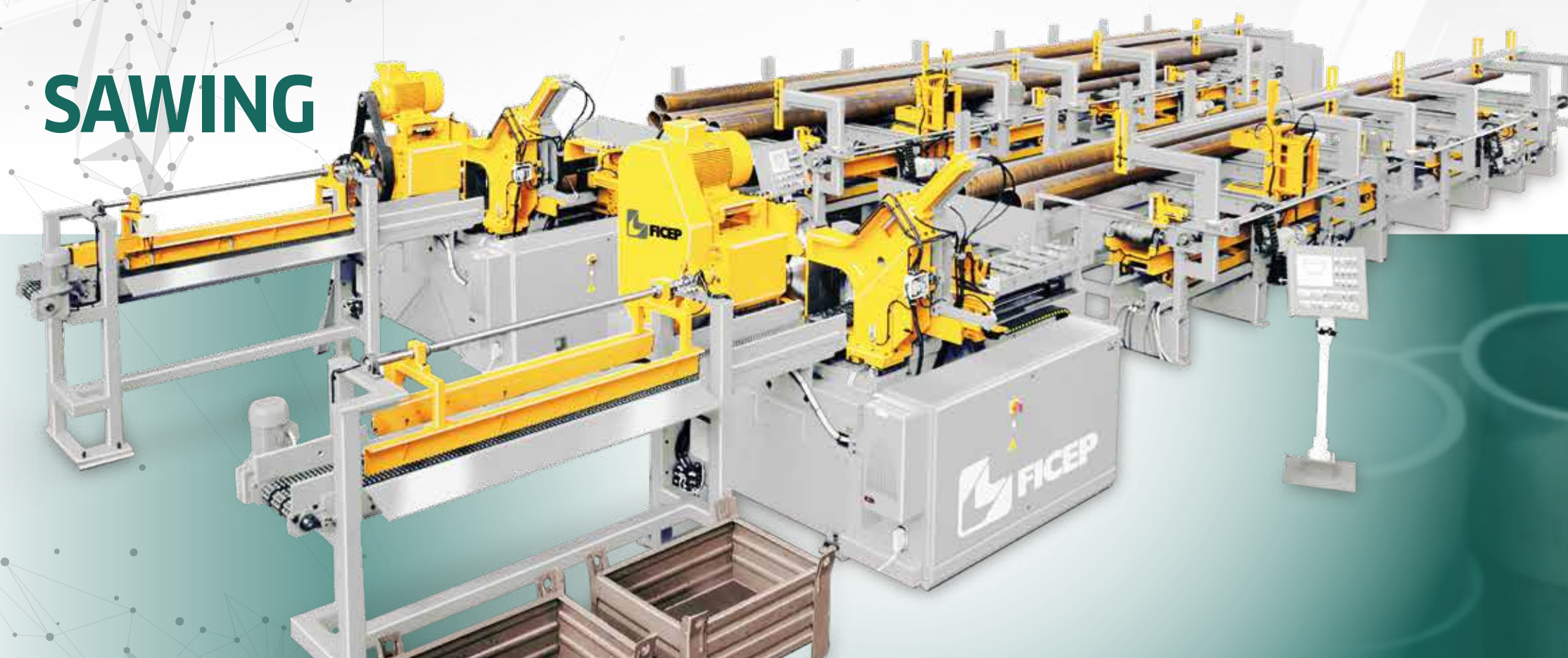




# OUR SOLID TECHNOLOGY

## FORGING

### SAWING


**S30C**


### HIGH SPEED DISC SAWING MACHINE FOR ROUND, SQUARE AND SPECIAL SHAPES PROFILES

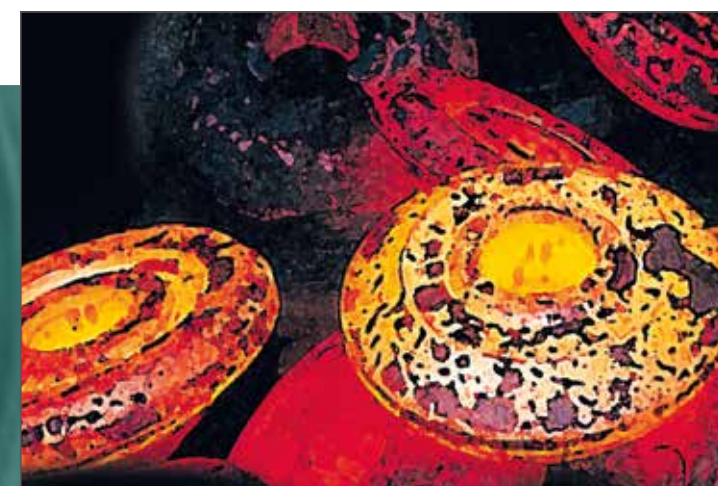
The S30 sawing machine for high-speed cutting of round, square and shaped profiles combines speed, precision, cut quality and ease of set-up: the ideal choice for companies looking to increase productivity (400 pieces per hour for diam. 50 mm and length 100 mm), reduce costs (50% reduction compared to using reground blades) and improve cut quality.

The use of the "carbide tipped" blade compared to conventional HSS blades ensures:

- reduced cutting times, enabling increased overall productivity
- significantly prolonged blade life cycle, thanks in part to the automatic modulation of cutting parameters

The quality of the cut is a key factor: on this aspect, the S30 sawing machine succeeds in high performance by making repeatable, perfectly parallel, flat, burr-free cuts with the correct degree of surface roughness.

### PRESSES


**MF**


### MECHANICAL ECCENTRIC PRESSES

With the addition of the mechanical presses MF, which assure high productivity and precision, we completed our range of presses.

The mechanical presses MF series comes in different variants, distinguished mainly by the nominal force (from 2,500 to 50,000 kN). Ficep engineers eliminated the traditional double reduction-torque kinematic drive and replaced it with a compact planetary system with a transverse flywheel shaft. This provides several design and construction advantages.

On the construction side, there is also an effective modularity of interchange between single-rod solutions (typical of upstream and downstream preforming and deburring operations) and double-rod (typical of large-table molding) with a transverse flywheel shaft.

The planetary system also allows a flywheel-coupled motor or a direct drive to be used, depending on the type of drive chosen. The machine is designed with an inverter-driven asynchronous motor coupled to the flywheel, which allows the available energy and molding speed to be varied.

Adjustment of the height of the mold bed is generally done by a mechanism inside the swing mace keeping the bed fixed. In the MF, things have been reversed, simplifying an expensive and relatively delicate organ such as the sledgehammer adjustment mechanism by moving the adjustment to the mold bed. The result is a more robust mechanism that is easier to maintain.



COME AND  
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**HALL 7**  
**BOOTH B21**



HANNOVER  
GERMANY  
SEPTEMBER 18-23  
**HALL 13**  
**BOOTH C52**



**FICEP S.p.A. - HEADQUARTERS**  
via Matteotti, 21 - 21045 Gazzada Schianno (VA) ITALY  
Tel +39 0332 876111 • Fax +39 0332 462459  
email: [ficep@ficep.it](mailto:ficep@ficep.it) • [www.ficepgroup.com](http://www.ficepgroup.com)

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