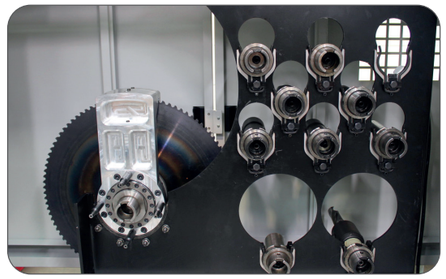
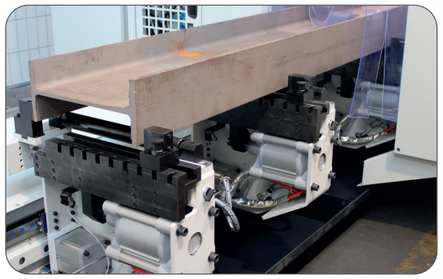


Automatic 11-position tool rack



Special material clamping system

XBLADE key features

- **Modular design**
  The machine features a modular base that facilitates the movement of the frame supporting the Y-axis cantilever structure.
- **Versatile spindle**
  Equipped with a spindle capable of positioning in any direction in space, thanks to double rotating universal head.
- **Movement precision**
  X and Z-axes movements are supported by roller runner blocks and servo motors, ensuring smooth and accurate operation.
- **Advanced command systems**
  XBlade utilizes brushless motors, high precision rack and pinions, and recirculating ball screws command systems for optimal performance.
- **Universal head**
  2 inclined rotary axes, one vertical axis and the other positioned at 45°, both driven by a servo motor, through a belt and pulleys with harmonic gearbox, allowing the positioning of the spindle on double-inclined surfaces.

TECH SPECS

XBLADE Automatic CNC single spindle drilling, milling and cutting line for sections	301 XB5
Section contained in area [min. mm]	30x30
Section contained in area [max. mm]	305x305 - 460x305* *with processing operation possible on 4 sides (datum line side)
Drilling / Sawing heads [no.]	1
Drilling tools per head [no.]	Drilling: 8 Milling: 2 (max. D200) Cutting: 1
Drilling diameter [max. mm]	50
Disc saw diameter [mm]	560
Spindle power [S1 kW]	32
Spindle speed [max. RPM]	3500
CNC axes [no.]	5
Base module mass [kg]	7000
Standard configuration mass [kg]	16000

Please review FICEP's sales terms and conditions and machine tolerances as per specific documentation that can be supplied upon request. All the specifications on this catalogue are merely indicative and not binding for the manufacturer. The raw material mentioned on this catalogue are in accordance with the following standards: UNI EN 10025 for technical conditions; UNI ISO 5679 - UNI ISO 5680 - UNI 5397 - UNI 5398 - UNI EN 10024 - UNI EN 10034 - UNI EN 10279 - UNI EN 10056-1 - UNI EN 10056-2 for dimensional tolerances; UNI EN 1090 for pieces execution tolerances.

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XBLADE

Automatic CNC single spindle drilling, milling and cutting line for sections

Processes

Other section shapes L – U O

Introducing XBLADE, the latest addition to FICEP machine range meticulously crafted by our team of engineers to meet the diverse needs of our customers. This innovative machine is born at the intersection point of advanced technology, versatility, and precision, offering a comprehensive solution for processing small profiles and executing complex operations within a standalone working cell.

Designed to streamline the manufacturing process, XBLADE boasts automated capabilities for drilling, tapping, milling and cutting steel construction beams of various sizes. It effortlessly handles sections up to 305x305 mm, and accommodates variable lengths, ensuring exceptional performance across a wide range of applications.

What makes XBLADE stand out is its versatility and modular configuration, making it an ideal choice for steel fabricators and small metalworking companies. Besides conventional steel construction profiles, it effortlessly tackles profiles not typically associated with the industry, including square tubes and rails, bulbs and light alloys.

One of the standout features of this machine is its ability to execute three-axis machining on double-inclined planes. The innovative double-axis rotary drill head with direct drive electrospindle, allows the machine to position the tool virtually anywhere within the working space with unparalleled precision.

The integration of the disc blade expands the processing capabilities of the machine without the need for manual intervention. By seamlessly combining the blade with the double-axis rotary head, XBLADE enables to work around the workpiece, facilitating operations on five faces with ease.

XBLADE represents a paradigm shift in the metalworking machinery sector, offering unrivalled versatility, efficiency, and precision to meet the evolving demands of modern manufacturing.

Double-axis rotary head

The working head features two rotary axes positioned at a 45° angle, enabling operations on double inclined planes without the need for profiled tools. The head is powered by a robust 32 kW (S1) three-phase asynchronous motor, delivering 100% power to the tool for complex drilling, tapping, and milling operations.

Electro-spindle cutting tool

XBLADE is designed with an innovative cutting tool equipped with a 560 mm diameter disc cutting blade capable of processing all five sides of the profile. A patented system is employed to increase cutting torque, enhancing overall performance.

Automatic tool rack

Equipped with an automatic tool rack featuring eight positions for standard tools, two positions for large tools, and one position dedicated to the 560 mm disc blade.

Section clamping system

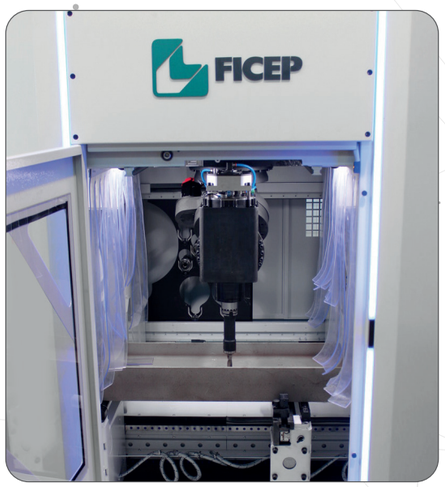
Independently mobile vices can be positioned along the X-axis and locked in place by a pneumatic clamping system. Rollers facilitate the handling of material during processing, allowing the rearrangement of vices.

Compact design

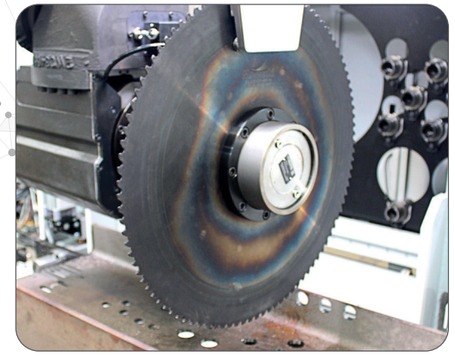
Thanks to the compact design with integrated electrical cabinet, air conditioning, and spindle fluid cooling systems, this configuration optimizes workshop space and requires minimal operator supervision.

Profile nesting

Profile nesting can be programmed and optimized through Ficep XBLADE Office Technology software. The embedded CAM software generates the ISO program, facilitating the launch of the working cycle.



32 kW powerful double-axis rotary universal head



Innovative disc cutting tool

New Polaris FICEP HMI

Open CNC Technology optimizes the integration between CNC and PC with high-speed communication. The connection is made via fiber optic cable, and the input/output modules are connected to the CNC through an I/O Link bus. The operational video interface is integrated into the industrial PC with touch screen and Windows 10 IoT operating system as well as the remote assistance software.
Software features include 2D & 3D display, multi-company/project management, document traceability, production feedback, nesting assistance, batch management, and multi-project nesting.

Some of the main distinguishing features of the Polaris System are its fanless design, which contributes to greater reliability and operational durability, coupled with a high IP65 protection rating, and the 22" LCD display that offers a high-quality, interactive visual experience thanks to capacitive multi-touch technology, which allows users to interact with the system intuitively, enhancing its operational efficiency.

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