

Twin Ferro E

Double-head cutting-off
machines

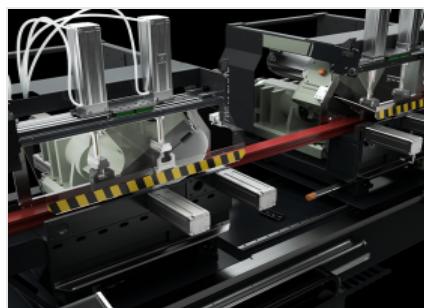


Twin-head cutting-off machine with automatic traverse of the moving head on recirculating ball guides, designed for cutting iron and stainless steel profiles. With its powerful and precise brushless motor, the machine is capable of setting the angular positions of both cutting heads at - 45° / 0° / + 45° in addition to all the angular settings about the vertical axis, with an accuracy on each degree of 240 positions. Traverse of the movable cutting head is automatic and electronically controlled, while it runs on slideways and roller packs such as to ensure the utmost accuracy and rigidity of the machine. Thanks to the increased range of the cutting angle, the movable cutting head can be used as an automatic positioning unit, thereby offering the possibility of machining particularly short workpieces. Optionally it is possible to configure the machine to perform automatic cutting, by programming via software the execution of sequences of push cuts. In this cutting mode there is no need for the operator to remain at the console to keep the two-hands control active.



Heads tilting

Servomotors with encoders provide the tilting of the mobile units, and the relevant positioning is electronically managed and parameterised by the control, which features a simple and intuitive operator interface.



Internal head inclination up to 150° (Optional)

The internal head inclination allows low-tip cutting, which does not require profile thickness measurement in order to determine the workpiece size. The extension of the internal inclination of the heads up to 150° extends the cutting range of the bars to allow the construction of complex structures.



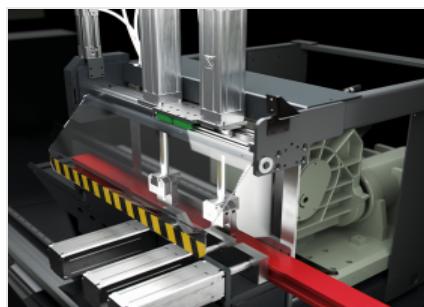
Profile support roller conveyor

Enables correct positioning in the machine and secure support of the profile in the machining area. Slide rollers make profile handling operations easier.



Horizontal vices

The machine has pneumatically-controlled horizontal vices with low pressure device and adjustable terminal, which assure the correct blocking of the profile in the machine.



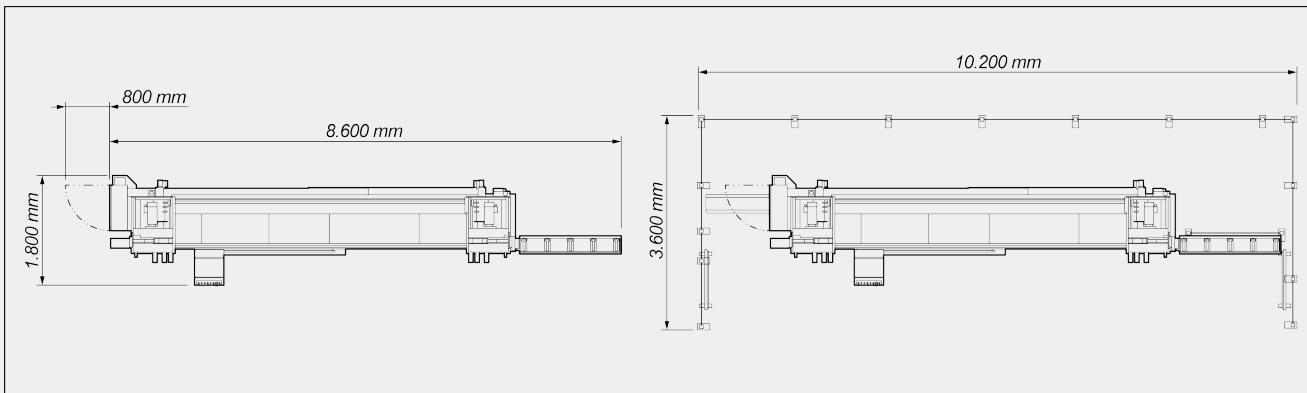
Automatic positioning vertical vices

The machine is equipped with pneumatically controlled vertical vices with a low pressure device. They are automatically placed in 2 fixed positions according to the cutting angle. The vices are moved on guides and recirculating ball bearings, this solution minimises clearances and maximises profile stability.



Control

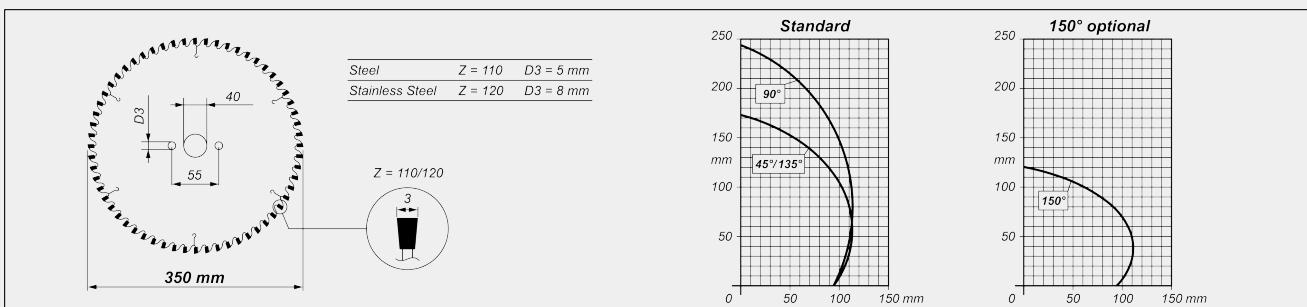
The ergonomic state-of-the-art control panel features a 10.4" touchscreen display and fully customised software and is packed with functions developed in the Microsoft Windows® environment specifically for this machine. The machining cycle can be optimised by creating cutting lists, thereby reducing scrap and cycle times for workpieces loading-unloading. In the case of lists not optimised or programmed by the operator, it allows the optimisation of the cut to be performed directly on the machine.

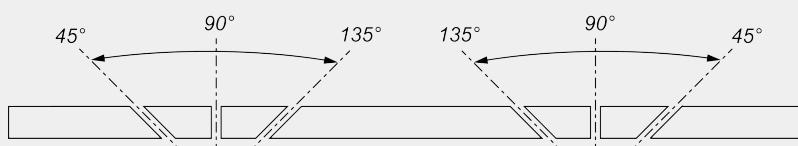
TWIN FERRO E / DOUBLE-HEAD CUTTING-OFF MACHINES
LAYOUT


The overall dimensions may vary depending on the product configuration.

MACHINE CHARACTERISTICS

Electronic control of the X axis	●
X axis positioning speed (m/min)	25
Blade diameter in HSS (mm)	350
Maximum external inclination	45°
Maximum internal inclination	135°
Push automatic cut with variable angles and lengths	○
Max. machinable length (mm)	5.200
Minimum cutting length at 90°/45° with EXTRA software (mm)	320
Ability to cut with blade at 45° (by using specific counterblocks) (mm)	95 x 110
Electronic profile thickness gauge	○

CUTTING DIAGRAM


CUTTING UNIT TILTING


Electronic adjustment of intermediate angles

BRUSHLESS BLADE MOTOR

Brushless blade motor + drive	●
Brushless blade motor power (kW)	5,7
Blade rotation speed with brushless blade motor (rpm)	15 ÷ 85
Brushless blade motor cutting speed (m/s)	0,3 ÷ 1,6

LUBRICATION SYSTEM

Blade lubrication system with minimum quantity oil lubrication	●
Continuous water lubrication system	○

PROFILE POSITIONING AND CLAMPING

Vertical vices	2
Horizontal vices	3
Horizontal clamps on version with 150° cutting	2
Roller conveyors	●

Included ● Available ○