

Quadra L0 Machining centre



Bar feed system

01 Ur



Unloading magazine

02



CNC 13-axis machining centre, built for milling, drilling and cutting aluminium profiles and light alloys. Optionally it may be equipped with an end milling module. QUADRA L0 is an automatic magazine with a thrust-feed system for profiles up to 7,500 mm, complete with gripper movement to block the profile. Thanks to the movement of the gripper, the feeder returns to the start position allowing the loader to prepare the next profile at the same time. The milling module, the cutting module and the optional end milling module are located in the central area of the machine. There are 4 electrospindles installed on the CNC 4-axis milling module which allow working on the whole edge of the workpiece, whichever way it faces. The cutting module is equipped with a Ø 350 blade with CNC 3-axis horizontal movement. The optional end milling module operates on two CNC axes by means of a group of cutting units. QUADRA L0 also includes an automatic ejector to transfer the workpiece from the cutting unit to the unloading magazine. The unit is composed of a transverse belts magazine to unload machined workpieces of up to 4000 mm in length (optional 7500 mm). The machining unit is equipped with a sound-proof cabin in the central operating part, which, besides protecting the operator, reduces the environmental noise impact.

Milling unit







The images are only given for illustrative purposes

End milling module (optional)

04



05

Quadra L0

Machining centre

01

Bar feed system

Numerically controlled, high precision and high speed bar positioning system. The system is complete with a gripper to block the profile with automatic horizontal and vertical position adjustment on two CNC axes. To guarantee that each type of profile is grasped with no manual intervention, the numerical control of the gripper slewing axis is also available, which is otherwise handled manually. The belt loading storage system is used for loading profiles with length of up to 7.5 m. If required, during loading and unloading, an optional tipping system can automatically rotate the workpiece by 90°. workpiece by 90°.

Unloading magazine

02

Belt magazine for unloading and storing large capacity finished workpieces. Available in two versions: for processed workpieces up to 4 m in length and, alternatively, workpieces up to 7.5 m. The unloading magazine is preceded by a swarf and short cut extraction system which can be optionally equipped with a conveyor belt and a lifting belt to the collection bag.

03 Milling unit

The core and value of the QUADRA L0 lie in its rotating base machining section, complete with 4 machining units that are controlled and can be controlled and can be interpolated on 4 axes: X, Y, Z, A (360° slewing around the axis of the bar). The machining units are fitted with air-cooled high-frequency electrospindles, ER 32 toolholder, with power up to 5.6 kW in S1. Each machining unit can be equipped with an area disengagement system by disengagement system, by means of recirculating ball slides to increase the working capacity.

04 **Cutting module**

Single-head cutting-off machine with a machine with a numerically controlled descending 350 mm blade and a cutting range: -45° to +45°. The setting of any cutting angle is fully automatic and CNC controlled.

05 End milling module

End milling unit with cutter unit with variable rotation speed up to 8,000 rpm. With quick cutter unit tool change with pneumatic control. Interacts with the horizontal cutting-off machine, with which it shares the support beam.

The three cutting and end milling modules are used to offload rejects into a trap door, which can be fitted optionally with a steel evacuation belt.









Camplus

Shape

.loh	
JUD	



Supervisor

AXES TRAVELS	
X AXIS (longitudinal) (mm)	320
Y AXIS (transversal) (mm)	402
Z AXIS (vertical) (mm)	395
A AXIS (rotary base slewing)	0° ÷ 360°
U AXIS (bar positioning) (mm)	9,660
V AXIS (gripper transversal positioning) (mm)	138
W AXIS (gripper vertical positioning) (mm)	138
C1 AXIS (gripper slewing) (optional)	0° ÷ 180°
B AXIS (ejector) (mm)	790
MILLING UNIT	
Electrospindle slewing unit on rotary base	0 ÷ 360°
Electrospindles with air cooling	4
Maximum number of machining units	4
Toolholder for quick tool change (WELDON)	0
Maximum power in S1 (kW)	5.6
Maximum speed (rpm)	24,000
Toolholder	ER 32
CUTTING UNIT	
Widia blade (mm)	350
CN blade positioning	-45° ÷ +45°
Blade motor power (kW)	0.85
Maximum rotation speed (rpm)	3500
FUNCTIONS	
Workpiece milling, drilling and cutting directly from the entire profile	٠
WORKABLE SIDES	
Number of sides (upper, lateral, lower)	1 + 2 + 1

2018/08/01

The images are only given for illustrative purposes

www.emmegi.com