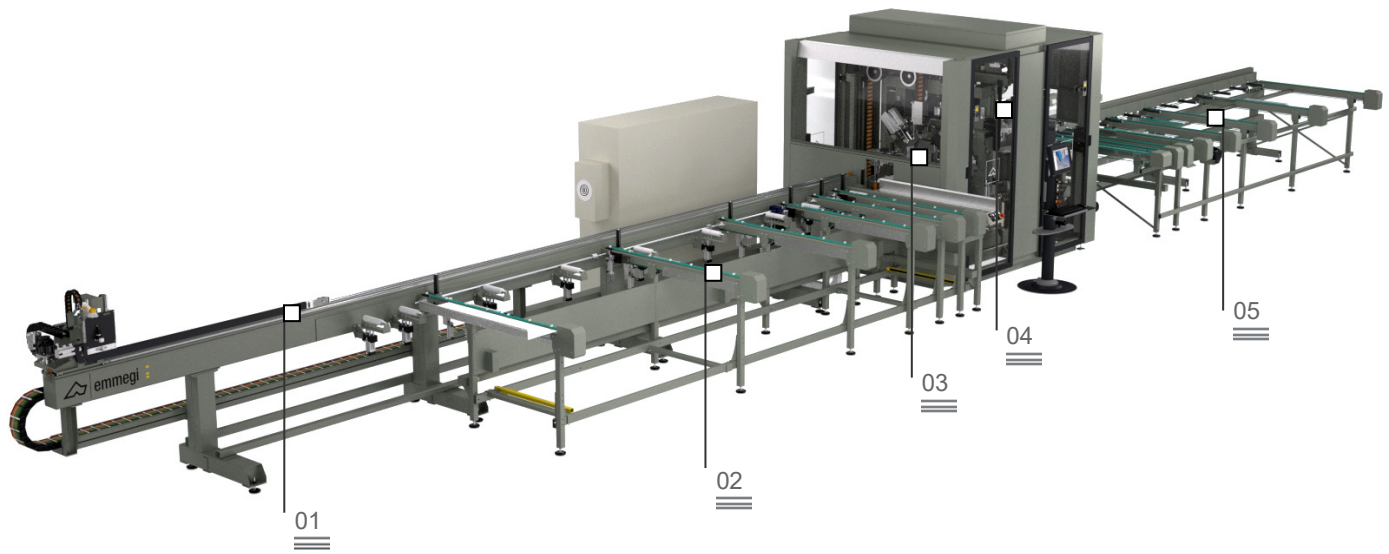


# Quadra L1

## Machining centre

Bar positioning 01

Load storage system 02

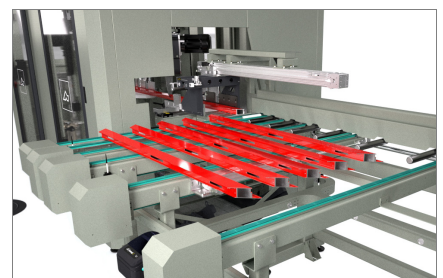
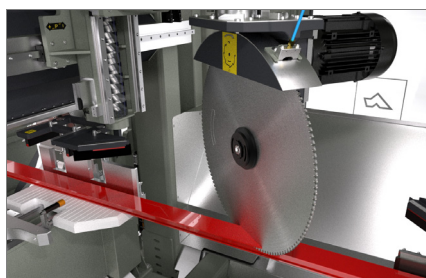
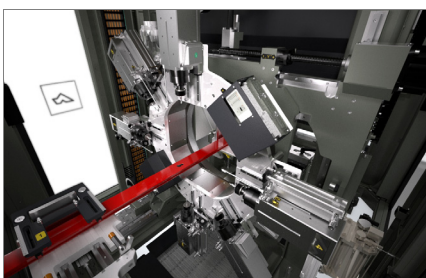


CNC 12-axis machining centre, built for milling, drilling and cutting aluminium profiles and light alloys. QUADRA L1 is an automatic storage system with a thrust-feed system for profiles up to 7,500 mm, complete with gripper movement to block the profile. Thanks to the movement of the gripper, the feeder returns to the start position allowing the loader to prepare the next profile at the same time. The milling module and cutting module are in the central part. There are from 4 to 6 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 made up of a  $\varnothing$  600 mm downstroke blade on three CNC axes. QUADRA L1 also includes an automatic stripper from the cutting unit to the discharge storage system. The unit is made up of a transversal belt storage system to discharge machined workpieces up to 4,000 mm long (7,500 optional). The work 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 03

Cutting module 04

Discharge storage system 05



The pictures are provided by way of illustration only

# Quadra L1

## Machining centre

### 01 Bar positioning

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 CN 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.

### 02 Load storage system

Belt storage system to load large capacity profiles, available in a basic version for bars that do not exceed 60 kg and in an optional reinforced version for bars up to 120 kg. Max bar length: 7.5 m. In certain conditions, the profiles can be loaded while the machine is working, with respect to the positioning system. If necessary, during loading and discharge, an optional tilting system can automatically rotate the workpiece 90°.

### 03 Milling unit

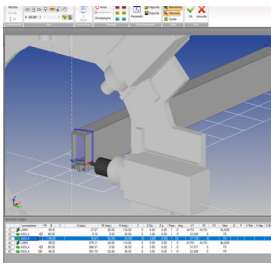
The core and value of the QUADRA L1 lie in its rotating base machining section, complete with 4 or 6 work units that are controlled and can be interpolated on 4 axes: X, Y, Z, A (360° slewing around the axis of the bar). The work units are fitted with air-cooled high-frequency electrospindles, ER 32 tool connector with power up to 5.6 kW in S1. Each work unit can be equipped with an area disengagement system, by means of recirculating ball slides to increase the working capacity.

### 04 Cutting module

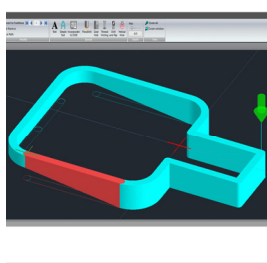
Single head cutting-off machine with a numerically controlled descending 600 mm blade and a wide cutting range: -48° to 245°. The setting of any cutting angle is fully automatic and CNC controlled.

### 05 Discharge storage system

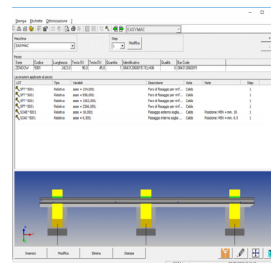
Belt storage system to discharge and store large capacity finished workpieces. Available in two versions: for processed workpieces up to 4 m in length and, alternatively, workpieces up to 7.5 m. The discharge storage system is preceded by a chip and short cut extraction system which can be optionally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



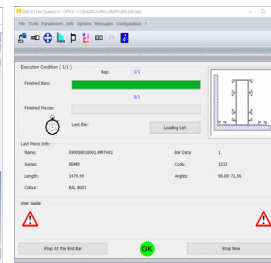
Camplus



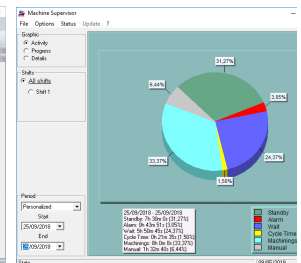
Shape



Job



Drill



Supervisor

#### AXES TRAVEL

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 (grripper transversal positioning) (mm)	138
W AXIS (grripper vertical positioning) (mm)	215
C1 AXIS (grripper slewing) (optional)	0° + 180°
H AXIS (cutting unit vertical movement) (mm)	627
P AXIS (cutting unit transversal movement) (mm)	880
B AXIS (ejector) (mm)	790

#### MILLING UNIT

Electrospindle slewing unit on rotary base	0 + 360°
Air cooling electrospindles	4
Maximum number of machining units	6
Disengagement from the work field of the electrospindles by means of recirculating ball slides	○
Maximum power in S1 (kW)	5,6
Maximum speed (rpm)	24.000
Tool connector	ER 32

#### CUTTING UNIT

Carbide-tipped blade Ø 600 mm	●
Cutting angles	-48° + 245°
Three-phase blade motor power (kW)	3
Preparation for automatic start-up of chip exhauster	●

#### OPERATION

Workpiece milling and cutting directly from the entire profile	●
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#### WORKABLE SIDES

Number of sides (upper, lateral, lower)	1 + 2 + 1
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