

Quadra Production system



Bar positioning



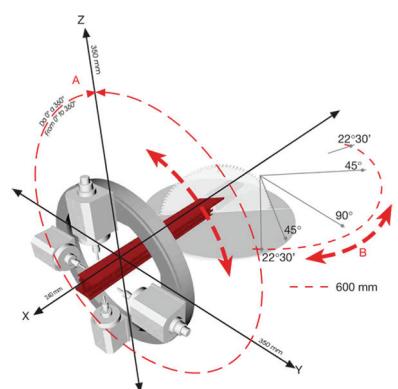
Loading magazine

01

02

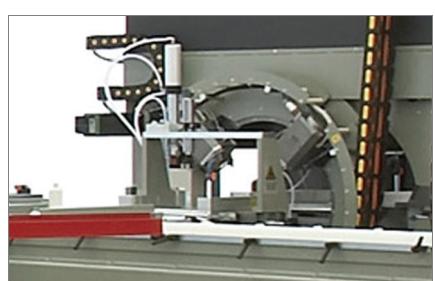


Complete 6-axis CNC machining centre, designed for milling, drilling, thread-cutting and slotting operations on bars or workpieces made of aluminium, PVC, light alloys in general. It is provided with an automatic magazine for feeding unmachined bars to the system without requiring operator attendance. The 4-axis CNC milling module with 4 electro-spindles, located in the centre, is able to machine along the entire contour of the workpiece regardless of its orientation. The N/C cutting module with continuous rotation allows cutting angles in the range $22^{\circ}30'$ and $157^{\circ}30'$ with rising blade dia. 600 mm. The final part of the system consists of a storage unit for finished parts with cross-belt conveyor. The central operating part is provided with a sound-damped enclosure which, besides protecting the operator, also allows reducing the environmental noise impact.



Milling unit

03



Cutting unit

04



Unloader/storage unit

05



Quadra

Production system

01

Bar positioning

High speed, precision N/C bar positioning system. The system is complete with gripper for clamping the profile (gripper position adjustment is manual; optionally it can be with N/C).

02

Loading magazine

Profile loading magazine with large capacity: 20 bars with max. width 100 mm or 10 bars with max. width 200 mm; max. bar length: 7.5 m; Feed movement towards the profile positioning system is with pilgrim step mechanism.

03

Milling unit

An innovative work area on a rotary base complete with 4 milling heads controlled and interpolated on 4 axes, namely: X, Y, Z, A (360° rotation about the bar axis); axis travel: X=240 mm, Y=350 mm, Z=350 mm, A=360°; the milling heads can be equipped with water-cooled, high frequency electro-spindles, tool taper ISO 25, with power rating at to 4.5 KW at 28,000 rpm.

04

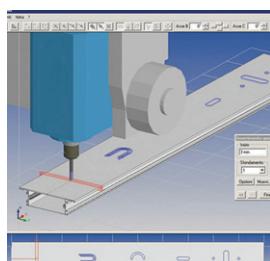
Cutting module

N/C rising blade single head cutting-off unit provided with 600 mm blade and wide cutting range: from 22° .30 to 157° .30'. Setting of all cutting angles is fully automatic and handled by the N/C

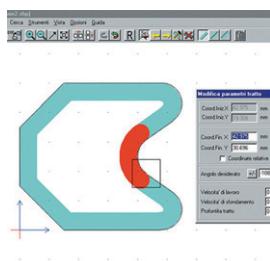
05

Unloader/storage unit

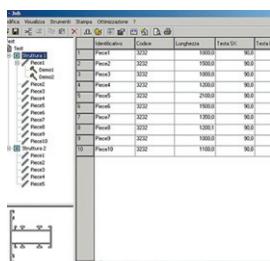
Unloader and storage unit for finished parts with large capacity: two versions are available: workpiece length up to 4.0 m or else workpiece length up to 7.5 m; the unloader/storage unit is preceded by a scrap removal/disposal system.



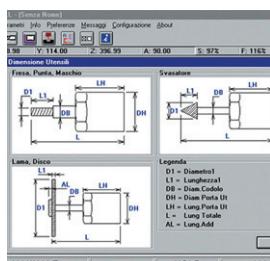
Campus



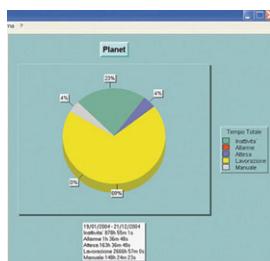
Shape



Job



Drill



Supervisor

AXIS TRAVEL	
X AXIS (longitudinal)	240
Y AXIS (cross)	350
Z AXIS (vertical)	350
A AXIS (workpiece rotation)	$0^\circ / 360^\circ$
U AXIS (bar positioning)	9500
POSITIONING SPEED	
X AXIS (m/min)	30
Y AXIS (m/min)	30
Z AXIS (m/min)	30
A AXIS ($^\circ$ /min)	2250
U AXIS ($^\circ$ /min)	80
ELECTRO-SPINDLE	
Max. power rating (S1) (kW)	4,5
Max. speed (rpm)	28000
Tool taper	ISO 30
Water cooling with external chiller unit	