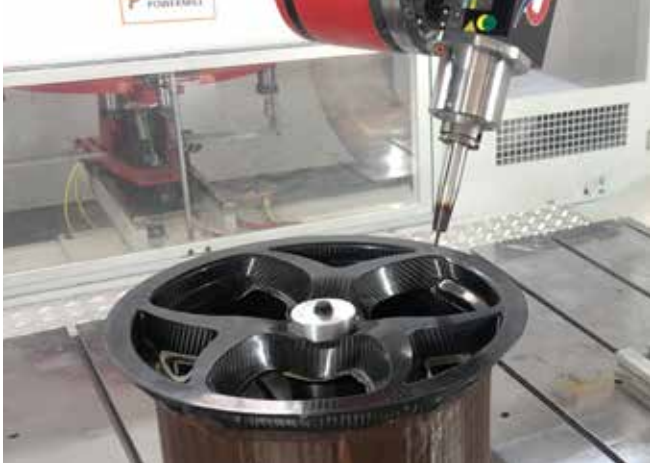
FLU SERIES



THE COMPACT AND FLEXIBLE SOLUTION FOR THE PROTOTYPING AND MANUFACTURING OF PATTERNS & MOULDS AND TOOLING BOARDS RESINS.

Workable materials*

TOOLING BOARDS RESINS
100 %

COMPOSITES
90 %

LIGHT ALLOYS
70 %

TECHNICAL PLASTIC
70 %

PLASTICS
30 %

* Efficiency indicators by material

Belotti FLU Series is the **ideal technology for 5-axis high-speed milling of resin patterns, aluminium moulds,** and for **trimming composite materials.** This Series has a sturdy, monolithic or double shoulder structure, specially designed to dampen vibrations as well as to assure maximum rigidity and total stability when high-volume operations are requested.

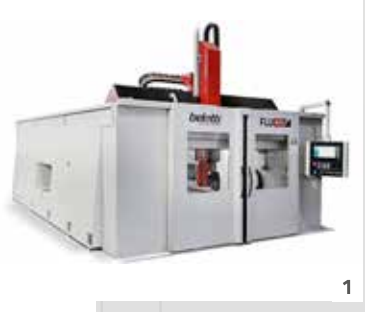
The high-speed processing provides a **significant reduction in cycle times**, while the single-shoulder machining units - HP or HP2 models – **enhance the milling accuracy with top-quality finishes.**

The special structure allows total accessibility to the work area: both dimes and heavy pieces can be loaded with a forklift or an overhead crane.

FLU machining centers can be customised with different work tables, safety enclosures, and advanced accessories (i.e. extruder for additive manufacturing, ultrasonic cutting system) according to the production needs.

Main accessories

- High Performance head (HP) made of cast iron to ensure high standards of rigidity and temperature stability
- High Performance 2 head (HP2) equipped with special features to decrease vibrations and increase the rigidity of the head itself [4]
- Linear scales
- Dust suction grids with dedicated extraction unit
- Total enclosure with fixed or moving roof [2]
- Upper rolling shutter [3]
- Cooling liquid system with chip conveyor [5]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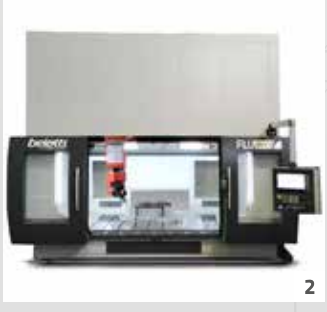
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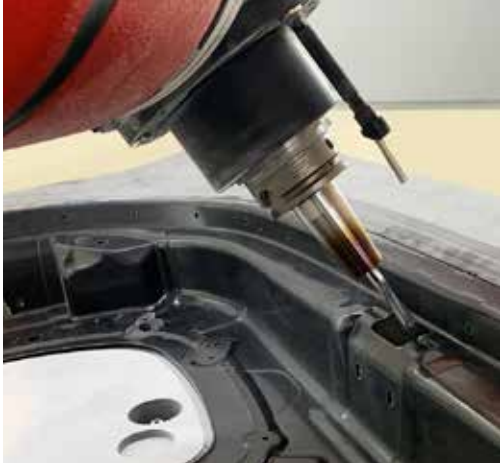
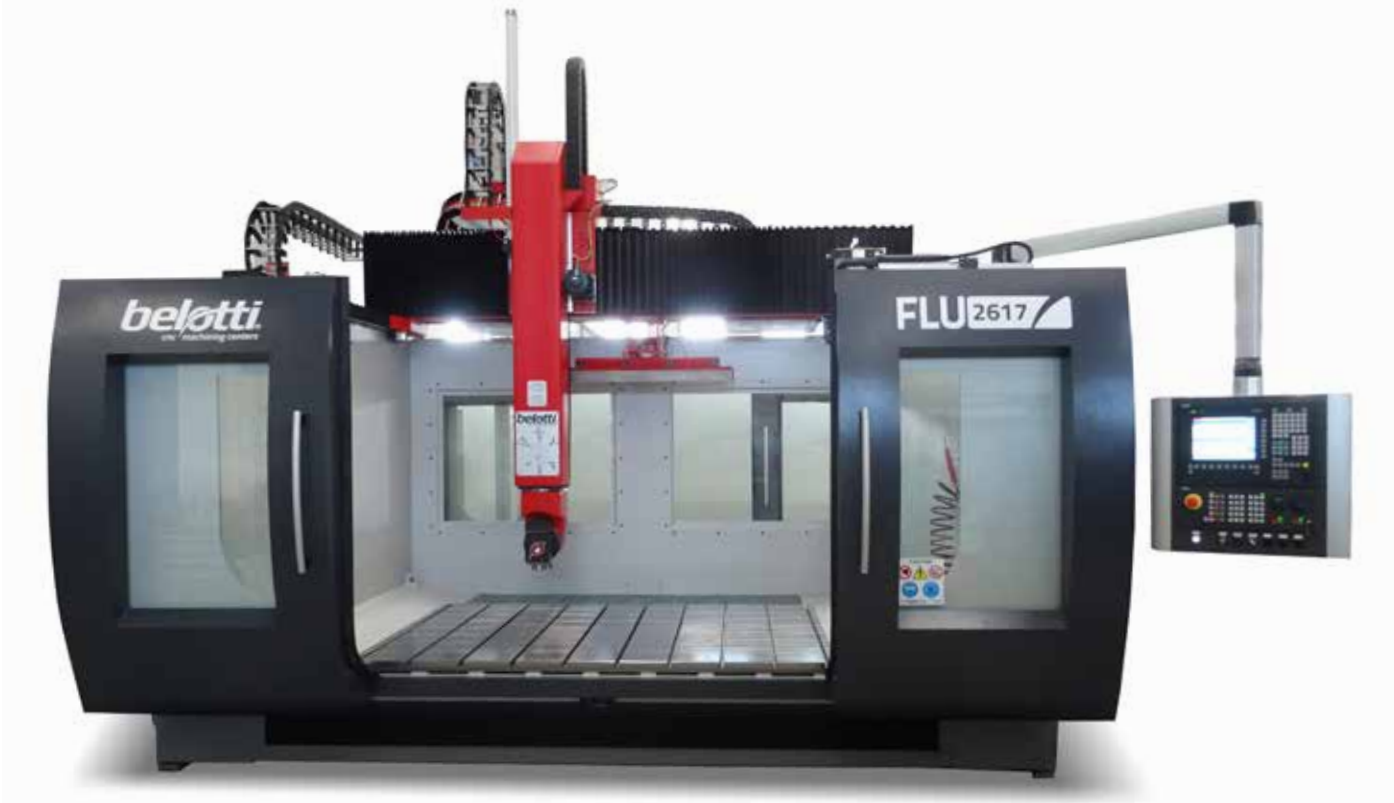



Application sectors



Technical features

Axis	X	Y	Z	C	A
Stroke	2,6/4 m	1,7/1,8/3,2 m	1/1,3 m	+/- 270°	+/- 120°
Speed	80 m/min		60 m/min	44 rpm	40 rpm
Spindle	From 15 kW up to 22 kW at 24.000 rpm max.				
CNC	Fanuc, Heidenhain, Siemens				
Tool changer	From 8 to 60 positions, also with exchange arm				
Linear accuracy	≤ 0,02 mm/m for linear axes				
Rotary accuracy	+/- 12 arcsec for rotary axes				
Measurement system	Linear scales, 5 microns resolution				
Combined technologies	Ultrasonic cutting system | Additive manufacturing				