SKY SERIES

THE BEST VERSATILE SOLUTION WITH THE HIGHEST DEGREE OF ACCURACY FOR MACHINING LIGHT ALLOY PATTERNS & MOULDS AND COMPOSITES PROTOTYPES.

Workable materials*

LIGHT ALLOYS
100 %

COMPOSITES
70 %

TOOLING BOARDS RESINS
50 %

* Efficiency indicators by material

Belotti SKY 5-axis CNC center is designed to mainly satisfy the specific applications of the automotive and aerospace industries.
SKY Series is the ideal solution for:

- **milling patterns & moulds** in **aluminium** and **composite materials;**
- **milling resin prototypes** for design centers;
- **trimming structural components** in **composite materials.**

This Series has a **monolithic structure, thermally stabilized to increase machining precision and stability over time**, while the axis movement is managed by screw balls. The Belotti patented fork head, compact and rigid, is equipped with torque motors and hydraulic locking brakes on the rotary axes, which guarantee a higher degree of surface finish during the simultaneous machining of the linear axes interpolated with rotary axes A and C.

The total protection enclosures, the vision cameras in the spindle housing for work-cycle and unattended machining monitoring, the suction system with motorized hood, and the cooling liquid system with filters and chip conveyor for aluminium high-volume processing (also available in the special version for composite materials), are additional features that ensure excellent operator safety and working enviroment cleanliness.

Main accessories

- Fork head with torque motors [2]
- Dust suction grids with air ducting and requalification
- Suction hood [3]
- Total enclosure with moving roof [1]
- Upper rolling shutter [5]
- Cooling liquid system with chip conveyor [4]
- Temperature control system

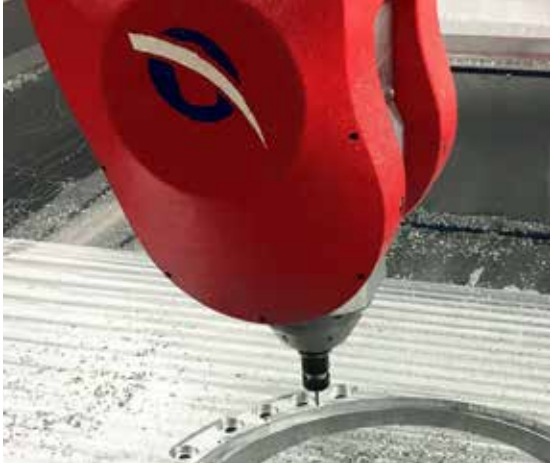

1


2


3


4


5



Application sectors

Technical features

Axis	X	Y	Z	C	A
Stroke	2,6/3,6 m	1,7/2,2/3 m	1,3 m	+/- 360°	+135° / -110°
Speed	50 m/min		30 m/min	60 rpm	60 rpm
Spindle	From 22 kW up to 42 kW at 24.000 rpm max.				
CNC	Fanuc, Heidenhain, Siemens				
Tool changer	From 18 to 200 positions				
Linear accuracy	≤ 0,010 mm/m for linear axes				
Rotary accuracy	+/- 10 arcsec for rotary axes				
Measurement system	Linear scales, 5 micron resolution				
Combined technologies	Ultrasonic cutting system | Additive manufacturing				