



## COMPACT AND FLEXIBLE SOLUTION FOR COMPOSITE AND ALUMINUM



- Monolithic structure to enhance accuracy during high-speed milling operations and long-lasting stability.
- Particular design suitable for **easy access of the total working area** with over-head crane.

# **APPLICATIONS**

High-speed milling and trimming of composite materials as well as machining of aluminum patterns and molds, constantly guaranteeing high performances.

**AUTOMOTIVE & MOTORSPORT** - Carbon fiber and fiberglass **PATTERN AND MOLDS** - Aluminum, resins and styling clay **DESIGN AND FURNITURE** – Composites and plastic materials

Axis	Х	Υ	Z	С	А		
Stroke	2,6 /4,0 m	1,7/3,2 m	1,0 /1,3 m	540°	+/- 120°		
Speed	80 m/min		60 m/min	44 rpm	40 rpm		
Spindle	From 15 kW up to 22 kW at 28.000 rpm maximum						
CNC	Siemens 840D, Heidenhain TNC640, Fanuc 31iB5, Osai Open M						
Tool Change	From 8 to 30 Positions						
Linear accuracy	Less than 0,03 mm/m for all linear axis						
Rotary accuracy	+/- 12 arc sec for rotary axis						
Measurement System	Heidenhain linear scales 5 microns resolution						















# **FLU**2617



### **MAIN FEATURES**

#### **CNC**

Siemens Sinumerik 840 D Solution Line with handheld terminal HT8 and Spline function

#### **TABLE**

Steel table with T slots 22mm H12.

#### **HEAD**

HP2 Performance head equipped with 15 kW electrospindle HSK A63 at maximum 20.000 rpm, Heidenhain direct drive encoder and rotary axis pneumatic locking system

#### **TOOL CHANGER**

18-position carousel

#### **ENCLOSURE**

Perimeter enclosure with manual upper rolling shutter

#### **MEASURING SYSTEMS**

SDS System, 3D measuring probe RMP60 set up

#### **OTHER EQUIPMENTS**

Spray mist cooling system; Heidenhain linear measuring system; 30-position chain tool changer; 22 kW electrospindle at maximum 24.000 rpm and direct drive encoder; high or low pressure liquid coolant systems



belotti







Carbon fiber machining

Resin model milling

Aluminum machining

Wet carbon fiber machining with coolant

Carousel tool change 18/24/30 pockets

TECHNICAL FEATURES									
AXIS	TYPE	STROKE	POSITIONING PRECISION	REPEATABILITY	SPEED				
X	Linear / rack and pinion	2.600 mm	0,025 mm	0,015 mm	80 m/min				
Υ	Linear / rack and pinion	1.700 mm	0,020 mm	0,012 mm	80 m/min				
Z	Linear / rack and pinion	950 mm	0,016 mm	0,01 mm	60 m/min				
С	Rotary	+/-270°	24 arcsec	12 arcsec	44 rpm				
А	Rotary	+/-120°	24 arcsec	12 arcsec	40 rpm				