

NESTING

The 3-axis compact Series for machining aluminium and plastic materials plates



COMPACT,
FLEXIBLE
AND HIGHLY
PRODUCTIVE

NESTING

Belotti NESTING Series is the ideal solution to machine and nest even small and detailed pieces out of a single aluminium or technical plastic plate, up to 50 mm thick. The NESTING Series is an automated and highly flexible technological solution, developed to meet the demands of several sectors: packaging, mechanical industry, checking fixtures, automotive and aerospace.



WATCH THE VIDEO

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The minimum footprint configuration combined with the high dynamism of the milling head, guarantee **maximum quality of the machined surfaces, high productivity and optimization of the material.**

Belotti NESTING cnc centers are designed to operate in **unattended mode** during the entire cycle-time, allowing a **significant reduction in operator-cost** and a **high return on investment (ROI).**

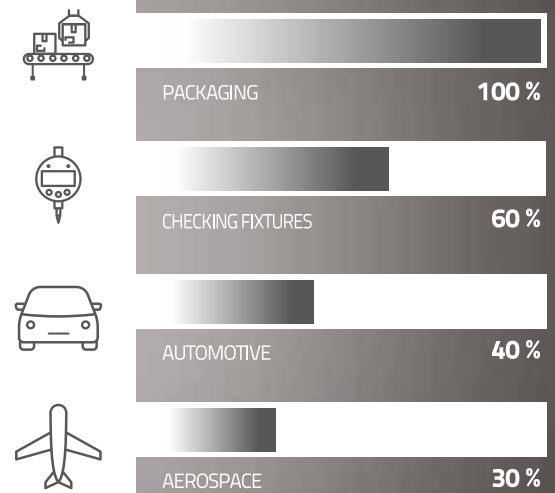


Workable Materials*



*Efficiency indicators by material

Application sectors



FEATURES AND ADVANTAGES



TOP FEATURES

- Compact and monolithic structure made of heat-treated welded steel and provided with double guideways at 90°, in order to increase rigidity and sturdiness
- Aluminium vacuum table with MDF panel, especially designed for machining large and small size aluminium plates, and equipped with vacuum clamping device
- 3-axis electronically controlled machining head equipped with suction system
- Minimum quantity lubrication system (MQL) located in the rotating joint, highly recommended for aluminium machining
- "Easy Programming", the CAM/CNC plug-in developed by Belotti for easy managing 2D geometries and complex machining operations

ADVANTAGES

- SET-UP TIMES AND COSTS REDUCTION: the machine is delivered already assembled, speeding up handling and positioning operations
- HIGH FLEXIBILITY AND CUSTOMIZATION OF CONFIGURATIONS
- OPTIMIZATION OF PROCESSING TIME-CYCLE, MATERIAL and ENERGY CONSUMPTION
- SIGNIFICANT REDUCTION IN OPERATOR COST thanks to the capacity to work in unattended mode
- MAXIMUM SPEED AND PRECISION during the machining of even small pieces (with thickness up to 50 mm)
- CLEANING AND SAFETY OF THE WORKING AREA thanks to the suction hood in contact with the working surface and with localized extraction flow

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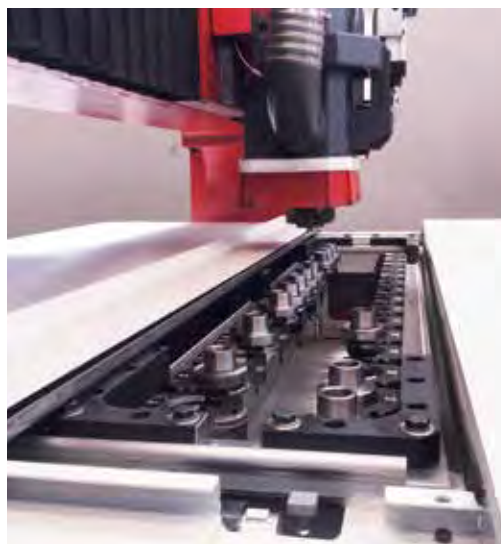


MAIN OPTIONS

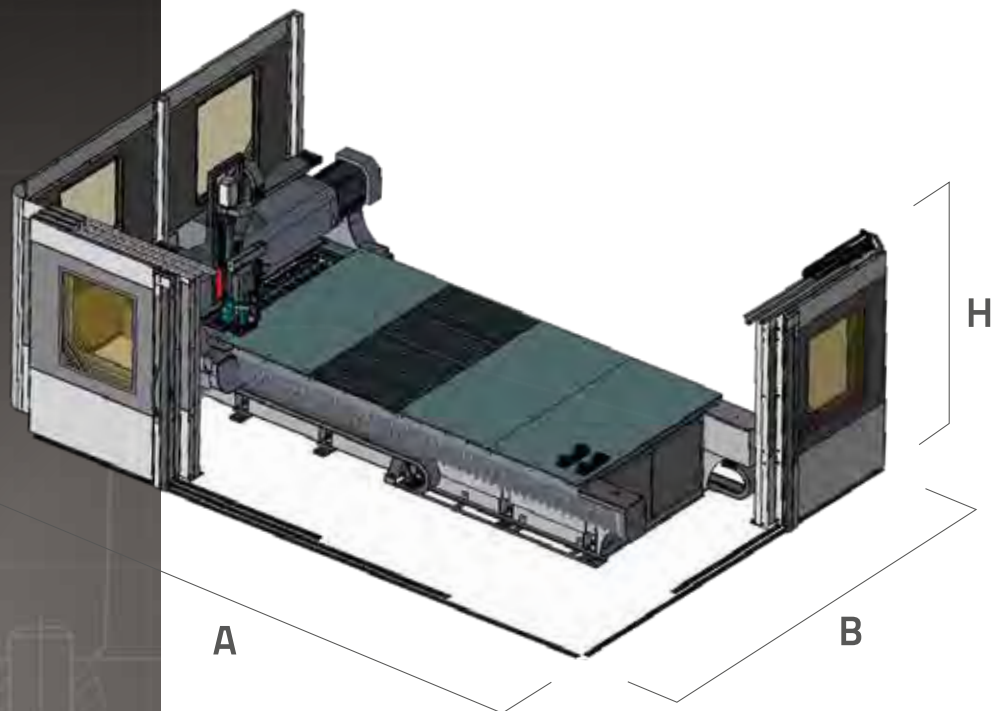
- Special table for nesting small pieces (equipped with Vilmill® protective film)
- Vertical aluminium table
- Tool changer up to 30 positions
- Perimeter protection
- "MyB" Suite for the remote management and the integration of the cnc center within the factory environment



SCAN THE QR CODE
TO DOWNLOAD THE
"MYB" SUITE
BROCHURE



TECHNICAL DATA



CONFIGURATION

Electrospindle	From 15 kW up to 22 kW From 18.000 up to 24.000 RPM.
CNC	Fanuc, Siemens
Tool changer	From 11 to 30 positions
Technologies	Vertical table
Enclosure	Perimeter / On board
Panels	<ul style="list-style-type: none"> ▪ Aluminium vacuum table with MDF panel ▪ Aluminium vacuum table ▪ Aluminium vacuum table with T-slots ▪ Resin vacuum table

DIMENSIONS

Models	3016	3020	3025	4016	4020
A (length)	5.780	5.780	5.780	6.780	6.780
B (depth)	3.320	3.720	4.220	3.320	3.720
H (height)	3.800	3.800	3.800	3.800	3.800

Measures are expressed in mm

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STROKES – SPEED – ACCURACY

Models	Axes	Strokes (mm)	Speed	Positioning precision	Repeatability	Circularity of interpolation
3016	X	3,050	80 m/min	0,040 mm	0,018 mm	≤ 0,020 mm/m (diam. 60 mm on X/Y, feed rate 3.000 mm/min)
	Y	1,650	80 m/min	0,020 mm	0,011 mm	
	Z	450	30 m/min	0,015 mm	0,011 mm	
3020	X	3,050	80 m/min	0,040 mm	0,018 mm	
	Y	2,000	80 m/min	0,025 mm	0,014 mm	
	Z	450	30 m/min	0,015 mm	0,011 mm	
3025	X	3,050	80 m/min	0,040 mm	0,018 mm	
	Y	2,550	80 m/min	0,034 mm	0,016 mm	
	Z	450	30 m/min	0,015 mm	0,011 mm	
4016	X	4,100	80 m/min	0,052 mm	0,026 mm	
	Y	1,650	80 m/min	0,020 mm	0,011 mm	
	Z	450	30 m/min	0,015 mm	0,011 mm	
4020	X	4,100	80 m/min	0,052 mm	0,026 mm	
	Y	2,000	80 m/min	0,025 mm	0,014 mm	
	Z	450	30 m/min	0,015 mm	0,011 mm	



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