

# 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).**

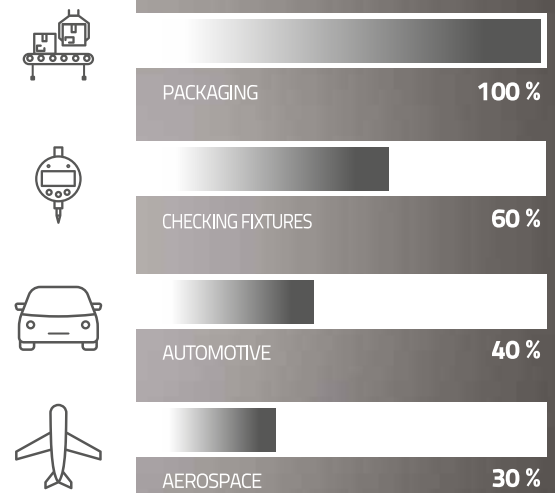


## Workable Materials\*



\*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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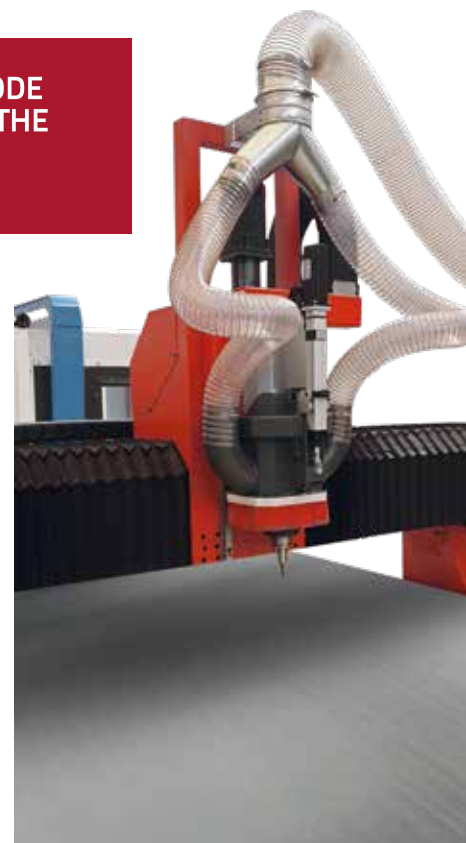


## MAIN OPTIONS

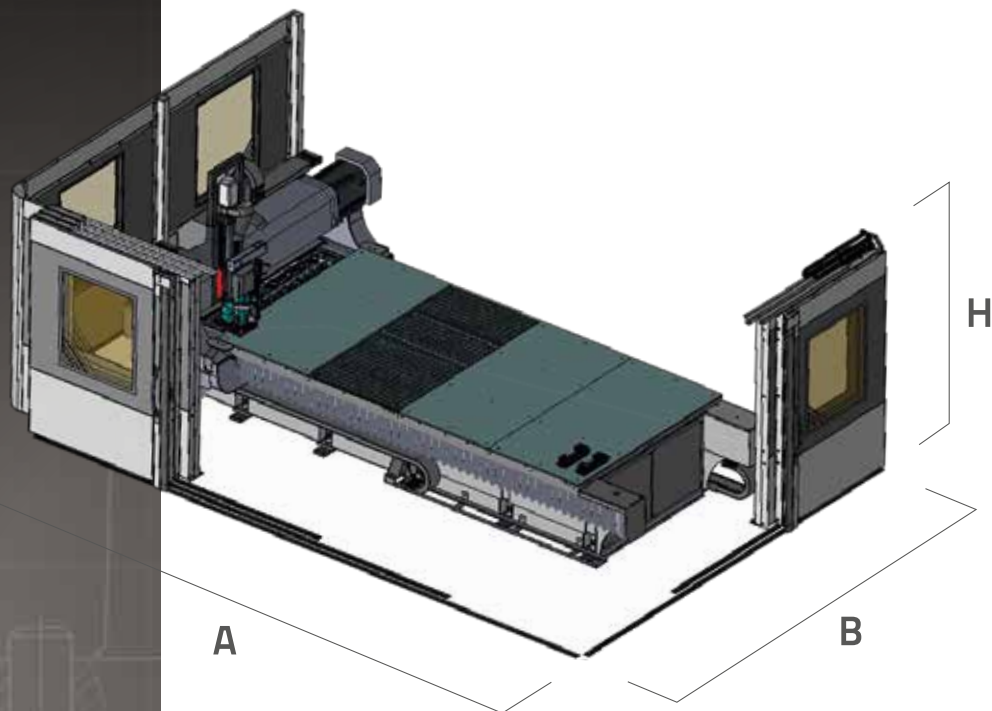
- Special table for nesting small pieces (equipped with Vilmill® protective film)
- Vertical aluminium table
- Tool changer up to 30 positions
- Perimeter protection
- "MyB" Suite for the remote management and the integration of the cnc center within the factory environment



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"> <li>▪ Aluminium vacuum table with MDF panel</li> <li>▪ Aluminium vacuum table</li> <li>▪ Aluminium vacuum table with T-slots</li> <li>▪ Resin vacuum table</li> </ul>

## 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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