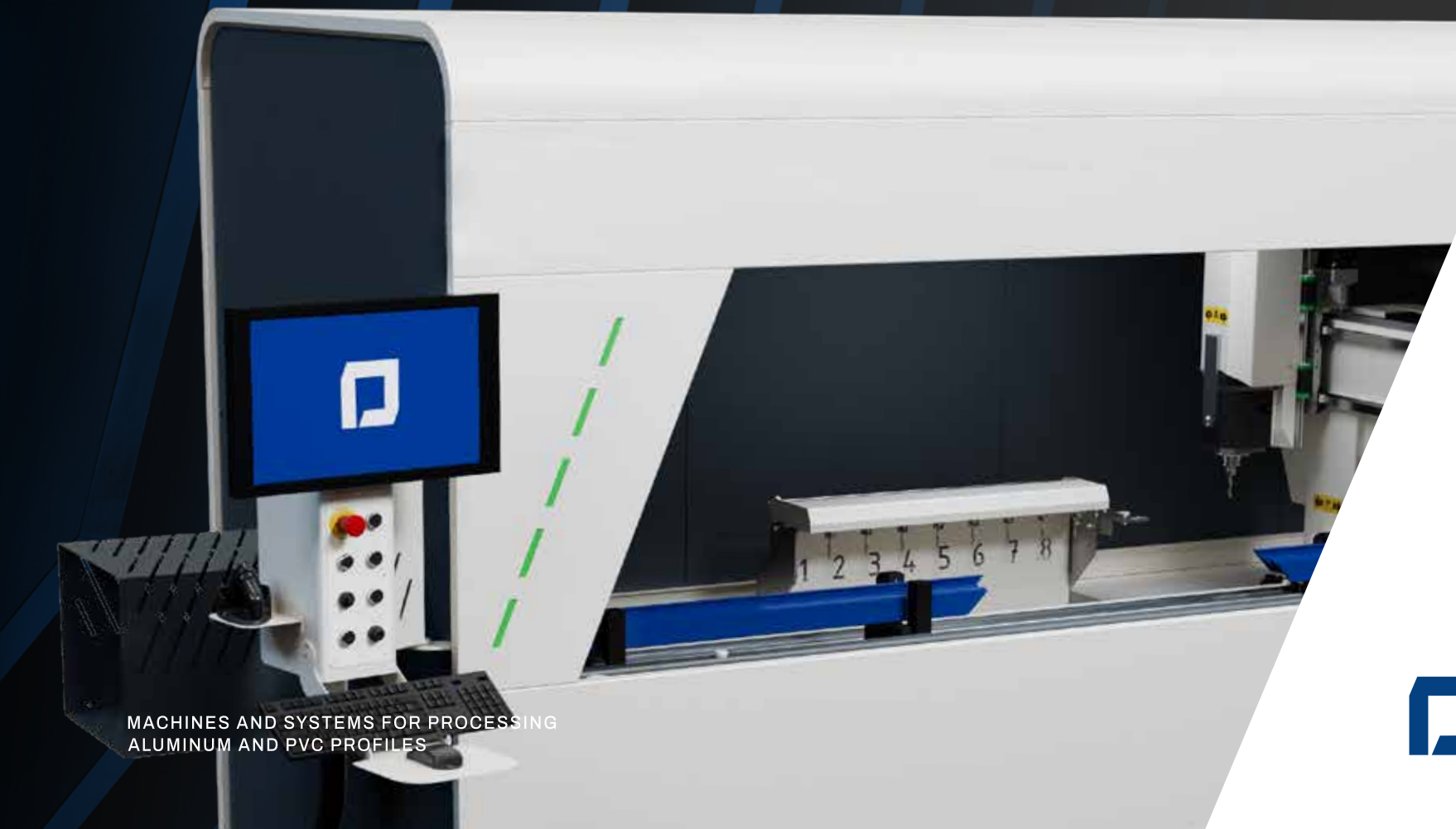
P1

MACHINING CENTRES



MACHINES AND SYSTEMS FOR PROCESSING
ALUMINUM AND PVC PROFILES

PERTICI®


PERTICI



solid quality first

Pertici is a reference company in the production of solid quality technological solutions for the processing of aluminium and PVC extrusions. Pertici technologies, distributed globally, are destined for the world of window and door frames and many other industrial applications.

+25K SYSTEMS INSTALLED WORLDWIDE

60 YEARS OF EXPERIENCE

+100 EMPLOYEES

Pertici traces its roots back to 1965 when Leto Pertici started Costruzioni Meccaniche Pertici, a company dedicated to the production of traditional woodworking machinery. Subsequently, the company shifted its production focus to the manufacture of machinery for the aluminium and PVC window and door industry, a production that still constitutes its current core business.

From the very beginning, the company has grown steadily, maintaining the highest quality and reliability of its solutions. Since the 1980s, it has been experiencing a strong push towards the internationalisation of its business and has built a solid and extensive distribution network, powered by a production that is totally articulated within the Italian headquarters through state-of-the-art industrial equipment.

Today, Pertici is guided by solid, deep-rooted drivers such as experience, expertise and continuous improvement: through these values shared by the entire group, the company is constantly committed to proposing solid solutions capable of generating value for its customers, through optimisation of performance, but also through outstanding functionality and ease of use. Pertici is always at the customer's side also through a global service that includes assistance, maintenance, installation, support and timely training.

Today, the company's industrial solidity consolidates the distinctive pluses that have always characterised Pertici technologies, launching the brand on the international competitive scenario with renewed energy.

P104 ESSENTIAL

CNC machining centre with 4 controlled axes, designed to perform milling, drilling, tapping and end milling operations on bars or workpieces made of aluminium, PVC, light alloys in general and steel, up to 2 mm thick.



AL PVC

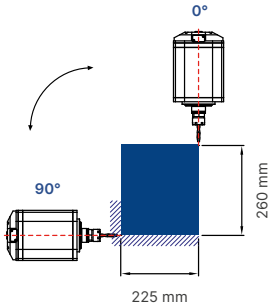
P104 ESSENTIAL

CHARACTERISTIC FEATURES

- Processing on 3 sides of aluminium, steel and PVC profiles and work pieces
- Electronic 4-axes CNC-control
- 4-sided cab + descending front door
- Main steel structures, processed for high precision
- Tool holding fixture HSK F50
- Fully automatic profile processing in one clamping possibility of profile end milling with 120 mm disc milling cutter
- Universal milling in various profile geometries as: profile cylinders, handle holes, etc.
- Collision avoidance system for the vices
- 4 clamps positioned via mobile carriage
- Tool magazine with 8 positions
- Clamp unit w=225mm
- No. 5 tool holders + cutters
- No. 2 zero point reference
- Tool length probe
- Powerful 3D CAD/CAM software with macro visualisation
- User-friendly graphical interface with remote connection and diagnosis function

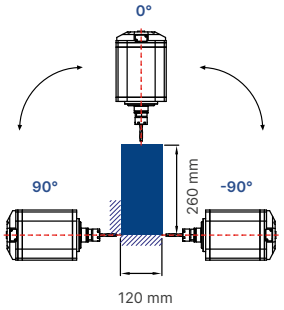
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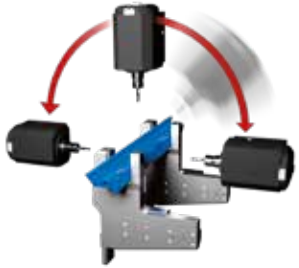
- X axis working stroke 3200mm
- Power (kW): 8
- Voltage (V): 400 – 50Hz
- Air pressure (bar): 7
- Milling spindle power (kW): 5
- Speed milling motor (U/min): 0 - 18.000
- Machine dimensions L x D x H (mm):
- approx. 4.400 x 1.750 x 2.400
- Weight (kg): approx. 2.000

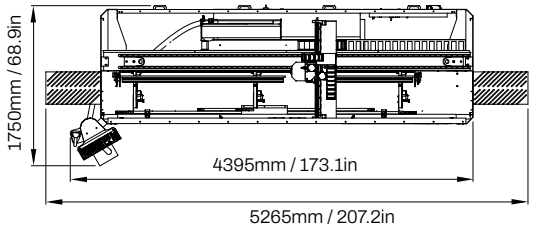


OPTIONAL EXTRAS

- Side tunnels
- Pair of additional clamps
- Electric board conditioner
- Cold air kit for tool
- Tool holder clamper HSK-F50
- Ups for industrial pc
- X-axis workpiece measuring system
- Bar code reader
- Tool plus kit
- Automatic x-y-z axis ball bearing greasing system







P104 PREMIUM

CNC machining centre with 4 controlled axes, designed to perform milling, drilling, tapping and end milling operations on bars or workpieces made of aluminium, PVC, light alloys in general and steel, up to 2 mm thick.

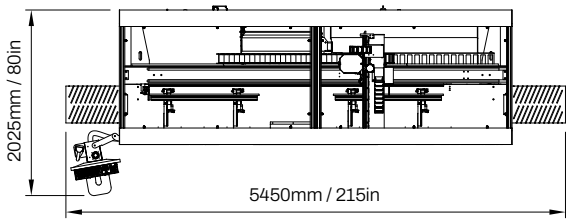


AL PVC

P104 PREMIUM

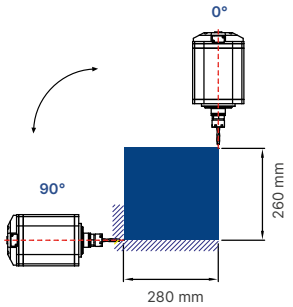
CHARACTERISTIC FEATURES

- Processing on 3 sides of aluminium, steel and PVC profiles and work pieces
- Electronic 4-axes CNC-control
- 4-sided cab and roof + descending front door
- Main steel structures, processed for high precision
- Tool holding fixture HSK F50
- Fully automatic profile processing in one clamping
- Possibility of profile end milling with 120 mm disc milling cutter
- Universal milling in various profile geometries as: profile cylinders, handle holes, etc.
- Collision avoidance system for the vices
- 4 clamps positioned via mobile carriage
- Special clamp with adjustable pad kit 4 clamps
- Clamp unit w=280mm
- Tool magazine with 8 positions
- No. 5 tool holders + cutters
- No. 2 zero point reference
- Tool length probe
- Side tunnels
- Tool holder clamper HSK-F50
- Powerful 3D CAD/CAM software with macro visualisation
- User-friendly graphical interface with remote connection and diagnosis function



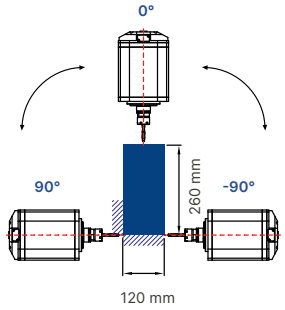
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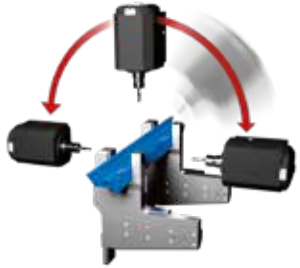
- X axis working stroke 3200mm
- Power (kW): 8
- Voltage (V): 400 – 50Hz
- Air pressure (bar): 7
- Milling spindle power (kW): 5
- Speed milling motor (U/min): 0 - 18.000
- Machine dimensions L x D x H (mm): approx. 5.500 x 2.000 x 2.300
- Weight (kg): approx. 2.200



OPTIONAL EXTRAS

- Pair of additional clamps
- Electric board conditioner
- Cold air kit for tool
- Ups for industrial pc
- X-axis workpiece measuring system
- High speed system for x axis (90 mt/min)
- Bar code reader
- Tool plus kit
- Automatic x-y-z axis ball bearing greasing system





P105

The P105 is a CNC machining centre with 4 controlled axes, designed to perform milling, drilling, threading and end milling operations on bars or workpieces made of aluminum, PVC, light alloys in general and steel up to 2 mm thick.



AL PVC



P105

CHARACTERISTIC FEATURES

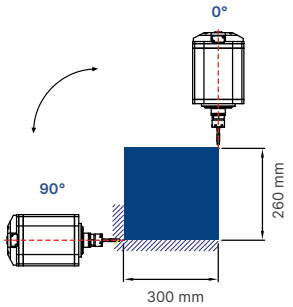
- Processing on 3 sides of aluminium, steel and PVC profiles and work pieces
- Electronic 4-axes CNC-control
- 4-sided cab and roof + descending front door
- Main steel structures, processed for high precision
- Tool holding fixture HSK F50
- Fully automatic profile processing in one clamping
- Possibility of profile end milling with 120 mm disc milling cutter
- Universal milling in various profile geometries as: profile cylinders, handle holes, etc.
- Collision avoidance system for the vices
- 4 clamps positioned via mobile carriage
- Special clamp with adjustable pad kit 4 clamps
- Clamp unit w=300mm
- Tool magazine with 8 positions
- No. 5 tool holders + cutters
- No. 2 zero point reference
- Tool length probe
- Side tunnels
- Tool holder clamper HSK-F50
- Powerful 3D CAD/CAM software with macro visualisation
- User-friendly graphical interface with remote connection and diagnosis function

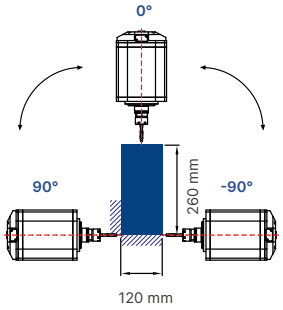
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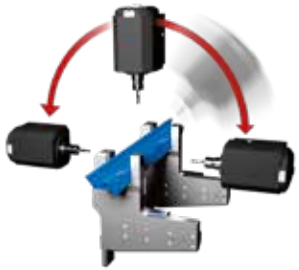
- X axis working stroke 4000mm
- High speed system for x axis (90 mt/min)
- Power (kW): 10
- Voltage (V): 400 – 50Hz
- Air pressure (bar): 7
- Milling spindle power (kW): 7
- Speed milling motor (U/min): 0 - 18.000
- Machine dimensions L x D x H (mm): approx. 6.400 x 2.000 x 2.300
- Weight (kg): approx. 2.600

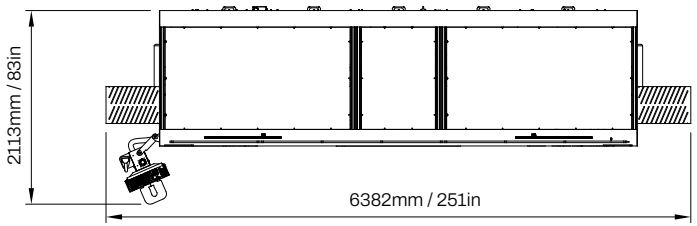
OPTIONAL EXTRAS

- Pair of additional clamps
- Electric board conditioner
- Cold air kit for tool
- Ups for industrial pc
- X-axis workpiece measuring system
- Bar code reader
- Tool plus kit
- Automatic x-y-z axis ball bearing greasing system









P107

CNC machining centre with 4 controlled axes, designed to perform milling, drilling, tapping and end milling operations on bars or workpieces made of aluminium, PVC, light alloys in general and steel up to 2 mm thick.

AL PVC





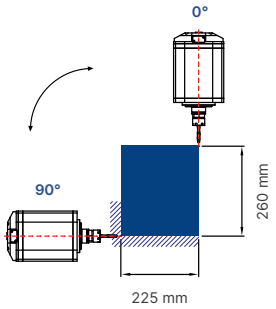
P107

CHARACTERISTIC FEATURES

- Processing on 3 sides of aluminium, steel and PVC profiles and work pieces
- Electronic 4-axes CNC-control
- 4-sided cab and roof + descending front door
- Main steel structures, processed for high precision
- Tool holding fixture HSK F50
- Fully automatic profile processing in one clamping
- possibility of profile end milling with 120 mm disc milling cutter
- Universal milling in various profile geometries as: profile cylinders, handle holes, etc.
- Collision avoidance system for the vices
- 8 clamps positioned via mobile carriage
- Tool magazine with 8 positions
- No. 2 zero point reference
- tool length probe
- Powerful 3D CAD/CAM software with macro visualisation
- user-friendly graphical interface with remote connection and diagnosis function

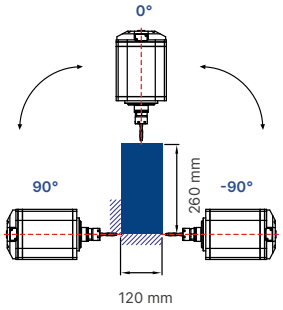
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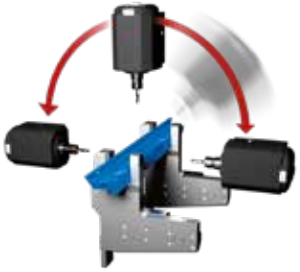
- X axis working stroke 7000mm
- High speed system for x axis (90 mt/min)
- Power (kW): 8
- Voltage (V): 400 – 50Hz
- Air pressure (bar): 7
- Milling spindle power (kW): 5
- Speed milling motor (U/min): 0 - 18.000
- Machine dimensions L x D x H (mm): approx. 8.100 x 1.750 x 2.500
- Weight (kg): approx. 3.500

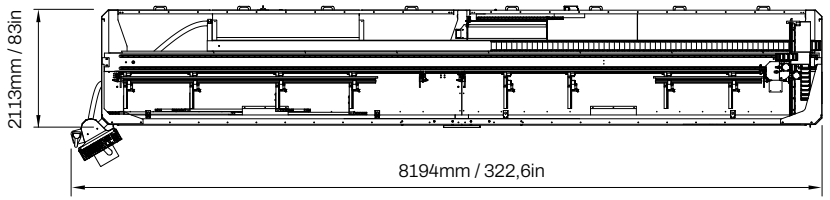


OPTIONAL EXTRAS

- Pair of additional clamps
- Clamp unit w=280mm
- Electric board conditioner
- Cold air kit for tool
- Tool holder clamper HSK-F50
- Ups for industrial pc
- X-axis workpiece measuring system
- Bar code reader
- Tool plus kit
- Automatic x-y-z axis ball bearing greasing system
- Independent clamps unit
- Central reference stops







GENERAL FEATURES AND OPTIONS	P104 E	P104 P	P105	P107
AXES TRAVEL				
X AXIS (longitudinal)	3450mm	3450mm	4360mm	7225mm
Y AXIS (transversal)	790mm	790mm	790mm	790mm
Z AXIS (vertical)	400mm	400mm	400mm	400mm
A AXIS (rotation)	0° ÷ 180°	0° ÷ 180°	0° ÷ 180°	0° ÷ 180°
POSITIONING SPEED				
X AXIS	50 m/min	50 m/min	90 m/min	90 m/min
Y AXIS	50 m/min	50 m/min	50 m/min	50 m/min
Z AXIS	20 m/min	20 m/min	20 m/min	20 m/min
A AXIS	7200°/min	7200°/min	6750°/min	7200°/min
ELECTROSPINDLE				
S1 Maximum power	5kW	5kW	7kW	5kW
Maximum speed (rpm)	18.000	18.000	18.000	18.000
S1 maximum torque	4 Nm	4 Nm	5,5 Nm	4 Nm
Cone tool holder	HSK-F50	HSK-F50	HSK-F50	HSK-F50
Cooling	Air	Air	Liquid	Air
TOOL MAGAZINE				
Tool change	Automatic	Automatic	Automatic	Automatic
Number of tools	8	8	8	8
Maximum diameter of milling blade	120mm	120mm	120mm	120mm
Maximum diameter of tapping tool *	M6	M6	M6	M6
Maximum lenght of the tool	130mm	130mm	130mm	130mm
Tool holder clamper HSK-F50	○	S	S	○
tool length probe	S	S	S	S
Additional tool magazine	/	○	○	/
Storage 12 places	/	/	/	○

	P104 E	P104 P	P105	P107
WORKPIECE CLAMPING				
Number of standard clamps	4	4	4	8
Maximum number of pneumatic clamps	6	6	6	12
Max. clamp opening	225mm	280mm	300mm	225mm (280mm OPT)
Automatic clamp positioning through spindle X AXIS	S	S	S	S
Indipendent clamp positioning	/	/	O (Motorized)	O (Special Axis)
Fixed automatic workpiece reference end stops	2	2	2	2
Central workpiece reference stops	/	/	/	○
Tandem operation	/	/	/	S
OTHER OPTIONS				
Tools air cooling system	○	○	○	○
Side tunnel	○	S	S	/
Tool detection system	○	S	S	S
Integral cover	○	S	S	S
Additional 8 positions tool magazine	○	○	○	○
X-Axis workpiece measuring system	○	○	○	○
Remote control via handheld	○	○	○	○
Automatic greasing system for X-Y-Z axis ball bearing	○	○	○	○
Ups for industrial pc	○	○	○	○
SAFETY DEVICES AND GUARDS				
Full guard cabin	S	S	S	S
GENERAL DATA				
in Overall dimensions (LxPxH) mm	4.400x1.750x2.400 mm	5.500x2.000x2.300 mm	6.400x2.000x2.300 mm	8.100x1.750x2.500 mm
Overall machine weight Kg - lb	2.000 Kg ÷ 4.409 lb	2.200 Kg ÷ 4.850 lb	2.600 Kg ÷ 5.732 lb	3.500 Kg ÷ 7.716 lb
Operating pressure	7 bar	7 bar	7 bar	7 bar
Air consumption	165 Nl/min	165 Nl/min	90 Nl/min	165 Nl/min
Installed power	8 kW	8 kW	10 kW	8 kW

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Minimal differences and variations on the technology cannot be excluded with the utmost certainty.

All information in this document has been checked, any edits or technical improvements and variations to the described technology will be published in following versions.

Pertici_P1_V01_EN_2024