

PE 75

CNC Machining Centre with 5-axis technology

for universal machining of wood, plastics and compound material

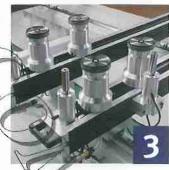




Routing unit
Standard routing spindle
with cardanic suspension,
HSK F 63



Drilling unitMultiple-spindle drilling unit
in L shape, 7/10 spindles,
individually selectable



Machine table

With 8\supporting bars
on linear guides

Fields of application

The universal machining centre **PE 75** in gantry design is the economic version of the successful travelling gantry series – it has been conceived for 5-axis precision machining of wood, plastics and compound material components with a length of up to 6,000 mm.

This series is perfectly suited for the manufacture of kitchen fronts, stairs, doors, windows and plastic panels for technical applications as well as for suppliers to the furniture industry and interior construction. As a multifunctional machine the PE 75 can be most economically used by manufacturers in the crafts business as well as in the industrial production.

The centre is fitted with a universal unit with a swarf collecting basket, adjustable in height, a horizontal drum-type tool changer and a multiple spindle unit. Users profit from state-of-the-art 5-axis technology and latest controller technique.

In addition to high acceleration speeds and machine precision, field-tested mechanical and electronical components guarantee high availability and a long-term service life.

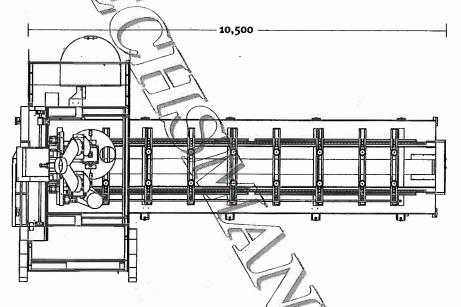
Required space applox.

5,700 x 10,500 x 500 mm (w x d x h)

Machine weight approx.

7,000 kg with usable length 6,000 mm







Tool magazine

Drum-type tool magazine, horizontal, 20 magazine places



CNC controller

The new 840 D, Powerline



Suction hood adjustable in height



CNC Special Machines

Technical Data PE 75 Standard

Details	
Controller	Siemens 840 D, Powerline
Routing spindle	HSK F 63, water-cooled, power max. 11 kW,
	infinitely variable speed regulation up to 24,000 rpm
Drilling unit	Multiple-spindle drilling unit in L shape, 7/10 spindles,
	individually selectable, C:C 32 mm
Working unit	universal robot unit with Z axis stroke 455 mm, A 540°, B +/- 90°
	A/B arranged at an angle of 50°
Extraction	swarf-collecting basket vertically adjustable, connection 1 x D 300
Axis drives	X axis recirculating ball screw
	Y axis gear rack, gantry drive
	Z axis recirculating ball screw
Machine table	8 supporting bars on linear guides with mechanical spring clamping
with Y = 6,000 mm	and pneumatic release
Clamping station	for alternating operation with Y = 6,000 mm
	2 stations, each fitted with:
	1 vacuum control circuit,
	3 control circuits (pneumatic circuits with pressure control)
Safety guard	accompanying cabin with safety bumpers
Working area in 3-axis operation	
Condition	tool dia. 160 mm, total length 160 mm
	X = 1,600 mm, Y = 5,900 mm, Z = 280 mm
Working area 5-axis operation	
Condition	tool dia. 160 mm, total length 160 mm
	X = 1,300 mm, Y = 5,600 mm, Z = 280 mm
Travel speeds	X = 60 m/min, Y = 60 m/min, Z = 24 m/min A/B = 10,000 °/min
Acceleration	$X, Y, Z = 1,5 \text{ m/sec}^2$
Tool changer	
Data	horizontal drum-type tool magazine, 20 magazine places,
	torque support, dia. 90 mm, total length 230 mm
	with assorted deposit max. dia. 300 mm, tool weight max. 6 kg
	max. saw blade dia. 300 mm, total weight approx. 60 kg
	optional change-in of angle/sensor heads/probe from the tool magazine

Installation conditions

Machine weight

Required space

approx. 7,000 kg with usable length 6,000 mm

approx. 5,700 x 10,500 x 3,000 mm (w x d x h)

incl. operating and safety space with usable length 6,000 mm