

## 1.5 MACHINE DESCRIPTION

PHANTOMATIC T5 is a CNC milling and cutting-off centre with 3 axes, designed for machining computer programmable figures. It allows drilling, milling and tapping on one or more sides of the profile, while it can handle workpieces made of aluminium, PVC and iron (the latter up to 3 mm thick). The machine centre is provided with:

- isola guard: this allows automatic unsupervised operation, while it improves the level of safety and allows use of special tools;
- partition: this allows 2 modes of operation:
  - multipiece: just the one work area for bars with overall length of 6 metres
  - double: two work areas
- independent vice positioner
- angle machining unit with side outlet: allows machining at 0° and 180°, so that it is not necessary to rotate the workpiece for milling the various faces up to a maximum of 5 in just one cycle;
- blade: for machining at the head- and tail-ends of profiles
- double pneumatic tool magazines, each with 6+1 places: allows automatic tool change
- intermediate lubrication: this feature allows efficient cooling of the tools mounted on the angle machining units and on straight toolholders.
- moving work table: by traversing sideways along the Y axis this table increases the work capacity of the angular machining units quite considerably
- special coolant (optional): for cooling the tools when machining ferrous materials;
- angle machining head rotating device: (optional)



## 1.6 SPECIFICATION AND ENVIRONMENTAL DATA

Specification	U.M.	Value
X axis travel (longitudinal)	mm	7000
Y axis travel (cross)	mm	300
Z axis travel (vertical)	mm	350
P, H service axis travel (vice positioners)	Mm	3500
Max. speed, X axis	m/min	56
Max. speed, Y, Z axes	m/min	22,5
Max. speed, P, H axes	m/min	45
Acceleration, X axis	m/sec <sup>2</sup>	4,68
Acceleration, Y, Z axes	m/sec <sup>2</sup>	1,84
Acceleration, P, H axes	m/sec <sup>2</sup>	3,75
Tool magazine capacity		2 x ( 5 + 1 ) places
Max. diameter, milling cutter	mm	50
Max. diameter, tapping tool		M10, through on, thickness 5mm
Max. diameter, blade	mm	180
Max. width, two-way angle machining unit	mm	239
Number of vices standard optional		8 ( 4 per zone ) 12 ( 6 per zone )
Number of stops		4 ( 2 per zone )
Vice positioning		Automatic and independent
Power rating, electrically-driven spindle in S1	KW	5,5
Max. speed, electrically-driven spindle	1/min	18.000
Tool taper		ISO 30 DIN69871
Shank		special
Weight	Kg	3100
Operating air pressure	bar	6-8
Compressed air consumption	NI/min	175
Total installed power	kW	8
Max. current drawn at 380 V	A	20
Max. overall workpiece dimensions machinable with vertical tool (*) (length x width x height)		280x200x7000 ( 280x150x7000 ) **
Max. overall workpiece dimensions machinable on 5 faces with two-way angle machining unit (***) and vertical tool (*) (length x width x height)		165x200x6650 ( 165x150x6650 ) **

Max. overall workpiece dimensions machinable on 5 faces with one -way angle machining unit (***) and vertical tool (*) (length x width x height)	mm	6500 x 150 x 150
Max. workpiece length in vertical position (with manual rechucking)	mm	14000

\*: with tool length 90mm

\*\*: with angle machining head rotating device (optional)

\*\*\*: with tool length 45mm

Hard- and software characteristics	
CNC configuration	Celeron 3; 850 MHz; 256MB RAM 9.75 + 8.85 GB
Control panel	TFT14" colour monitor
CD ROM and Floppy Drive	included
International USA keyboard	
Operating system	Windows 2000©
Basic software	Cam; Editor; Drill

Multi-piece operation	U.M.	Value
Max. number of workpiece per cycle		4
Max. workpiece length per cycle	mm	4 x 1550

Double operation	U.M.	Value
Max. number of workpiece per zone		2
Max. workpiece length per zone	mm	2 x 1550

ENVIRONMENTAL DATA			
Ambient air temperature:	Operative:	°C	10 ÷ 40
	No operative:	°C	-20 ÷ 60
Maximum no pressurized altitude:	Operative:	m	1.000
	No operative:	m	12.000
Relative humidity:	Operative:	%	30 ÷ 90
	No operative:	%	5 ÷ 95