

## PAMA SPEEDRAM 1000 HP

HEIDENHAIN TNC 640 HSCI



### Working range

Column longitudinal travel (X axis)	mm.	12.000
Headstock vertical travel (Y axis)	mm.	3.500
Axial travel of spindle <i>ram</i> (Z axis)	mm.	1.600
Boring spindle axial travel (W axis)	mm.	700
Total axial travel (W + Z axes)	mm.	2.300

### Capacity

- X= 12.000, Y= 3.500, Z= 2.300
- Table weight capacity
  - o rotary table 25 000 kg
  - o Floor plate 1, 6000 x 2500 mm ; 15 000 Kg/m<sup>2</sup>
  - o Floor plate 2, 4200 x 2000 mm ; 15 000 Kg/m<sup>2</sup>

### Rototravelling table

Longitudinal traverse (V axis)	mm	1.500
Max workpiece loading capability (with centered load)	Kg	25.000



Worktable size	<b>mm</b>	<b>2.000 x 2.500</b>
Automatic tool changer	<b>Pce</b>	<b>80</b>

## Automatic universal milling head

Max. spindle speed	<b>rpm</b>	<b>6.000</b>
Max. spindle power	<b>kW</b>	<b>50</b>
Max. spindle torque	<b>Nm</b>	<b>1.200</b>
Transmission ratio		<b>1 : 1</b>
Positions A, C axes		<b>360 000</b>

## Headstock / spindle

Boring spindle diameter	<b>mm.</b>	<b>130</b>
Max spindle rotation speed –Direct Drive	<b>rpm</b>	<b>5.000</b>
Max. spindle motor power (S1) –Direct Drive	<b>kW</b>	<b>90</b>
Max. torque (S1)	<b>Nm</b>	<b>1.800</b>

## Other features

- Headstock/spindle (dia. 130 mm)
- Ram section 440 x 480 mm
- Rapid of X, Y, Z, W axes 30.000 mm/min
- Ram with hydrostatic slideways on four sides;
- Hydraulic balancing for headstock;
- Ram deflection compensation;
- Pressurized optical scales with zero multi-reference system for Y and Z axes;
- Magnetic measuring scale for W axis
- Rotating encoder for spindle rotation;
- Preloaded precision recirculating ball screws on linear axes Y, Z;
- Compensation of boring spindle thermal elongations;
- Operator's platform with safety enclosure fixed to the saddle, equipped with swivelling control panel and CNC commands
- Automatic clamping of attachments on RAM
- Twin motors for X axis (double pinion with electronic variable preload);
- Hydraulic units;
- Refrigerating unit for oil thermostabilization;
- Spindle orientation by encoder
- AC axes servomotors;

## Headstock/spindle DSD (Direct Spindle Drive)

- Spindle dia.130 mm
- Spindle power 90 kW (S1);

