

# WHtec 130

MACHINING CENTRE



111 years 1903-2014  
**VARNSDORF**  
**TOS**

*New goals need new solutions*



05/2014

**TOS VARNSDORF a.s.**

# WHtec 130 - machining centre

www.tosvarnsdorf.com

The WHtec is a high performance, large capacity Horizontal Machining Centre. It has been designed to machine traditional components that were machined on Horizontal Boring Machines. The WHtec incorporates all the latest in machine tool technology which allows efficient production of these components thus reducing cycle times, costs with improved accuracies. The WHtec can carry components up to a weight of 16,000 Kgs.

<b>X max.</b>	<b>= 4,000 mm</b>
<b>Y max.</b>	<b>= 2,500 mm</b>
<b>Z max.</b>	<b>= 2,500 mm</b>
<b>W</b>	<b>= 800 mm</b>

## AXIS FEEDRATES AND FORCES

- Maximum Feedrates for X, Y, Z axis = 36 m/min
- Maximum Feedrate for W axis = 20 m/min
- Maximum feedforce for X, Y, Z, W axis = 20 kN
- Maximum acceleration = 2.5 m/s<sup>2</sup>

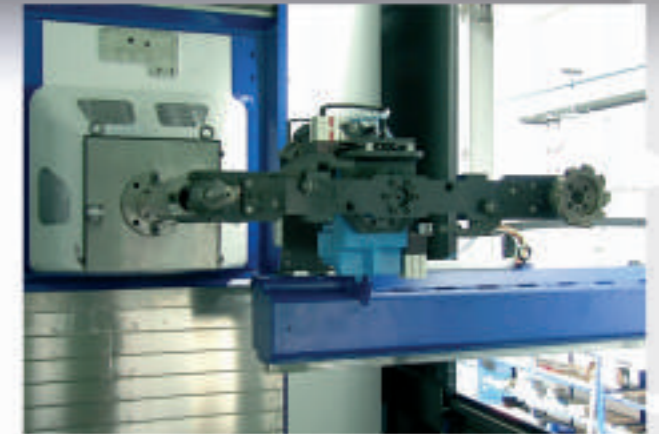
## MACHINE CHARACTERISTICS:

- High rigidity and stability during the machining process is ensured by the optimised designed of the cast iron machine base and column
- High dynamic of machine
  - Lightweight, ribbed design of the column ensures high stiffness and dynamics
  - Drive systems specified to cope with the high feedrates & forces
  - Linear guideways on all axes
- High accuracy machining with rotary table is achieved by two electronically tensioned pinions drives (Master-slave system)
- High productivity is ensured by the use of:
  - Pallet changer
  - Fast Automatic Toolchanger
  - Spindle probes
  - Tool Probes
  - Prometec adaptive control system
  - All the above reducing idle / lost time
- High performance and flexibility of machine is guaranteed by special designed headstock and traveling spindle
- The Ecological Footprint is achieved by fully enclosing the working area and filtering the air from this area to ensure that harmful elements are not released to the atmosphere



## POWERFUL SPINDLE

- Spindle fitted for ISO 50 BIG+
- Spindle diameter 130 mm
- W axis of 800 mm
- Max. power (S1) = 46 kW
- Max. torque (S1) = 3,200 Nm
- Max. spindle speed 4,000 RPM



## AUTOMATIC TOOL CHANGER

- 80 position Automatic toolchanger
- Tool weight max. 25 kg per pocket
- Tool change time (tool-tool) 12 sec



## HIGH-PERFORMANCE COOLANT SYSTEMS

- System of cooling liquid from external nozzles and through the work-spindle axis
- Maximum coolant pressure is 70 bar

## ADAPTIVE CONTROL & PROBING

- Measuring touch probes and tool probes
- Monitoring and adaptive system Prometec

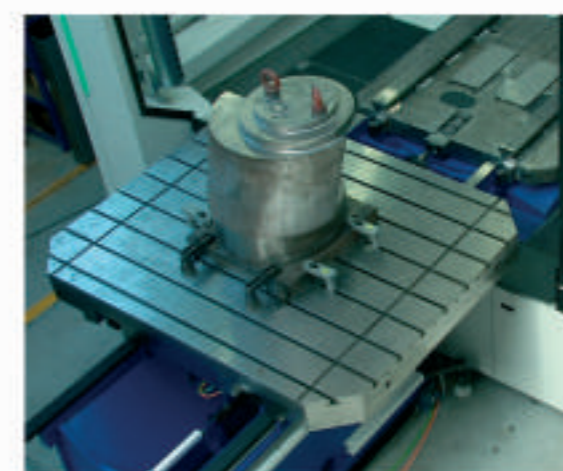


## THE ECOLOGICAL FOOTPRINT

- Machine working area fully guarded
- Controlled air circulation in the working area
- Air extraction and filtration from the working area
- Bedwash to remove swarf from the X and Z Slideway covers



## HEADSTOCK WITH TRAVEL SPINDLE

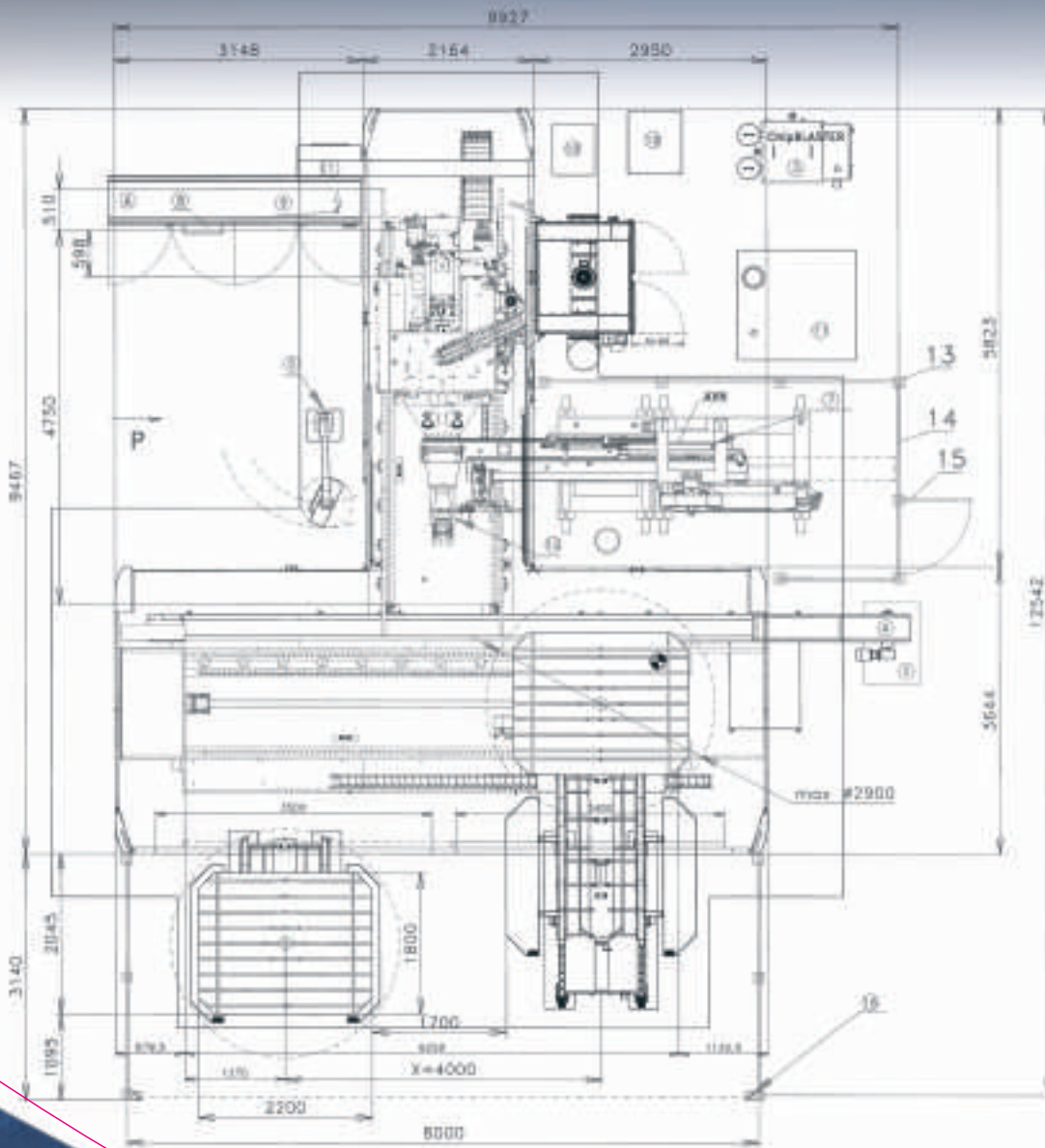


## AUTOMATIC EXCHANGE OF TECHNOLOGICAL ACCESSORIES

Automatic changing of 2 Axis, HUI 50 Milling Head, which can run up to 3,000 RPM and transmit 1,000 Nm at 32 kW.

## AUTOMATIC PALLET CHANGER

- Twin Pallet changer with pallet size of 1,800 x 2,200 mm
- Maximum workpiece weight 16,000 kg on each pallet
- Pallet change time 90 sec



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