#### Vertical 5-Axes Machining Center

## VMX 60SRTi





## Keydata



	VMX 60SRTi	
Travels (X/Y/Z) [mm]	1,520 / 660 / 610	
Diameter of Faceplate [mm]	600	
Spindle Speed [1/min]	12,000	
Power [kW]	36.5	
Torque [Nm]	118	
Automatic Tool Changer (stations)	40	

#### **Table of Content**

- <u>Technical Specification</u>
- Clearance Conditions
- Working Dimensions
- Shipping Dimensions
- Foundation Diagram
- Machine Options

**Technical Specification** 

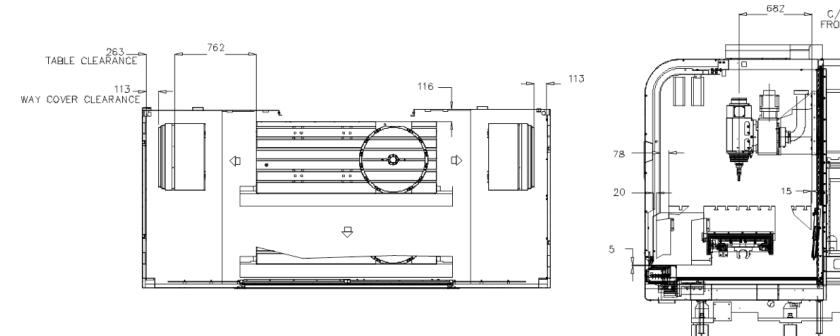
Machine Capacity		Feedrates	
Travels X/Y/Z [mm]	1,520 / 660 / 610	Cutting feedrate X / Y / Z [mm/min]	22,900 / 22,900 / 20,000
Travels B-/C-Axis	±90°/ 360°	Rapids X / Y / Z [m/min]	30 / 30 / 20
Spindlenose to Table [mm]	0 – 613	Rapids B-/C-Axes [rpm]	50 / 100
Working Surface / Rotary-Diameter [mm]	1,675 x 660 / Ø 600	Axis Thrust X/Y/Z [N]	15,200 / 15,200 / 23,700
T – Slots (DIN 650)	6 x 18 x 100	Automatic Tool Changer	
Max. Tableload / Rotaryload [kg]	1,360 / 500	Number of stations	40
Spindle		Max. Tool Diameter [mm] / Adjacent Sides Empty and magazine guard removed [mm]	75 until length 150 mm / 120
Max. Speed [min <sup>-1</sup> ]	12,000	Max. Tool length [mm]	250
Max. Power [kW]	36.5	Max. Tool weight [kg]	7
Max. Torque [Nm]	118	ATC Time (Tool to tool) [sek.]	4
Spindle Taper (DIN 69871)	SK 40	ATC Time (Chip to chip) [sek]	10.3
Retention knobs	ISO 7388/II B	Service requirements / Weights	
Accuracy (VDI / DGQ 3441)		Electrical	81 kVA / 117 A / 400 V
Positioning P <sub>max</sub> [mm]	0.01 (Full travel)	Air (requires dry, clean air acc. DIN/ISO 8573-1, class 1, dew point 3°)	7bar / 150 l/min
Repetability P <sub>S</sub> [mm]	0.005	Machine Weight [kg]	9,500*
Positioning B / C [sec]	±7/±7	Shipping Weight [kg]	10,000*
Repetability B / C [sec]	7/7	Chip conveyor [kg]	500

Back to Content

\*due to the position of the mass center of the machine, for unloading by forklift it is recommended to plan with a higher carrying capacity of 30%

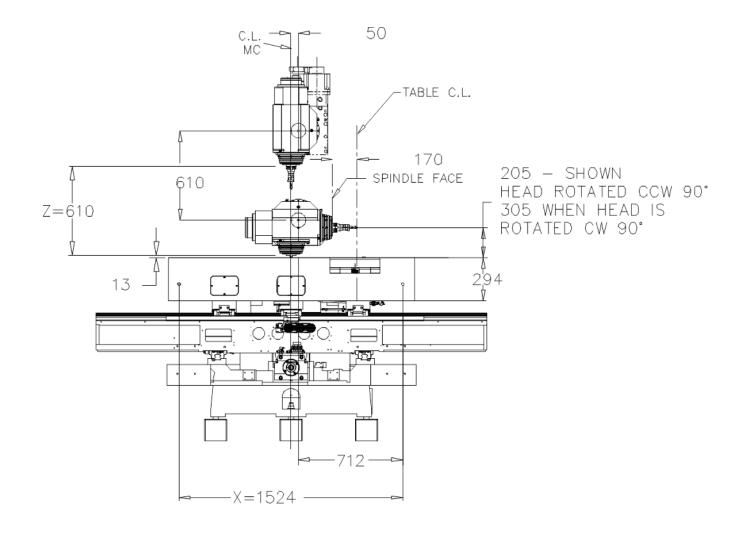


### **Clearance Conditions**

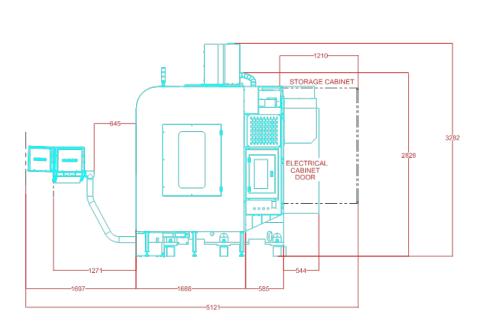


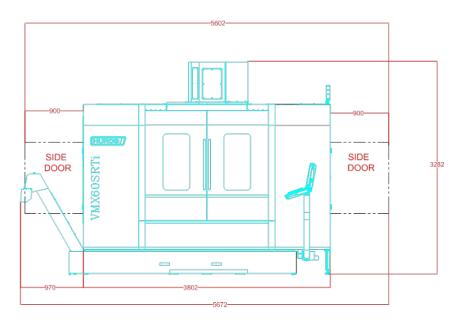


### **Clearance Conditions**

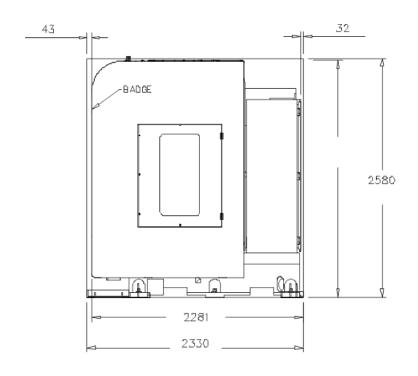


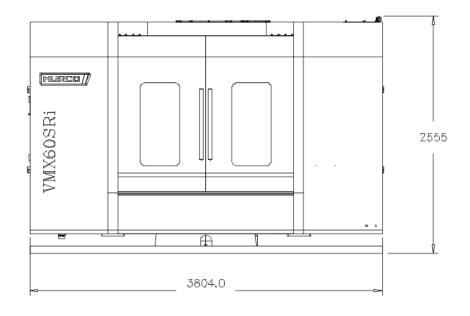
## **Working Conditions**



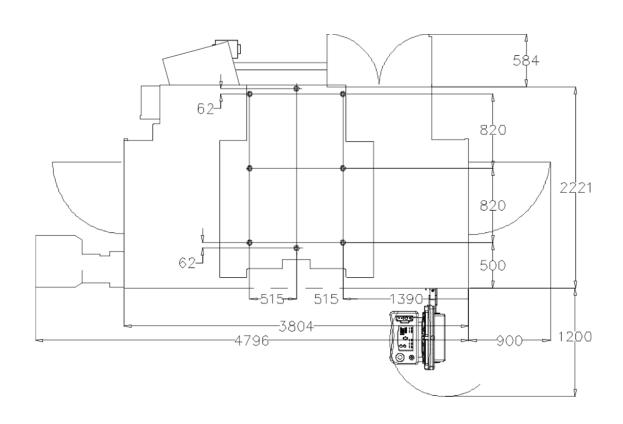


## **Shipping Conditions**





## **Foundation Diagram**



## **Machine Options**

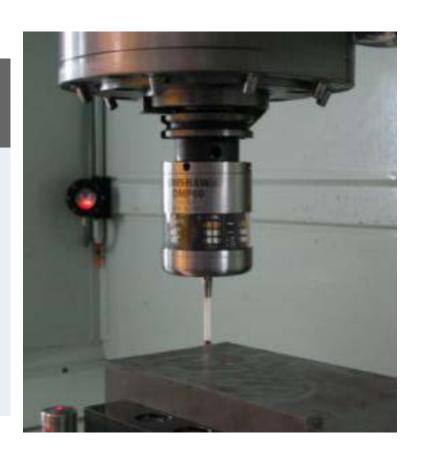
- Coolant air through coolant nozzles
  - selectively coolant water or coolant air through coolant nozzles. Programmable as "Coolant 2" or by M-function
- Coolant air through Spindle
  - as before, however supplying is through the spindle. Option "Coolant through Spindle" (CTS) is required
- BT-Arm
  - for usage of BT-tool holders instead of SK holders
- Part- and Tool Probing <u>more</u>
- Coolant through Spindle (CTS) <u>more</u>
- Production Package <u>more</u>
- Bypass Filter <u>more</u>
- Rotoclear
  - The rotating pane throws off cooling emulsion, leaving the view free for the machine operator

**HURC®** 

## **Part- and Tool Probing**

#### **Partprobing**

- Probing Part Zero:
  - Edge
  - Corner
  - Hole or Circle
  - Cylinder
  - Rectangular Pocket
  - Rectangular Solid
- Probing Skew Angle
- Measuring of Workpiece



## **Part- and Tool Probing**

#### Tool Probing with Touch Probe

- Probing of Tool Length
- Tool Breakage Control of Tool Length and – if Tool is broken – Usage of a Spare Tool
- NO Probing of Tool Diameter



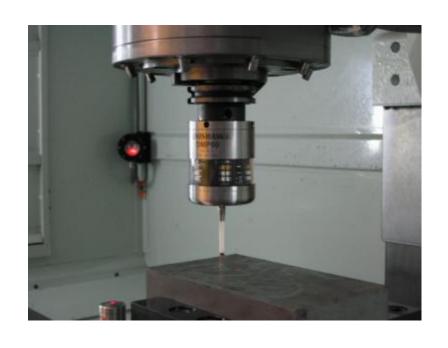
## **Part- and Tool Probing**

#### Tool Probing with Laser

- Probing of Tool Length
- Probing of Tool Diameter
- Tool Breakage Detection and if the Tool is broken – Usage of a Spare Tool
- Tool Wear Detection and Compensation



# Part Probing and Tool Probing with Touch Probe



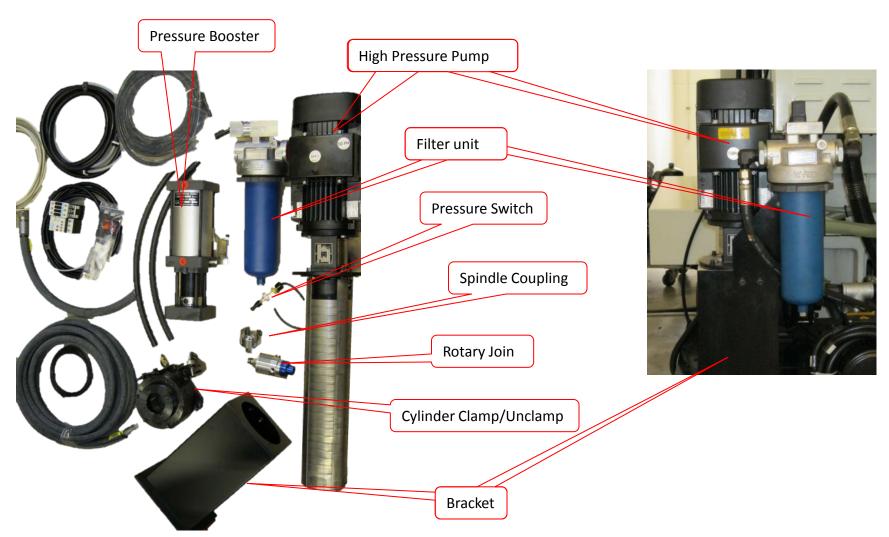


## Part Probing and Tool Probing with Laser Probe



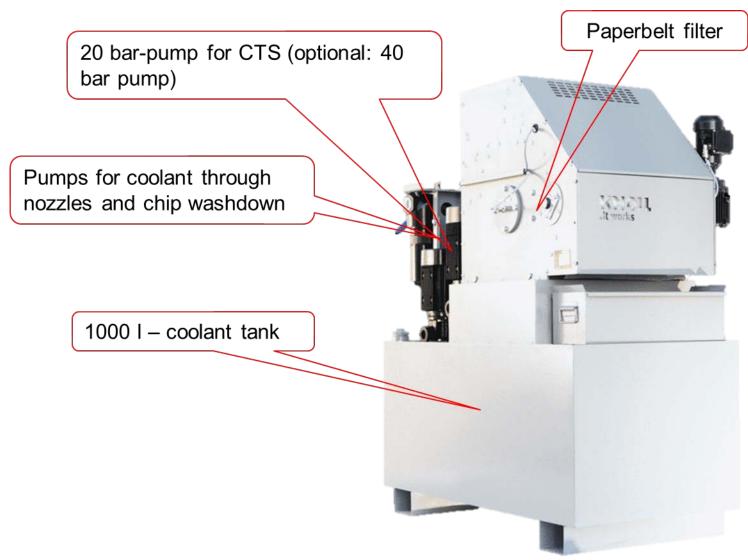


## **Coolant through Spindle 20 bar**



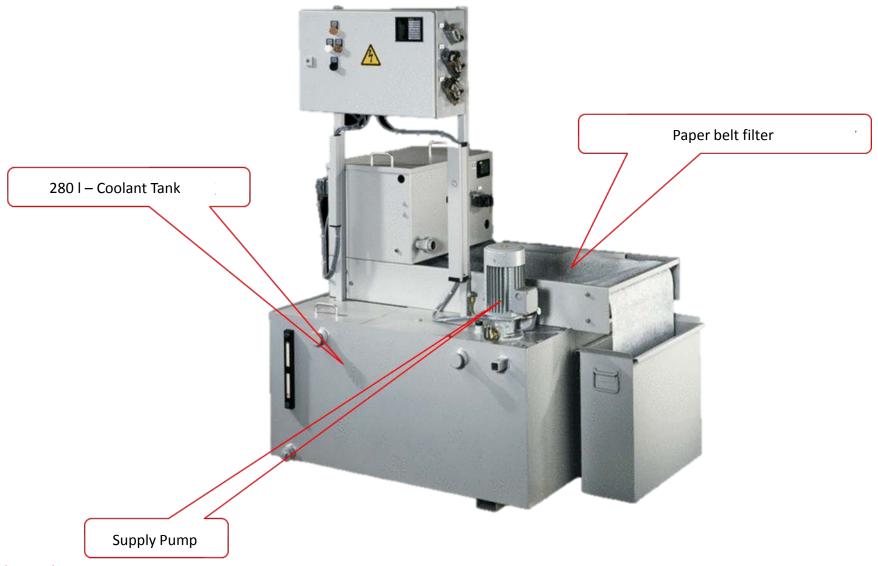
**Back to Machine Options** 

## **Production Package KF400**



**Back to Machine Options** 

## **Bypass Filter**



**Back to Machine Options** 

