

Vertical 5-Axes Machining Center

VMX 42SRTi



mind over metalSM

HURCO[®]

Keydata



	VMX 42SRTi
Travels (X/Y/Z) [mm]	1,067 / 610 / 610
Diameter of Faceplate [mm]	600
Spindle Speed [1/min]	12,000
Power [kW]	36.5
Torque [Nm]	118
Automatic Tool Changer (stations)	40

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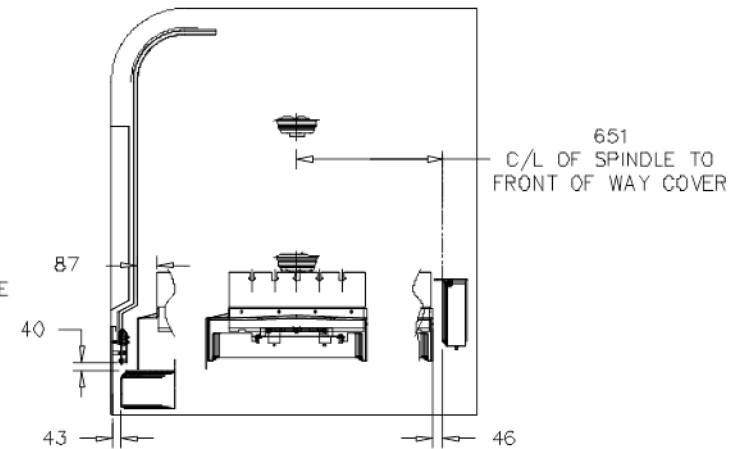
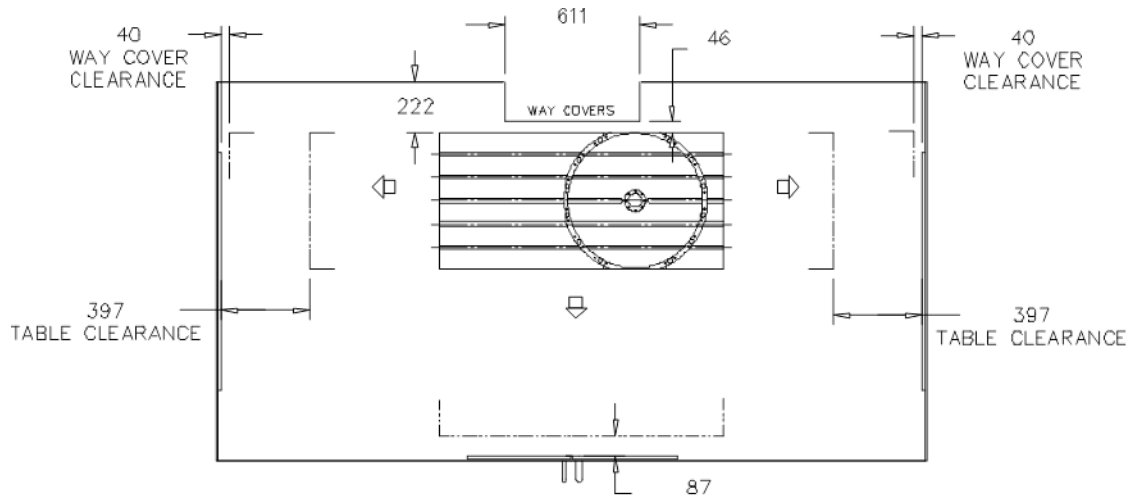
Technical Specification

Machine Capacity		Feedrates	
Travels X/Y/Z [mm]	1,067 / 610 / 610	Cutting feedrate X / Y / Z [mm/min]	22,900 / 22,900 / 22,900
Travels B-/C-Axis	±90°/ 360°	Rapids X / Y / Z [m/min]	35 / 35 / 30
Spindlenose to Table [mm]	0 – 613	Rapids B-/C-Axes [rpm]	50 / 100
Working Surface / Rotary-Diameter [mm]	1,270 x 610 / Ø 600	Axis Thrust X/Y/Z [N]	10,900 / 13,400 / 23,700
T – Slots (DIN 650)	5 x 18 x 100	Automatic Tool Changer	
Max. Tableload / Rotaryload [kg]	1,360 / 500	Number of stations	40
Spindle		Max. Tool Diameter [mm]	75
		Adjacent Sides Empty and disassembled ATC enclosure	120
Max. Speed [min ⁻¹]	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	78 kVA / 114 A / 400 V
Positioning P _{max} [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 _s [mm]	0.005	Machine Weight [kg]	8,500*
Positioning B / C [sec]	± 7 / ± 7	Shipping Weight [kg]	9,000*
Repetability B / C [sec]	7 / 7	Chip conveyor [kg]	500

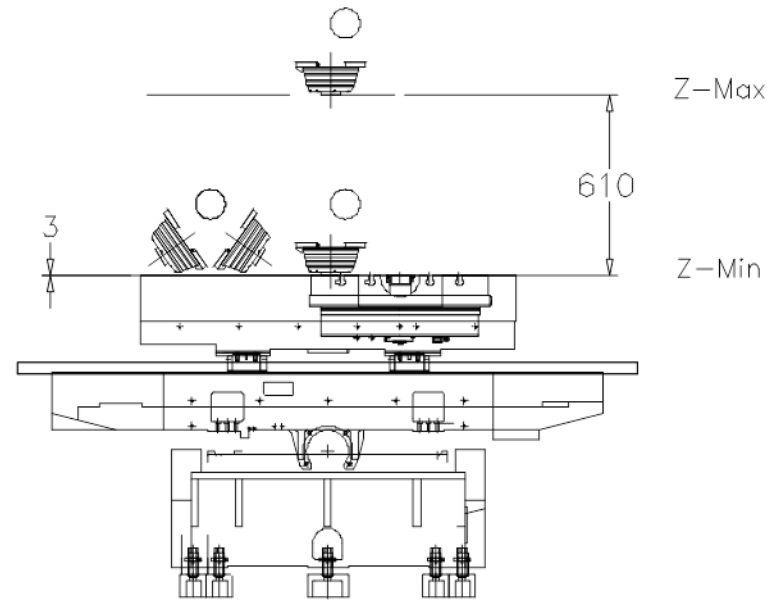
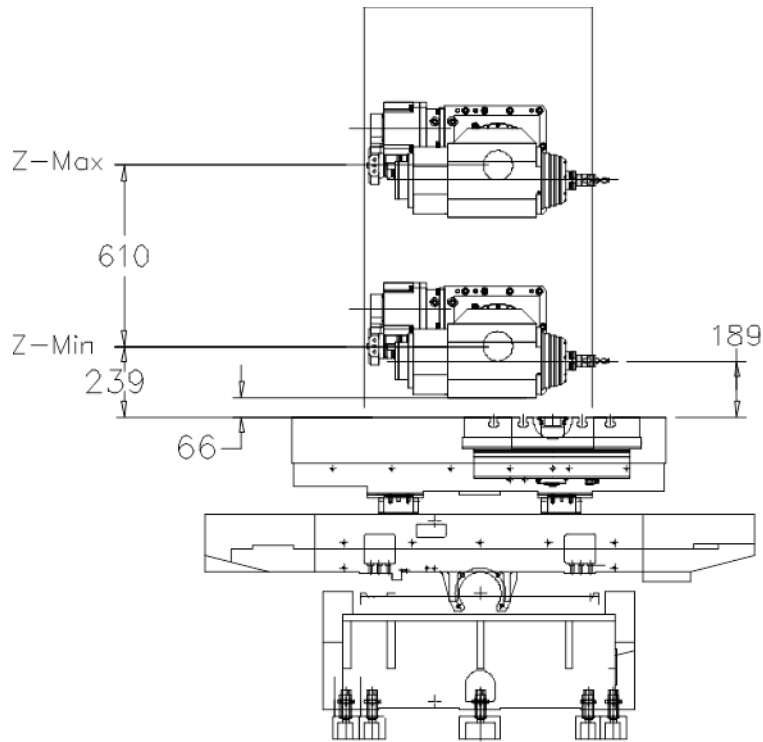
*due to the position of the mass center of the machine, for unloading by forklift it is recommended to plan with a higher carrying capacity of 30%

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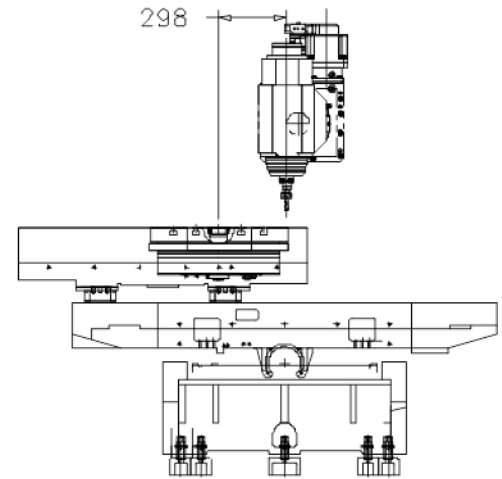
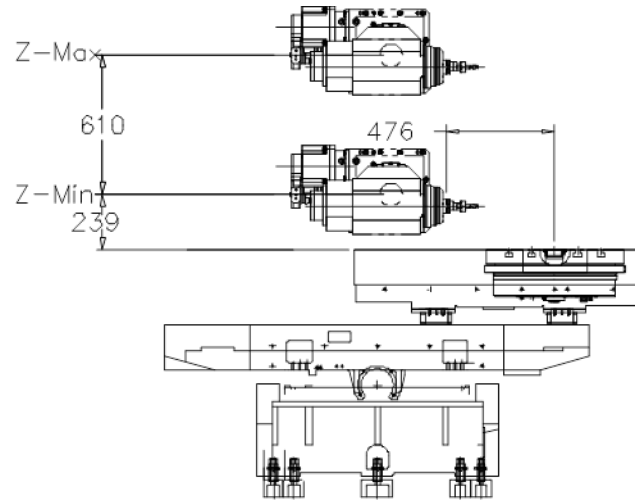
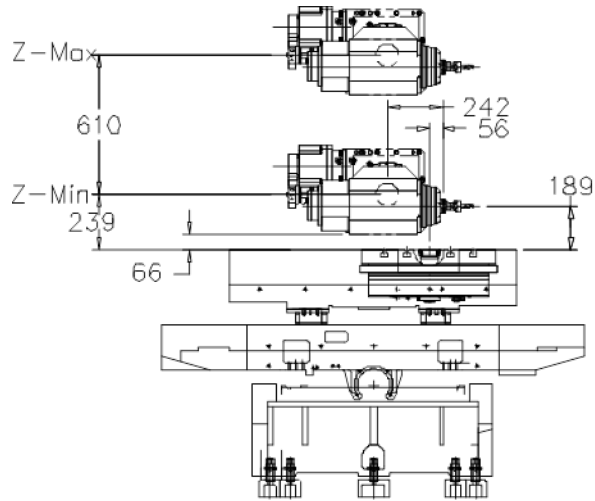
Clearance Conditions



Clearance Conditions

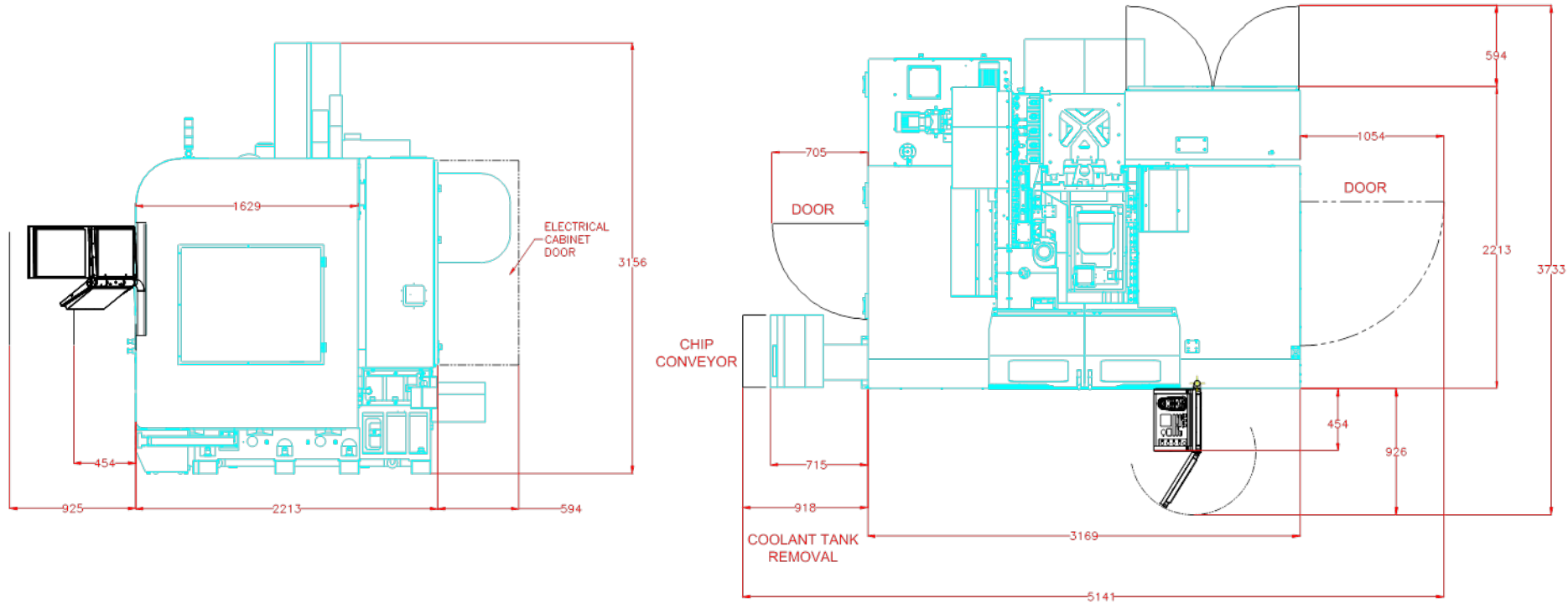


Clearance Conditions



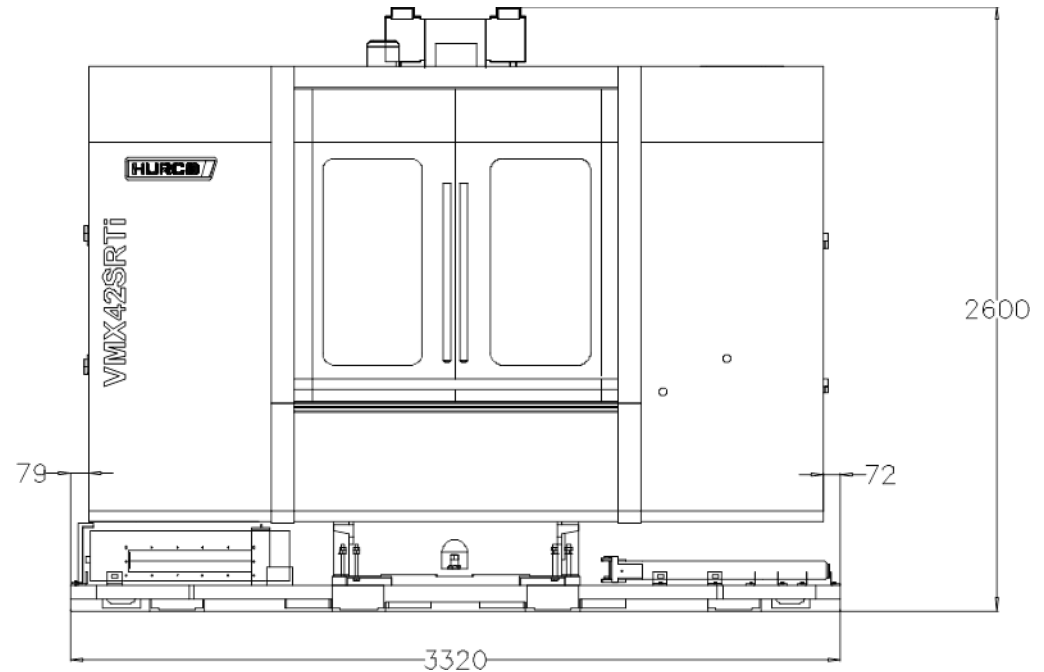
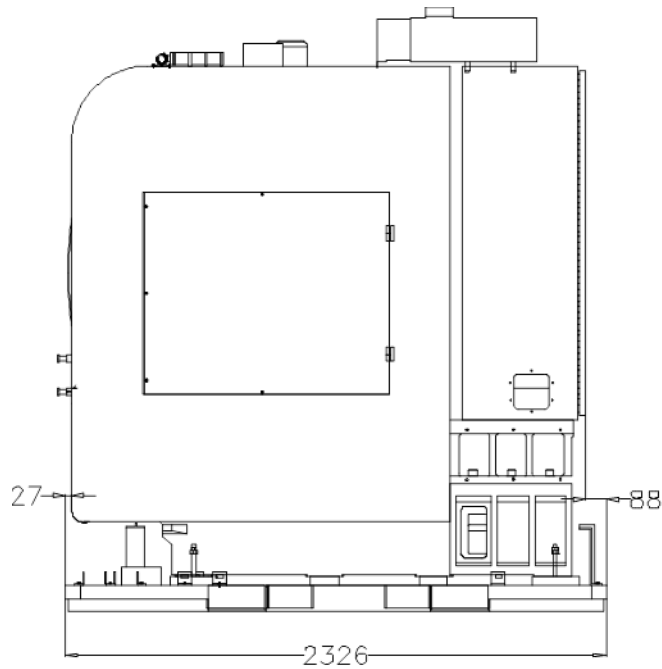
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Working Conditions



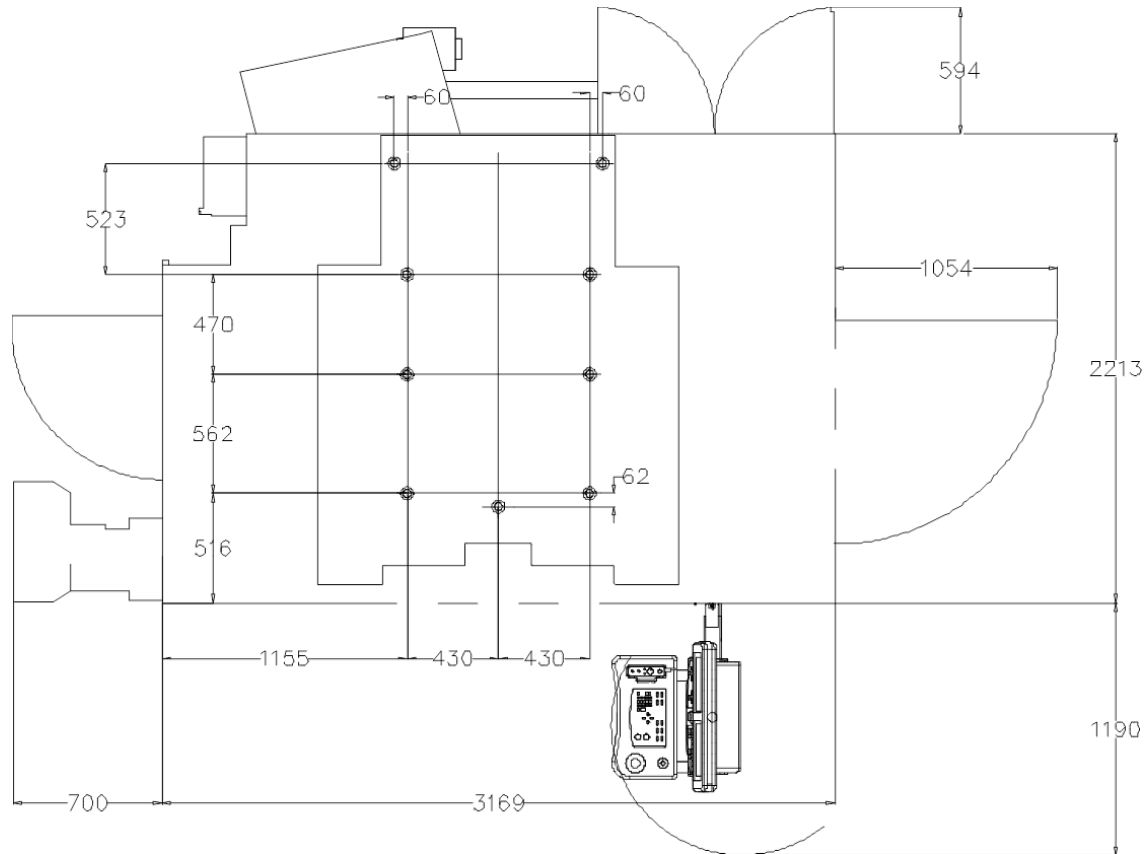
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Shipping Conditions



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Foundation Diagram



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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** [more](#)
- **Coolant through Spindle (CTS)** [more](#)
- **Production Package** [more](#)
- **Bypass Filter** [more](#)
- **Rotoclear**
 - The rotating pane throws off cooling emulsion, leaving the view free for the machine operator

Part- and Tool Probing

Partprobing

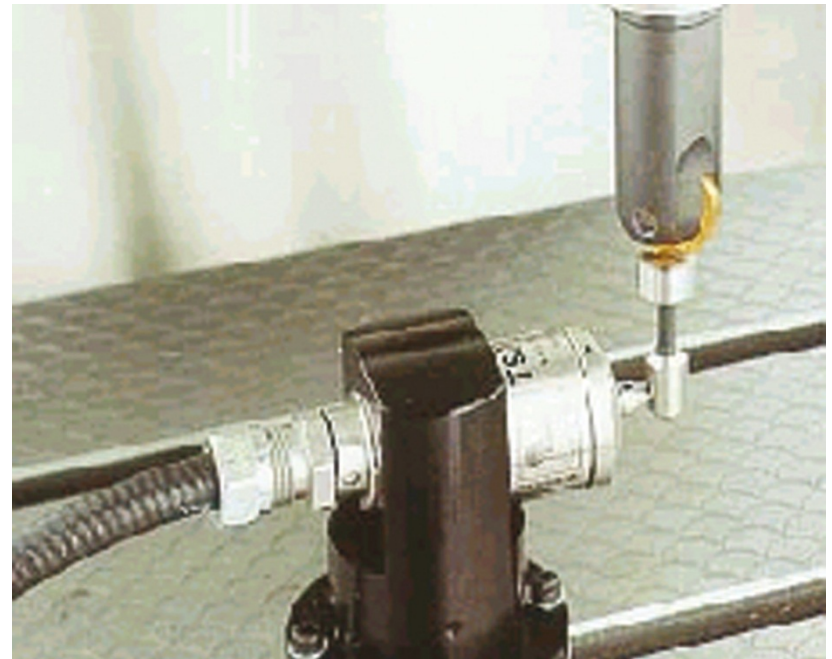
- Probing Part Zero:
 - Edge
 - Corner
 - Hole or Circle
 - Cylinder
 - Rectangular Pocket
 - Rectangular Solid
- Probing Skew Angle
- Measuring of Workpiece



Part- and Tool Probing

Tool Probing with Touch Probe

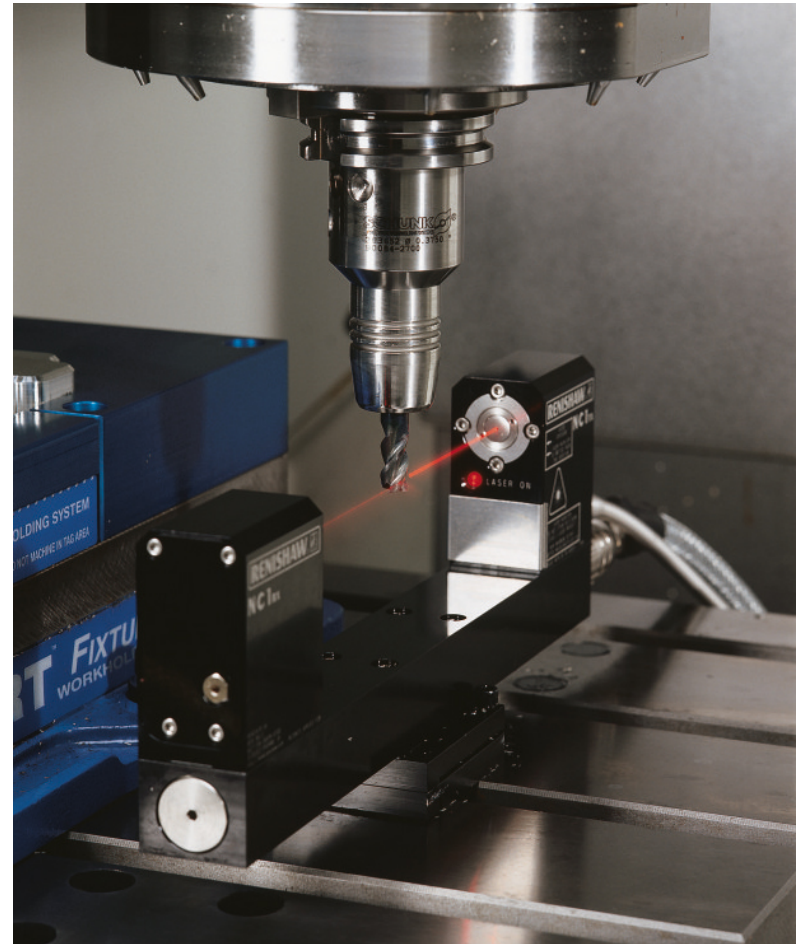
- Probing of Tool Length
- Tool Breakage Control of Tool Length and – if Tool is broken – Usage of a Spare Tool
- NO Probing of Tool Diameter



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

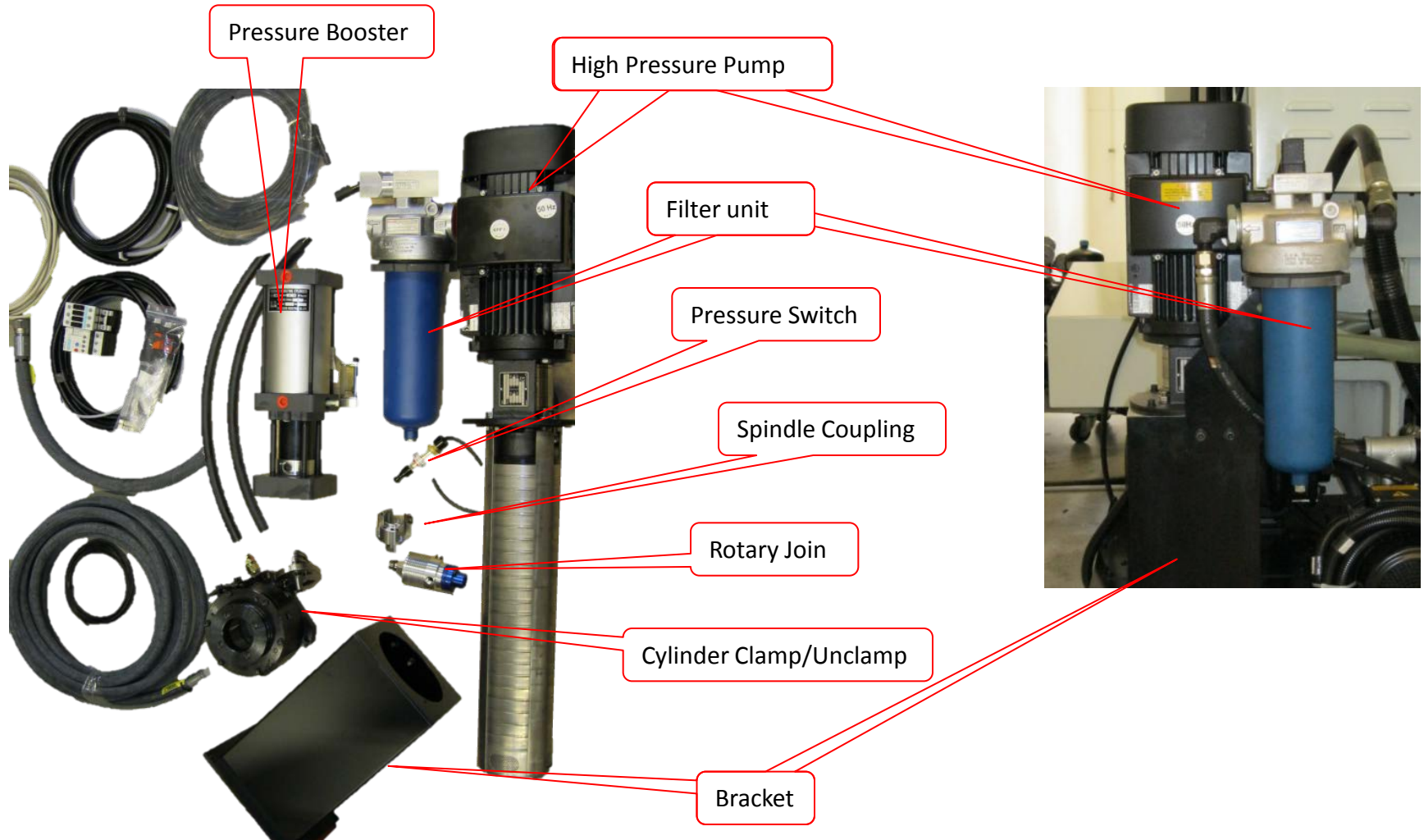


Part Probing and Tool Probing with Laser Probe



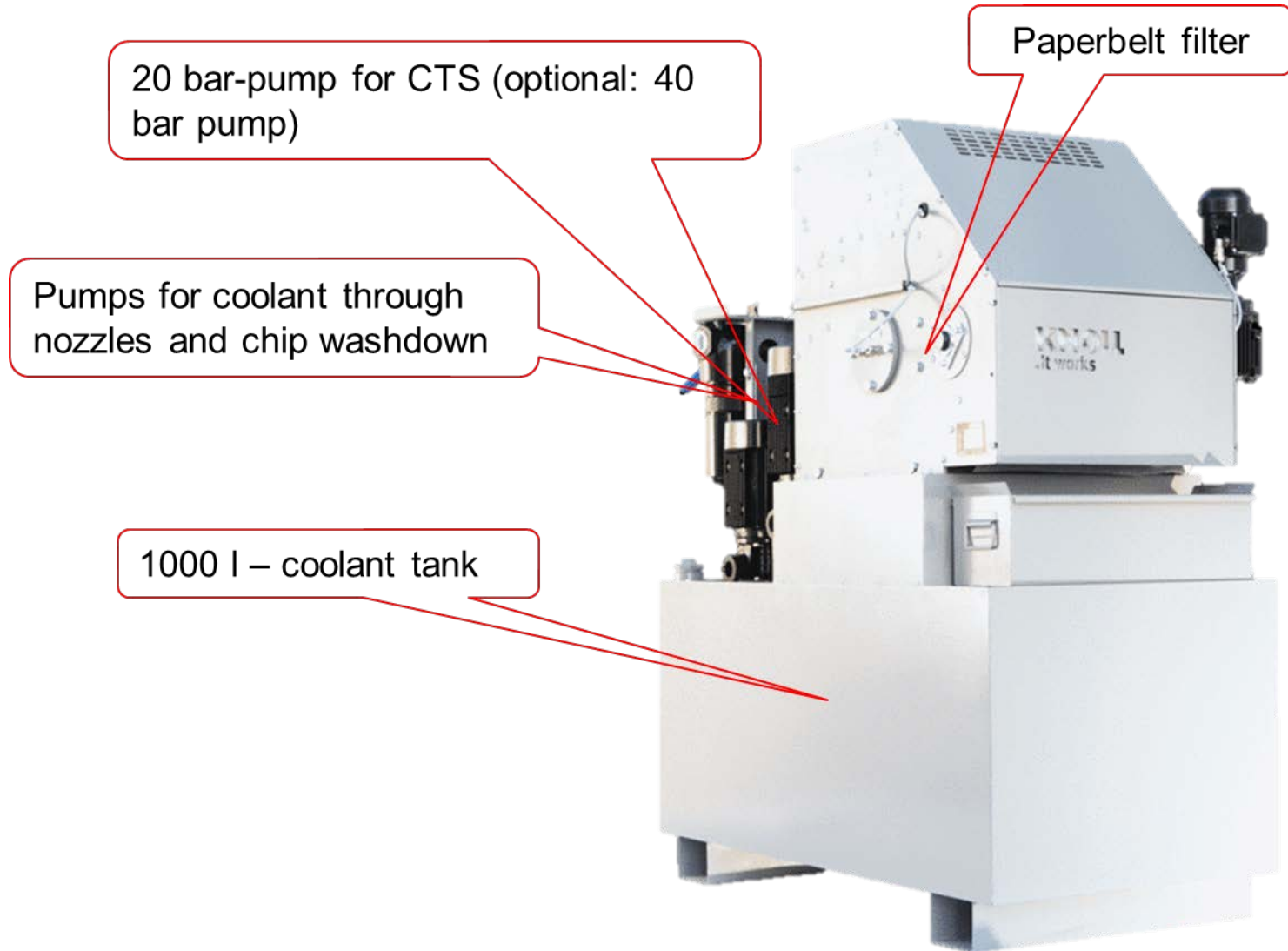
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Coolant through Spindle 20 bar



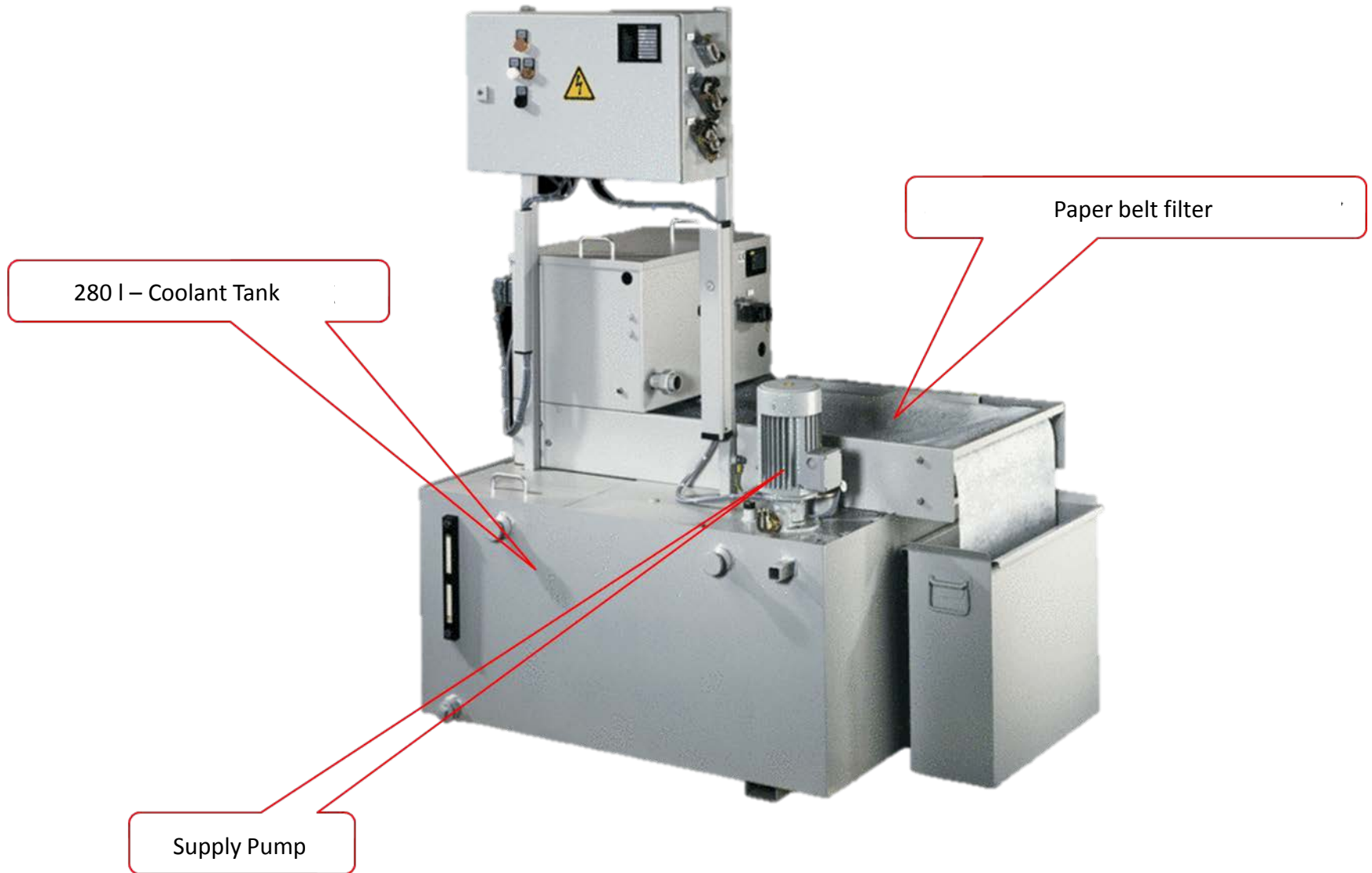
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Production Package KF400



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Bypass Filter



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