Vertical 3-Axes Machining Center

VMX 30i

mind over metal℠

HURCO®

Keydata

	VMX 30i
Travels (X/Y/Z) [mm]	760 / 510 / 610
Spindle Speed [1/min]	12,000
Spindle Power [kW]	13.5
Torque [Nm]	214
ATC stations (option)	30 (40)

Table of Content

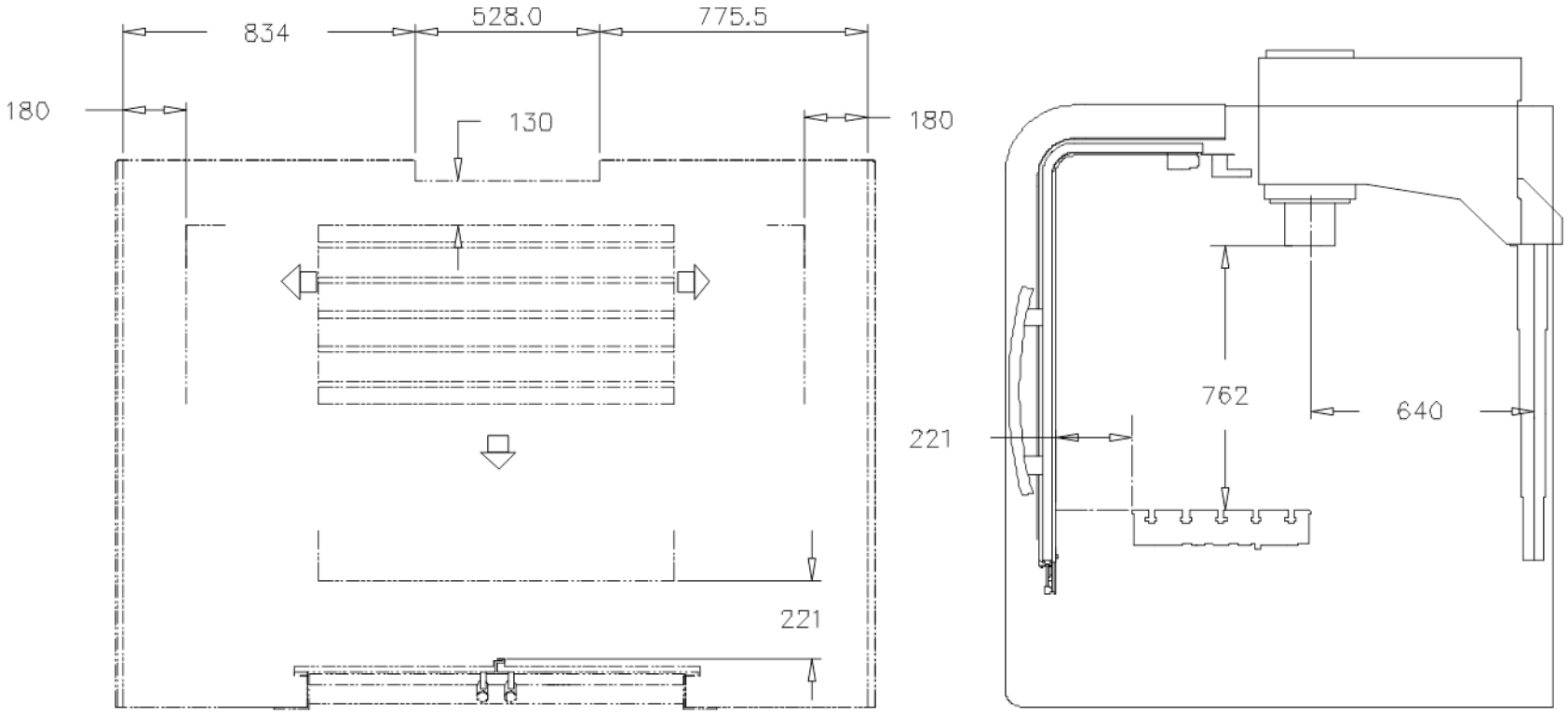
Technical Specification

Machine Capacity		Rapids X / Y / Z [m/min]	35 / 35 / 30
Travels X/Y/Z [mm]	760 / 510 / 610	Axis Thrust X/Y/Z [N]	10,900 / 10,900 / 23,700
Spindle Nose To Table [mm]	150 - 760	**Automatic Tool Changer**	
Table Working Surface W x D [mm]	1020 x 510	Number of stations (optional)	30 / 40
T – Slots (DIN 650)	5 x 18^{H8} x 100	Max. Tool Diameter [mm]	80 / 76
Max. load (uniform distribution) [kg]	1360	Adjacent Sides Empty [mm]	130 / 150
Spindle		Max. Tool length [mm]	300
Spindle Taper (DIN 69871 A)	Sk 40	Max. Tool weight [kg]	7
Max. Speed [min^{-1}]	12,000	ATC Time (Tool to tool) [sek.]	2
Max. Power [kW]	13.5	ATC Time (Chip to chip) [sek]	6
Max. Torque [Nm]	214	**Service Requirements**	
Retention knobs	ISO 7388/II B	Electrical	31 kVA / 45 A / 400V
Accuracy (VDI / DGQ 3441)		Air (Dry, clean air acc. DIN/ISO 8573-1, class 4)	7bar / 150 l/min
Positioning P_{max} [mm]	0.01 (Full travel)	**Weights**	
Repetability P_S [mm]	0.005	Machine Weight [kg]	5,000*
Feedrates		Shipping Weight [kg]	5,500*
Cutting feedrate X / Y / Z [mm/min]	30,000 / 30,000 / 22,900	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%

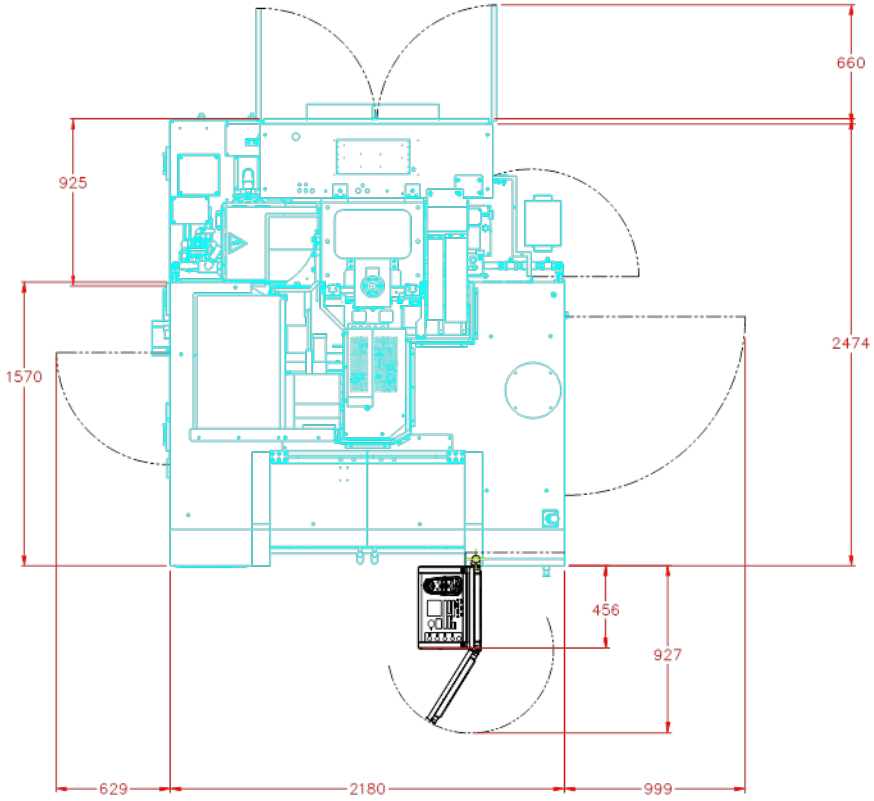
Back to Content

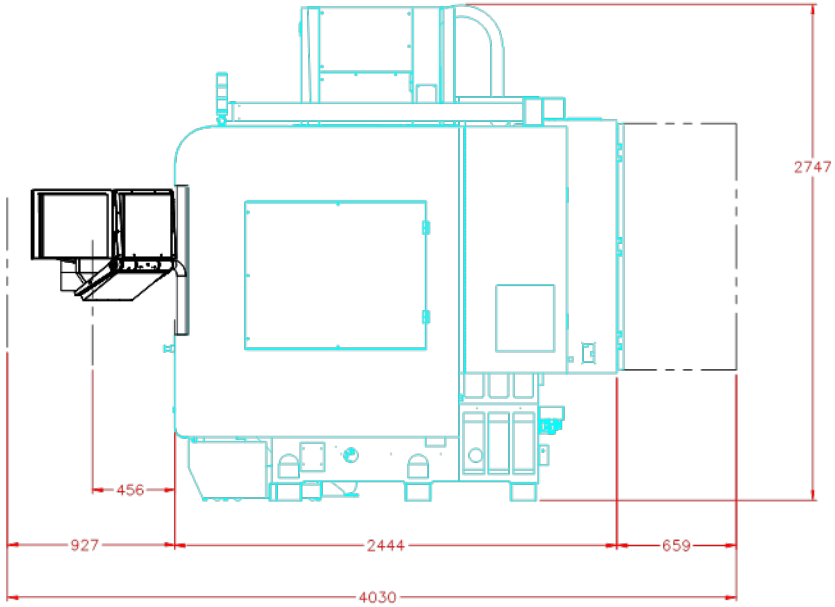
Interior Clearances



Back to Content

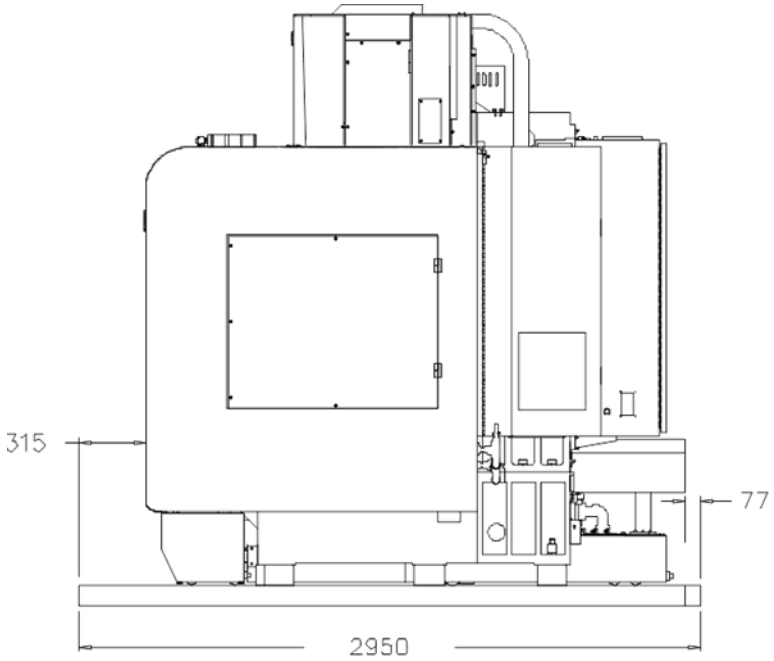
Operating Dimensions

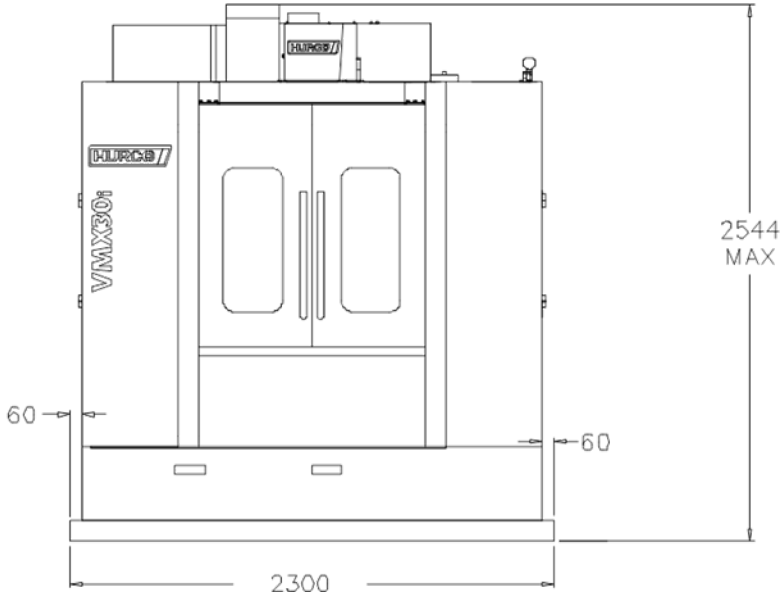




Back to Content

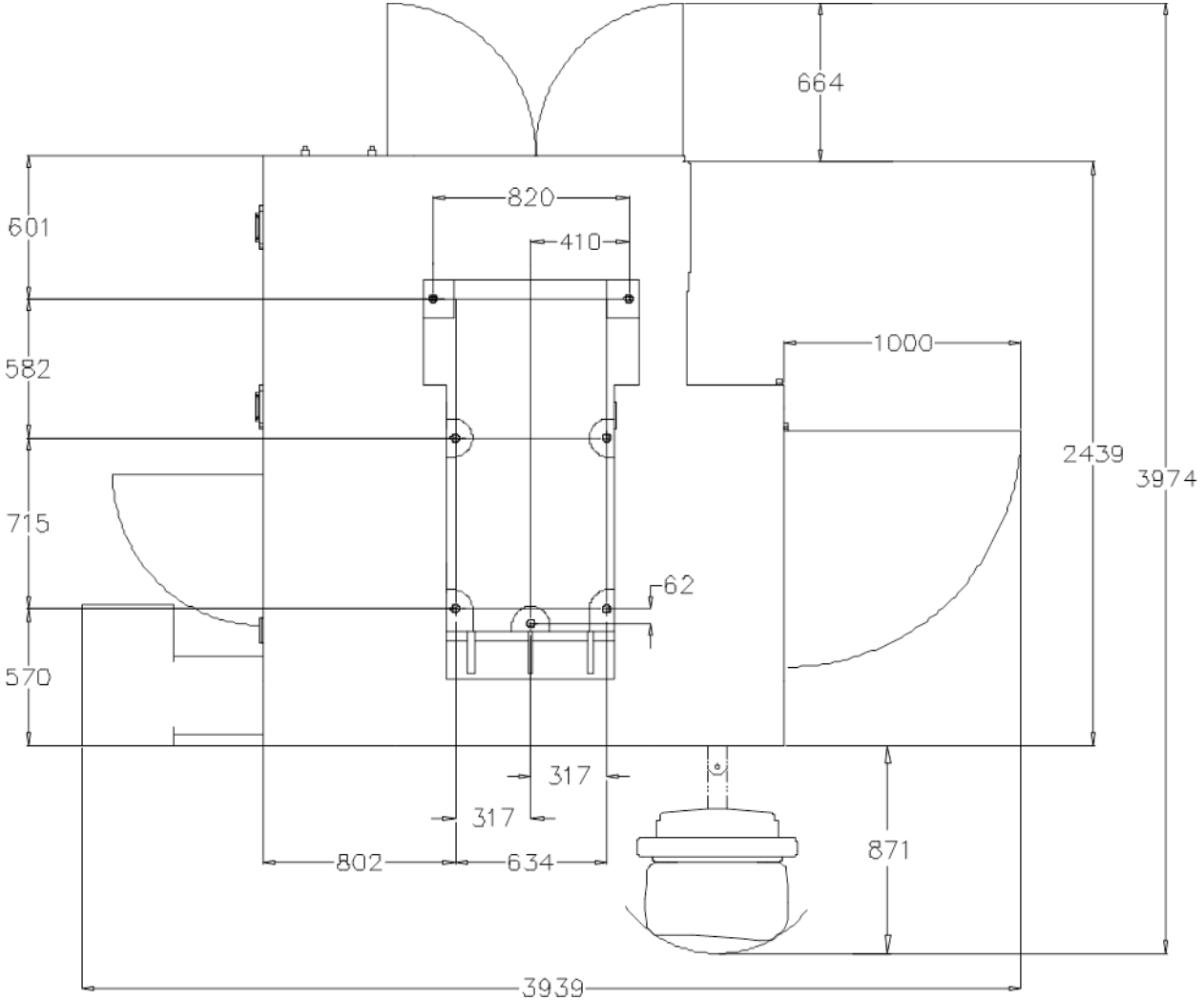
Shipping Dimensions





Back to Content

Foundation



Back to Content

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
- **Linear Scales**
  - Evaluation of axis position with a linear scale instead of rotary encoders (requires dry, clean air acc. DIN/ISO 8573-1, class 1, dew point 3°)

Back to Content

Part- and Tool Probing

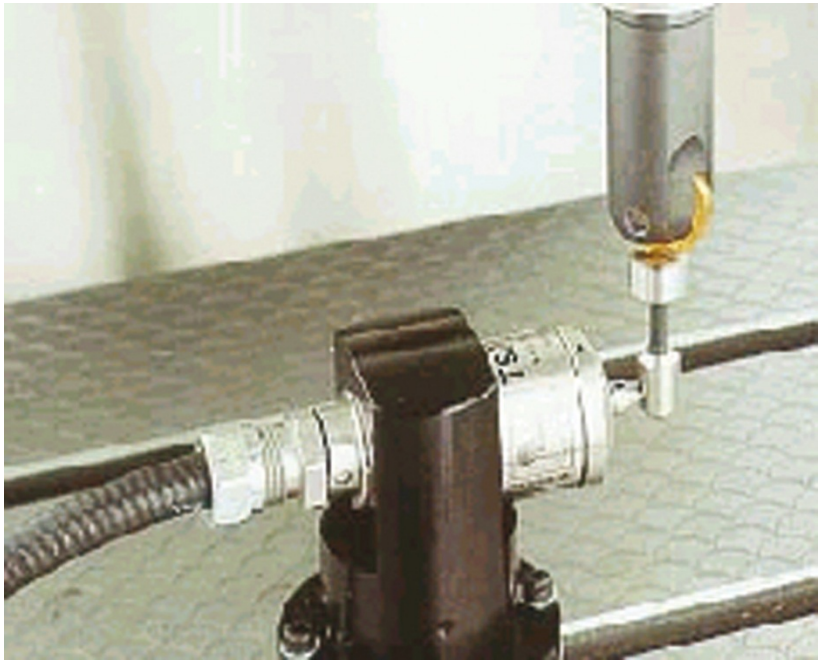
Partprobing

- 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

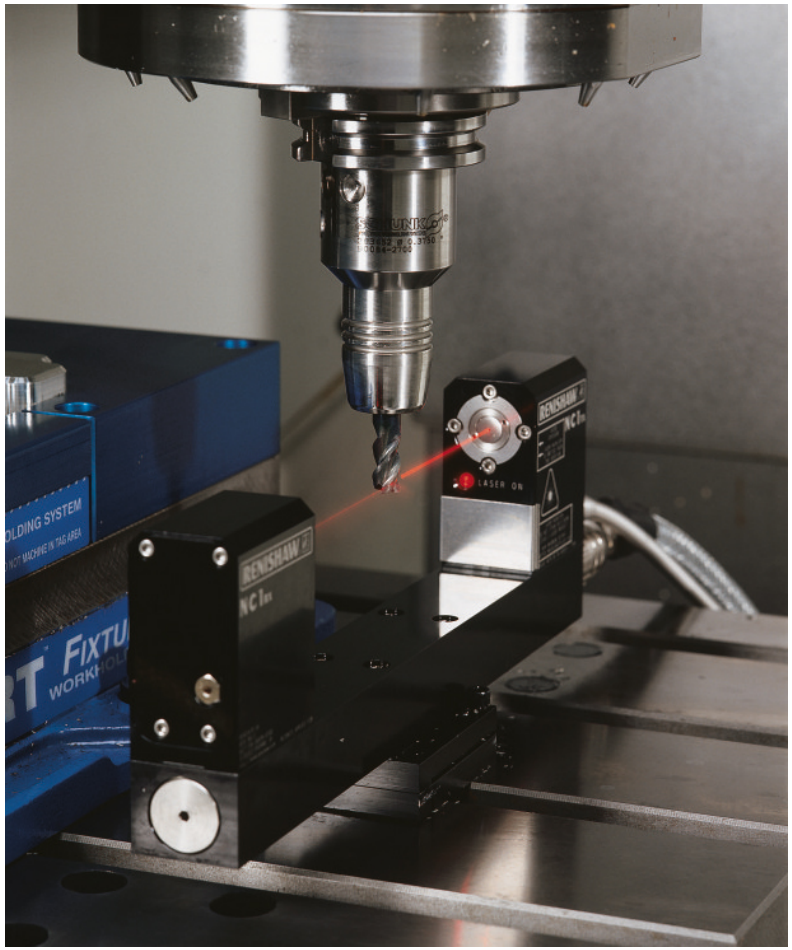
- Probing of Tool Length
- Tool Breakage Control of Tool Length and – if Tool is broken – Usage of a Spare Tool
- NO Probing of Tool Diameter



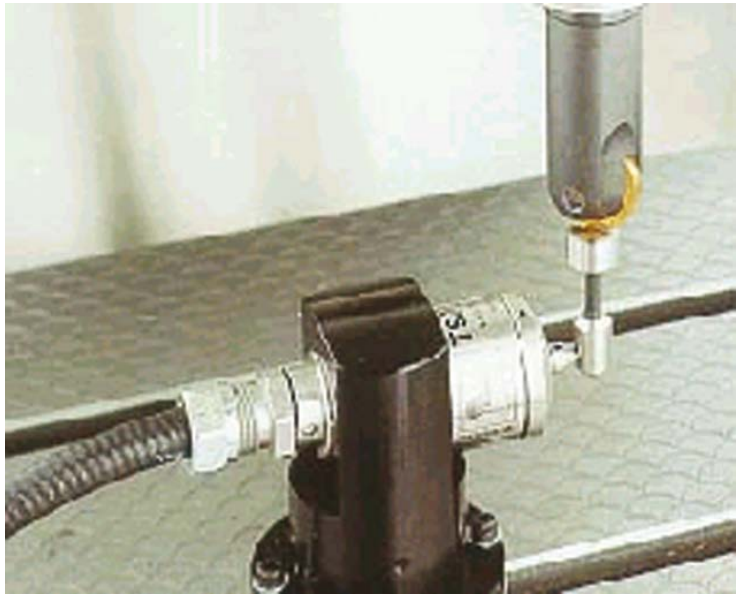
Part- and Tool Probing

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



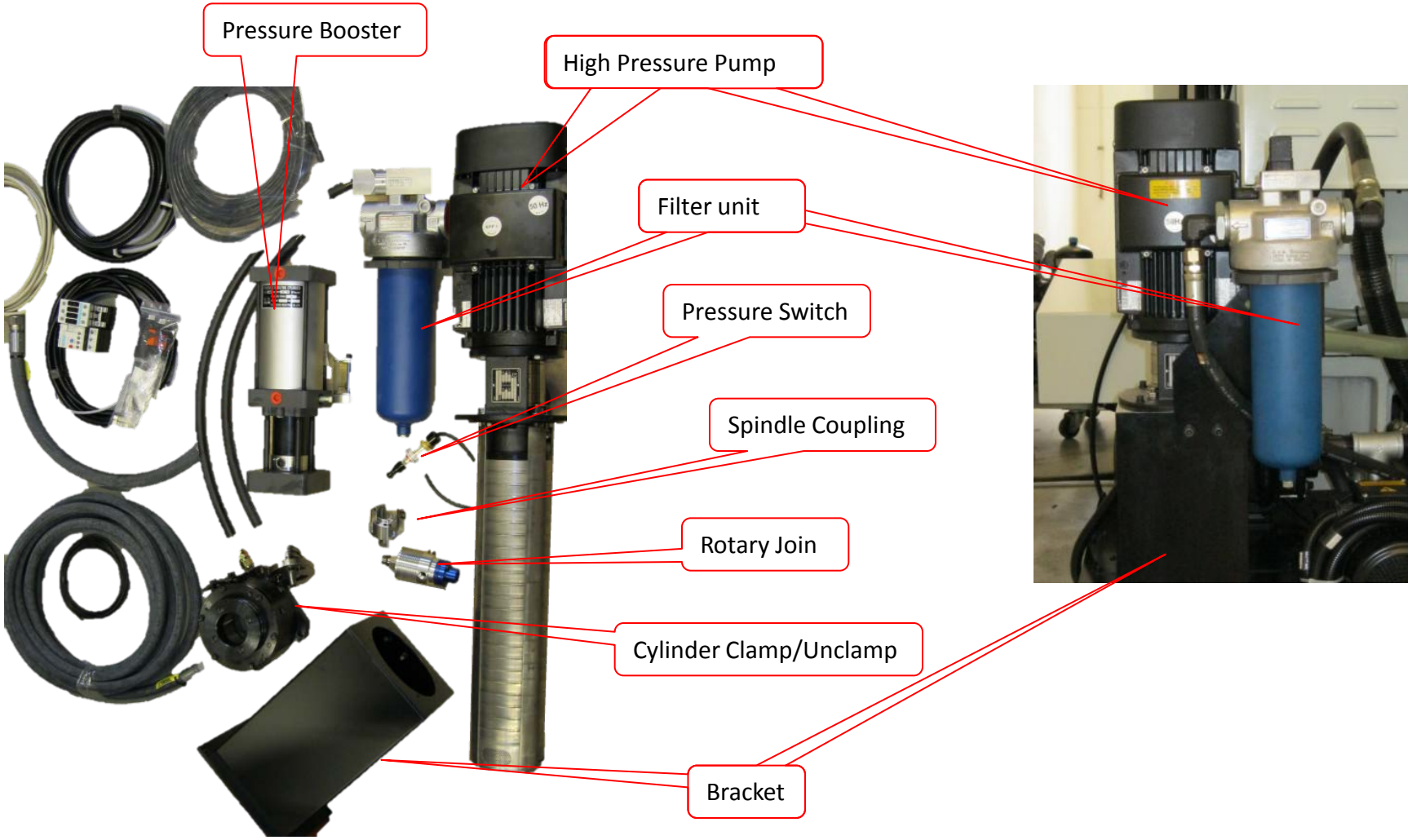
Part Probing and Tool Probing with Touch Probe



Part Probing and Tool Probing with Laser Probe

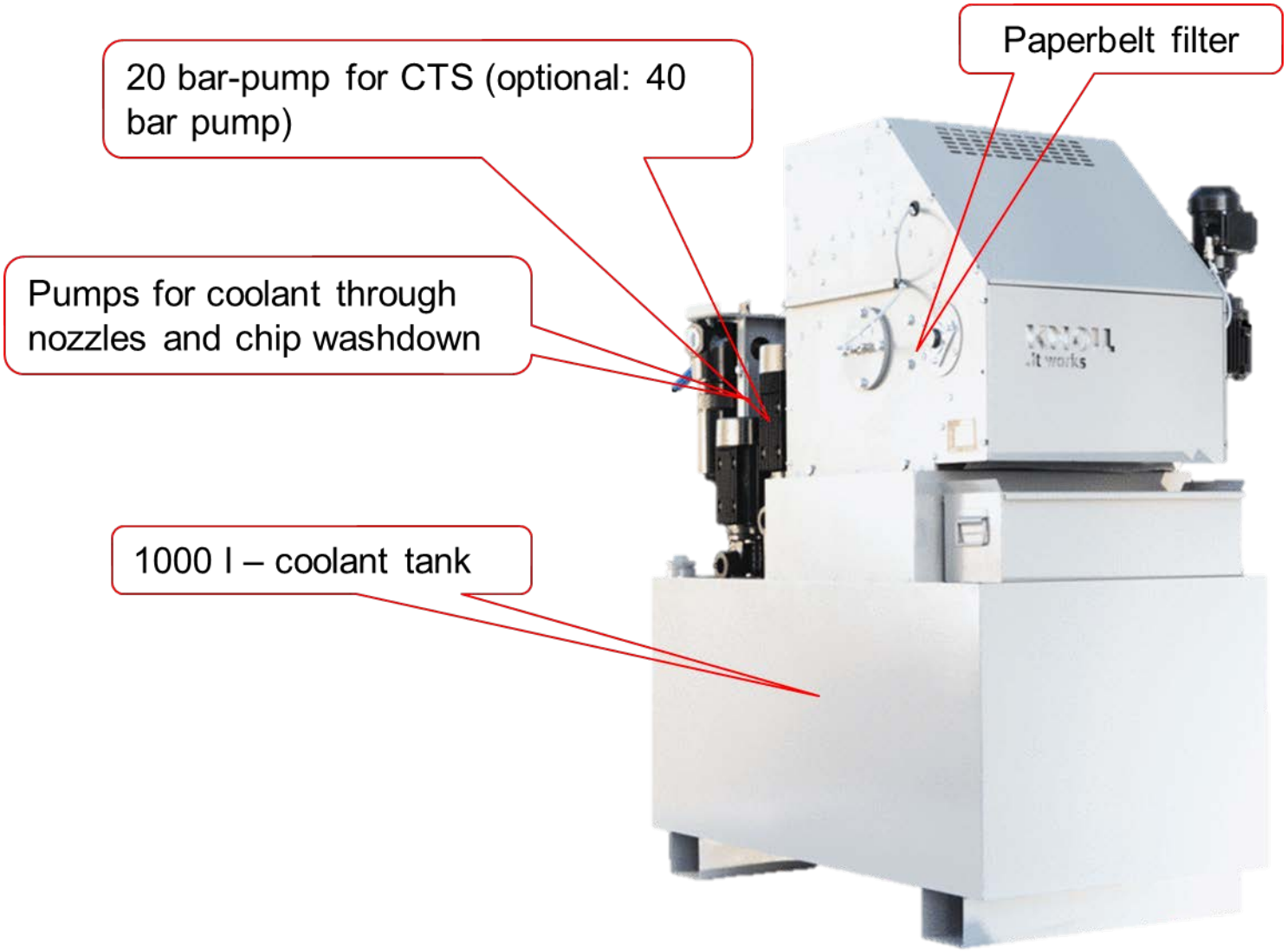
Back to Machine Options

Coolant through Spindle 20 bar



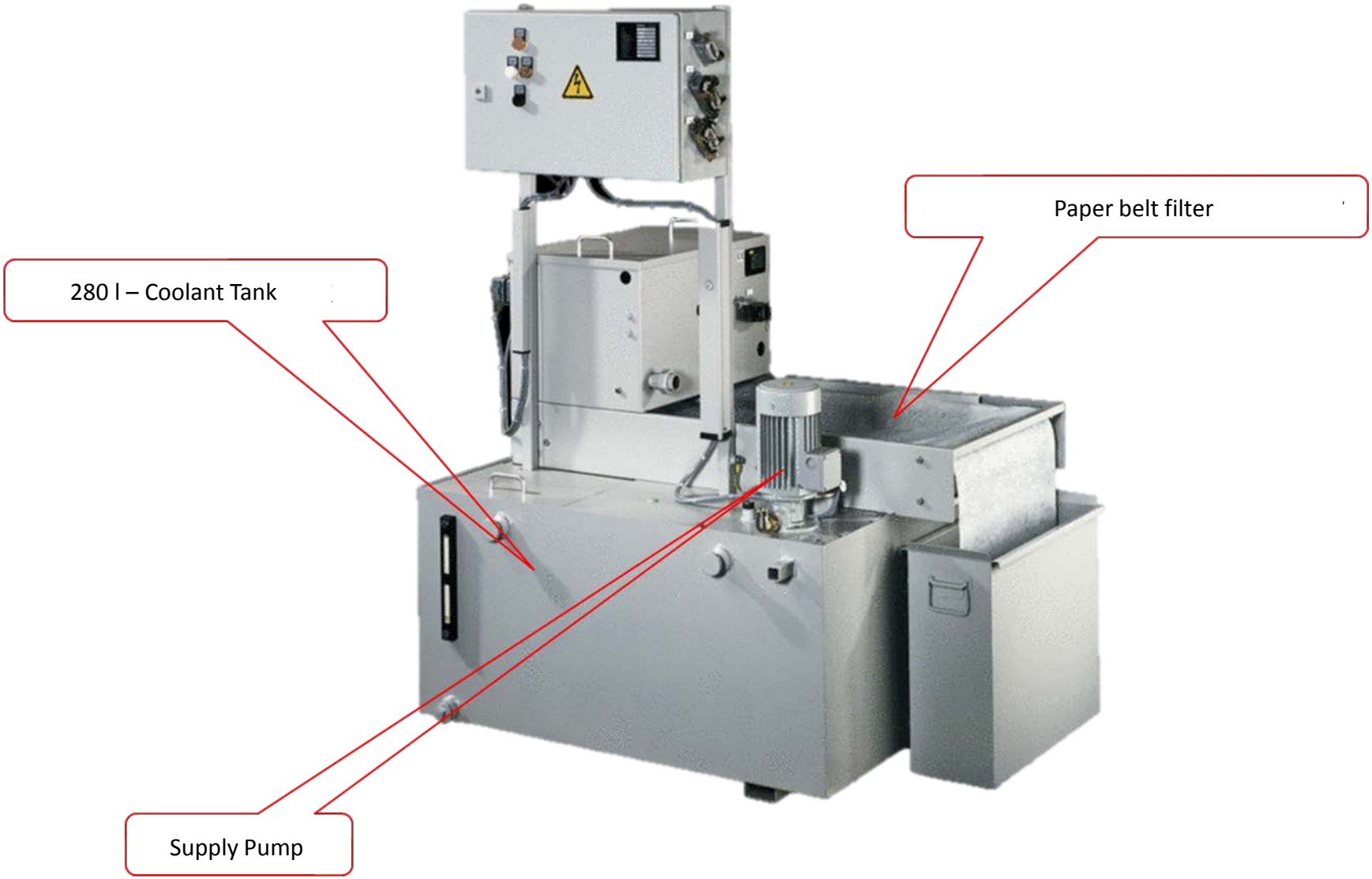
Back to Machine Options

Production Package KF400



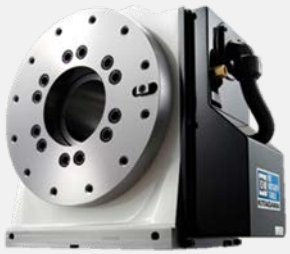
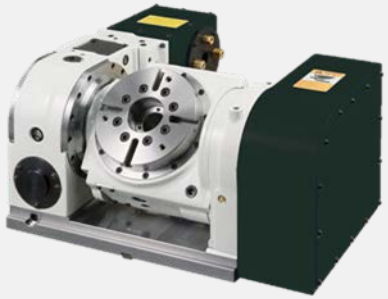
Back to Machine Options

Bypass Filter



Back to Machine Options

Rotaries

	Rotary	Eligibility	Faceplate Diameter (mm)	Center Height (mm)	Spindle Bore (mm)	Clamping Torque (Nm @ 0,5MPa)
 x well suited o after consulting - not suited	MR 120	x	128	120	32	150
	MR 160	x	165	140	40	310
	GT 200	x	200	140	45	820
	GT 250	x	250	180	70	1600
	GT 320	x	320	225	105	2800
	TT 101	x	110	140	32	180 (4.) 300 (5.)
	TT 182	x	180	180	40	450 (4.) 800 (5.)
	TT 251	o	250	250	70	900 (4.) 1200 (5.)
	TT 321	-	320	255	110	2600 (4.) 2600 (5.)

Back to Content


HURCO®
mind over metal℠