Vertical 5-Axes Machining Center

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Keydata

	VTXUi
Travels (X/Y/Z) [mm]	800 / 700 / 510
Diameter of Faceplate [mm]	610
Spindle Speed [1/min]	12,000
Power [kW]	18
Torque [Nm]	237
ATC stations (optional)	48 (96)

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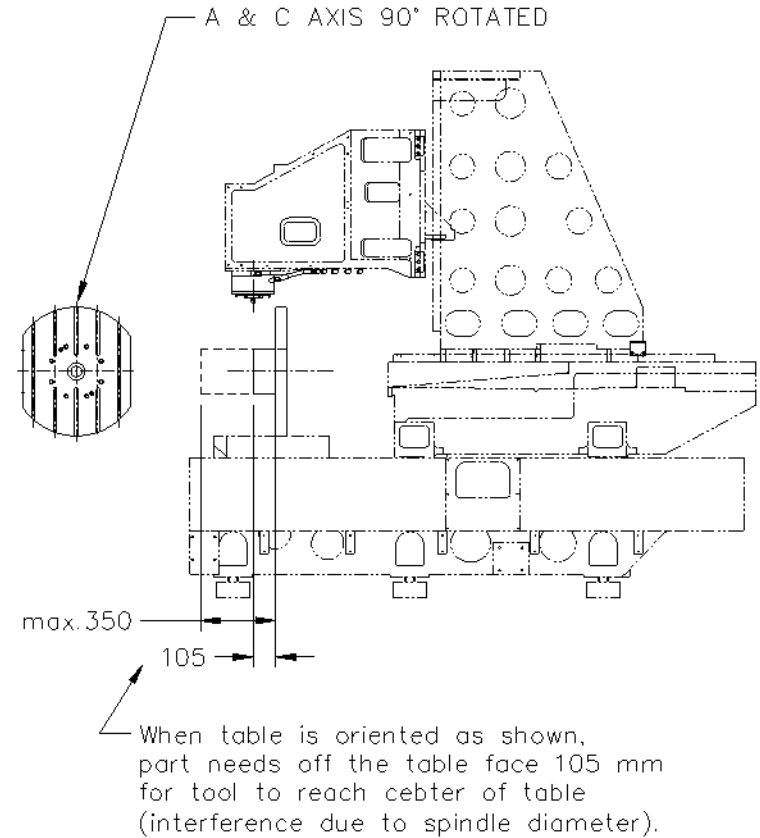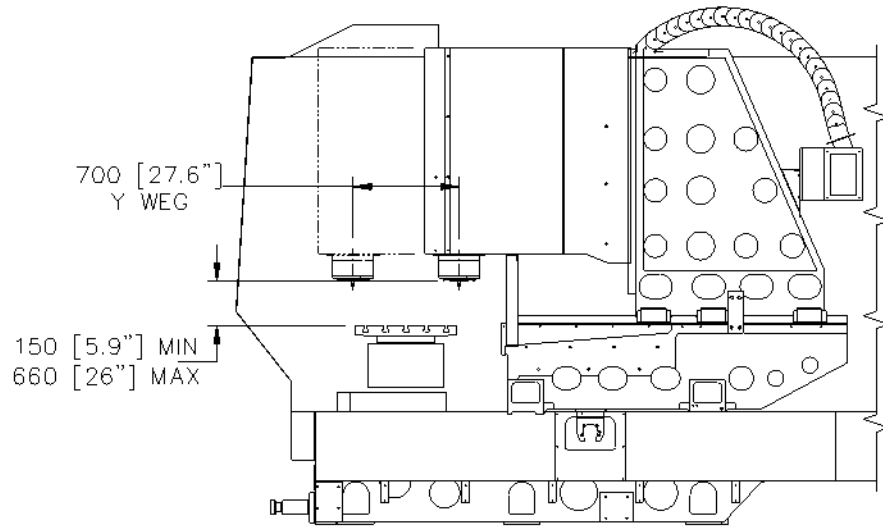
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Technical Specification

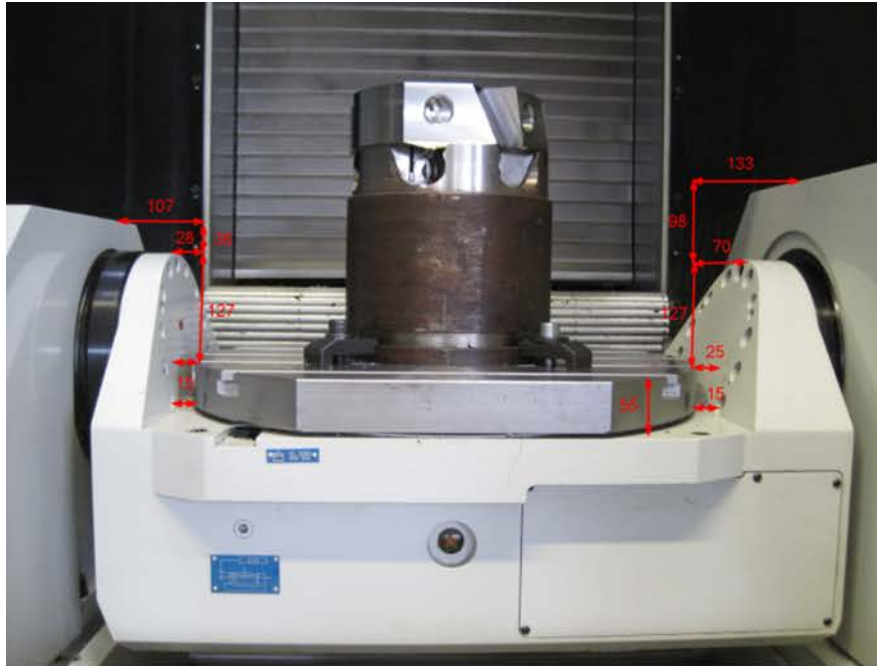| Machine Capacity		Feedrates	
Travels X / Y / Z [mm]	800 / 700 / 510	Cutting feedrate X / Y / Z [mm/min]	22,900 / 22,900 / 22,900
Travels A- / C-xis	-30°/110° / 360°	Rapids X / Y / Z [m/min]	35 / 35 / 35
Spindlenose to Table [mm]	150 - 660	Rapids A-/C-Axes [rpm]	16.6 / 16.6
Faceplate-Diameter [mm]	610	Axis Thrust X/Y/Z [N]	31,200 / 23,700 / 23,700
T – Slots (DIN 650)	5 x 18 x 100	**Automatic Tool Changer**	
Max. load (uniform distribution) [kg]	400	Number of stations (option)	48 (96)
Spindle		Max. Tool Diameter [mm] / Adjacent Sides Empty [mm]	75 / 125
Spindle Taper (DIN 69871 A)	Sk 40	Max. Tool length [mm]	280
Max. Speed [min^{-1}]	12.000	Max. Tool weight [kg]	7
Max. Power [kW]	18	ATC Time (Tool to tool) [sek.]	3
Max. Torque [Nm]	237	ATC Time (Chip to chip) [sek]	8
Retention knobs	ISO 7388/II B	**Service requirements / Weights**	
Accuracy (VDI / DGQ 3441)		Electrical	55 kVA / 79 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
Repeatability P_S [mm]	0.005	Machine Weight [kg]	12,500* (13,000*)
Positioning A / C [sec]	± 7 / ± 7	Shipping Weight [kg]	14,000* (14,500*)
Repeatability A / C [sec]	7 / 7	Pallet with Accesories [kg]	1,500

*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

700 [27.6"] Y WEG

150 [5.9"] MIN
660 [26"] MAX

A & C AXIS 90° ROTATED

max.350

105

When table is oriented as shown, part needs off the table face 105 mm for tool to reach cebter of table (interference due to spindle diameter).

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Clearance Conditions

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Working Conditions

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Shipping Conditions

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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** *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

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Part- and Tool Probing
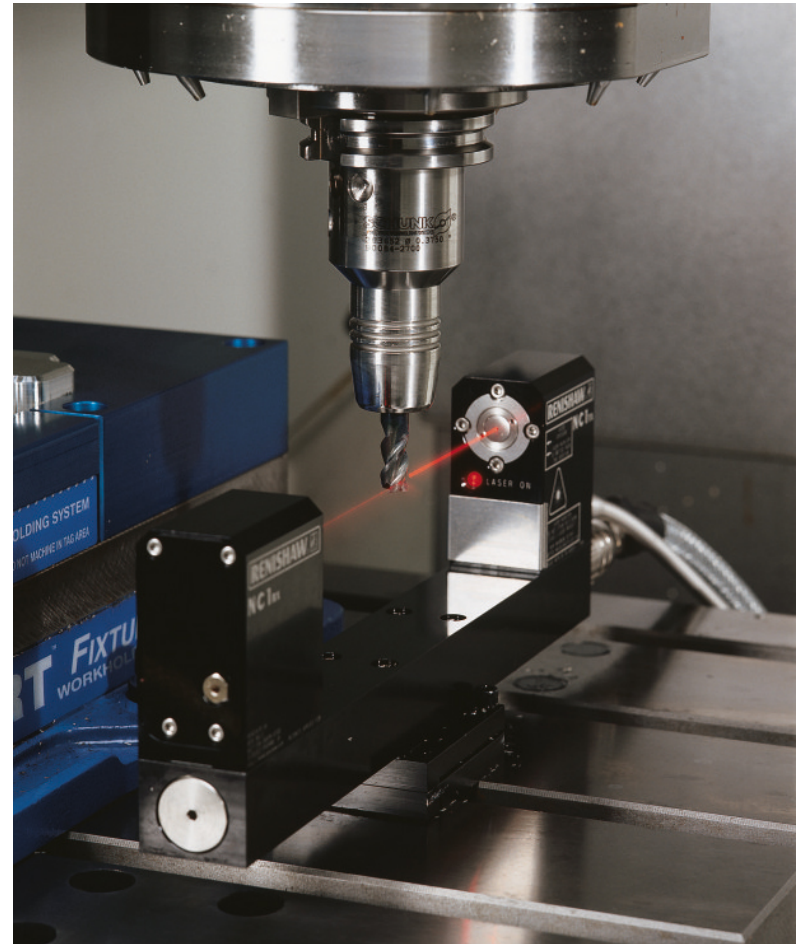
Partprobing

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

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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
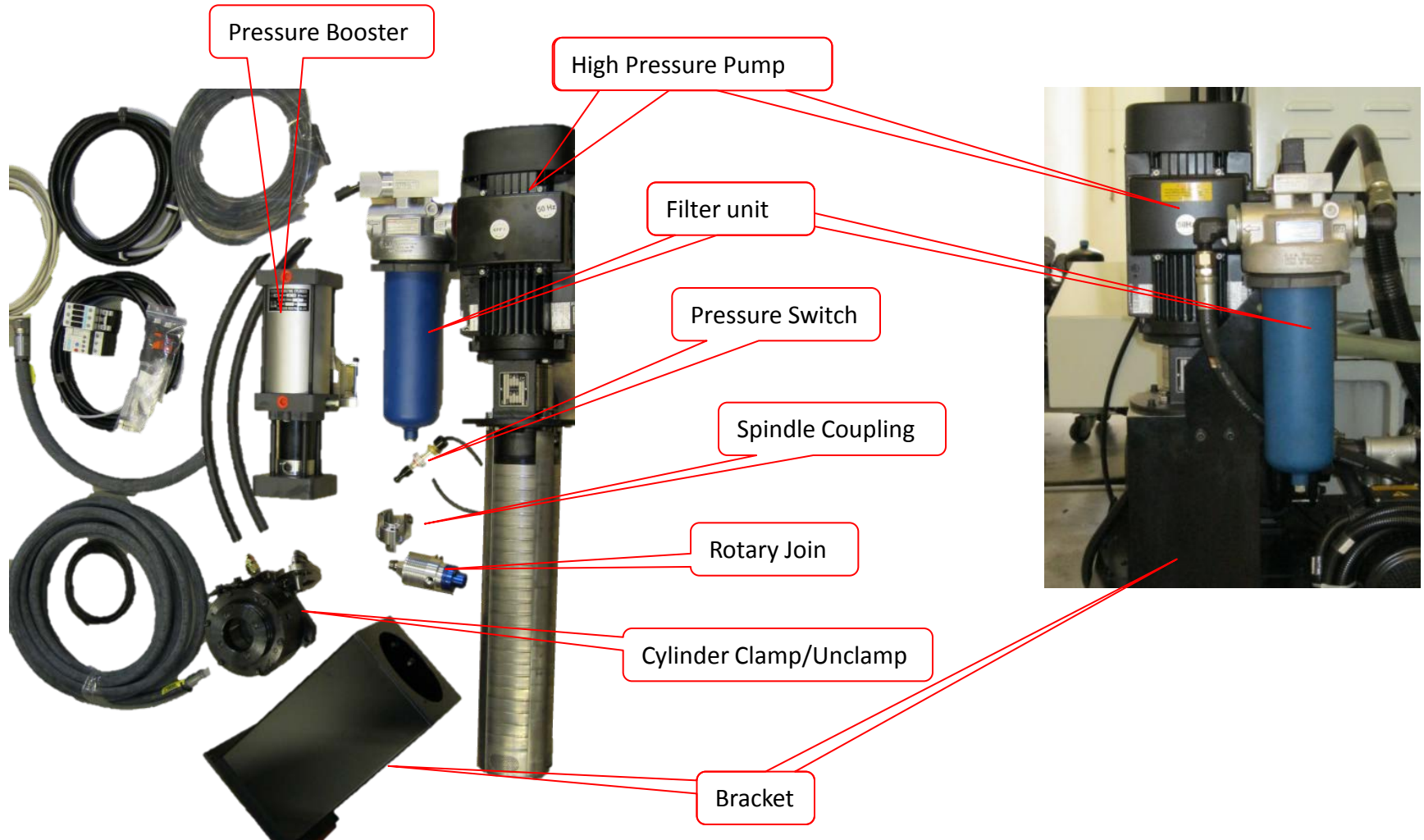- Tool Wear Detection and Compensation

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Part Probing and Tool Probing with Laser Probe

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Coolant through Spindle 20 bar

Pressure Booster

High Pressure Pump

Filter unit

Pressure Switch

Spindle Coupling

Rotary Join

Cylinder Clamp/Unclamp

Bracket

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Production Package KF400

20 bar-pump for CTS (optional: 40 bar pump)

Paperbelt filter

Pumps for coolant through nozzles and chip washdown

1000 l – coolant tank

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Bypass Filter

Paper belt filter

280 l – Coolant Tank

Supply Pump

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