

UV Series

5-AXIS GANTRY TYPE MACHINING CENTER



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UV series

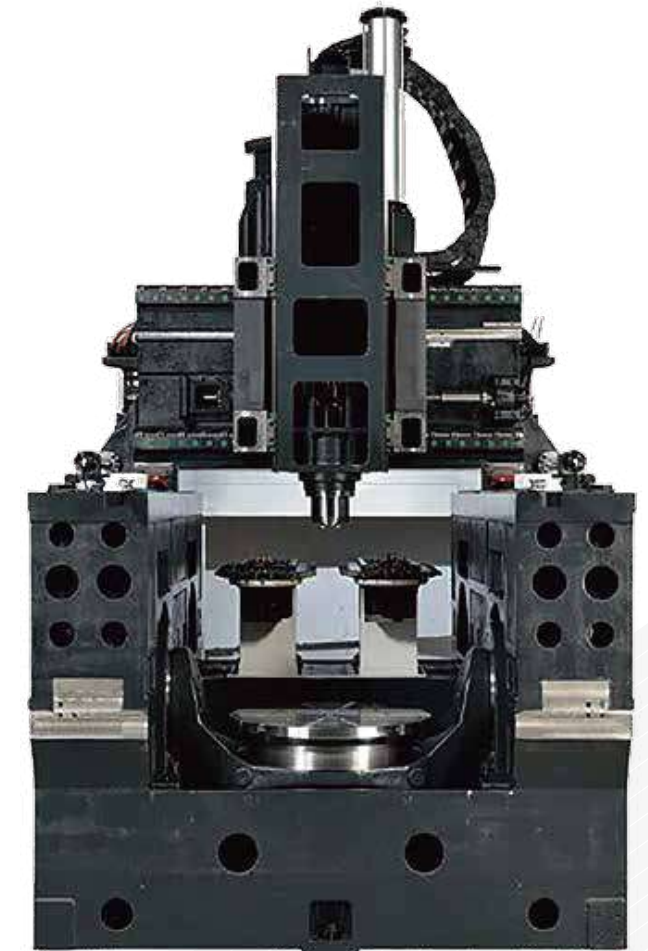
5-AXIS GANTRY TYPE MACHINING CENTER

- The UV-800 Gantry-Type 5-Axis Machining Center is engineered for outstanding structural rigidity and superior machining stability.
- Key components are engineered with advanced technologies and sourced from world-class suppliers to ensure high precision, long-term reliability, and consistent performance.
- Forceone patented AI technology delivers superior accuracy and fully embraces Industry 4.0 capabilities, enhancing overall system reliability.
- The design significantly reduces maintenance costs while minimizing unexpected downtime



UV-800 series

- The spindle is supported by three linear axes without any intermediate rotary axis, ensuring maximum rigidity between the tool and machine structure.
- Delivers consistent structural stability across the full X- and Y-axis travel range
- Highest rigidity during roughing operations with a high-torque spindle.
- Table driven by swiveling rotary axes for maximum accuracy.
- Optimal servo response under milling forces.
- A large, high-rigidity gantry system slides on two fully synchronized linear axes for superior positioning accuracy.
- Entire machine body made from high-quality castings.
- Maximized work area.
- Minimal table-to-door distance of 720 mm (for easy workpiece loading).



Heidenhain TNC 640 w/touchscreen

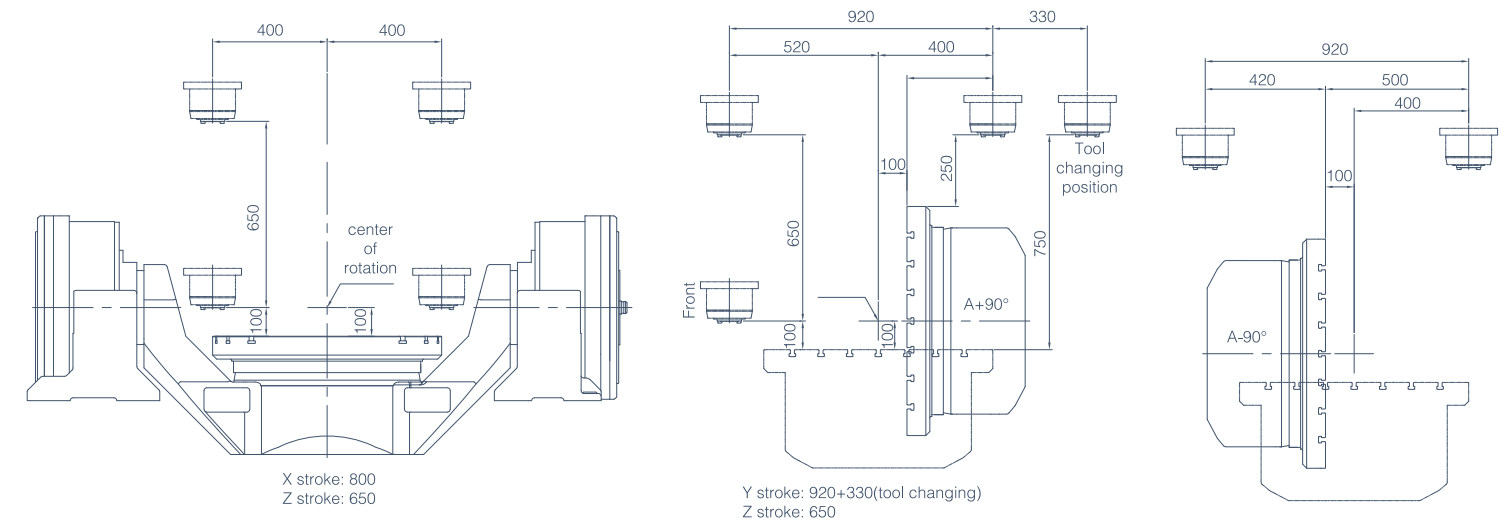


Siemens 840D w/touchscreen

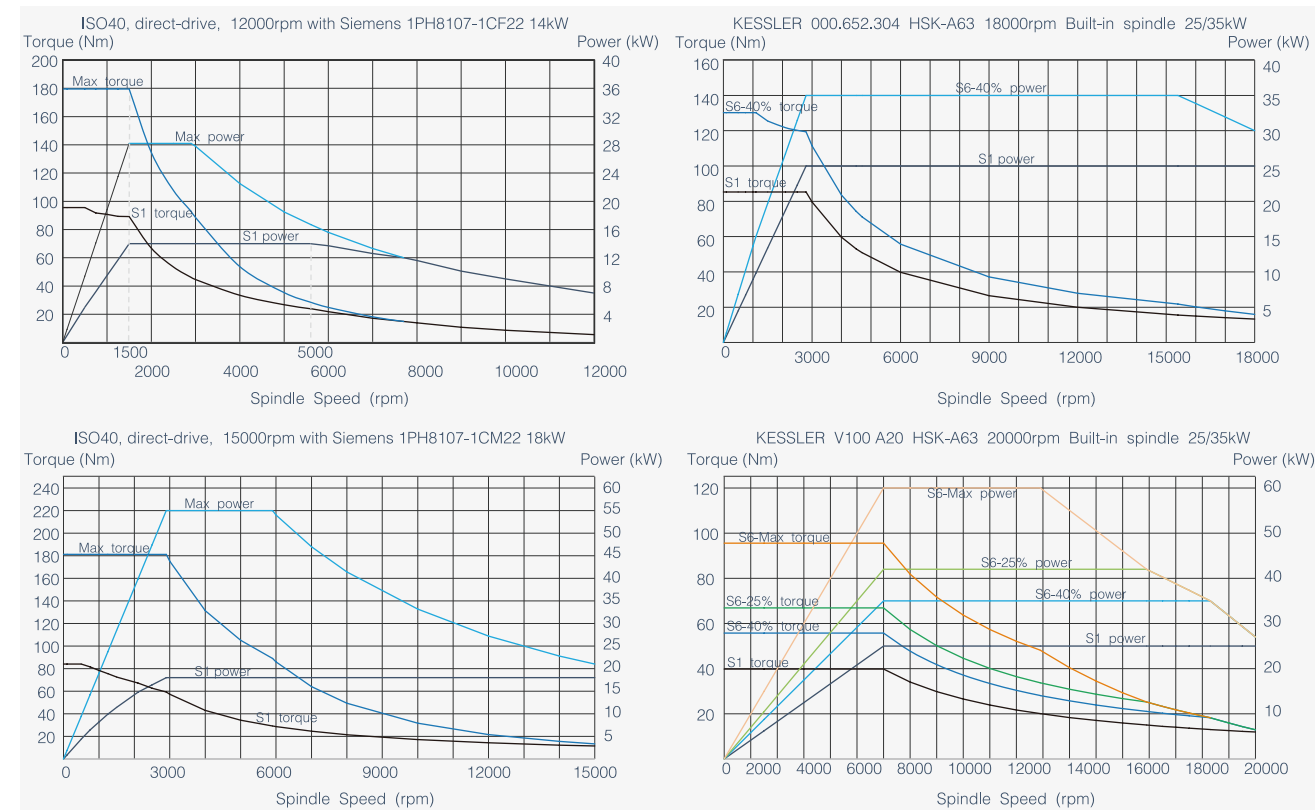
Tool management carousel - type magazine with 32 to 120 tools



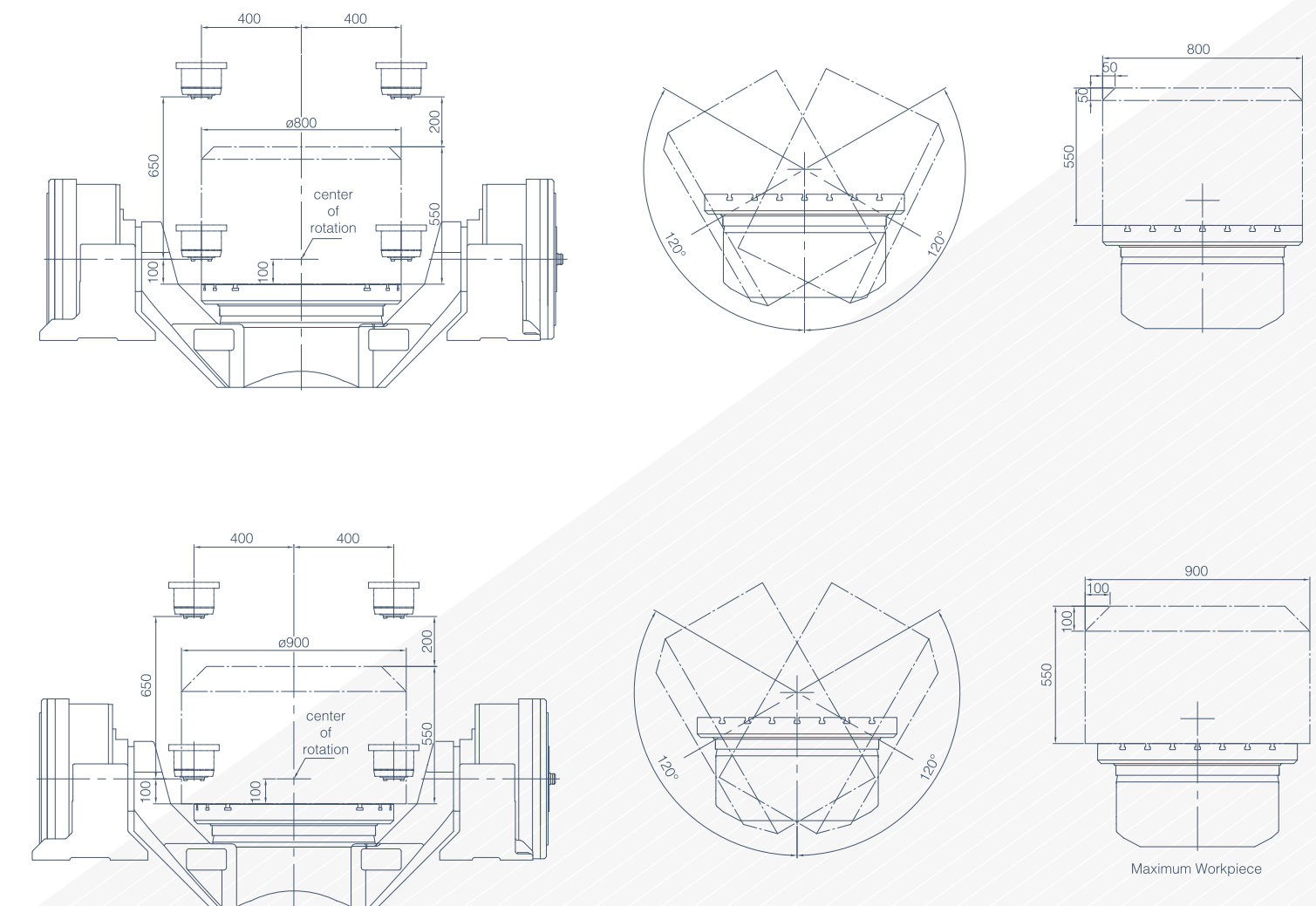
INTERFERENCE PATTERN



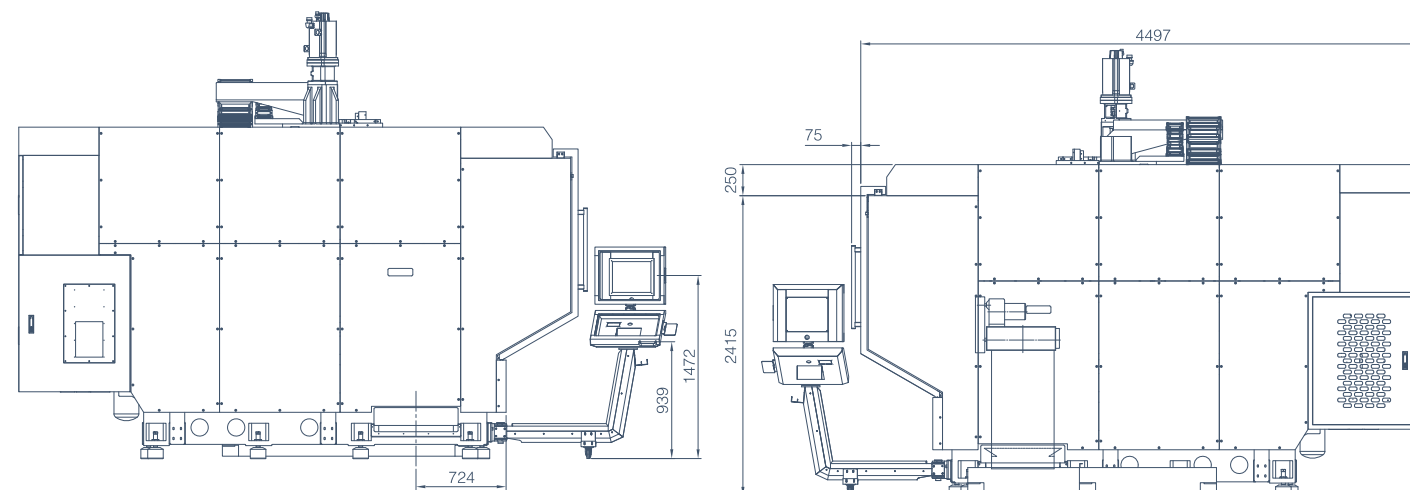
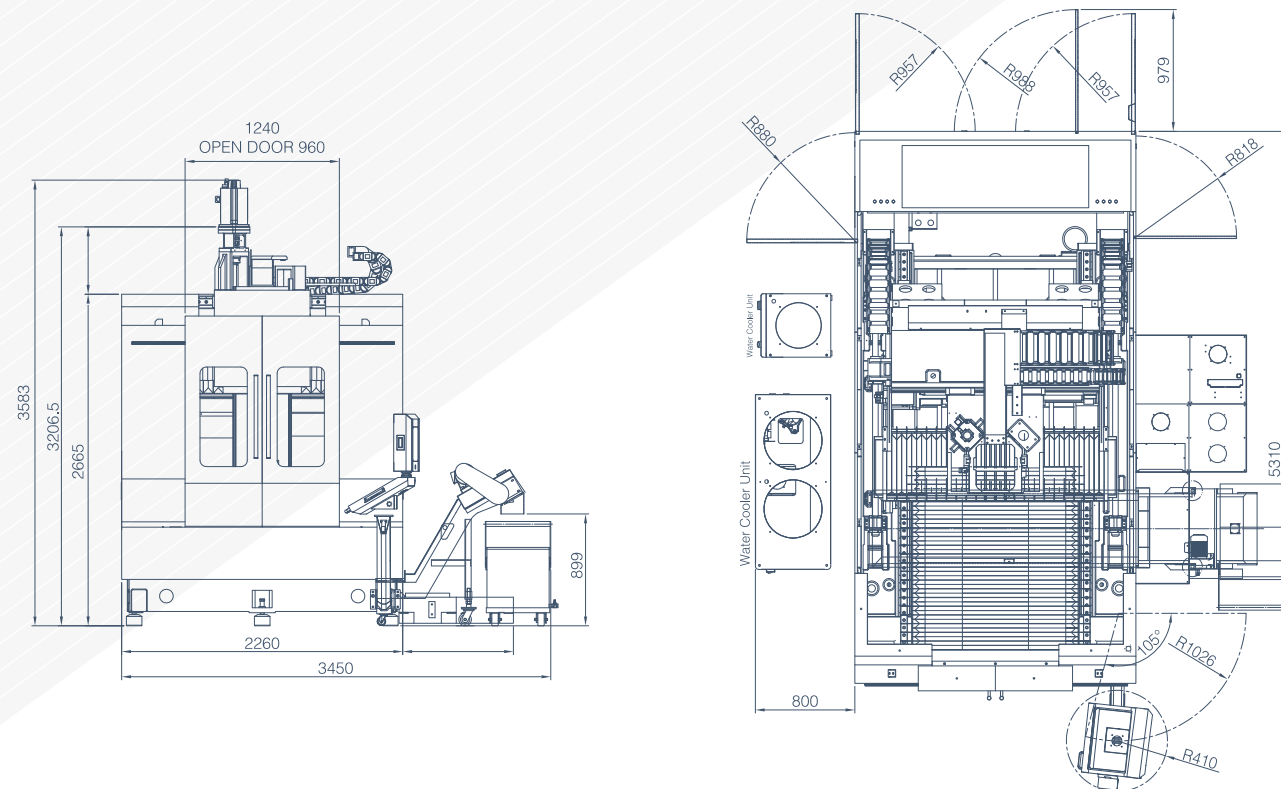
SPINDLE OUTPUT



VU-800 Spindle output charts



DIMENSIONAL DRAWINGS



MACHINE

	UNIT	UV-800
Spindle		
Spindle type		Direct
Spindle taper		ISO40/HSK-A63(ISO50/HSK-A100)
Spindle speed		12000(15000/18000/20000)rpm
Travel		800/920/650
X/Y/Z	(mm)	800/920/650
A Axis tilting range		-120°-+120°
C Axis rotating range		360°
Spindle nose to table surface	(mm)	100-750
A.T.C		
Tool magazine capacity		ISO40 32 (40/60/64/80/120) ISO50 32(40/60)
Tool Shank	(mm)	ISO40/HSK-A63 (ISO50/HSK-A100)
Max. tool length		300mm(40# / 50#)
Max. tool diameter	(mm)	Ø75 / Ø 125 mm (40# Flat Tool Magazine) Ø125 / Ø 200 mm (50# Flat Tool Magazine)
Max tool weight	(kgs)	ISO40/7 (ISO50/15)
Rapid Speed		
X/Y/Z axis	(mm/min)	36(48)
A/C axis	(rpm)	60/90
Cutting feedrate	(m/min)	20
A/C AXIS		
Table size	(mm)	800
T-Slot number/pitch	(mm)	5x125x14
Max. table loading	(kgs)	1200
Center hole	(mm)	50H8
Others		
Machine Dimension LxWxH	(mm)	3450x5310x3600
Machine Weight	(net/kgs)	21000
Coolant tank capacity	(liters)	210
Pneumatic supply	(kg/cm)	4-6

- All specifications, design and characteristics shown on this catalogue are subject to change without prior notice.

STANDARD ACCESSORIES :

- Spindle speed direct 12000 rpm
- Spindle chiller
- Chip conveyor
- A.T.C 32T
- Heat exchanger
- X/Y/Z Linear scale
- A/C axis encoder
- Heidenhain iTNC 640
- M30
- Coolant Gun
- Air Gun
- Spindle Thermal Compensation

OPTIONAL ACCESSORIES :

- C.T.S
- Laser tool length measurement (Blum/Renishaw)
- Work piece measurement
- CE mark
- Transformer
- Air conditioner
- Spin window
- Oil mist collector
- Siemens controller 840D
- Kinematics calibrating device (KKH-100/TS 460/TS 640)