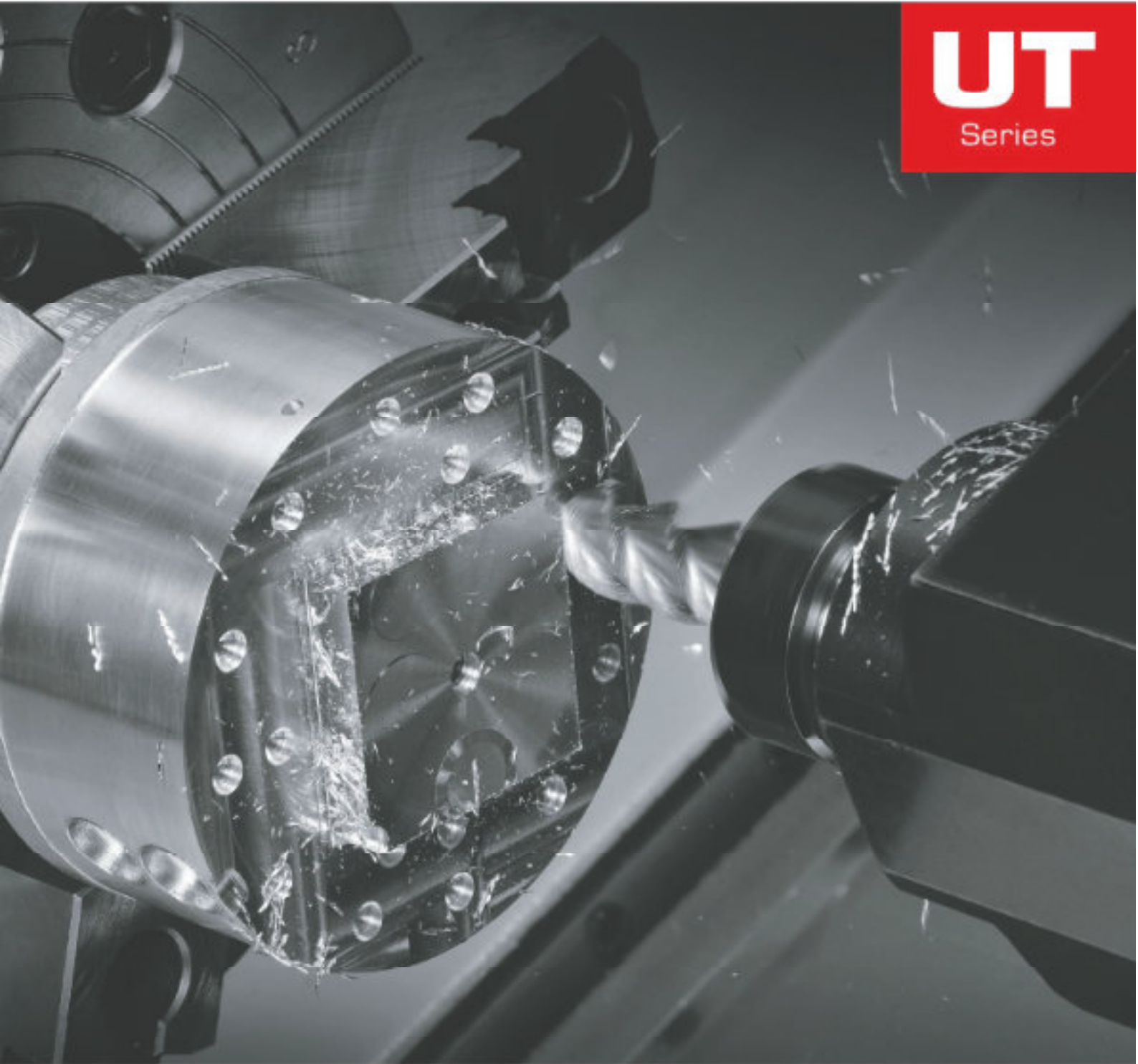


ACCUWAY

Slant-Bed Turning Center

UT
Series



Structure

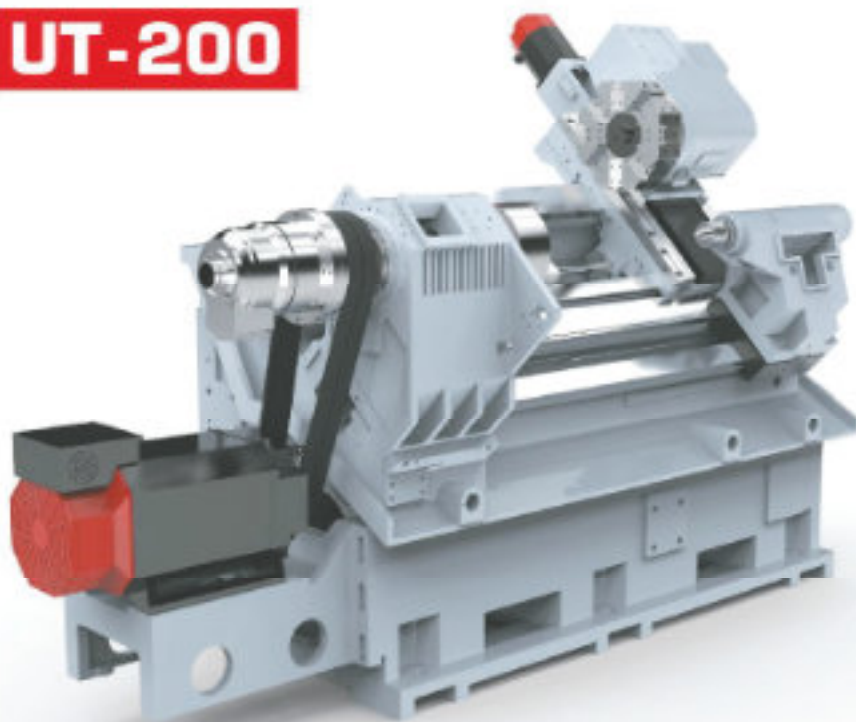
High Quality Meehanite Casting

Our one piece Meehanite casting is heavily ribbed and reinforced to eliminate flexing and deformation. The UT-200 series comes with a 45 degree slant bed and the UT-300 series is equipped with a 30 degree slant bed.

Designed for Stability

The base on these machines is extra heavy and is set low to deliver a low center of gravity for enhanced stability during machining.

UT-200



Hardened Wide Box Ways

Our specially hardened and heat treated large box ways on our single piece slant bed deliver excellent rigidity and stability. The low center of gravity in our structural design allows for a larger swing diameter and easy chip removal.



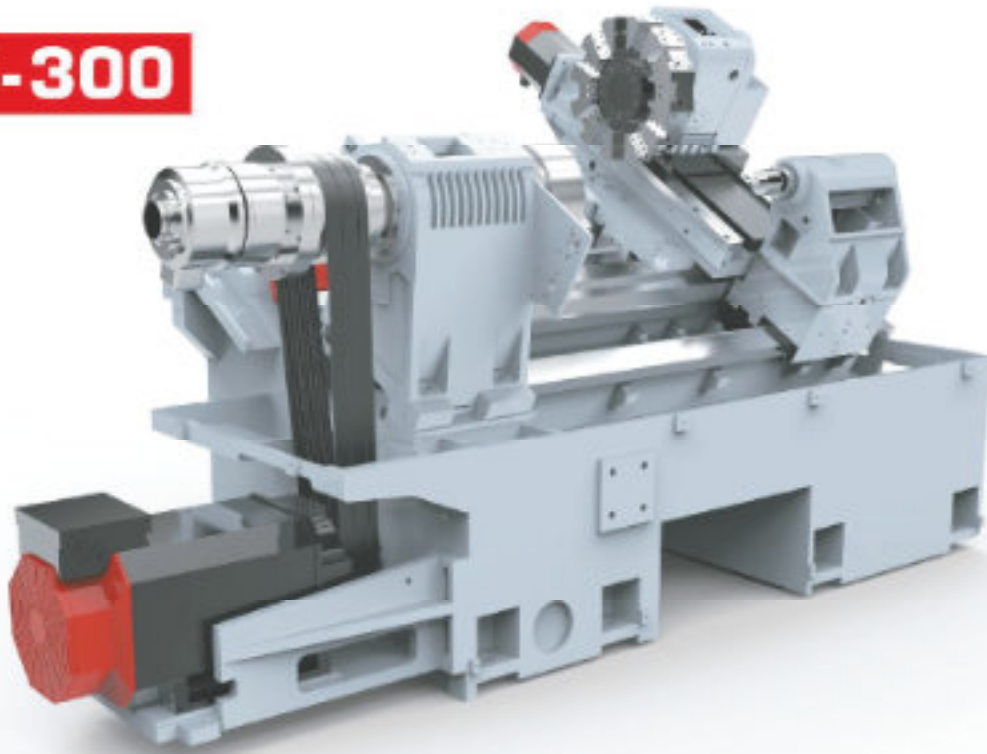
Expert Hand Scraping

All sliding surfaces are coated with Turcite B and hand scraped to create the excellent lubrication retention required for precision positioning and long service life.

During assembly flatness, squareness and straightness is constantly checked and adjusted to deliver the excellent accuracy that our Accuway lathes are renowned for.



UT-300



Precision Assurance

Prior to assembly our key components are checked using our CMM system to ensure the accuracy of all components.



Rigid Shock Absorbing Headstock

Our headstock is specially designed to resist flexing, it is heat treated and annealed twice to remove internal stress and is hardened to Rockwell 53. Our headstocks are made to withstand the extreme demands of continuous heavy-duty and step cutting.

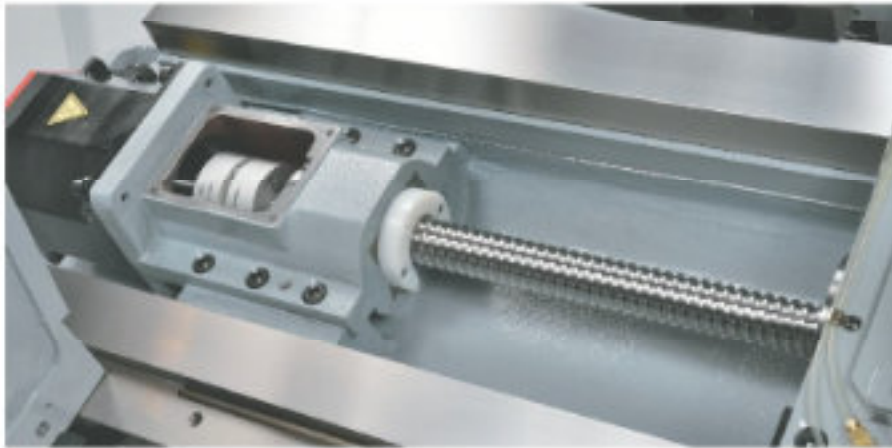
Headstock Performance

Our headstock features symmetrically placed heat dissipating ribs to enhance cooling. It is precision bored and ground to reduce errors from heat distortion. This allows it to maintain its circularity and concentricity to deliver the high precision that our customers demand.

Precision Spindle

Precision In-house Spindle Assembly

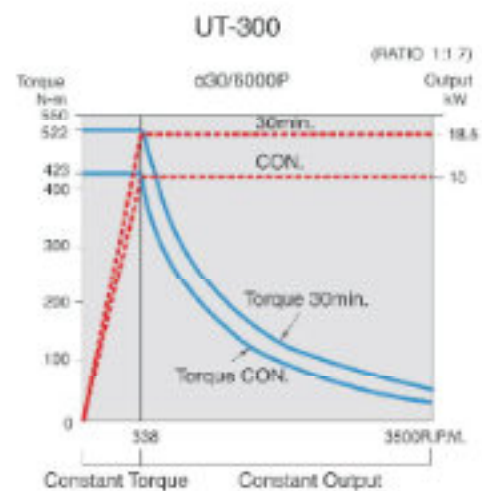
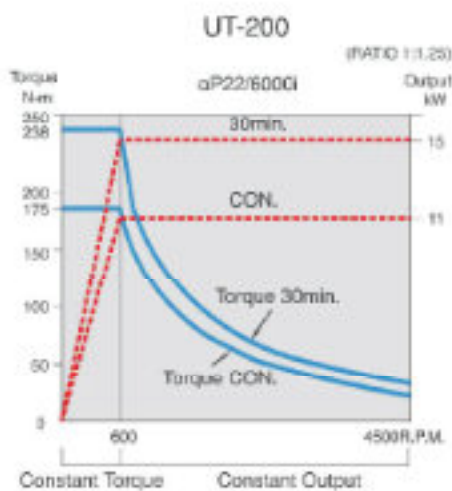
Precision belt drive spindles are custom designed and assembled in-house to provide unsurpassed power, long term durability, and peak machining capability. They are enclosed in cast headstocks with balanced design to dissipate heat evenly to maintain machining accuracy. Each spindle undergoes a dynamic balance to reduce the vibration and increase the performance and overall quality.



Ballscrew Drive Mechanism

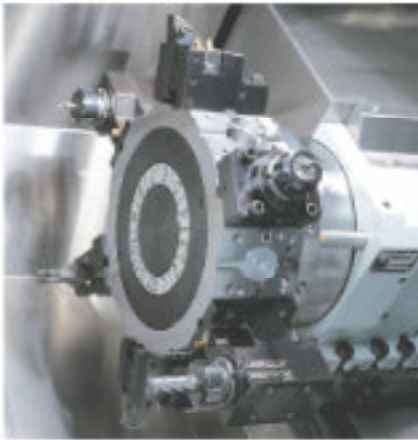
Oversized AC servo motors are used to deliver powerful thrust for high feedrates and accurate cutting. Large diameter pre-tensioned precision ballscrews are directly connected to the drive mechanism for nearly backlash free movement. Precision ground boxways are widely spaced and hardened for optimal performance.

Spindle Power Chart



High Precision Turrets

UT
Series



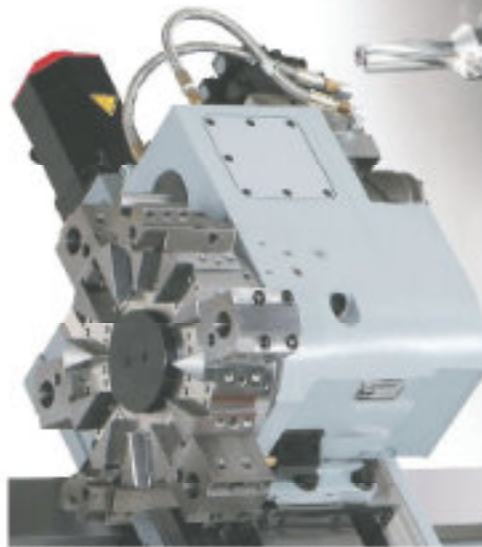
APT 30 (UT-200)

Precision In-house Turret Assembly

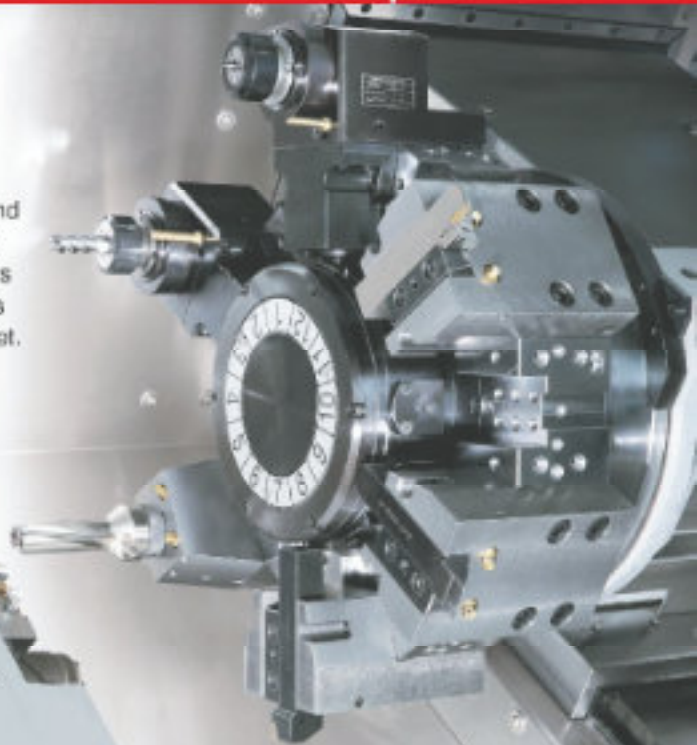
All turrets are built with care and we provide both hydraulic and servo-mechanical power turrets to cover a wide range of needs including an optional BMT turret.



8 Station Hydraulic Turret



12 Station Hydraulic Turret



APT 40 (UT-300)

Programmable Tailstock

The tailstocks on the UT series machines can be either manually or automatically controlled. They are located on the same one-piece cast guideway surface as the headstock and main spindle. On the UT-200 series the tailstock is manually driven but optionally can be upgraded to programmable. The UT-300 series has a fully programmable tailstock.



UT-300 Programmable Tailstock



UT-200 Programmable Tailstock

UT-300 Rack & Pinion Drive Mechanism

A rack and pinion mechanism drives the heavy duty tailstock on the UT - 300 series using its high torque to deliver powerful positional locking.



Optional Peripheral Equipment

Accuway APT Power Turret

With live tooling capability for drilling, milling, tapping and turning you are now able to maintain precision and increase productivity without having to transfer parts to another machining station.



Renishaw Tool Setting

With this optional tool setter from Renishaw you can set your tool and then quickly remove it for a fast and accurate production operation: 5µm repeatability accuracy.



Parts Catcher

A hydraulic parts catcher is available to quickly and automatically transfer parts to an outside collection box or peripheral automation station. Parts catchers improve productivity by enabling the machine to run unattended, freeing up operators to handle other activities.



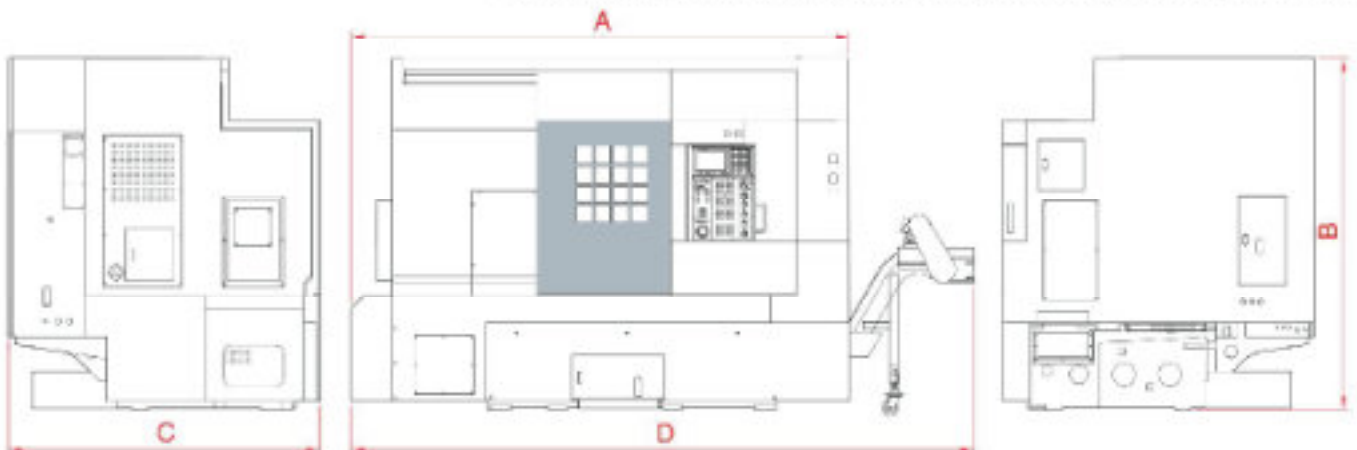
Steady Rest

The steady rest for long workpieces can be programmed for maintaining concentricity and accuracy during machining. Travel is either programmable or manual.



UT-200 / 300 Machine Dimensions

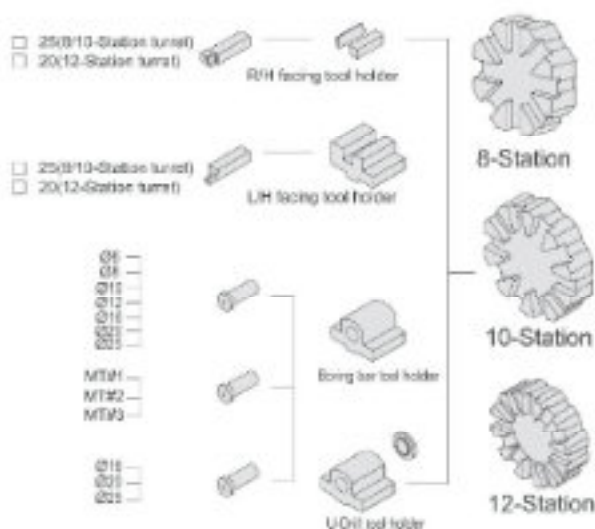
	UT-200	UT-200L	UT-300	UT-300L	UT-300LX	UT-300LX2	UT-300LX3
A	2863	3620	3030	3750	5217	5550	7029
B	1735	1735	1830	1830	2250	2250	2250
C	1590	1590	1780	1800	2298	2298	2298
D	3498	4249	3763	4483	6026	6361	7840



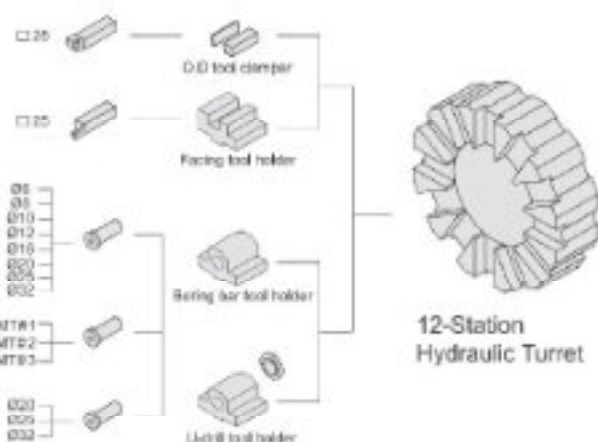
Tooling System Diagrams

Unit: mm

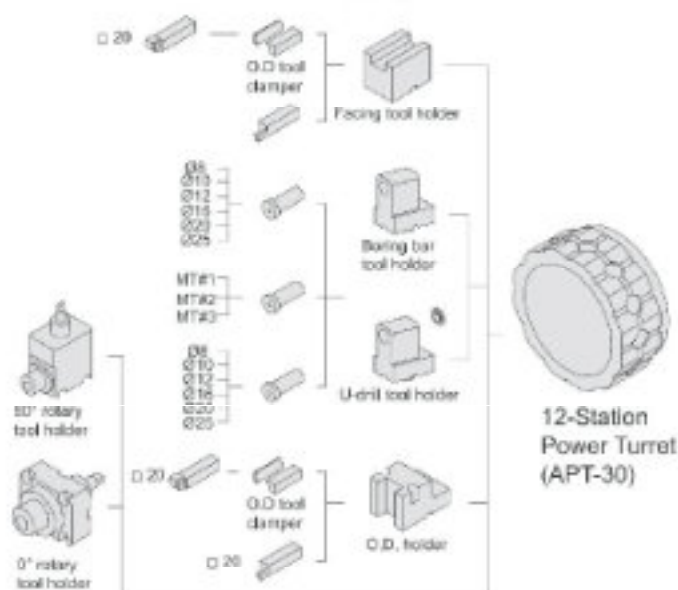
■ UT-200 Block Tooling System



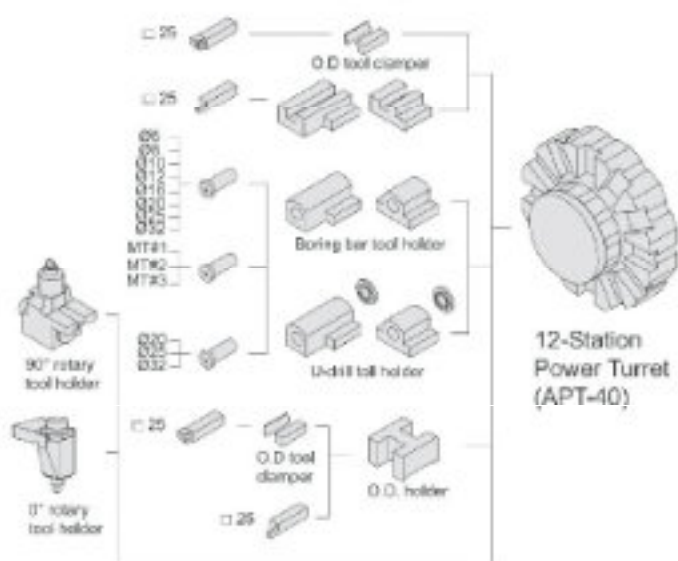
■ UT-300 Block Tooling System



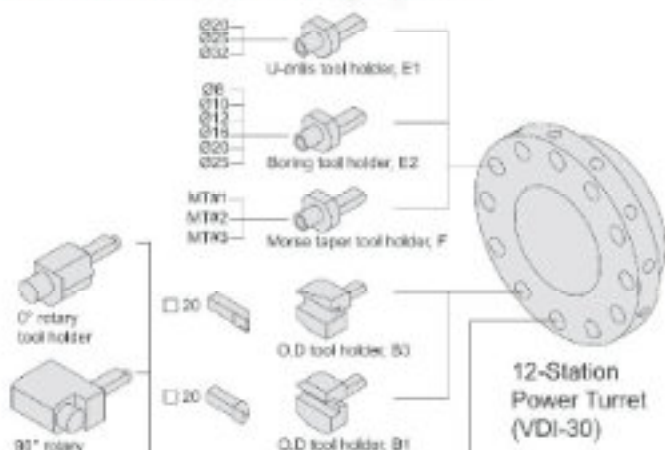
■ UT-200 APT-30 Tooling System



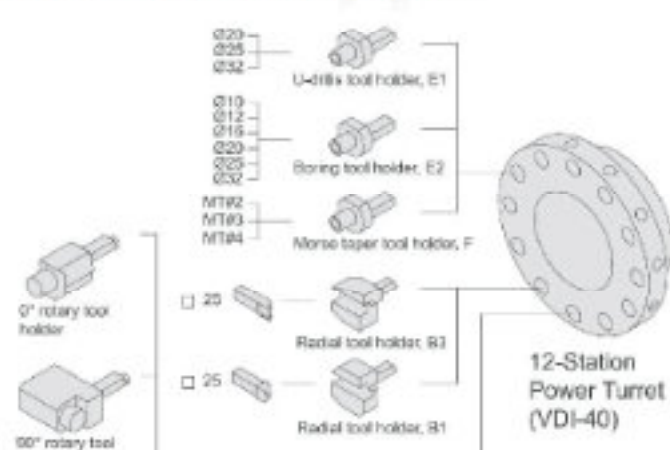
■ UT-300 APT-40 Tooling System



■ UT-200 VDI-30 Tooling System

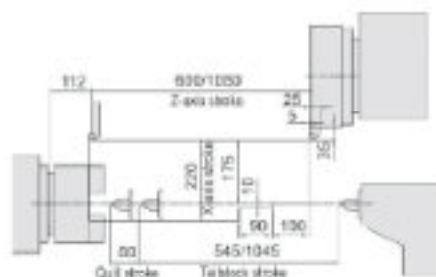
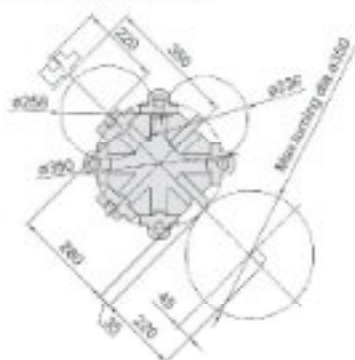


■ UT-300 VDI-40 Tooling System

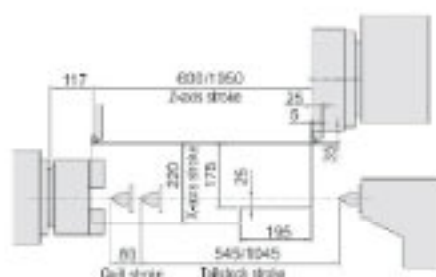
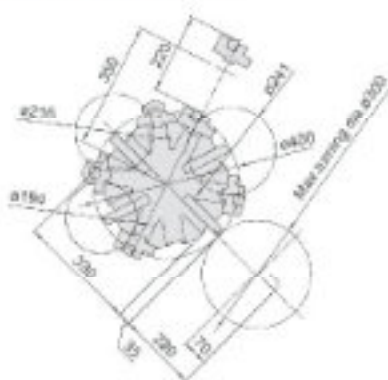


Tool Interference Diagrams

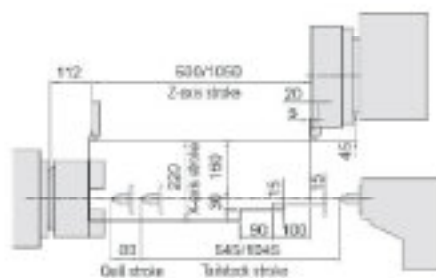
■ UT-200 8-Station Block Turret



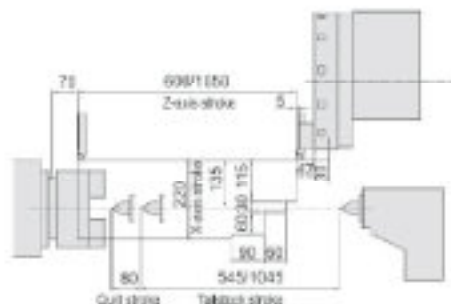
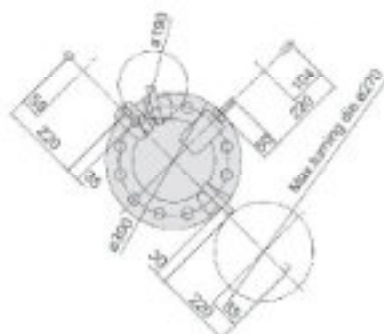
■ UT-200 10-Station Block Turret



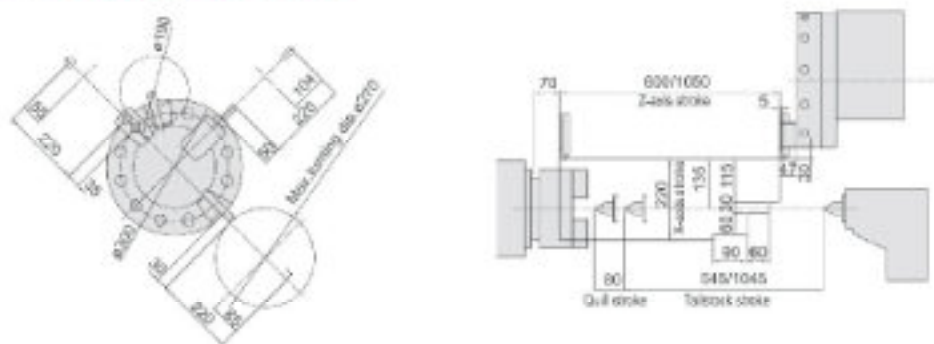
■ UT-200 12-Station Block Turret



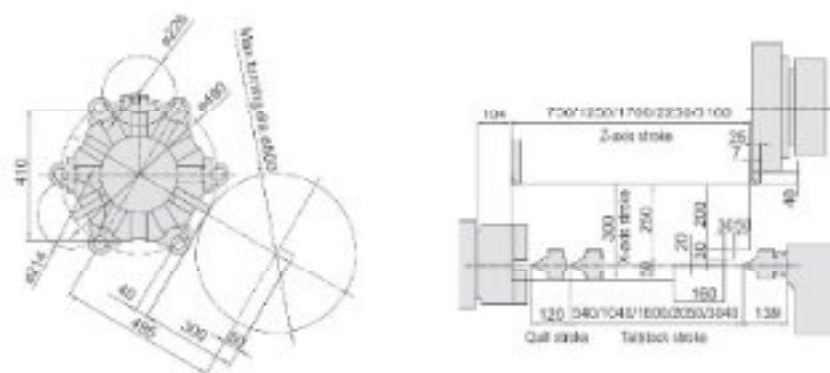
■ UT-200 APT-30 12-Station Power Turret



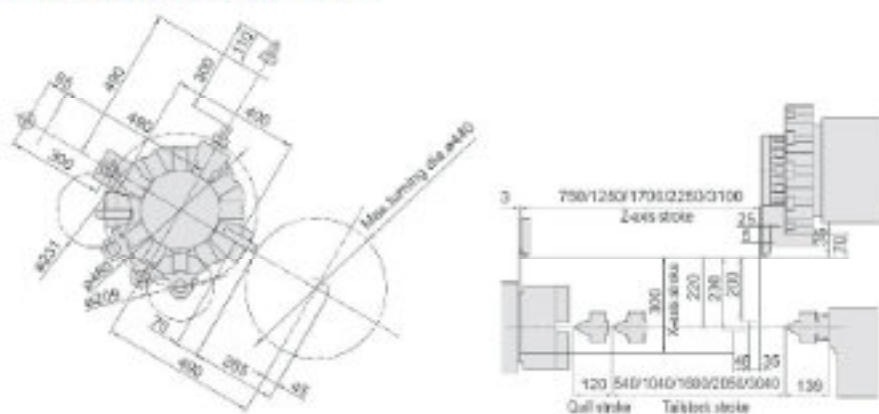
■ UT-200 VDI-30 12-Station Power Turret



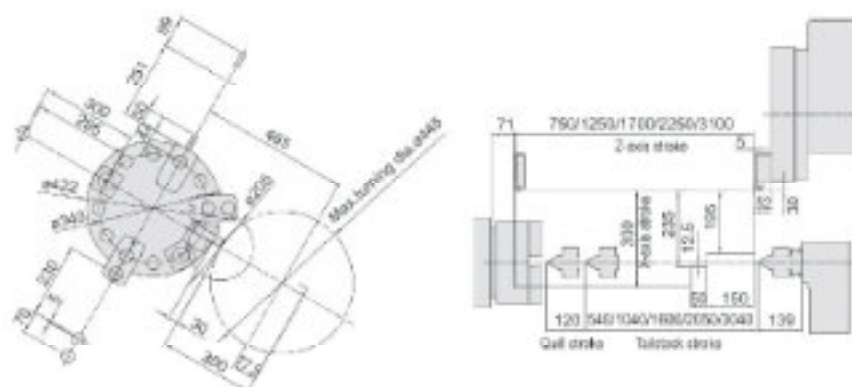
■ UT-300 12-Station Block Turret



■ UT-300 APT-40 12-Station Power Turret



■ UT-300 VDI-40 12-Station Power Turret



Specifications

Item \ Model		UT-200		UT-200L		UT-300	UT-300L	UT-300LX
Controller		FANUC Oi-T						
Swing Over Bed	mm	505					612	
Swing Over Saddle	mm	318					388	
Max. Turning Diameter	mm	350					500	
Max. Turning Length	mm	570	570	1000	1000	700	1200	1640
Spindle Nose Taper	ASA	A 2-5	A 2-6	A 2-6	A 2-8	A 2-8	A 2-8	
Spindle Hole Diameter	mm	56	62	76	86	86	101	
Chuck Diameter	mm	6	8	8	10	10	12	
Spindle Speed	rpm	6000	4500	4000	3500	3500	2700	
Spindle Motor Power (Cont./30min)	kW	11 / 15			15 / 18.5 (18.5 / 22)			
Bar Capacity	mm	44	52	65	75	75	90	105
Z-axis Travel	mm	600	600	1050	1050	750	1250	1700
X-axis Travel	mm	220					250+50	
Z-axis Rapid Traverse Rate	m/min	20					24	
X-axis Rapid Traverse Rate	m/min	20						
Turret Drive Type		Hydraulic (Servo Mechanical)						
Tooling System		BOT (VDI/ BMT)						
Number of Tools	stations	8 (10 / 12)					12	
Square Tool Shank Size	mm	25 (20)					25	
Round Tool Shank Size	mm	32					40	
Cs Spindle Index Angle	degree	-					-	
Max. Rotary Tool Speed	rpm	-					-	
Rotary Tool Driver Power	kW	-					-	
Tailstock Body Travel	mm	545	545	1045	1045	540	1040	1600
Quill Travel	mm	80					120	
Quill Diameter	mm	75					85	
Quill Taper	MT#	4					5	
Floor Space Required	m	2.9 x 1.6	2.9 x 1.6	3.7 x 1.6	3.7 x 1.6	3 x 1.8	3.6 x 1.8	4.5 x 1.8
Height	m	1.7					1.8	
Machine Weight	kg	3600	3600	5200	5200	5500	6000	7500

■ Specifications are subject to change without notice.

UT-300LX2		UT-300LX3		UT-200M			UT-300M		UT-300LM		
FANUC Oi-T											
				505			612				
				318			388				
				270			425				
2200		3000		450			670		1140		
A 2-11		A 2-5		A 2-6	A 2-6	A 2-8		A 2-8	A 2-8	A 2-11	
116		56		62	76	86	101	86	101	116	
15		6		8	8	10	12	10	12	15	
2500		6000		4500	4000	3500	2700	3500	2700	2500	
15 / 18.5 (18.5 / 22)		11 / 15			15 / 18.5		15 / 18.5 (18.5 / 22)				
105	105	44	52	65	75	90	75	90	105		
2250		3100		600			750		1250		
				220			300				
15		10		20			24				
				20			20				
Servo Mechanical						Servo Mechanical					
APT / VDI						APT / VDI					
						12					
						20					
						32					
						0.01					
						4000					
						2.2					
2040		2840		545			540		1040		
				80			20				
				75			85				
				4			5				
5.1 x 1.8		6.5 x 1.8		2.9 x 1.6			3 x 1.8		3.6 x 1.8		
				1.7			1.8				
9000		12000		3600			5500		6000		



S. H. Værktøjsmaskiner

Klokkestøbervej 15, 9490 Pandrup, Tlf. 98 20 44 00

www.shv.dk info@shv.dk



ISO 9001
PM 55007

