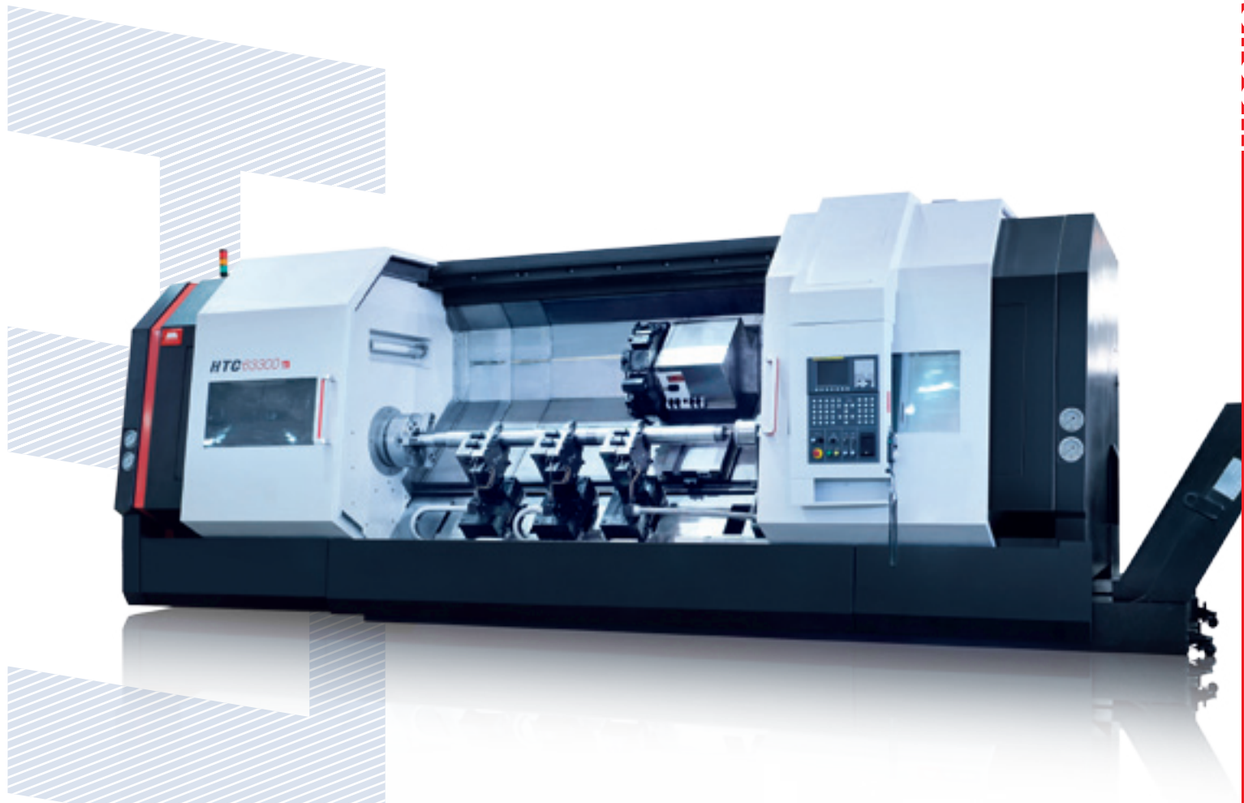


HTC 40/50/63/80/100

CNC LATHE
TURNING CENTER

www.smtcl.com

SMTCL USA, INC.
Tel: +1-626-667-1192
Fax: +1-626-667-1197
E-mail: info@smtcl-americas.com

SMTCL CANADA INC.
Tel: +1-905-829-1579
Fax: +1-905-829-8692
E-mail: info@smtcl.ca

SMTCL DEUTSCHLAND GMBH
Tel: +49 (0) 69-4305328 0
Fax: +49 (0) 69-4305328 28
E-mail: smtcleu@smtcl.com

SHENYANG MACHINE TOOL IMP & EXP (TURKEY) CO., LTD.
Tel: +90-212-671 41 33/36
Fax: +90-212-671 41 39
E-mail: smtcltr@smtcl.com

SHENYANG MACHINE TOOL CO., LTD.
Headquarters Add: NO.1,17-A, Kaifa Avenue, Shenyang Economic & Technological Development Zone, Shenyang 110142, China
Sales Tel: +86-24-25191511 After-sales Service Dept. Tel: +86-24-25191559
E-mail: iec@smtcl.com http://www.smtcl.com

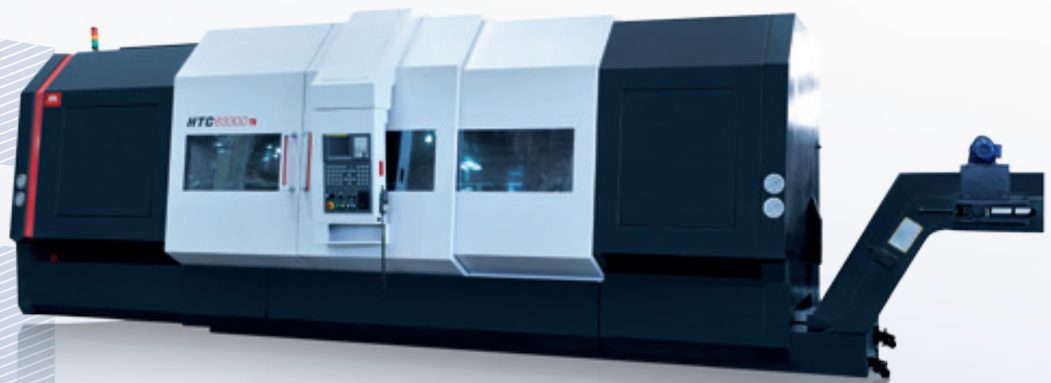
HTC
CNC LATHE

High Rigidity High Accuracy
Highly Configurable
Very User-friendly

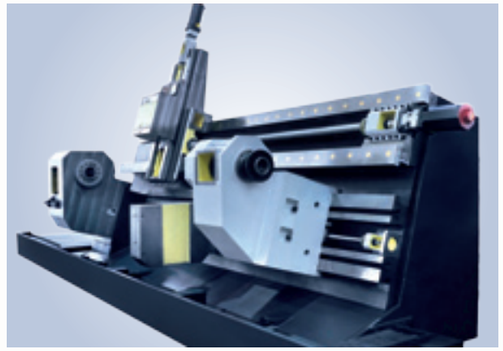
HIGH PRECISION

HIGH RIGIDITY

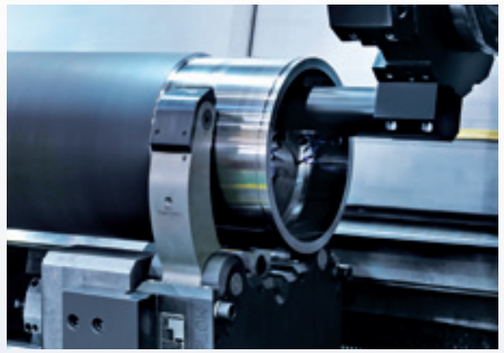
HIGH EFFICIENCY



HTC63n/80n series CNC lathes are a heavily upgraded version of our traditional CNC horizontal lathes. Based on advanced modular design methods, they effortlessly support both 3 and 4 axis configurations. Each lathe features a unique combination of sliding and linear guideways which serve to guarantee high rigidity and stability. Furthermore, our 45° integrated slant bed design ensures reliable performance and machining accuracy as well as enhanced service life.



From the 45° and 75° integrated slant beds to the specialized spindle, bed, and tailstock design, each aspect of this series has been optimized for overall rigidity. Excellent stability can be expected even during high-speed heavy-duty turning.

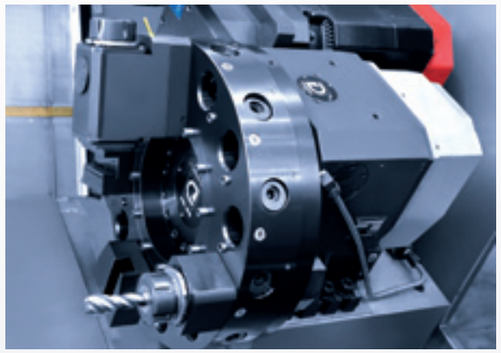


Very User-friendly

The optional 75° integrated slant bed brings the spindle center much closer to the operator creating a much more comfortable, less tiring working environment. The additional steady rest perpendicular configurations allow for easier workpiece loading and unloading as well as simplify chip removal.

High Accuracy

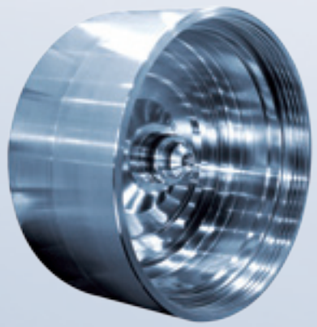
Featuring high quality precision components from suppliers around the world, this series' advanced structural design and extensive optimization ensure that each machine is not only highly accurate on the very first cut, but also will produce beautiful, consistent workpieces for years to come.

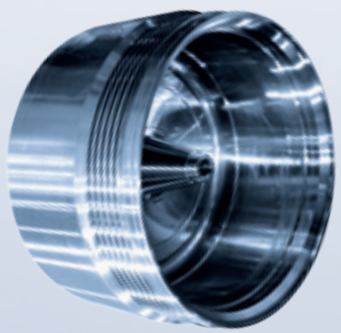


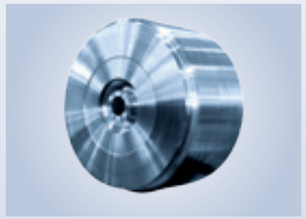
Highly Configurable

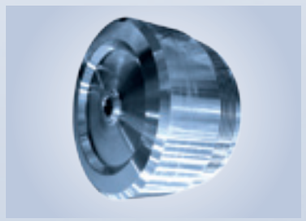
A great variety of customer-pleasing configuration options are available in this series. Many different lengths are available, certain models support power turrets and in effect can even serve as turning centers.

Sample Workpiece: Drum Body

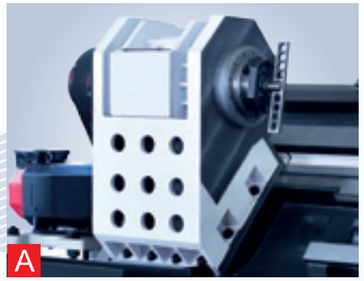






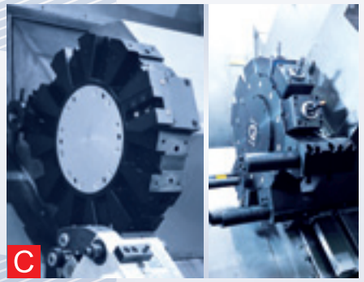


HTC
CNC LATHE

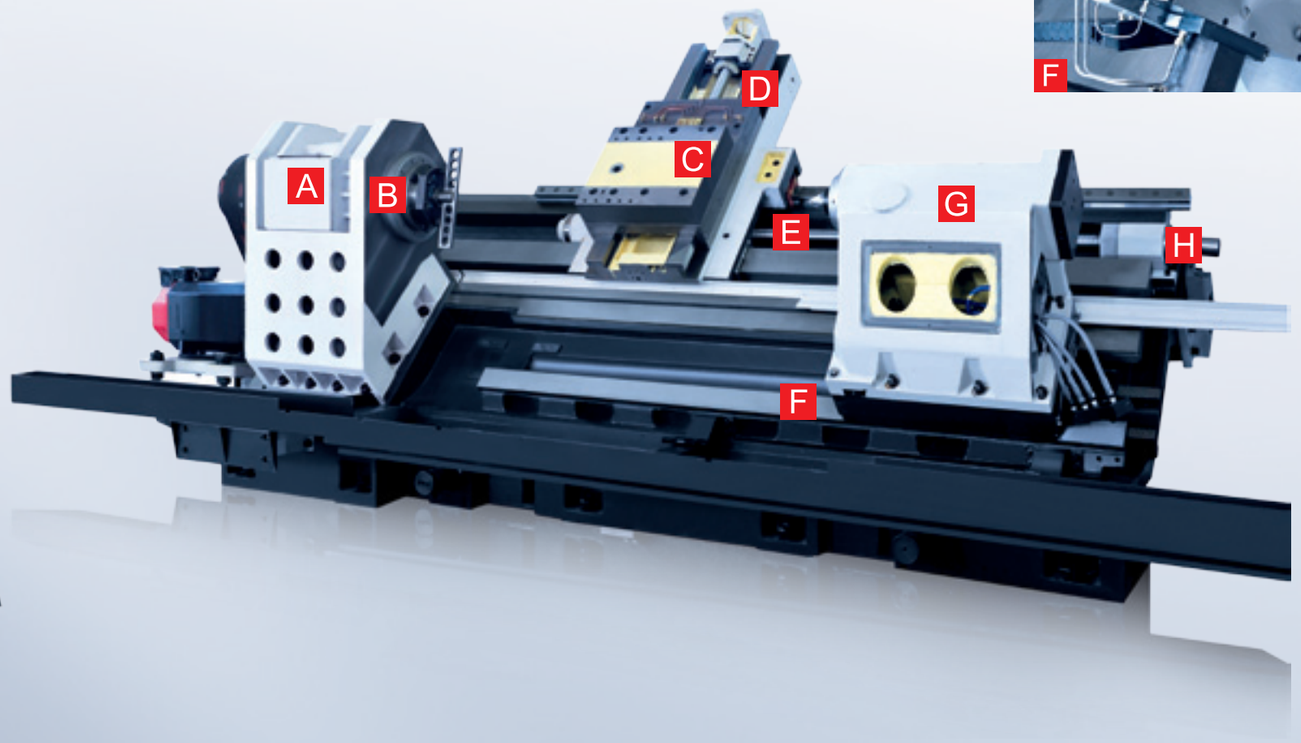


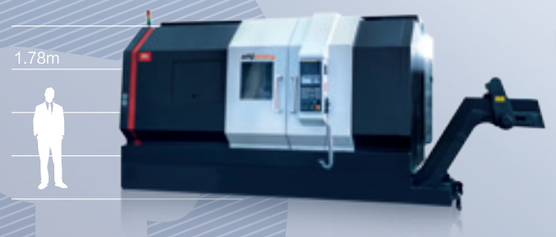
Spindle This series utilizes all precision spindle bearings. A number of headstock design optimizations have been made to improve spindle accuracy and rigidity. The spindle has been ground tighter with the inner bearing ring while the headstock has been bored tighter with the outer bearing ring. The spindle bearings are pre-tightened. Some series models feature a variable-speed spindle headstock.

Chuck This series offers both solid and hollow hydraulic chucks from leading Taiwan manufacturers.



Turret Our standard configuration is a 12-station hydraulic turret from Taiwan. This design is driven by a hydraulic motor and features high reliability and rigidity with minimal deformation under heavy-duty cutting. Certain models offer live tooling for use as turning centers. Turret height can be from 160mm to 200mm according to customer need.





Feed System HTC63n and HTC80n feature the integrated 45° slant bed and unique sliding-linear guideway combination. The main guideway is a plastic-coated sliding assembly. The secondary guideway is a roller linear assembly. This innovative layout combines dynamic and static damping methods to optimize stability and also results in excellent structural rigidity. The X and Z-axis ball screws are left floating at one end to avoid screw extension and longitudinal distortion due to temperature rise during intensive operation.

Tailstock Driven by automated hydraulic control, our tailstocks come equipped with high precision bearings from NSK. The end result is excellent rotational accuracy and very high rigidity. An optional hydraulic locking mechanism for the tailstock sleeve is available to eliminate cutting-induced vibrations.

Servomotor The lateral feed employs a servomotor with absolute encoder.

HTC40n/50n
SERIES CNC LATHE

Classic Design
Optimized for Modern Needs

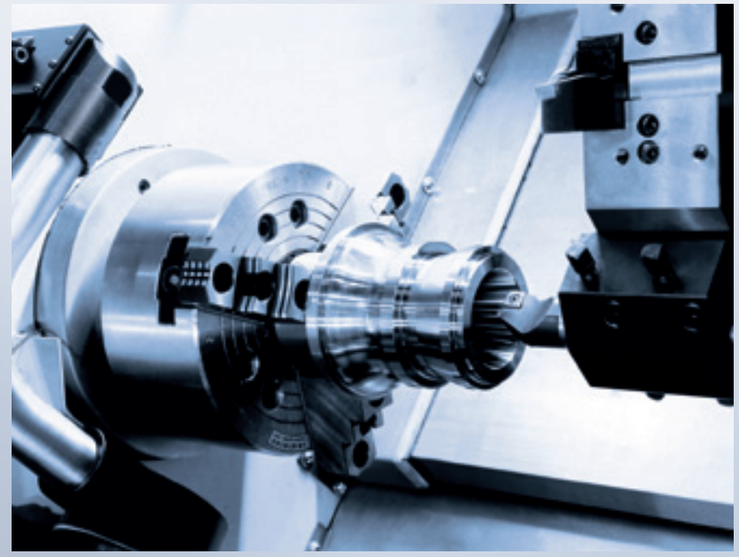
The HTC40/50n lathe is based on a classic horizontal lathe design, with advanced module design philosophy. It is a new horizontal CNC lathe with fully redesigned functions.

Features:

Highly rigid and stable integral 45° bed.

Servo driven, for high speed in both revolving and travelling motion.

Modular assembly for easy configuration of 3rd and 4th axes.



HTC63n/80n
SERIES CNC LATHE

Unique Hybrid Technology

The HTC63/80n lathe is an updated version of our original horizontal lathe. It uses current advanced modular design and new dynamic and static technology. It is a new CNC horizontal lathe with full functions.

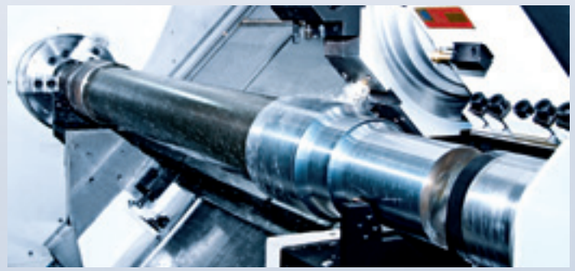
Features:

A highly rigid and stable 45°slant bend for high accuracy over a long service life.

Designed using Finite Element Analysis to get optimal structural rigidity.

Modular assembly, allowing easy configuration of 3rd and 4th axes.

Guideways designed for rigidity and stability.



HTCt
SERIES CNC LATHE

Ideal for Long-Shaft Work

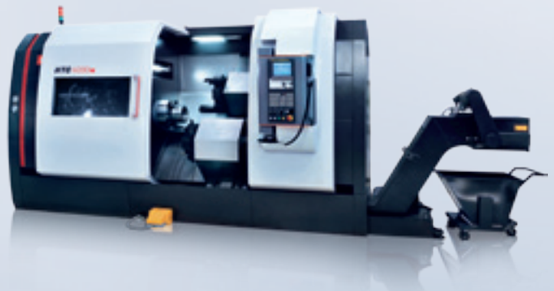
HTC50t/63t/80t/100t

The HTCt series lathes are designed to meet customer demand for more flexibility, offering a 75° slant bed. This model offers high rigidity, large torque, and stability for high accuracy and repeatability.

Features:

The machining position is convenient to the operator location.

Parts are easy to clamp and unclamp safely on the vertical steady rest.

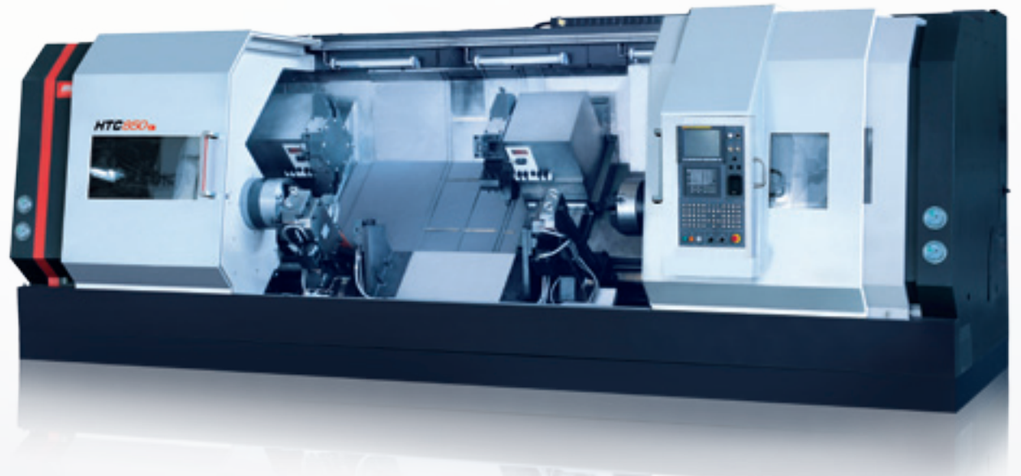


HTC4030t

HTC4030t CNC lathe and its 45° integrated slant bed is especially suitable for machining shaft and disc parts as well as cutting all kinds of threads, arcs, cones and the internal and external curved surfaces of rotors. Opportunities abound for high efficiency, large-batch and high-accuracy machining of parts for engines, automobiles, electronics, aerospace, and military industrial applications.

HTC850n
CNC LATHE

The Axle Industry Future

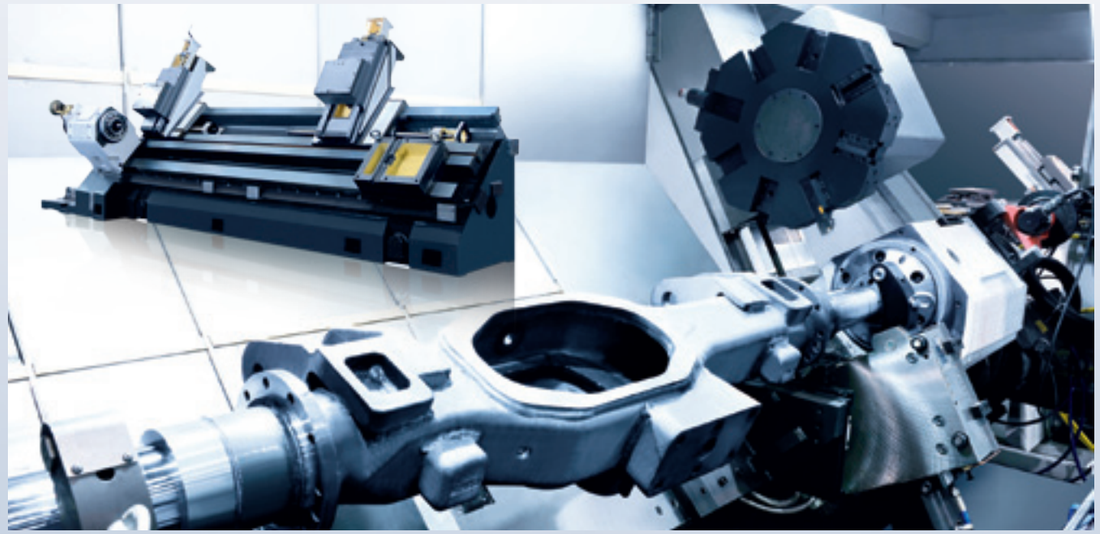


The 850n is a special CNC lathe for axles.

Features:

A double turret and double spindle make machining of axles practical and efficient.

Rough and finishing processes are integrated



HTC
CNC LATHE

MAIN SPECIFICATIONS

Item		Unit	HTC40n(m)(y) Series			HTC50n(m) Series		HTC63n(m)(y) Series		
			HTC40n Series	HTC40nm Series	HTC40ny Series	HTC50n Series	HTC50nm Series	HTC63n Series	HTC63nm Series	HTC63ny Series
Max Swing Diameter		mm	690, 690, 690, 650, 650	690, 690, 690, 650, 650	690, 690, 690, 650, 650	690 , 690, 690, 650, 650	690, 690, 690, 650, 650	850, 850, 850, 820, 800	850, 850, 850, 820, 800	1000, 1000, 970, 950
Max Cutting Length		mm	500, 1000, 1500, 2000, 2500	500, 1000, 1500, 2000, 2500	400, 900, 1400, 1900, 2400	500 , 1000, 1500, 2000, 2500	500, 1000, 1500, 2000, 2500	1000, 1500, 2000, 3000, 4000	1000, 1500, 2000, 3000, 4000	1500, 2000, 3000, 4000
Max Cutting Diameter (Disc/Shaft)		mm	400	400	400	500	500	750/630	750/630	630
Max Swing Dia. Over Cross Carriage		mm	400	400	400	500	500	630	630	630
Spindle Nose			A2-8	A2-8	A2-8	A2-11	A2-11	A2-11	A2-11	A2-11
Spindle Bore		mm	80	75	70	104	104	100	100	130
Max Bar Diameter (hollow chuck)		mm	65	60		85	85	85	85	115
Spindle Speed Steps			Stepless	Stepless	Stepless	Stepless	Stepless	Stepless	Stepless	Two Mechanical Grades
Spindle Speed Range		r/min	35-3500	35-3500	35-2200	35-2500	35-2500	20-2000	20-2000	20-1200
Main Motor Output Power		kW	18.5/22	18.5/22	30/22	30/22	30/22	30/22	30/22	37/30
Spindle Max Output Torque (30min)		N.m	560	560	770	860	860	950	950	2450
Standard Chuck	Chuck Diameter	inch	10"	10"	10"	12"	12"	15"	15"	15"
X/Z Axis Rapid Traverse		m/min	20/15	20/15	12/12	20/15	20/15	12/12	12/12	12/12
Y Axis Rapid Traverse			-	-		-	-	-	-	10
X/Z Axis Travel		mm	220/600, 1100, 1600, 2100, 2600	220/600, 1100, 1600, 2100, 2600	500, 1000, 1500, 2000, 2500	270 / 600, 1100, 1600, 2100, 2600	360/600, 1100, 1600, 2100, 2600	410/1050, 1550, 2050, 3050, 4050	410/1050, 1550, 2050, 3050, 4050	410/1550, 2050, 3050, 4050
Y Axis Travel			-	-	±55	-	-	-	-	±50
C Axis	Max Speed	r/min	-	30		-	30	-	27	27
	Rated Torque Output	N.m	-			-		-	1900	1900
Dia/Travel of Tailstock Sleeve		mm	120/150	120/150	120/150	120/150	120/150	180/160	180/160	180/160
Tailstock Taper		Morse	5#	5#	5#	5#	5#	6#	6#	6#
Tailstock Body Travel		mm	300, 800, 1300, 1800, 2300	300, 800, 1300, 1800, 2300	300, 800, 1300, 1800, 2300	30 0, 800, 1300, 1800, 2300	400, 900, 1100, 1900, 2400	850, 1350, 1850, 2850, 3850	850, 1350, 1850, 2850, 3850	1350, 1850, 2850, 3850
Turret Type			Horizontal 12-station Turret	Horizontal 12-station Turret	Horizontal 12-station Turret	Ho rizontal 12-station Turret	Horizontal 12-station Turret	Horizontal 12-station Turret	Horizontal 12-station Power Turret	Horizontal 12-station Power Turret
Tool Size		mm	25×25/ ∅ 40	25×25/ ∅ 40	25×25/ ∅ 40	25×25/ ∅ 50	25×25/ ∅ 40	32×32/ ∅ 50	32×25/ ∅ 50	32×25/ ∅ 50
Machining Accuracy			IT6	IT6	IT6	IT6	IT6	IT6	IT6	IT6
Positioning Accuracy	X Axis	mm	0.012	0.012	0.012	0.012	0.012	0.013	0.013	0.013
	Y Axis	mm		-	0.015	-	-	-	-	0.013
	Z Axis	mm	0.015/0.015/0.02/0.025/0.035	0.015/0.015/0.02/0.025/0.035	0.015/0.015/0.02/0.025/0.035	0.01 5/0.015/0.02/0.025/0.035	0.015/0.015/0.02/0.025/0.035	0.020/0.026/0.035/0.040/0.048	0.020/0.026/0.035/0.040/0.048	0.026/0.035/0.040/0.048
	C Axis			48"	40"	-	48"	-	48"	48"
Repeatability	X Axis	mm	0.005	0.005	0.005	0.005	0.005	0.006	0.006	0.006
	Y Axis	mm			0.006	-	-	-	-	0.006
	Z Axis	mm	0.007/0.007/0.01/0.013/0.02	0.007/0.007/0.01/0.013/0.02	0.007/0.007/0.01/0.013/0.02	0.0 07/0.007/0.01/0.013/0.02	0.007/0.007/0.01/0.013/0.02	0.008/0.01/0.013/0.016/0.016	0.008/0.01/0.013/0.016/0.016	0.01/0.013/0.016/0.016
	C Axis			28"	28"	-	28"	-	24"	24"
Max Load	Disc/Shaft Type	kg	200/800	200/800	200/800	200/800	200/800	500/2000	500/2000	500/2000
Machine Weight	Machine	kg	5500, 7500, 9000, 11000, 12500	5500, 7500, 9000, 11000, 12500	5500, 7500, 9000, 11000, 12500	55 00, 7500, 9000, 11000, 12500	5500, 7500, 9000, 11000, 12500	14000/17000/20000/23000/30000	14000/17000/20000/23000/30000	17000/20000/23000/30000
Overall Dimensions	L×W×H	mm	4050/4550/5050/5550/6050×2286×2260	4050/4550/5050/5550/6050×2286×2260	4050/4550/5050/5550/6050×2286×2260	4050/4 550/5050/5550/6050×2286×2260	4050/4550/5050/5550/6050×2286×2260	4900/5400/5900/6900/7900×2825×2680	4900/5400/5900/6900/7900×2825×2680	5400/5900/6900/7900×2825×2680