

TONGTAI

Products Guide



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MEMBER OF
TIGROUP

Tapping Center

EZ-II Series

- Equipped with high speed tool changer, reducing the T-T time to 1.2 sec.
- Tool magazine is driven by servo motor, saving the time in tool selection.
- The spindle is driven by DD motor, allowing high acceleration/deceleration reactivity and rigid tapping achieves 6,000rpm.
- 3-axes rapid traverse up to 60m/min with acceleration up to 1.2G.
- Max spindle speed up to 24,000rpm.



Specification	Unit	EZ-5II	EZ-7II
Table size(LxW)	mm	600x400	850x400
Max. loading capacity	kg	300	
X/Y/Z axis travel	mm	510/400/300	710/400/300
X/Y/Z axis rapid traverse	m/min	60/60/60	
Spindle taper		7/24 Taper No. 30	
Spindle speed	rpm	12,000 (24,000)	
Spindle motor	kW	5.5/3.7 (3.7/1.5)	
Tool capacity	pc	21	

VTX Series

- Equipped with high speed tool changer to reduce T-T time to 1.2 sec.
- Equipped with high rigidity roller type linear guideway.
- The spindle is driven by DD motor, allowing for high acceleration/deceleration reactivity and rigid tapping achieves 6,000rpm.
- Shaft's optimum spindle radius (up to 50mm) enhances cutting rigidity.
- Max. torque of the spindle motor is up to 82Nm.



Specification	Unit	VTX-5II	VTX-7II	VTX-10
Table size(LxW)	mm	600x400	850x400	1,100x510
Max. loading capacity	kg	300		500
X/Y/Z axis travel	mm	510/400/300	710/400/300	1,000/500/300
X/Y/Z axis rapid traverse	m/min	60/60/60		50/50/56
Spindle taper		7/24 Taper No. 30		
Spindle speed	rpm	12,000		
Spindle motor	kW	High torque type : 13/3.7(7.5/5.5) High efficiency type : 26/9(34/9)		
Tool capacity	pc	21		

TMV Series

- Moving column design.
- Equipped with APC to improve production efficiency.
- Equipped with ATC to decrease tool change time to 0.9 sec.
- Equipped with BT-30 spindle that achieves 6,000rpm maintaining rigid tapping.
- Suitable for small parts processing and magnesium alloy machining in the 3C industry.



Specification	Unit	QT-II+APC	TMV-510+APC	TMV-510T+APC
Table size(LxW)	mm	600x360		
Max. loading capacity	kg	100x2		
X/Y/Z axis travel	mm	510/360/435	510/360/300	510/360/435
X/Y/Z axis rapid traverse	m/min	40/40/48		
Spindle taper		7/24 Taper No. 30		
Spindle speed	rpm	15,000 (20,000)	8,000 (4,000) (12,000)	
Spindle motor	kW	2.2/2.2 (9/5.5/3.7)	7.5/3.7	
Tool capacity	pc	20	10 (14)	20

Vertical Machining Center

VP Series

- Direct-drive spindle and high rigidity structure design.
- Equipped with BBT-40 spindle, which supports dual contact tool holder.
- Excellent precision and machining performance.
- General purpose machine and suitable for most industrial customers.
- High Performance/Cost value.



Specification	Unit	VP-8	VP-10	VP-12
Table size(LxW)	mm	900x510	1,100x510	1,350x710
Max. loading capacity	kg	500		1,300
X/Y/Z axis travel	mm	820/510/535	1,020/510/600	1,270/670/710
X/Y/Z axis rapid traverse	m/min	48/48/36	36/36/36	36/36/30
Spindle taper		7/24 Taper No. 40		
Spindle speed	rpm	10,000 (15,000)		
Spindle motor	kW	15/11/7.5 (18.5/15/11)	18.5/15/11.5	
Tool capacity	pc	24 (30)		

QVM-610All

- Moving column design.
- Equipped with APC which can improve production efficiency.
- Pallet changing time is only 4 sec., it saves idle time and improves the production efficiency.
- Triple-point clamping and supporting device (patented) assures the stability of machining precision.
- Max pallet load is up to 400kg x2.



Specification	Unit	QVM-610All
Table size(LxW)	mm	700x410
Max. loading capacity	kg	400x2
X/Y/Z axis travel	mm	610/410/510
X/Y/Z axis rapid traverse	m/min	36/36/30
Spindle taper		7/24 Taper No. 40
Spindle speed	rpm	8,000 (10,000)
Spindle motor	kW	12/9/7.5 (18.5/15/11)
Tool capacity	pc	24 (30)

TMV Series

- Popular machine model, T-T time is 2 sec.
- High rigidity structure design.
- Uses high precision guideway and ballscrews, the 3-axes rapid traverse is up to 48 m/min.
- High machining efficiency with stable machining performance.
- Available for various customization applications, especially for the automotive industry.



Specification	Unit	TMV-720A	TMV-850QI	TMV-850QII	TMV-1050QI	TMV-1050QII
Table size(LxW)	mm	800x480	950x600		1,100x600	
Max. loading capacity	kg	500	800			
X/Y/Z axis travel	mm	720/480/530	850/600/530		1,050/600/530	
X/Y/Z axis rapid traverse	m/min	48/48/48	48/48/32	48/48/48	48/48/32	48/48/48
Spindle taper		7/24 Taper No.40				
Spindle speed	rpm	8,000 (10,000)	10,000 (15,000)	8,000 (15,000)	10,000 (15,000)	8,000 (15,000)
Spindle motor	kW	11/7.5/5.5	18.5/15/11	18.5/15/11 (18.5/11/7.5)	18.5/15/11	7.5/5.5 (8.0/7.5/15/11)
Tool capacity	pc	24	24 (30)	24 (30/48)	24 (30)	24 (30/48)

TMV Series

- Special structure design with the features of high rigidity and high vibration adsorption capacity.
- Adopts large-sized linear guideway and ballscrews.
- BT-50 spindle has excellent performance in heavy duty cutting (opt.).
- Available for various customization applications, especially for the automotive industry.
- Suitable for mass production lines and automated production line arrangements.



TMV Series

- 3-axes adopts box-way design with the features of high rigidity and high vibration adsorption capacity.
- Y axis uses four box-ways to provide solid support to the saddle.
- BT-50 spindle (gearbox type) has excellent performance in heavy duty cutting (opt.).
- Z axis is equipped with a counterbalance system to reduce load on the Z axis motor.
- Available for various customization applications, especially for automotive industry.



TMV Series

- Special structure design with the features of high rigidity and high vibration adsorption capacity.
- Adopts large-sized linear guideways and ballscrews.
- BT-50 spindle has excellent performance in heavy duty cutting (opt.).
- Y axis uses four linear guideways provide solid support to the saddle.
- Door opens up to 1,664mm to facilitate loading/unloading large workpieces.



VC Series

- High dynamic rigidity for structure design.
- The spindle uses oil-air lubrication with the advantages of low heat generation and long-term usage.
- High speed & high precision functions.
- BBT dual contact tool holders.
- Suitable for the mold & die industry.



Bridge Type Machining Center

MDV Series

- Machine structure adopts bridge type design, it provides the high stability in high speed machining.
- The spindle uses oil-air lubrication and has the features of low heat generation and long usage life.
- Max. spindle speed is up to 20,000rpm.
- Excellent surface machining precision.
- Suitable for the mold & die industry.



Specification	Unit	TMV-920A	TMV-1100A
Table size(LxW)	mm	1,050x530	1,200x600
Max. loading capacity	kg	1,000	
X/Y/Z axis travel	mm	920/530/530	1,100/600/530
X/Y/Z axis rapid traverse	m/min	30/30/24	
Spindle taper		7/24 Taper No.40/No.50	
Spindle speed	rpm	BT-40 : 8,000 (10,000) BT-50 : 3,500 (6,000)	
Spindle motor	kW	BT-40 : 12/9.0/7.5 BT-50 : 18.5/15/11	
Tool capacity	pc	BT-40 : 24 (30/48) BT-50 : 24 (30)	

Specification	Unit	TMV-1350A	TMV-1600A
Table size(LxW)	mm	1,500x750	1,700x850
Max. loading capacity	kg	1,300	2,000
X/Y/Z axis travel	mm	1,350/750/700	1,600/800/700
X/Y/Z axis rapid traverse	m/min	20/20/15	15/15/12
Spindle taper		7/24 Taper No.50	
Spindle speed	rpm	3,500 (6,000)	
Spindle motor	kW	18.5/15/11	18.5/15/11 (25/18.5/15)
Tool capacity	pc	24 (32)	32 (40)

Specification	Unit	TMV-1500A	
Table size(LxW)	mm	1,600x762	
Max. loading capacity	kg	1,869	
X/Y/Z axis travel	mm	1,525/762/710	
X/Y/Z axis rapid traverse	m/min	18/18/1 (30/30/30)	
Spindle taper		7/24 Taper No.40	7/24 Taper No.50
Spindle speed	rpm	8,000 (15,000)	3,500 (6,000)
Spindle motor	kW	18.5/15/11 (18.5/11/7.5)	18.5/15/11
Tool capacity	pc	24 (30/48)	24

Specification	Unit	VC-608	VC-610	VC-711
Table size (LxW)	mm	950x600	1,100x650	1,200x710
Max. loading capacity	kg	800		
X/Y/Z axis travel	mm	850/610/530	1,050/610/530	1,100/710/710
X/Y/Z axis rapid traverse	m/min	24/24/24		
Spindle taper		7/24 Taper No.40		
Spindle speed	rpm	12,000 (15,000) (20,000)		
Spindle motor	kW	11/7.5 (15/11/7.5) (40/30)		
Tool capacity	pc	24 (30)		

GT Series

- Machine structure adopts gantry type design. The moving axes are driven at the center of gravity and the dynamic performance is improved dramatically.
- 5-axis simultaneous machining function allows all machining tasks in one time clamping.
- High rigidity enclosed structure design.
- Gantry type movement method assures the feeding efficiency in three axes and avoids influence by weight of workpieces.
- The spindle uses oil-air lubrication and has the features of low heat generation and long usage life.
- A/C axis is driven by DD motor, which has the features of high accuracy and high speed.



Specification	Unit	GT-500	GT-630	GT-630F	GT-800E
Table size	mm	Ø500	Ø630		Ø800
Max. loading capacity	kg	400	600		800
X/Y/Z axis travel	mm	610/610/510	760/820/560		800/820/560
A/C axis travel	deg		+30° - -120°/±360°		
X/Y/Z axis rapid traverse	m/min		48/48/48		
A/C axis rapid traverse	rpm	25/25	50/100	25/25	50/100
Spindle taper		7/24 Taper No.40			
Spindle speed	rpm	15,000 (20,000) (24,000)			
Spindle motor	kW	40/40 (40/30) (42/35)			
Tool capacity	pc	32 (40)	32 (40) (64) (80)		

Horizontal Machining Center

SH Series

- High rigidity machine structure with triple-point supporting design.
- Minimized the machine front width to benefit production line arrangement.
- APC (automatic pallet changing) is available as an option for optimizing production efficiency.
- Standard equipped with 15,000rpm built-in spindle, its maximum HP is 37kW and maximum torque is 250Nm.
- Suitable for aluminum alloy machining.



Specification	Unit	SH-4000(P)	SH-4500(P)	SH-5000(P)
Table size (LxW)	mm	400x400	400x400 (500x500)	500x500
Max. loading capacity	kg	400	450	500
X/Y/Z axis travel	mm	510/510/510	630/630/730	730/730/830
X/Y/Z axis rapid traverse	m/min	60/60/60		
Spindle taper		7/24 Taper No.40		
Spindle speed	rpm	15,000		
Spindle motor	kW	37/26/18.5		
Tool capacity	pc	40 (60)		

HA Series

- High rigidity machine structure with triple-point supporting design.
- NC rotary table uses high rigidity full circumference hydraulic braking system.
- APC (automatic pallet changing) is available as an option for optimizing production efficiency.
- High precision, high rigidity, and high output.
- Suitable for the automotive industry.



Specification	Unit	HA-400II	HA-500II
Table size(LxW)	mm	400x400	500x500
Max. loading capacity	kg	400	500
X/Y/Z axis travel	mm	610/580/580	710/680/680
X/Y/Z axis rapid traverse	m/min	60/60/60	
Spindle taper		7/24 Taper No.40	
Spindle speed	rpm	12,000	
Spindle motor	kW	25/22	
Tool capacity	pc	60 (90) (120)	

HB Series

- Standard equipped 10,000 rpm built-in spindle, able to perform surged torque which can reach 420 N m while running to 500 rpm.
- B-axis rotary table adopted with hydraulic jig fixture, ensuring powerful clamping for stable cutting.
- Rotary table adopted with full circle brake, able to withstand heavy cutting with its large contact surface.
- Adopt high efficiency automated pallet changer system.
- Flexible manufacturing system available for option.
- Suitable for heavy cutting machining for metallic materials.



Specification	Unit	HB-500II	HB-630	HB-800II
Table size (LxW)	mm	500x500	630x630	800x800
Max. loading capacity	kg	600	1,200	1,800
X/Y/Z axis travel	mm	800/710/710	1,050/850/970	1,400/1,200/1,300
X/Y/Z axis rapid traverse	m/min	60/60/60	50/50/50	
Spindle taper		7/24 Taper No.50		
Spindle speed	rpm	10,000	10,000 (6,000/8,000)	
Spindle motor	kW	30/25	30/25 / (22/18.5) / (26/22)	
Tool capacity	pc	60 (90) (120)		

HG Series

- Machine structure is made by high-level casted iron.
- Three axes adopts box-way design for intensely stable machining quality.
- Powerful servo motor drives ballscrews directly to avoid the transmission errors.
- Three axes rapid traverse up to 20m/min.
- Gearbox type spindle adopts two-step gear reducer with maximum torque up to 1,319 N m.



Specification	Unit	HG-800II	HG-1250
Table size(LxW)	mm	800x800	1,250x1,250
Max. loading capacity	kg	2,400	4,000
X/Y/Z axis travel	mm	1,550/1,500/1,250	2,000/1,400/1,250
X/Y/Z axis rapid traverse	m/min	15/15/15	20/20/20
Spindle taper		7/24 Taper No.50	
Spindle speed	rpm	6,000/8,000	
Spindle motor	kW	22/18.5 / (26/22)	
Tool capacity	pc	60 (90) (120)	

TMH Series

- Compact machine structure with narrow width front design is suitable for production line arrangement.
- Excellent machining capacity brings high production efficiency.
- Depend on the requests of production line, it allows to add special devices such as storage rack or feeding unit for loading.



Specification	Unit	TMH-400	TMH-500
Table Size	mm	Ø400	Ø500
Max. Load Capacity	kg	350	700
X/Y/Z axis travel	mm	510/510/510	710/600/600
X/Y/Z axis rapid traverse	m/min	36/36/36	48/48/48
Spindle taper		7/24 Taper No.40	7/24 Taper No.50(40)
Spindle speed	rpm	8,000(10,000/12,000)	6,000
Spindle motor (50% ED)	kW	11/7.5(18.5/15)	11/15
Tool capacity	pc	24 (30)	

Horizontal CNC Lathe

TG Series

- High dynamic rigidity and stability in structural design.
- High-power motors directly drive ball screws.
- Depending on the requirements, Z-axis offers three different stroke options for flexible selection.
- Features with box ways, a rigid main spindle, and a high-performance turret for heavy-duty cutting.



Specification	Unit	TG-2500[M][1.6M/2.0M]	TG-2800[1.6M/2.0M]
Chuck O.D.	mm	Ø619	
Max. swing diameter	inch	10" (12")	12" (15")
X/Z axis travel	mm	275/1,100 (1,600/2,000)	
X/Z axis rapid traverse	m/min	24/24	
Spindle nose		A2-8	A2-11
Spindle speed	rpm	3,500 (2,500)	2,500
Spindle motor	kW	25/28.5/15	35/26/22
Tool capacity	pc	12	

HS-22

- Especially designed for medium and small sized workpieces machining.
- Box-way structure design.
- Power turret and C axis are available for satisfying the machining requirements of turning and milling.
- Equipped with the patented automatic loading/unloading and workpiece storage units. The workpiece changing time is only 4.8 sec.



Specification	Unit	HS-22	HS-22M
Max. swing diameter	mm	Ø220	
Chuck O.D.	inch	6" (8")	
Bar capacity	mm	Ø26 (Ø44) (Ø51)	
X/Z axis travel	mm	155/220	
X/Z axis rapid traverse	m/min	Box way : 20/20	
Spindle nose		A2-5 (A2-6)	
Spindle speed	rpm	6,000 (4,800) (4,500)	
Spindle motor	kW	15/11/7.5	18.5/15/11
Tool capacity	pc	12 (8)	VDI-40: 12

Q5

- Compact gang type CNC lathe.
- Allowable for various automation solutions.
- Allowable for different gang type tool holders.
- Based on the workpiece's shape to select proper robot arm and storage unit.
- Suitable for mass production in component parts.
- Symmetrical machine structure design to reduce the influences of thermal deformation.



Specification	Unit	Q5
Max. swing diameter	mm	Ø230
Chuck O.D.	inch	5" (4" Air chuck)
Bar capacity	mm	Ø26
X/Z axis travel	mm	220/220
X/Z axis rapid traverse	m/min	30/30
Spindle nose		A2-4
Spindle speed	rpm	6,000 (8,000)
Spindle motor	kW	7.5/5.5/3.7
Tool capacity	pc	2-5(Depends on workpiece)

A-1500

- Compact gang type CNC lathe with front width of only 1,990mm.
- Allowable for various automation solutions.
- Allowable for different gang type tool holders.
- Based on workpiece shape, proper robot arm and storage units are selected.
- 60° slanted machine bed design ensures excellent chips disposal.



Specification	Unit	A-1500
Max. swing diameter	mm	Ø300
Chuck O.D.	inch	6" (8")
Bar capacity	mm	Ø44 (Ø51)
X/Z axis travel	mm	320/400
X/Z axis rapid traverse	m/min	30/30
Spindle nose		A2-5 (A2-6)
Spindle speed	rpm	4,800 (4,500)
Spindle motor	kW	15/11/7.5
Tool capacity	pc	2-5(Depends on workpiece)

TNL T Series

- Integrated high rigidity machine structure.
- Vertical type machine bed design performs excellent chips disposal.
- High rigidity slide structure is suitable for heavy duty cutting.
- Short distance between the spindle/turret and the operator facilitates workpiece loading/unloading.



Specification	Unit	TNL-100T [L]	TNL-120T [L]	TNL-130T [L]
Max. swing diameter	mm	Ø400		
Chuck O.D.	inch	8" (10")	10" (12")	
Bar capacity	mm	Ø51	Ø64	Ø74
X/Z axis travel	mm	200/400 (600)		
X/Z axis rapid traverse	m/min	24/30		
Spindle nose		A2-6	A2-8	
Spindle speed	rpm	3,000 (4,500)	2,500 (3,500)	
Spindle motor	kW	18.5/15/11		
Tool capacity	pc	12 (8)		

MT Series

- Independent spindles and working areas are separated into two zones.
- Individual bed structure eliminates the resonance effect of processing dual area simultaneous turning.
- Standardly equipped with gantry type 3 axis robot arms driven by servo for rapid feeding speed.
- Compared with conventional small-sized CNC lathes, one compact MT lathe uses its two machining areas to process turning tasks simultaneously to save floor space.
- Maximum floor utility and minimum manpower required.



Specification	Unit	MT-1500	MT-2000
Max. swing diameter	mm	Ø210	
Chuck O.D.	inch	6" 8"	8" 10"
X/Z axis travel	mm	155/155	
X/Z axis rapid traverse	m/min	30/30	
Spindle nose		A2-5	A2-6
Spindle speed	rpm	4,500 (6,000)	4,500 (3,000)
Spindle motor	kW	11/7.5/5.5	15/11/7.5
Tool capacity	pc	12	

TCS Series

- Machine structure is optimized by finite element analysis (FEA) with the features of high dynamic rigidity and stability.
- High efficient turning capacity.
- Servo driven turret has the feature of rapid tool changing to reduce the non-cutting time.
- Excellent Performance/Cost ratio.



Specification	Unit	TCS-2000L	TCS-2000LII	TCS-2500L	TCS-2500LII
Max. swing diameter	mm	Ø520			
Chuck O.D.	inch	8"		10"	
Bar capacity	mm	Ø51		Ø64/Ø74	
X/Z axis travel	mm	170/400 (600)			
X/Z axis rapid traverse	m/min	30/30			
Spindle nose		A2-6		A2-8	
Spindle speed	rpm	4,500 (3,000)		2,500 (3,500)	
Spindle motor	kW	15/11			
Tool capacity	pc	12 (8)			

TNL Series

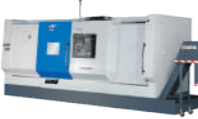
- Adopts box-way and powerful spindle designs allow the excellent performances in heavy duty cutting.
- Slanted machine bed ensures the high machine stability and benefits chips disposal.
- Spindle adopts angular contact ball bearings and double-row roller bearing design to provide the high rigidity in machine.
- The external reducer is able to provide high torque output in low spindle speed (opt.).



Specification	Unit	TNL-160AII-1.0M [0.7M/1.0M/2.0M]
Max. swing diameter	mm	Ø620
Chuck O.D.	inch	12" (15")
Bar capacity	mm	Ø90
X/Z axis travel	mm	285 (260+25) / 1,000 (700/1,600/2,000)
X/Z axis rapid traverse	m/min	20/24 (24)
Spindle nose		A2-11
Spindle speed	rpm	2,500
Spindle motor	kW	22/18.5/15 (26/22/18.5)
Tool capacity	pc	12 (8)

THL Series

- 37kW spindle motor uses deceleration gear reducer, the maximum spindle torque is up to 1,477Nm.
- Integrated machine bed and box-way design.
- Max. turning diameter is up to 620mm.
- C axis and BMT-75 power turret are available for satisfying requirements of turning and milling.
- Max. Z axis travels up to 3,000mm. For long workpieces, the steady rest (opt.) strengthens the support force.



Specification	Unit	THL-620L[M]	THL-620XL[M]
Max. swing diameter	mm	Ø780	
Chuck O.D.	inch	15" (18")	
Bar capacity	mm	Ø90 (Ø116)	
X/Z axis travel	mm	365/1,200	365/2,000
X/Z axis rapid traverse	m/min	20/20	
Spindle nose		A2-11	
Spindle speed	rpm	2,500 (2,000)	
Spindle motor	kW	45/37/30	
Tool capacity	pc	12 [12 (BMT-75)]	

Horizontal CNC Lathe

TE Series

- Machine structure adopts 75° slanted design. It drops down the machine's center of gravity to improve structure rigidity of the machine.
- Standard equipped with a servo turret with 8 tools. Power turret is another option and allows the maximum tool capacity for 16 tools.
- The sub-spindle is selectable for customers. It allows a single machine to complete whole machining procedures for both sides of the parts.
- The maximum machining size is 18" motorcycle wheel.



Specification	Unit	TE-2000[M]	TE-2000B	TE-2000MB[C]	TE-2500[M]	TE-2500B	TE-2500MB[C]	TE-2500 wheel machine
Max. swing diameter	mm	Ø700						
Chuck O.D.	inch	8" (10")			10" (12")		Finger chuck (opt.)	
Bar capacity	mm	Ø51			Ø64/Ø74		-	
X/Z/B axis travel	mm	230/600/-	230/600/630	230/600/-	230/600/630	245/600/-		
X/Z/B axis rapid traverse	m/min	30/30/-	30/30/30	30/30/-	30/30/30	30/30/-		
Spindle nose		A2-6						
Spindle speed	rpm	4,500 (3,000)			3,500 (2,500)		2,500	
Spindle motor	kW	18.5/15/11			-		-	
Sub-spindle nose		-	A2-5	-	A2-5	-		
Sub-spindle chuck O.D.	inch	-	6"	-	6"	-		
Sub-spindle speed	rpm	-	5,000	-	5,000	-		
Sub-spindle motor	kW	-	7.5/5.5	-	7.5/5.5	-		
Tool capacity	pc	8/12 [12/16]	8/12 [BMT65]	12 (16)	8/12 [12/16]	8/12 [BMT65]	12 (16)	8 [12]

Multi-tasking Turning Center

TB Series

- Standard equipped with a 12 stations power turret.
- 90° slanted machine bed design benefits chips disposal.
- High rigidity structure with low center of gravity.
- X/Y/Z axis are orthogonal to each other, allowing for high straightness accuracy and precise and positioning accuracy.



Specification	Unit	TB-2000Y [BC]	TB-2500Y [BC]
Max. swing diameter	mm	8"	10"
Chuck O.D.	inch	Ø450	
Bar capacity	mm	Ø51	Ø64
X/Y/Z/B axis travel	mm	230/±51/700/700	
X/Y/Z/B axis rapid traverse	m/min	30/15/36/36	
Spindle nose		A2-6	A2-8
Spindle speed	rpm	4,500 (3,000)	3,500
Spindle motor	kW	15/11	
Sub-spindle nose		-(A2-5)	
Sub-spindle chuck O.D.	inch	- [6"]	
Sub-spindle speed	rpm	- [5,000]	
Sub-spindle motor	kW	- [7.5/5.5]	
Tool capacity	pc	12	

TD Series

- Standard equipped with a 12 stations power turret.
- 75° slanted machine bed design benefits chips disposal.
- High rigidity structure with low center of gravity.
- X/Y/Z axis are orthogonal to each other, allowing for high straightness accuracy and precise and positioning.
- Available for various automation devices, including: bar feeders, workpiece turnover units, and joint type robot arms.



Specification	Unit	TD-2000Y [BC]	TD-2500Y [BC]	TD-1500Y
Max. swing diameter	mm	Ø700		
Chuck O.D.	inch	8" (10")	10" (12")	6" (8")
Bar capacity	mm	Ø51	Ø64 (Ø74)	Ø26 (Ø44) (Ø51)
X/Y/Z/B axis travel	mm	230/±51/600/- [630]		155/±35/250
X/Y/Z/B axis rapid traverse	m/min	30/15/30/- [30]		30/15/30
Spindle nose		A2-6	A2-8	A2-5 (A2-6)
Spindle speed	rpm	4,500 (3,000)	3,500 (2,500)	6,000 (4,800) (4,500)
Spindle motor	kW	18.5/15/11		18.5/15/11
Sub-spindle nose		A2-5		-
Sub-spindle chuck O.D.	inch	- [6"]		-
Sub-spindle speed	rpm	- [5,000]		-
Sub-spindle motor	kW	- [7.5/5.5]		-
Tool capacity	pc	12 (16)		16 (12)

TMT Series

- Two spindles, two Y axes, and three power turrets.
- All machining procedures are able to be done in one time clamping, including turning, milling, tapping, etc.
- Allowable for various automation solutions, including bar feeders and robot arms.
- Three power turrets are able to process the turning tasks together or separately. It shortens the machining time and improves efficiency.



Specification	Unit	TMT2000-T2	TMT2000-T2Y1	TMT2000-T2Y2	TMT2000-T3Y2
Max. swing diameter	mm	Ø720			
Chuck O.D.	inch	8"			
Bar capacity	mm	Ø65 (Ø51 Built-in type)			
X1/X2/X3 axis travel	mm	230/205/-	230/-/230		230/205/230
Y1/Y2/Y3 axis travel	mm	-	±51/-	±51/-/±51	
Z1/Z2/Z3/B axis travel	mm	600/600/-/680	440/-/440/680		440/600/440/680
X/Y/Z/B axis rapid traverse	m/min	30/15/36/30			
Spindle nose		A2-6			
Spindle speed	rpm	4,500 (6,000 Built-in type)			
Spindle motor	kW	18.5/15/11			
Sub-spindle chuck O.D.	inch	8"			
Sub-spindle speed	rpm	6,000			
Sub-spindle motor	kW	18.5/11			
Tool capacity	pc	12 (16)×2		12 (16)×3	

TMS Series

- 75° slanted machine bed design not only benefits accessibility and excellent chips disposal, but also lowers the machine's center of gravity to enhance the entire structure rigidity.
- The TMS series is able to be applied for multi-process machining. With the functions of swing B axis and 5 axes simultaneous motion controller, it is able to process complex curve surface contouring.
- Standard equipped with 40 tools chain type ATC tool magazine. For further applications, 80 tools is also available.



Vertical CNC Lathe

TVL Series

- Excellent heat dissipation for long-term heavy duty cutting.
- Integrated machine structure allows better vibration-absorption.
- Vertical type machine bed design allows the operator closer proximity to facilitate workpiece loading/unloading, tool adjustments, and chips disposal.



Specification	Unit	TMS-2000[S]	TMS-2500[S]	TMS-3000[S][11]	TMS-3800[S][11]
Max. swing diameter	mm	Ø660			Ø710
Chuck O.D.	inch	8"	10"	12"	15"
Bar capacity	mm	Ø51		Ø72	Ø95
X1/Y axis travel	mm	-125-600/±125		-150-575/±150	
Z1 axis travel	mm	1,000		1,500	
X2 axis travel	mm	-		-[200]	
Z2 axis travel	mm	-[-]		-[-] [1,500]	
W axis travel	mm	1,000		1,500	
X/Y/Z/W axis rapid traverse	m/min	40/40/40/30			
Spindle nose		A2-6	A2-8		A2-11
Spindle speed	rpm	5,000	3,500		2,500
Sub-spindle chuck O.D.	inch	-[8"] [8"]		-[12"] [12"]	
Sub-spindle speed	rpm	-[5,000] [5,000]		-[3,500] [3,500]	
Machining spindle travel	deg	240° (-30° ~ 120°)			
Machining spindle speed	rpm	12,000			

Wheel Machine

TVW Series

- Single turret type and double turret type vertical CNC lathes are especially designed for wheel turning.
- Large size box-way design maintains high rigidity and high reliability.
- Huge chip disposal exit allows a large volume of chips to flow out during wheel turning.
- Suitable for the production line of various types of wheels.



Specification	Unit	TVW-22DT	TVW-22T	TVW-26DT	TVW-26T	TVW-28DT	TVW-28T
Wheel size	inch	O.D.:14"-22" Height: 12"	O.D.:14"-24" Height: 12"	O.D.:14"-24" Height: 6"-12"	O.D.:14"-28" Height: 6"-12"	O.D.:14"-28" Height: 6"-12"	O.D.:14"-28" Height: 6"-12"
Spindle nose		A2-11					
Spindle speed	rpm	2,500		2,000			
Spindle bearing dia.	mm	Ø160					
Tool capacity	pc	6+6	6	6+6	6	6+6	6
X/Z axis travel	mm	450/450		500/525		540/750	
X/Z axis rapid traverse	m/min	20/20					
Spindle motor	kW	55/45	45/37	55/45	45/37	75/60	45/37

TMV Wheel Series

- Especially designed for wheel machining.
- Suitable for machining wheel ribs, PCD holes, valves, and stud holes.
- Heightened column design allows setup of the 4th axis for further applications.
- Equipped with four chip augers to ensure chips disposal efficiency.



Specification	Unit	TMV-850W	TMV-1050W	TMV-1100W
Wheel size	inch	O.D.:14"-22" Height: 4"-10.5"		O.D.:14"-26" Height: 4"-12.5"
Spindle taper		7/24 Taper No.40		
Spindle speed	rpm	10,000 (15,000)		
Tool capacity	pc	24		
X/Y/Z axis travel	mm	850/650/610	1,050/650/610	1,100/762/710
X/Y/Z axis rapid traverse	m/min	48/48/48		30/30/20
Spindle motor	kW	18.5/15/11 (18.5/11/7.5)		

HS Series

- Heat dissipation technology for spindle headstock eliminates heat accumulation during long-term turning.
- Built-in spindle has the feature of low vibration suitable wheel polishing.
- Integrated machine bed has high rigidity that benefits high turning precision.
- Suitable for wheel production lines.



Specification	Unit	HS-36WIIIG	HS-40WG
Wheel size	inch	13"-22"	14"-24"
Spindle nose		A2-11	
Spindle speed	rpm	2,000	
Spindle bearing dia.	mm	Ø160	
Tool capacity	pc	10	8
X/Z axis travel	mm	350/740	385/750
X/Z axis rapid traverse	m/min	20/20	
Spindle motor	kW	45/37	

Ultrasonic Assisted Machining Center

VU-5

- Ultrasonic control technology automatically completes frequency scanning and power settings.
- Tool vibrates periodically (15-45 kHz), reducing cutting resistance and enhancing surface quality.
- 15,000 rpm high speed spindle, supports standard BBT-30 tools.
- Ultrasonic assisted machining reduces cutting resistance and temperature rise, to extend tool life.
- Ultrasonic assisted machining reduces roughness from processed surface, to reduce polishing time.
- Reduces burrs arising from processing hard and brittle material.
- Allowable for the micro-hole processing for hard and brittle material.



Specification	Unit	VU-5
Table size (LxW)	mm	850x410
Max. table load	kg	250
Spindle taper		7/24 Taper No.30
Spindle speed	rpm	15,000 (20,000)
X/Y/Z axis travel	mm	510/400/350
X/Y/Z axis rapid traverse	m/min	48/48/48
Tool capacity	pc	20 (30)
Spindle motor	kW	3.7/2.2