



TOPWORK Industry Co.,Ltd.

The Professional Manufacturer of Cutter and Tool Grinder.



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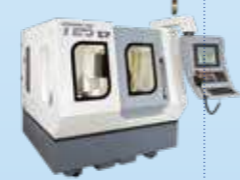














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TOPWORK Industry Co., Ltd. established in 1980, and locates in Taichung with 6000 M² plant area . We are the one of the few companies in Taiwan which involves into only on the cutter and tool grinder manufacturing. Our tool grinder range includes universal type and CNC type and mainly provides to the tool factories, especially, those who producing and re-sharpening the tungsten carbide cutter grinding. We started from the M-40 and CM-2 universal cutter grinders and sold them worldwide. Now, these products are still popular and export to US, China, Europe, and Southeast Asia. For the same machine construction we

provide the universal and CNC type to our customers. Another famous product is 4/5 axis CNC tool grinder. Accumulating the experience of the cutter grinding, we provide the high quality products and services for client. We are qualified ISO 9001-2000, and CE certification for our products, and win our government's R&D fund . In Taiwan, we get a good reputation from our customers as well as the worldwide agents trust us. That is the reason we can compete with the Europe competitors. For an everlasting enterprise like us, pursuing perfection on every details our goal forever.

1985	1990	1995	1998	2002	2006	2008	2009	2012	2014	2016	2018	
 M-40 Universal Cutter & Tool Grinder	 HS-16 Hob Sharpening Machine	 TG-4plus CNC Tool Grinder	 TG-5 Master CNC Tool Grinder	 CM-A Monaset Tool Grinder	 TE-5 CNC Tool Grinder	 TD Series(TD-3) Diamond Wheel Truing and Dressing Machine	 2009 Taiwan Small & Medium Enterprises Innovation Award	 Taiwan Machine Tools Industry Award 2009 For Excellence in Research and Innovation Other NC Machine Tools Grand Champion Award	 TM CNC Cutter & Tool Grinder	 TM Helical Shaper Cutter Resharpener Machine	 TP Series CNC Cylindrical Grinding Machine	 TA-5 CNC Tool Grinder
 CM-2 Monaset Tool Grinder				 SI Series PCD & PCBN Grinder	 TB Series Broach CNC Grinder	 TD Series (TD-5) Diamond Wheel Truing and Dressing Machine		 M-60 Universal Cutter & Tool Grinder				

-IN UNISON-

When you picked up this catalogue as an expert of cutting tool, we hope you gain a better acquaintance with TOP WORK and more comprehension of cutter grinders from TOP WORK.

Since established in 1980, TOP WORK has been engaged in the pursuit of enduring improvement in quality. This aspiration is leading TOP WORK to the global market of cutting tool.

Finally, we appreciate your permanent support for the continuing growth of TOP WORK and keeping the extended partnership. We wish you have continuing prosperity in business.

Technology-Consistent Persistence

Optimization-Promotion Motivation

Professional-Leading Factor



Academia-Industry Cooperation



R & D



Scraping



Assembly



Product Inspection



Marketing



Sales



Innovation & Research



Technical specialist





TG-5 Master

CNC Series

- Strongly structured bed – minimum vibration
- High rigidity linear guideway – Maximum wear resistance
- Full servo controller – Positioning accuracy
- High precision ballscrew – Highly accurate operations



TA-5

WORKHEAD

- Spindle taper: BT-50.
- Fast workpiece chucking with pneumatic control.
- Workhead concentricity accuracy within 4µm.



TE-5



TG-5



TG-4

GRINDING WHEEL HEAD

- High rigidity design.
- Equipped with high-precision, angular-contact ball-bearing.
- Motor speed: 9000rpm max.

OPERATION

- SIEMENS controller
- Touch screen panel allows manual inputs
- Fast screen switch between 3D CAD and CNC

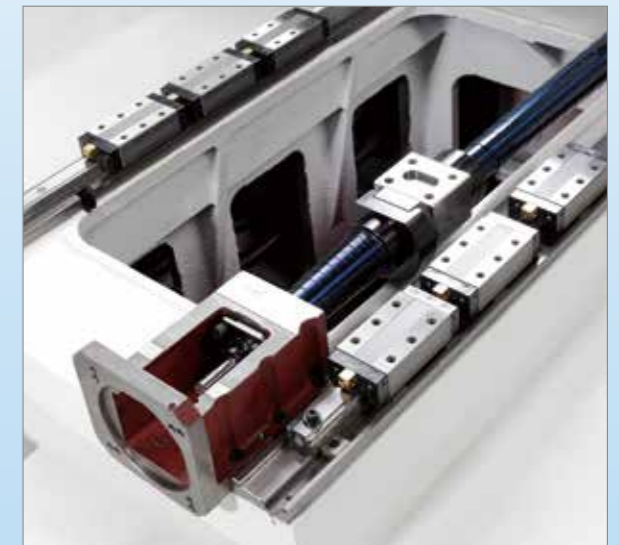
COOLANT SYSTEM

- 500 liter oil capacity.
- 80~100 liters per minute.
- Powerful pump.(3Hp or 2Hp)
- Equipped with oil cooler.



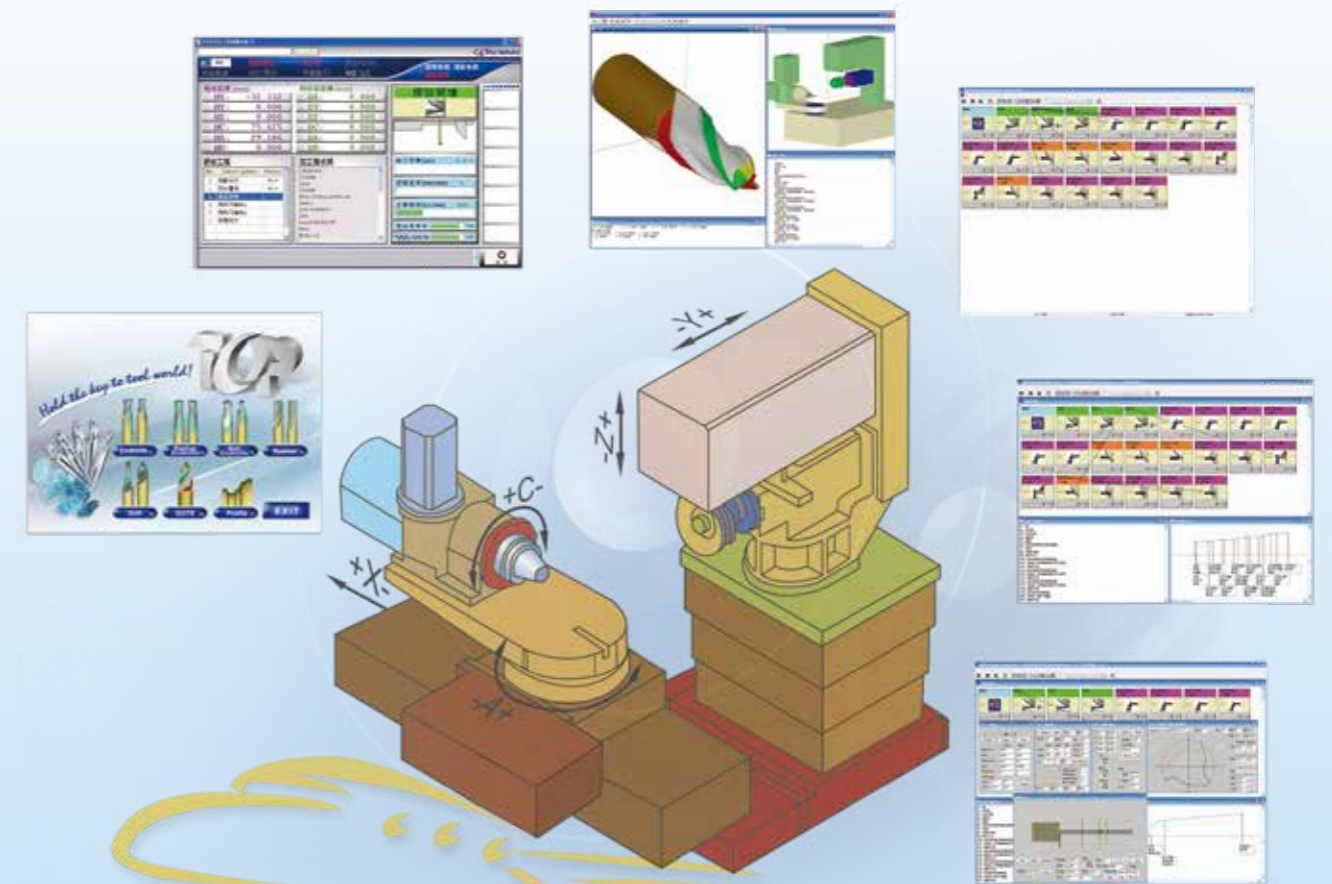
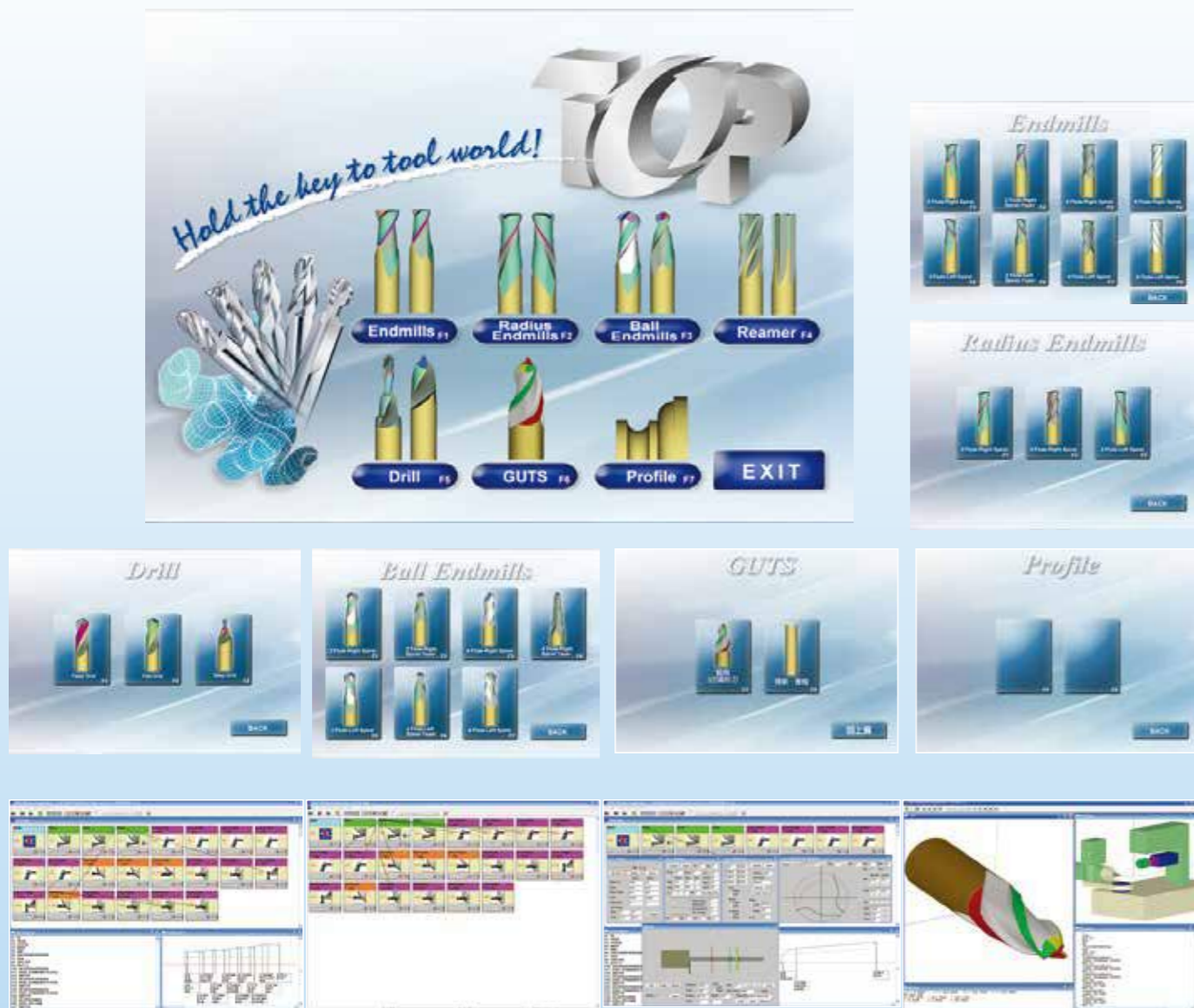
LINEAR GUIDEWAY

- High rigidity linear guideway for X, Y, Z axis .
- Driven by high precision ballscrew
- Central lubrication system reduce maintenance while operates.



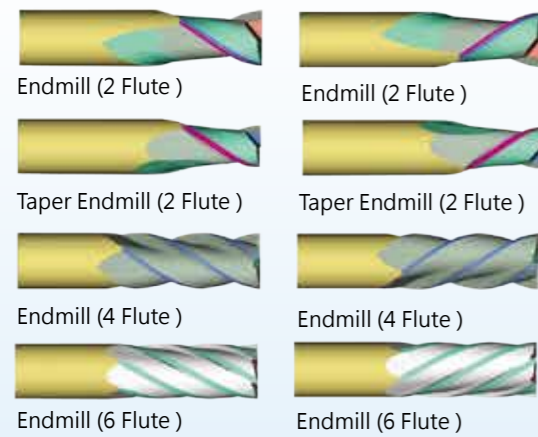
GUTS Software

- Powerful tool design function with no limitation.
- Intellectual and logical interface.
- Combined with 3 advanced tools: design with spatial geometry calculation as key; grinds with 5-axis CNC grinding tool; infused with manual grinding concept.
- Spatial geometry based tool profile are more accurate than previous methods.
- Editable process sequence and method.
- Re-sharpening operation available.

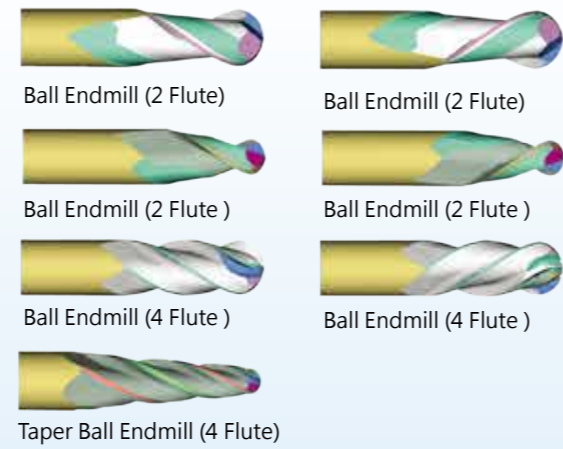


Standard Cutting Tool

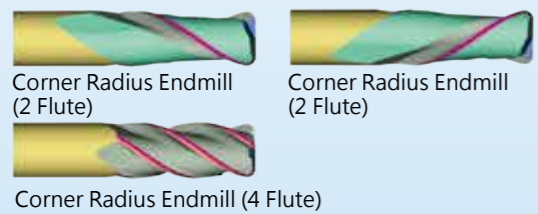
Endmills



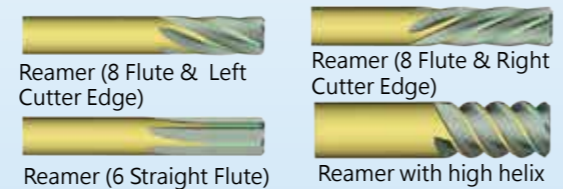
Ball Endmills



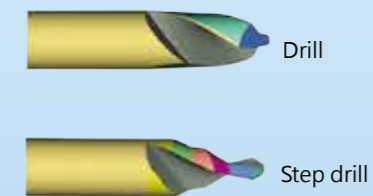
Corner Radius Endmills



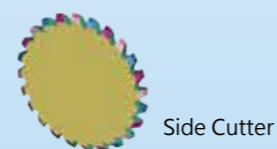
Reamer



Drill



Cutter

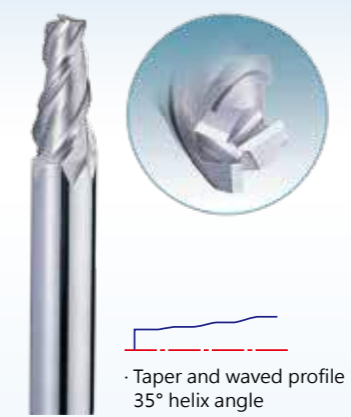


Special Cutting Tool

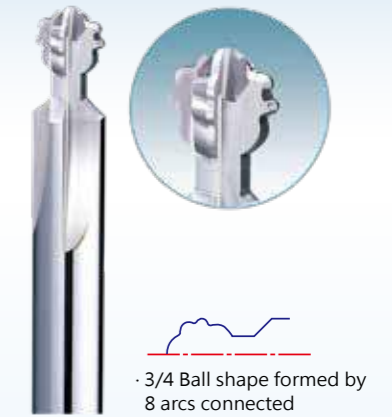
Profile tool with 3 different cutting edges



Cutting edge with wave shape



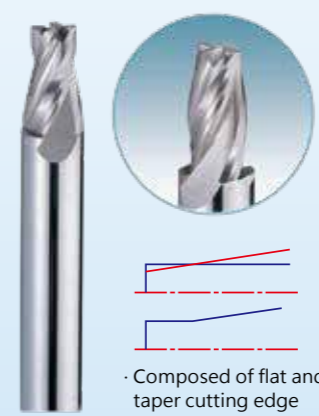
3/4 Ball shape formed by arcs connected



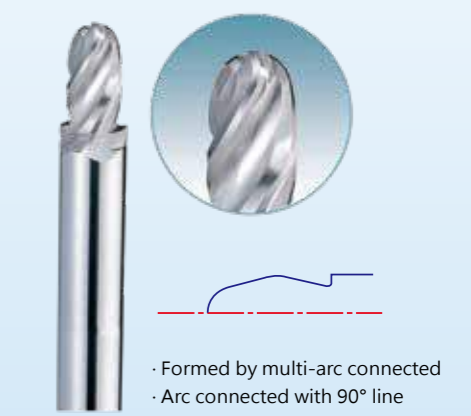
Straight flute with 3/4 ball shape



Angle tool formed with flat and taper cutting edge



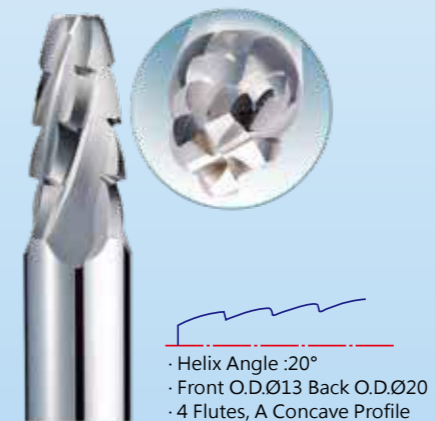
Whale shape



Endmill with arc-end



Step-Arc & Taper Shape

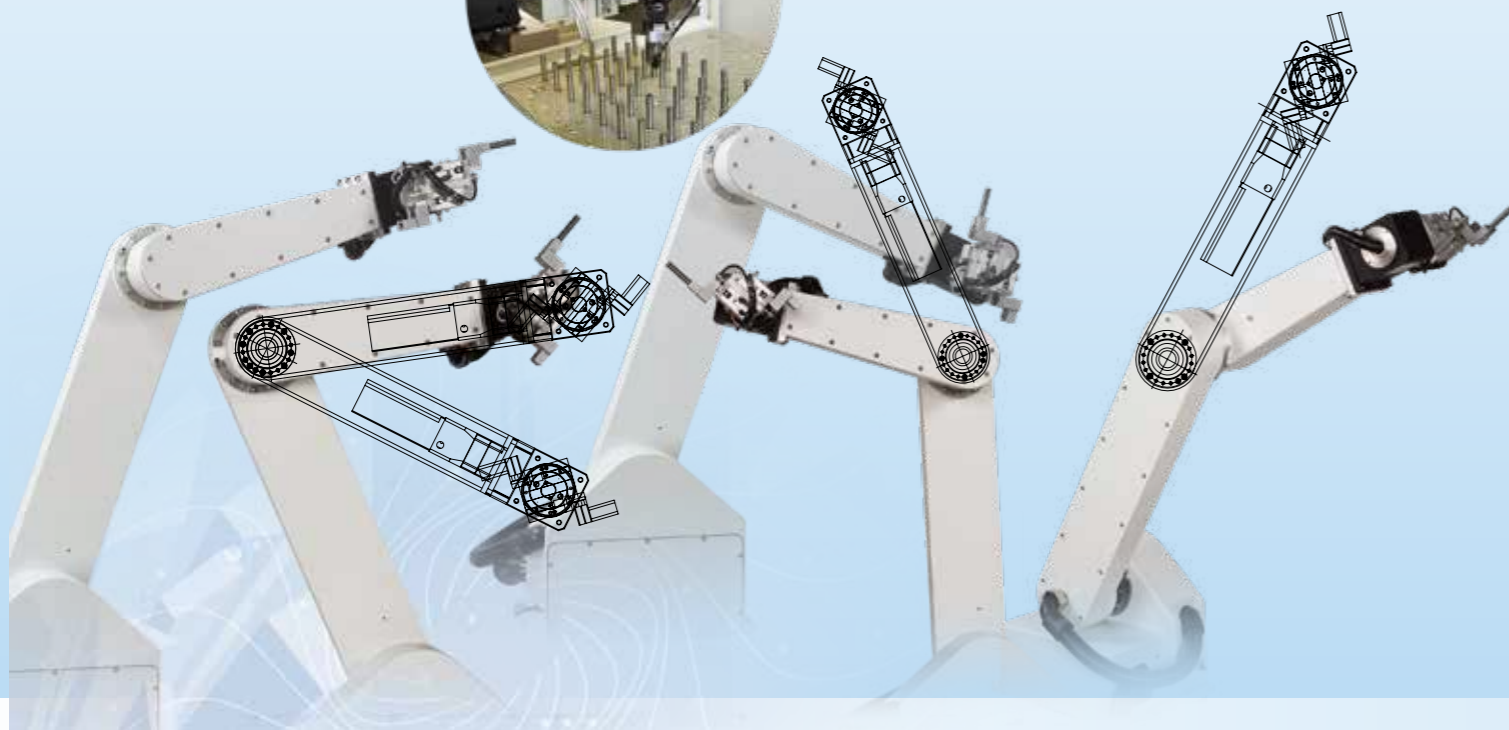


Robotic System

Robot Loading/unloading System®

- Fast loading robotic system: automation of loading and unloading within 10 seconds.
- Time efficient without the door adjustment.
- Avoid cutting oil mist to pollute the factory environment.

Equipped with robotic system and touch probe that automatically measures the new or resharpening tool.





TA Series CNC Tool Grinder

Automatic changes grinding wheels system.



Controller

- User-friendly operational panel.
- Touch screen panel allows manual inputs.
- Fast screen switch between 3D CAD and CNC.



Machine Specifications

		TA-51	TA-5
Mechanical Axes	X Axis	450 mm	400 mm
	Y Axis	470 mm	
	Z Axis	350mm	
	C Axis (Direct drive)	360°	
	A Axis (Direct drive)	-20° / 200°	
	Liear resolution	0.0001 mm	
	Radial resolution	0.0001°	
Tool data	Tool diameter	3 - 32 mm	3 - 20 mm
	Max. work-piece length	330 mm	180 mm
	Max. Tool length	300 mm	150 mm
Grinding spindle drive	Wheel changer	3	
	Tool holder	HSK-A50	
	Built-in spindle power rating	25.0 kW	5.5 kW
	Spindle revolving speed	1200-9000 rpm	
Controller	Type	NUM / SIEMENS	
Machine	L x W x H	2246 x 2926 x 2580 mm	
	Weight	7460 kg	

Standard Accessories

1. Full Enclosure splash Guard
2. Halogen Lamp
3. Grinding Wheel Flange
4. Leveling Bolts / Block
5. Pneumatic Collet Holder Ø6 · Ø8 · Ø10 · Ø12 · Ø16 mm
6. Tool Box / Adjusting Tool
7. Angular Setting Disc for Machine Reference Point Measurement
8. Plug Gauge BT#50 for presetter Measurement
9. Plug Gauge BT#50 for Machine Reference Point Measurement

Optional Accessories

1. Robotic System
2. 3D Touch Probe with Workpiece
3. 3D Touch Probe with Wheel
4. Dressing Wheel with A-axis
5. M-40 Universal Cutter Tool Grinder with Cylindrical Grinder Attachment
6. TD Diamond Wheel Truing and Dressing Machine
7. U Axis with TA-51



TG-5 Master 5 Axis CNC Tool Grinder

Machine Specifications

Mechanical Axes	X Axis	370 mm
	Y Axis	240 mm
	Z Axis	190 mm
	C Axis (Worm gear)	∞
	A Axis (Worm gear)	-15° ~ +195°
	Rapid traverse X	6 m/min
	Rapid traverse Y	6 m/min
	Rapid traverse Z	6 m/min
	Rapid traverse C	100 rpm
	Rapid traverse A	15 rpm
	Linear resolution	0.001 mm
	Radial resolution	0.001°
Axes Motor	X Axis	1.5 kW
	Y Axis	1.5 kW
	Z Axis	1.5 kW
	C Axis	0.8 kW
	A Axis	0.8 kW
Tool data	Tool diameter	3-20 mm
	Max. turning diameter	200 mm
	Max. work-piece length	130 mm
	Max. tool length	100 mm
Grinding spindle	Max. grinding wheel diameter	150 mm
	Grinding spindle speed	0 ~ 9000 rpm
	Peak Power	7.5HP (5.5 kW) / 10 HP (7.5 kW)
Controller	Type	SIEMENS / FANUC
Machine	L x W x H	2062 X 2127 X 1955 mm
	Weight	4530 kg



Direct drive of C-axis



Built-in spindles

Standard Accessories

1. Full Enclosure splash Guard
2. Halogen Lamp
3. Grinding Wheel Flange
4. Leveling Bolts / Block
5. Spare belt 4R7M875
6. Pneumatic Collet Holder Ø6 · Ø8 · Ø10 · Ø12 · Ø16 mm
7. GUTS Grinding Software
8. Tool Box / Adjusting Tool
9. Angular Setting Disc for Machine Reference Point Measurement
10. Plug Gauge BT#50 for presetter Measurement
11. Plug Gauge NT#50 for Grinding wheel dressing (M40)
12. Plug Gauge BT#50 for Machine Reference Point Measurement
13. Automatic Lubrication System
14. 3-Dimension Model Simulation System

Optional Accessories

1. Robotic System
2. 3D Touch Probe with workpiece
3. Built-in spindle (5.5 kW)
4. Direct drive of C-axis
5. M-40 Universal Cutter Tool Grinder with Cylindrical Grinder Attachment
6. TD Diamond wheel truing and dressing Machine



TG-4 4 Axis CNC Tool Grinder



Machine Specifications

Mechanical Axes	X Axis	370 mm
	Y Axis	230 mm
	Z Axis	170 mm
	C Axis (Worm gear)	∞
	Rapid traverse X	10 m/min
	Rapid traverse Y	10 m/min
	Rapid traverse Z	10 m/min
	Rapid traverse C	100 m/min
	Linear resolution	0.001 mm
Radial resolution	0.001°	
Axes Motor	X Axis	1 kW
	Y Axis	1 kW
	Z Axis	1 kW
	C Axis	1 kW
Tool data	Min. diameter	3 mm
	Max. turning diameter	200 mm
	Max. work-piece length	400 mm
Grinding spindle	Max. grinding wheel diameter	150 mm
	Grinding spindle speed	0 ~ 9000 rpm
	Peak Power	7.5HP (5.5 kW)
Controller	Type	MITSUBISHI / FANUC
Machine	L x W x H	2300 x 1990 x 2250 mm
	Weight	4530 kg

Standard Accessories

1. Full Enclosure splash Guard
2. Halogen Lamp
3. Grinding Wheel Flange
4. Leveling Bolts / Block
5. Pneumatic Collet Holder
6. Tool Box / Adjusting Tool
7. Angular Setting Disc for Machine Reference Point Measurement
8. Plug Gauge BT#50 for presetter Measurement
9. Plug Gauge NT#50 for Grinding wheel dressing
10. BT#50 Plug Gauge Machine Reference Point Measurement
11. Automatic Lubrication System
12. Tailstock

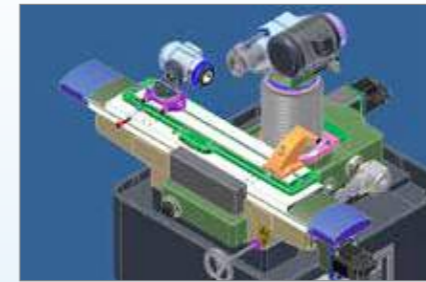


TM Series CNC Tool Grinder

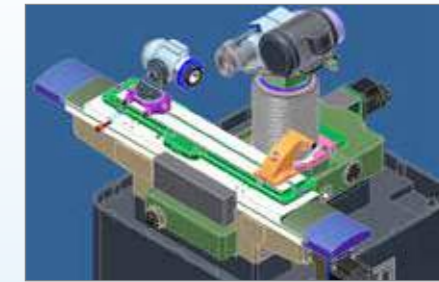
Machine Specifications

		TM-2	TM-3	TM-4
Mechanical Axes	X Axis		250 mm	
	Y Axis		200 mm	
	Z Axis		170 mm	
	A Axis		∞	
	Rapid traverse X		6 m/min	
	Rapid traverse Y		6 m/min	
	Rapid traverse Z		6 m/min	
	Rapid traverse A		20 rpm	
	Linear resolution		0.001 mm	
	Radial resolution		0.001°	
Axes Motor	X Axis	1 kW	1 kW	1 kW
	Y Axis	1 kW	1 kW	1 kW
	Z Axis	-	1 kW	1 kW
	A Axis	-	-	0.4 kW
Working spindle	Spindle Taper	MT#5, NT/BT50		BT-40
		BT-40 (Option)		
Tool data	Min. diameter	3 mm		
	Max. turning diameter	200 mm		
	Max. work-piece length	250 mm		
Grinding spindle	Max. grinding wheel diameter	150 mm		
	Grinding spindle speed	0 ~ 6000 rpm		
	Peak Power	3HP (2.25 kW)		
Cooling	Cooling motor	1/8 HP		
Controller	Type	MITSUBISHI / FANUC		
	L x W x H	2080 x 1765 x 1656 mm		
Machine	Weight	2200 kg		

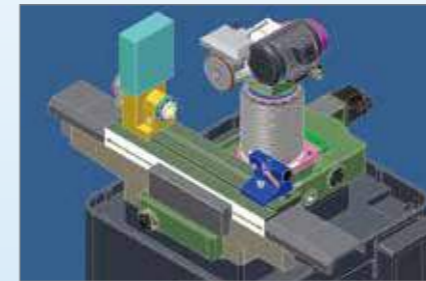
Application



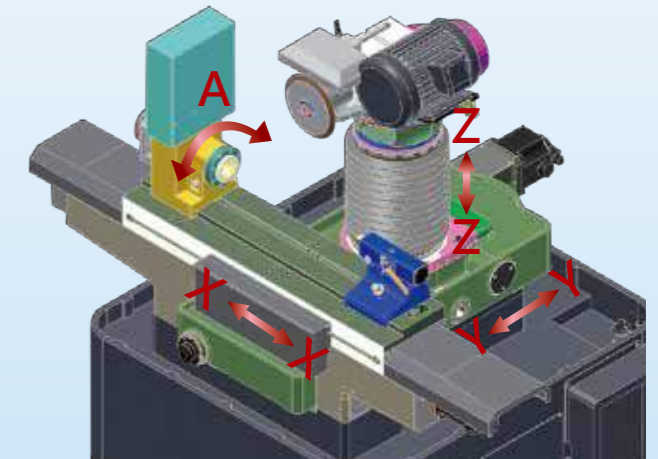
TM-2 (XY axis)



TM-3 (XYZ axis)



TM-4

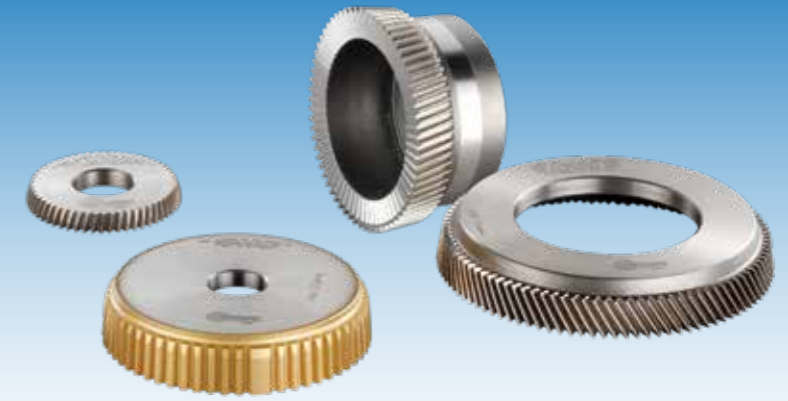


Standard Accessories

1. Full splash guard
2. Halogen lamp
3. Grinding wheel flange
4. Leveling bolt / block
5. Tool box / Adjust tool
6. Paper Filter Coolant System

Optional Accessories

1. Oil mist collector



Helical Shaper Cutter Resharpener Machine

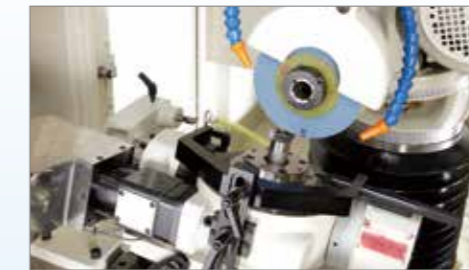
Machine Specifications

		TM	TG
Mechanical Axes	X Axis	250 mm	350 mm
	Y Axis	200 mm	230 mm
	Z Axis	200 mm	170 mm
	C Axis	∞	-
	A Axis	-15° ~ 45°	-
	B Axis	-5° ~ 5°	-
	Rapid traverse X	6 m/min	10 m/min
	Rapid traverse Y	6 m/min	10 m/min
	Rapid traverse Z	6 m/min	10 m/min
	Rapid traverse C	50 rpm	50 rpm
	Rapid traverse A	manual	manual
	Rapid traverse B	manual	manual
	Linear resolution	0.001 mm	-
	Radial resolution	0.001	-
Axes Motor	X Axis	1 kW	1.5 kW
	Y Axis	1 kW	1.5 kW
	Z Axis	1 kW	1.5 kW
	C Axis	0.4 kW	0.4 kW
	A Axis	N/A	N/A
	B Axis	N/A	N/A
Tool data	Min. diameter	15 mm	15 mm
	Max. turning diameter	140 mm	240 mm
	Max. work-piece length	180 mm	180 mm
	Max. grinding wheel diameter	150 mm	150 mm
Grinding spindle	Grinding spindle speed	0 ~ 10000 rpm	-
	Peak Power	3 HP (2.25 kW)	7.5 HP (5.5 kW)
Fixture	Taper	MT2/MT3/MT4	-
Cooling System	Cooling motor	1/8 HP	2 HP
Controller	Type	MITSUBISHI / FANUC	
Machine	L x W x H	2080 x 1870 x 2230 mm	1850 x 1990 x 2150 mm
	Weight	2200 kg	4530 kg

Wheel Dresser



Application



TM



TG

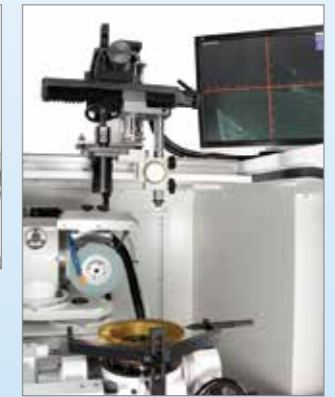
Standard Accessories

1. Full splash guard
2. Halogen lamp
3. Automatic Lubrication System
4. Grinding wheel flange
5. Leveling bolt / block
6. Tool box / Adjust tool
7. Angle adjustment
8. Wheel Dresser
9. Paper Filter Coolant System
10. C.C.D Camera System
11. Spare belt

CCD System



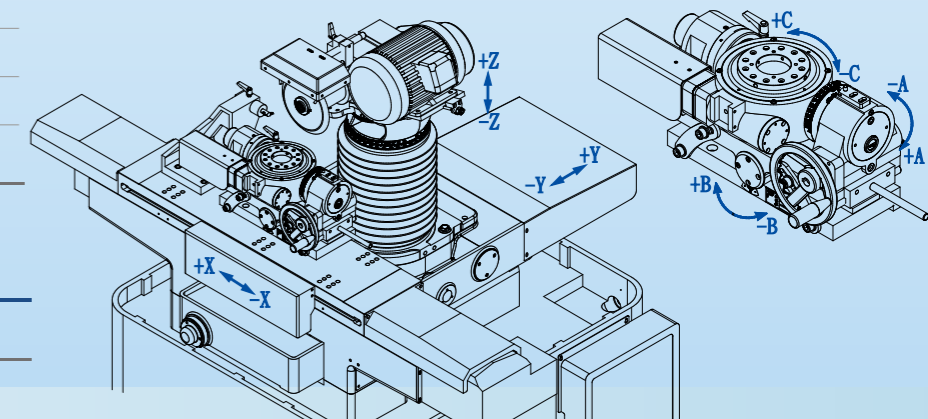
TM



TG

Option Accessories

1. Oil mist collector

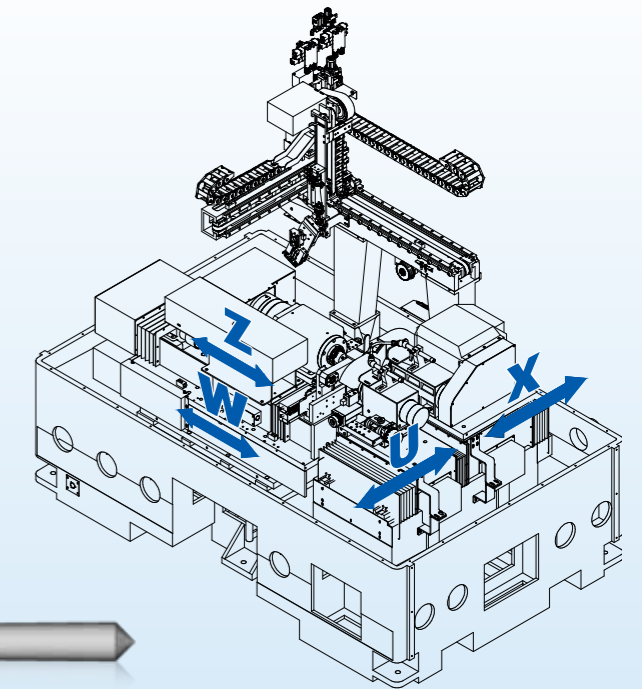


TP Series CNC Cylindrical Grinding Machine

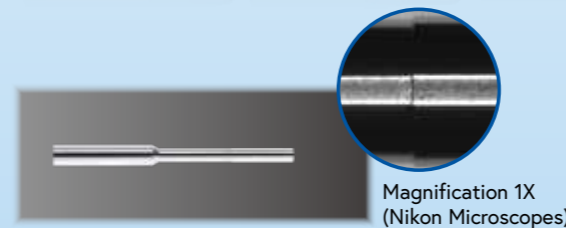
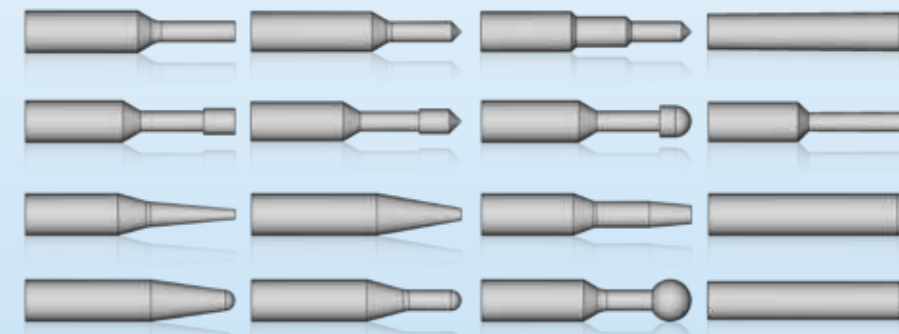


Machine Specifications

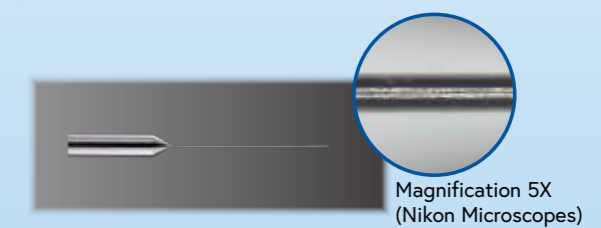
Mechanical Axes	X Axis stroke	30 mm
	U Axis stroke	30 mm
	X & U Axis resolution	0.0001 mm
	Z Axis stroke	370 mm
	W Axis stroke	100 mm
	Z & W Axis resolution	0.001 mm
	Accuracy (A)	≤ 0.004 mm
	Repeatability (R)	≤ 0.002 mm
Axes Motor	X Axis	0.75 kW
	U Axis	0.75 kW
	Z Axis	1.20 kW
	W Axis	1.20 kW
Grinding range	Shank	∅ 1 - ∅ 20 mm
	Diameter	∅ 0.025 - ∅ 20 mm
	Grinding length	Max. 330 mm
Manual loading	Shank	∅ 1 - ∅ 20 mm
	Overall length	35 - 350 mm
Load & unload	Shank	∅ 1 - ∅ 20 mm
	Overall length	35 - 110 mm
Grinding spindle	Roughing rotational speed	Max. 4500 r.p.m.
	Roughing Motor	4.0 kW
	Roughing Wheel	∅250 mm
	Finishing rotational speed	Max. 10000 r.p.m.
	Finishing Built-in Spindle Motor	4.2 kW
	Finishing Wheel	∅150mm
Working spindle	Tool rotational speed	Max. 3000 r.p.m
	Motor	2.5 kW
Controller	Resolution	0.001 deg
	Type	FANUC
Machine	L x W x H	2268 mm x 1907 mm x 2184 mm
	Weight	4700 kg
	Total power	Max. 22 KVA
	Air pressure	Min. 5 Kgf/cm2
	Rated flow	Min. 150 l/min



Application



Shank ∅ 4 mm
Front ∅ 2.878 mm, Grinding length 12 mm
Middle ∅ 2.6 mm, Grinding length 14 mm



Shank ∅ 4 mm
Front ∅ 0.1 mm, Grinding length 35 mm
350 Length diameter ratio



TD-2

TD-3

TD-5

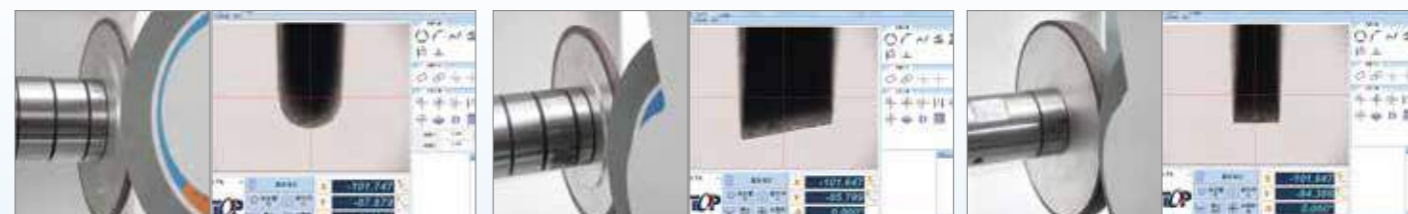


TD Series Diamond Wheel Truing and Dressing Machine

Machine Specifications

		TD-2	TD-3	TD-5	
Diamond / CBN grinding wheel	Spindle type		BT-40		
	Max. diameter		Ø 230 mm		
	Min.diameter		Ø 50 mm		
	Speed		100~2500rpm		
	Motor power		2 HP (1.5 kW)		
	W Axis-Cross drive	Manual		Servo	
	U Axis-Longitudinal drive	Manual		Servo	
	W Axis-Cross travel		280 mm		
U Axis-Longitudinal travel		140 mm			
Truing / Dressing wheel	Dimensions		Ø 205 x 19t mm		
	Speed		200~3500 rpm		
	Motor power		1HP (0.75 kW)		
	X Axis-Longitudinal drive		Servo		
	X Axis-Longitudinal travel		100 mm		
	Z Axis-Oscillation drive		Servo		
	Z Axis-Oscillation stroke		20~80 mm		
	Oscillation frequency		0~10m/min	0~0.6m/min	
	B Axis-Swivelling drive	Manual		Servo	
	B Axis-Swivelling travel		±95°		
Controller	Type	MITSUBISHI PLC		MITSUBISHI M70	
Machine	L x W x H	2300 x 2100 x 1820 mm		1660 x 2340 x 2050 mm	
	Weight	1750 kg		3000 kg	

Application



Radius

Angles

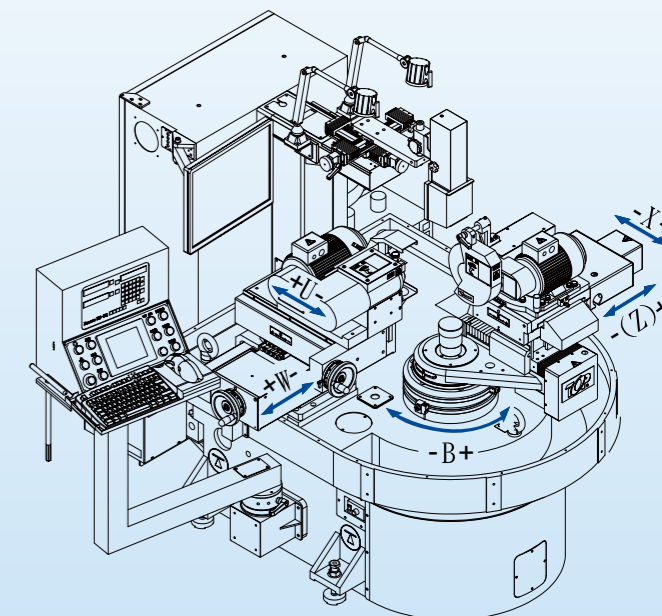
Flat

Standard Accessories

1. Half splash guard (manual)
2. Work Lamp
3. Optical linear scales with digital display counter (Resolution: TD-3= 0.005mm, TD-5= 0.001mm)
4. Leveling Bolts and Blocks
5. Spare Belt for Spindle Drive
6. Dressing Wheel Flange. (Metric: 32 mm .or Imperial: 31.75 mm)
7. Tool Box / Adjusting Tool
8. Cooling spray system
9. C.C.D Camera System with Magnification 5x~50x
10. Monitor
11. Dust collection system
12. Wheel Dresser

Optional Accessories

1. Harmonic drive with B - Axis (TD-3)
2. Half splash guard (TD-3)
3. Full splash guard
4. Customer specified adapter and shank
5. Customer spindle type
6. DXF Dressing software (TD-5)



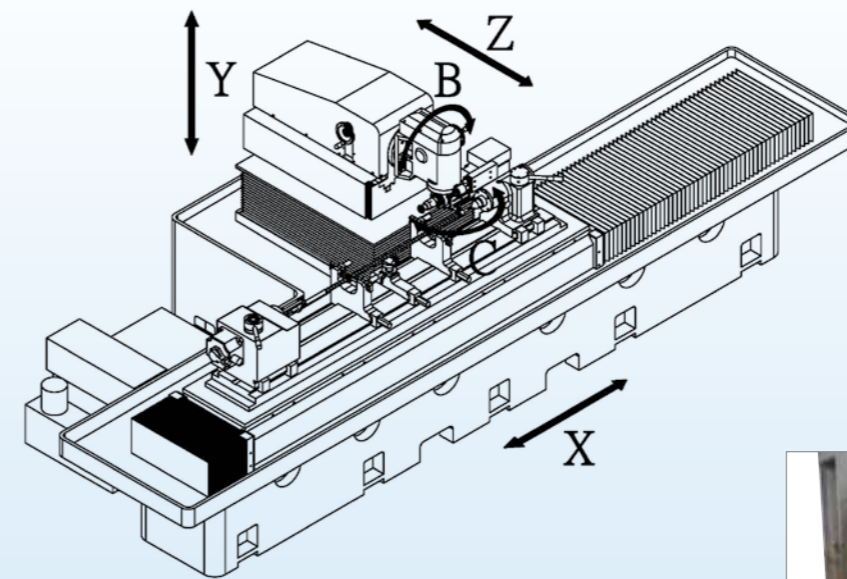


TB Series Broach CNC Grinder



Machine Specifications

		TB-3	TB-4	TB-41	TB-42
Mechanical Axes	X Axis	1500 mm / 2000 mm			
	Y Axis	200 mm			
	Z Axis	250 mm			
	A Axis	360°			
	B Axis	0° ~ 90°			
	C Axis	±30°			
	Distance between centers	1500 mm / 2000 mm			
Axes Motor	X Axis	2.2 kw			
	Y Axis	1 kw			
	Z Axis	1.5 kw			
	A Axis	3 HP (Induction motor)	3 kW (Servo motor)		
	B Axis	Manual	1.5 kW		
	C Axis	Manual	1 kW		
Tailstock	Travel of spindle	45 mm			
	Taper	MT 5			
Tool data	Min. diameter	Ø 20 mm			
	Max. turning diameter	Ø 150 mm			
	Max. work-piece weight	150 kg			
Grinding spindle	Max. grinding wheel diameter	Ø 50 - Ø 150 mm			
	Grinding spindle speed	1000 ~ 10000 rpm			
	Peak Power	2 KW			
Cooling System	Cooling motor	1/2 HP (0.375 kW)			
Controller	Type	MITSUBISHI / FANUC			
Machine	L x W x H	5000 x 2043 x 1950 mm / 6000 x 2043 x 1950 mm			
	Weight	7000 kg			



Standard Accessories

1. Full splash guard
2. Halogen lamp
3. Automatic lubrication system
4. Grinding wheel flange
5. Leveling bolt / block
6. Tool box / Adjust tool
7. Spare belt
8. Magnetic Separator & Paper Filter Coolant system

Optional Accessories

1. B Axis servo motor (1.5 kW)
2. C Axis servo motor (1 kW)





M-40



M-60



CCD Measurement (Optional)



5C collector (Option)

Universal Cutter & Tool Grinder



Machine Specifications

	M-40	M-60
Longitudinal movement of table	400 mm	600 mm
Distance between center	700 mm	900 mm
Cross movement of saddle	250 mm	250 mm
Vertical movement of wheelhead	250 mm	250 mm
Distance between tailstock and workhead	580 mm	780 mm
Workhead taper	MT#5	
	NT50 (BT 50 Option)	
Table	T-Slot	
	15 mm (+0.05 mm ~ +0.10 mm)	
	Working range of table	
	135 x 940 mm	135 x 1140 mm
	Grinding spindle speed	
	2600, 3700, 6200 rpm	
	Peak Power	
	1.5 HP (1.1 kW)	
	Rotative angle of table	
	±60°	±60°
JOG adjustment of table		
±10°		
Inclination of wheelhead		
+15°		
Rotative angle of wheelhead		
360°		
Distance between center of spindle and table		
Max. 300 mm / Min. 50 mm		
Distance between center of spindle and T-slot		
Max. 415 mm / Min. 165 mm		
Machine	L x W x H	1735 x 1550 x 1480 mm 2740 x 1550 x 1384 mm
	Weight	1160 kg 1260 kg

Standard Accessories

- | | | |
|---|--|---|
| 1. Workhead | 16. T-wrench for grinding wheel sleeve | 31. Grinding wheel (4"x1/16" x 1/2") |
| 2. Left-hand tailstock | 17. Sleeve extracting bar | 32. Grinding wheel (5"x1 1/2" x 1 1/4") |
| 3. Right-hand tailstock | 18. Pin wrench | 33. Grinding wheel (3"x 1/2" x 1/2") |
| 4. Diamond dresser holder | 19. Micrometer adjustable toothrest | 34. Double end wrench |
| 5. Wheel guard | 20. Leveling block | 35. Nut wrench |
| 6. Wheel guard | 21. Touch-up paint | 36. Screw Driver |
| 7. Wheel guard | 22. Plain tooth rest holder (with offset blade) | 37. Nut wrench |
| 8. Wheel guard | 23. Reducing collets B&S No.12 x No.10 (or MT No.5 x NO.4) | 38. Allen type wrench |
| 9. Wheel guard holder (long) | 24. Reducing collets B&S No.12 x No.9 (or MT No.5 x NO.3) | 39. Spacer for 1/8" dia. Grinding wheel |
| 10. Wheel guard holder (short) | 25. Reducing collets B&S No.12 x No.7 (or MT No.5 x NO.2) | 40. Center for workhead spindle MT 3 |
| 11. Universal tooth rest plate and blade holder extension | 26. Grinding wheel flange(5 set) | 41. 4" spindle extension |
| 12. Center gauge | 27. Grinding wheel (6"x3/4" x 1 1/4") | 42. 4" extension wheel sleeve and collar |
| 13. Collets wrench | 28. Grinding wheel (6"x1/2" x 1 1/4") | 43. Belt for spindle drive (Poly- flex belt) |
| 14. Plain tooth rest holder (with offset blade) | 29. Grinding wheel (6"x1/2" x 1 1/4") | 44. Draw-in bolt for workhead and spacer |
| 15. Ejector rod | 30. Grinding wheel (3 1/2"x 1 1/2"x 1 1/4") | 45. Tool cabinet <small>(Amendment: optional accessories, not standard)</small> |
| | | 46. Extension and spacer of slit-saw and side-mill cutter. |

*Amendment: optional accessories, not standard

Optional Attachment



NO.1 Radius Grinding Attachment (NO. 01)

1. Peak Power of motor :0.2kW (1/4 HP)
2. Holder :MT#5 , Clamping range of tool diameter: Ø3~ Ø32mm
3. Grindable range of arc radius:1.5mm~16mm
4. Suitable for re-grinding radius of ball, and end radius of ball endmill.



NO.2 Radius Grinding Attachment (NO. 02)

1. Holder :NT50 (BT50)
2. Max. Tool diameter: Ø300mm
3. Suitable for re-grinding side cutter, face mill and end radius.



NO.3 Face Mill Grinding Attachment

1. Grinding range of tool diameter: Ø170mm~ Ø457mm
2. Inclination of workhead : ±15°
3. Rotary horizontal angle : ±90°
4. Suitable for re-grinding large face cutter or large cutting tool.



NO.4 Cylindrical Grinding Attachment

1. Peak Power of motor :0.2kW(1/4 HP)
2. Three-jaw chuck:4" three-jaw chuck
3. Clamping range of tool diameter: Ø3~ Ø90mm
4. Suitable for re-grinding surface of cylinder and surface of taper.



NO.5 Helical Grinding Attachment

1. Grindable range of helical angle:40°
2. Holder :MT#4 , Clamping range of tool diameter : Ø3~ Ø25mm
3. The inner workhead equally distribute 24 teethes for indexing device.
4. Suitable for re-grinding mill, hob, and drill of helical flute.



NO.6 Internal Grinding Attachment

1. Must be assembled with cylindrical grinding attachment that could grind taper of the internal hole.
2. The internal attachment is driven by wheel spindle.
3. Wheel spindle speed :20000rpm
4. Internal grinding wheel diameter : Ø3 , Ø6 ; Length :40mm



NO.7 Workhead Indexing Attachment (24 T) (Excluded workhead and collet)

1. Standard issued attachment is a 24 equally distributed teethes indexing plate.
2. Available for customize different numbered teeth of indexing plate.



NO.8 Extended Grinding Wheel Spindle

1. Length of extended grinding wheel spindle: extension 75mm
2. Suitable for re-grinding small and special tool.



NO.9 Surface Grinding Attachment

1. Width of Vise :100mm
2. Depth of vise :25mm
3. Rotary horizontal angle:360°
4. Suitable for re-grinding horizontal surface.



NO.10 Drill Pointing Attachment

1. Clamping range of six-jaw chuck: 3mm~90 mm
2. Suitable for re-grinding drill point, step drill, center drill, chamfer mill, relief angle of 3 or 4 flutes' taps.



NO.11 Lathe & Planer Tool Grinding Attachment

1. Clamping range of tool:10mm~38mm
2. Suitable for re-grinding lathe and planer



NO.12 Spring Collet Set

1. Clamping range of tool diameter : Ø6 ~Ø25mm
2. Holder :MT#5



NO.13 Wet Grinding Attachment with Waterproof Equipment

1. Peak Power of Motor: 0.1kW(1/8HP)
2. Suitable for cooling tool while it grinds.



NO.14 Dust Collector

1. Peak Power of Motor: 0.4kW(1/2HP)
2. It collect chips with dusts to keep working environment clean.

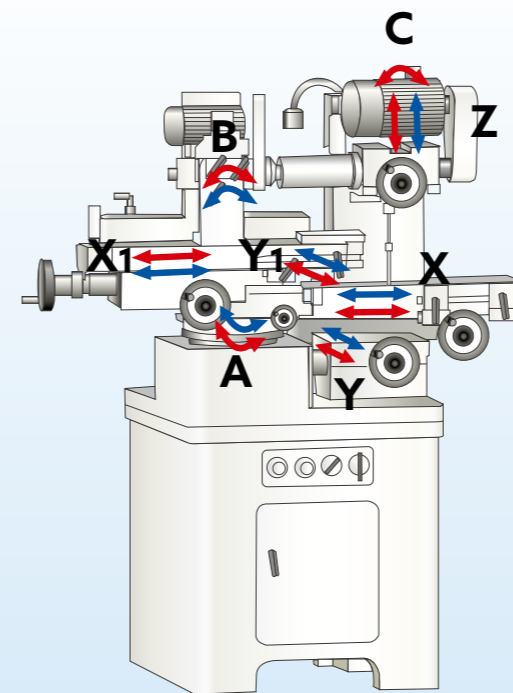




MONASET Tool Grinder

Machine Specifications

		CM-2	CM-A	
Workhead	Max. Swing diameter	304 mm		
	Max. Collet work diameter	32 mm		
	Min. Collet work diameter	5 mm		
	Max. Spiral angle	60°		
	Max. Distance between nose of spindle and center of tailstock	100 mm, 152 mm		
	Grinding Diameter	100 mm		
Grinding wheel spindle	Workhead			
	X1 Axis - Slide travel	130 mm		
	Y1 Axis - Offset slide travel	100 mm		
	Front of center	50 mm		
	Rear of center	50 mm		
	Angle adjustment of Workhead			
	A Axis - Rotation of Horizontal plane	±105° (210°)		
	B Axis - Rotation of Vertical plane	±40° (80°)		
	Grinding wheelhead			
	X Axis - Longitudinal Slide travel	110 mm		
Y Axis - Cross Slide travel	240 mm			
Z Axis - Vertical Slide travel	170 mm			
C Axis - Rotation of Vertical plane	N/A	±15° (30°)		
Spindle speed	Workhead speed	50 HZ	370 rpm	
		60 HZ	440 rpm	
Motor	Grinding wheelhead speed	4000, 6000, 8000 rpm		
	Workhead	1/4 Hp (0.186 kW)		
Machine	Grinding wheelhead	1/2 Hp (0.373 kW)		
	L x W x H	1600 x 1150 x 1650 mm	2100 x 1150 x 2050 mm	
	Weight	860 kg	1030 kg	



■ CM-2 (7 axis) ■ CM-A (8 axis)

- The CM-A is equipped with linear scale device on the X, Y and A axis.
- High precision camera device (C.C.D) provides convenience operation, accurate positioning, and increased quality control efficiency.
- It is ideal for precision grinding for angles, arc and re-sharpening, especially for small cutter.



• C.C.D. System 28~180 times Variable focus change

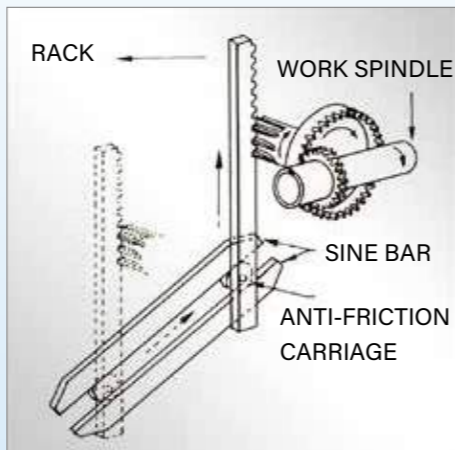


SMART OPERATION

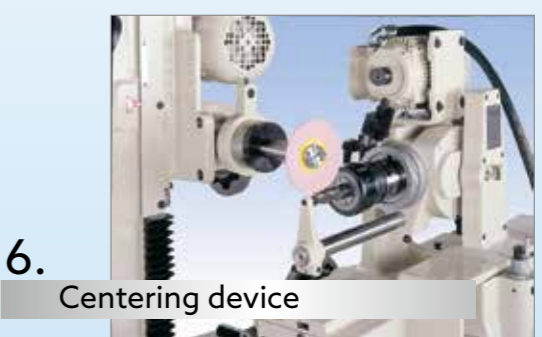
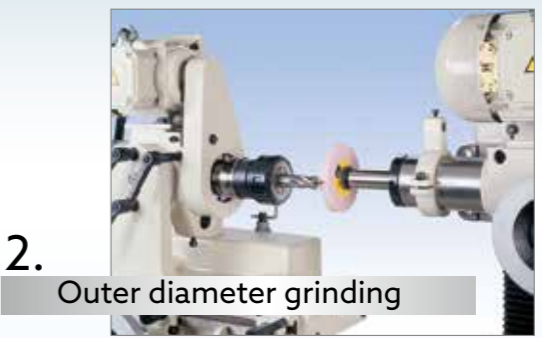
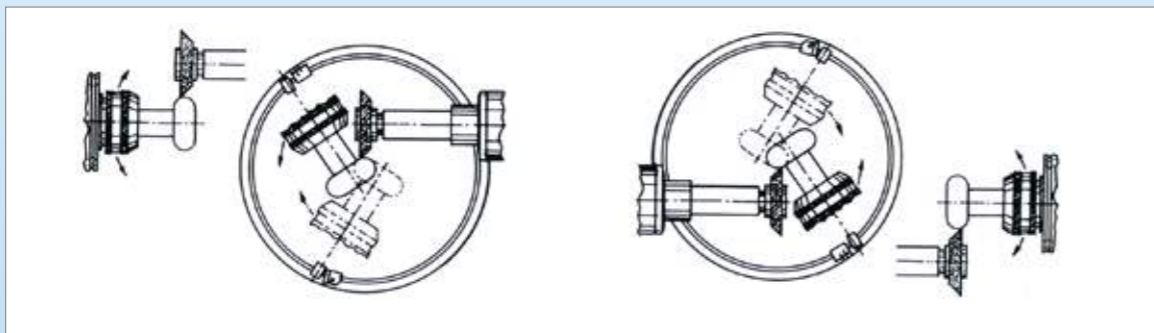


Function Description

- CM-A & CM-2 sharpen and recondition complex tool shapes and parts.
- Turntable and guide bar allows workpieces grinding from different direction.
- Turntable and workhead set can rotate horizontally for 210°angle.



Spiral mechanism generates infinitely variable leads.



MONASET Tool Grinder



CM-2 Standard Accessories

1. Wheelhead toothrest assembly with extension bar
2. Grinding wheel guard with extension bar
3. Front stock support
4. Straight cylindrical collet:
(A) Metric sizes: 5,6,8,10,12,16,20,25, & 32mm
Including set of 3 taper collect: MT#2,3,4.
5. Set of (5) grinding wheel flanges : (4) Standard and (1) extension flanges.
6. Diamond Holder Bracket
7. Wrench for workhead
8. Toothrest centering gauge
9. Adjustable tailstock support unit
10. Spanner for grinding wheel
11. Leveling block
12. Standard arbor
13. Screw drive
14. Set of Wrenches
15. Double-end Spanner
16. Set of (3) Index plates for spiral lead mechanism 8,10&12 divisions."
17. Tool Box
18. Oil Bottle
19. Grinding wheel
(one each of straight, flaring cup and dish shape)
20. Diamond Truing tool with diamond nib
21. Spring-loaded index pawl for workhead index plates
22. 1/2" wheel flange and spanner



CM-2 Optional Accessories

1. Large cutter radius grinding attachment.
2. Four-inch universal six-jaw chuck for workhead
3. Additional index plates for spiral lead indexing unit - 24T.
4. Extended collect set with wrench for smaller collect included in Ø3mm collet.
5. Frequency inverter for grinding wheel spindle - 2 HP
6. Upgrading grinding wheel spindle motor - 2HP
7. Dust collector attachment



CM-A Standard Accessories

1. Wheelhead toothrest assembly with bar
2. Grinding wheel guard with extension bar
3. Front stock support
4. Straight cylindrical collet:
(A) Metric sizes: 5,6,8,10,12,16,20,25, & 32mm
Including set of 3 taper collect: MT#2,3,4."
5. Set of (5) grinding wheel flanges : (4) Standard and (1) extension flanges.
6. Diamond Holder Bracket
7. Wrench for workhead
8. Toothrest centering gauge
9. Adjustable tailstock support unit
10. Spanner for grinding wheel
11. Leveling block
12. Standard arbor
13. Screw drive
14. Set of Wrenches
15. Double-end Spanner
16. Set of (3) Index plates for spiral lead mechanism 8,10&12 divisions.
17. Tool Box
18. Oil Bottle
19. Grinding wheel
(one each of straight, flaring cup and dish shape)
20. Diamond Truing tool with diamond nib
21. Spring-loaded index pawl for workhead index plates
22. 1/2" wheel flange and spanner
23. Grinding attachment for large face milling cutter
24. 4" six-jaw chuck for workhead
25. Wheel flange with 2 collets for internal grinding
26. Wet grinding attachment with water proof equipment



CM-A Optional Accessories

1. Frequency inverter for grinding wheel spindle - 2 HP
2. Extended collect set with wrench for smaller collect included in Ø3mm collet.
3. Additional index plates for spiral lead indexing unit - 24T.
4. Upgrading grinding - wheel spindle motor - 2HP
5. Dust collector attachment



The machine is specially designed for sharpening hob cutters.

HS-16 Hob Sharpening Machine

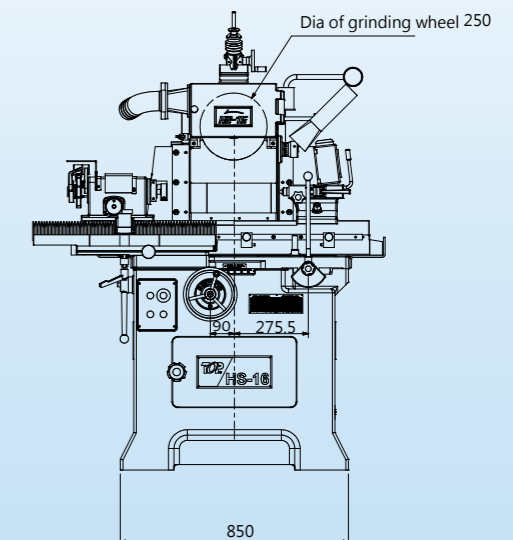
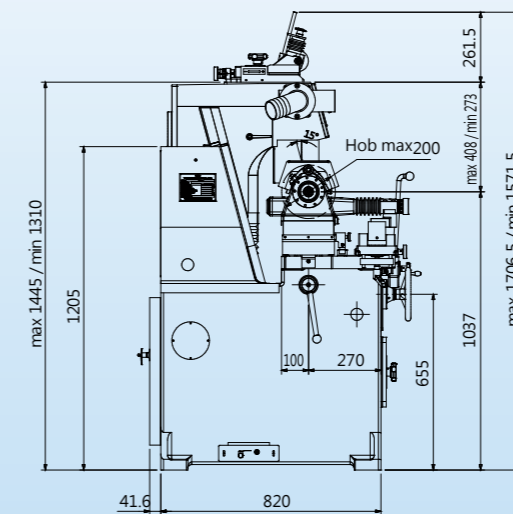


Index Head

The indexing operation is driven by indexing plate and indexing rods and transmitted by the steel belt to eliminate the transmission gap.

Machine Specifications

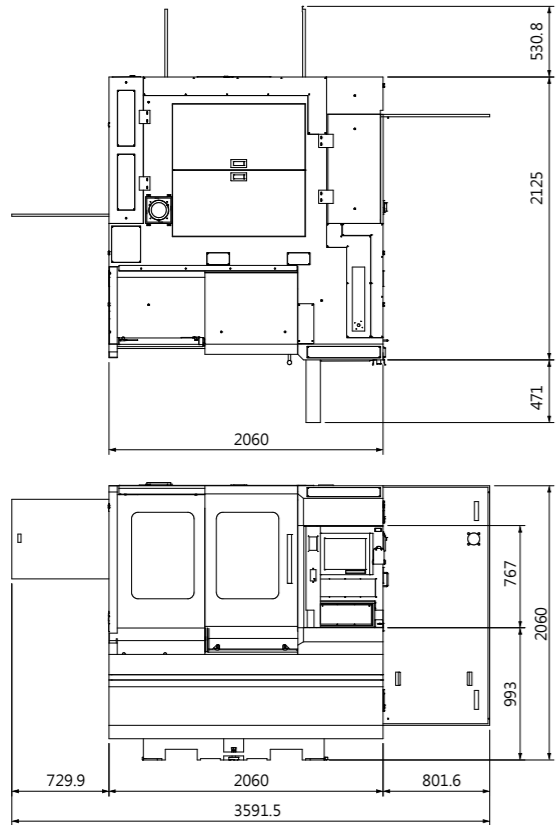
Max. hob dia.	200 mm
Max. hob length	250 mm
Max.module	M16
Min. lead of hob	1400 mm
Longitudinal travel of table	380 mm
Vertical travel of grinding head	130 mm
Distance between centers	550 mm
Dia. of index plate	120 mm
Dia. of grinding wheel	250 mm
Grinding spindle speed	2300 rpm
Motor for grinding spindle	1.5 kW
Motor for dust collector	0.4 kW
Floor space	1000 x 1500 x 1713 mm
Net weight	1200 kg



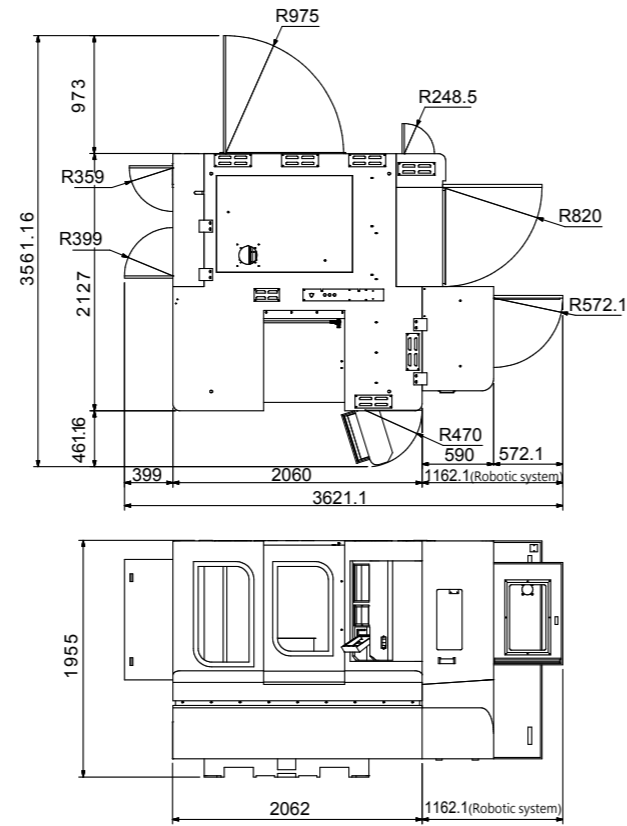
Standard Accessories

1. Dust Collector	1 pc
2. Index plate	3 pcs
3. Hob mandrel	1 pc
4. Grinding wheel	1 pc
5. Tool cabinet	1 pc

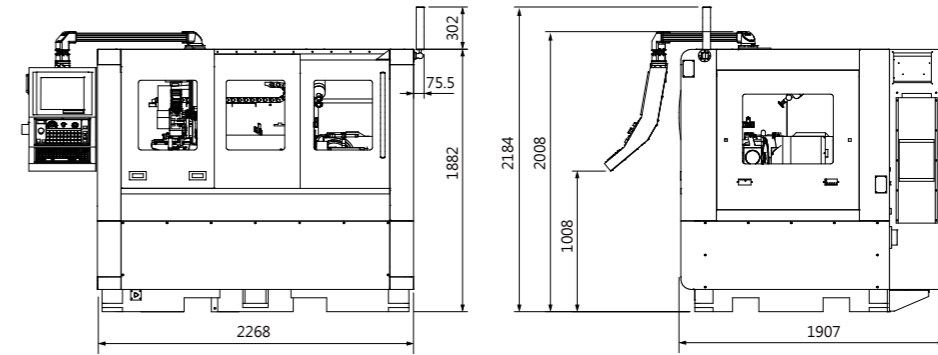
TG-4



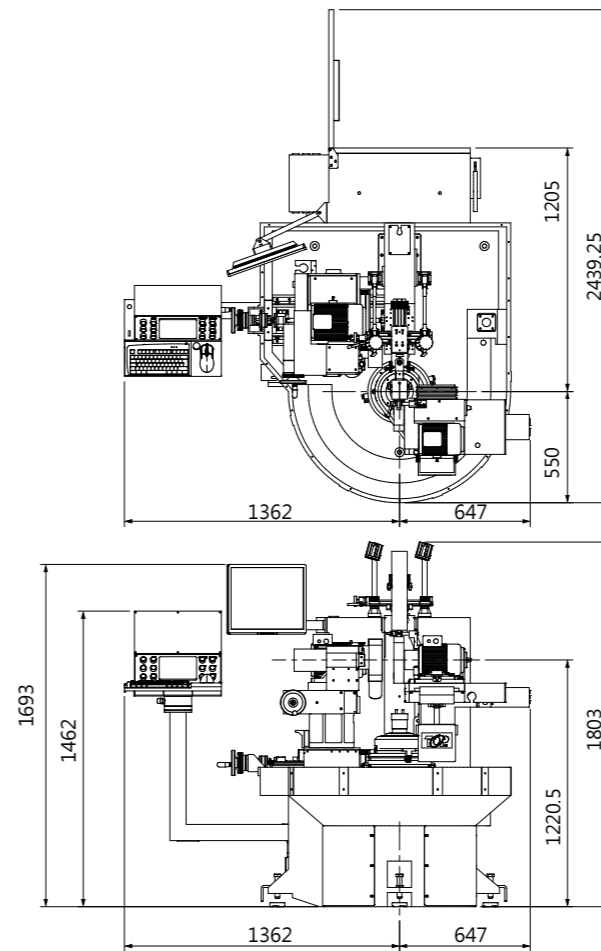
TG-5 Master



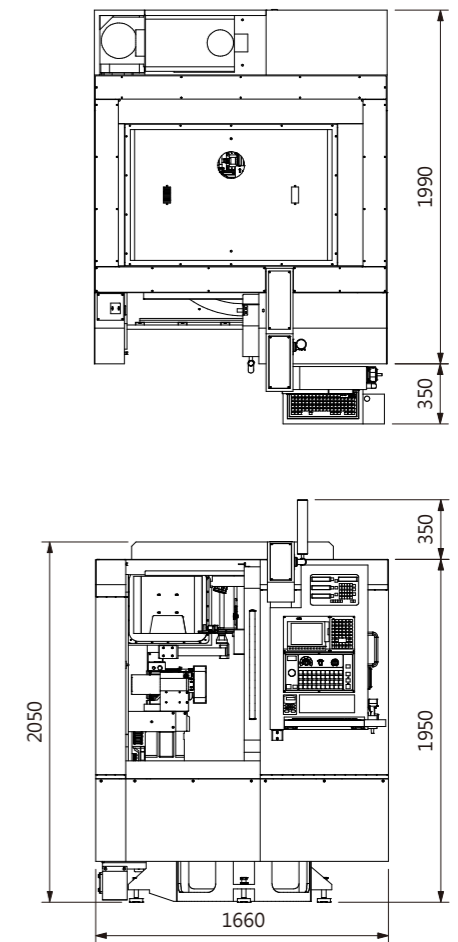
TP Series



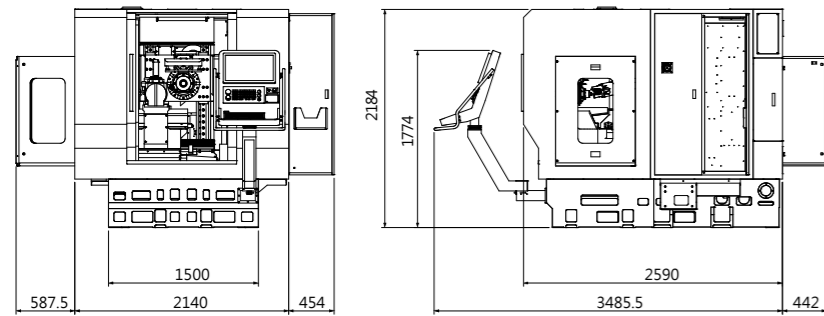
TD-3



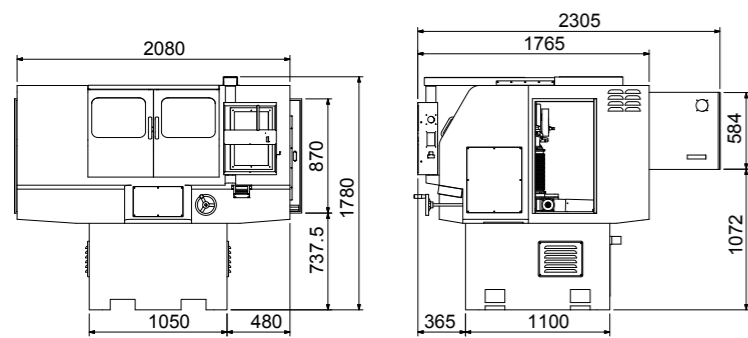
TD-5



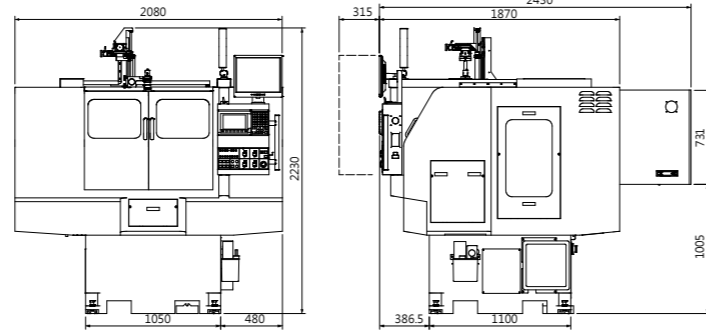
TA Series



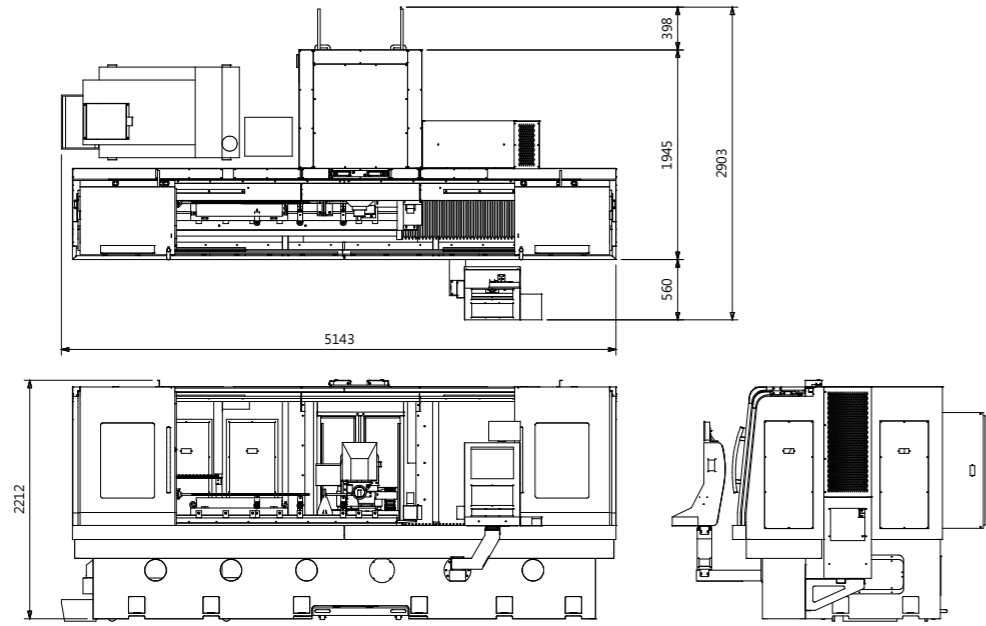
TM Series



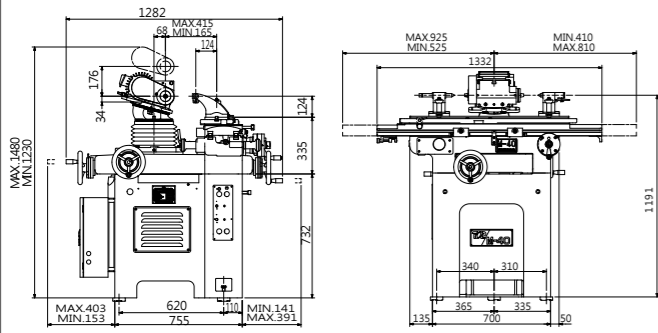
TM Helical Shaper Cutter Resharpener Machine



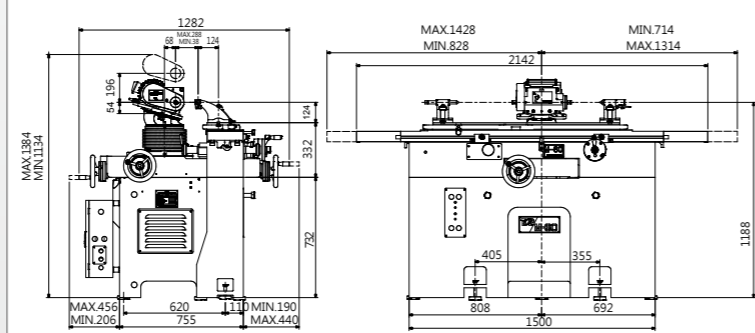
TB Series



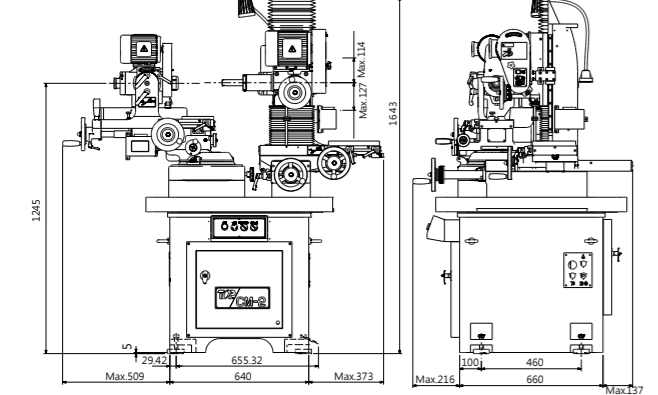
M-40



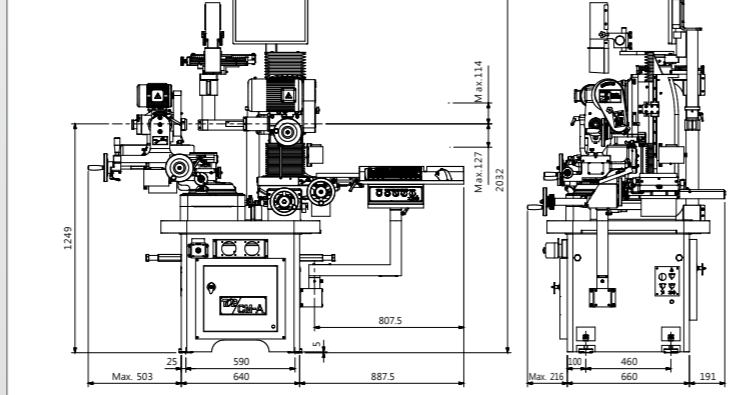
M-60



CM-2



CM-A



In 2010, TOPWORK founds "Development center for precision cutting tool engineering". By the integration of the practical application of design engineering and the advanced modification of cutter and tool grinders, the first institution for professional manufacturers of cutter and tool grinders in Taiwan.





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All specifications are subject to change without prior notice.

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