

MONASET CUTTER & TOOL GRINDER



CM-2 / CM-A

An excellent grinder for irregular and complex form milling cutters and parts. The multiple grinding can be done under a single clamping condition. It is time-saving in replacing accessories and improving efficiency.

 PALMARY



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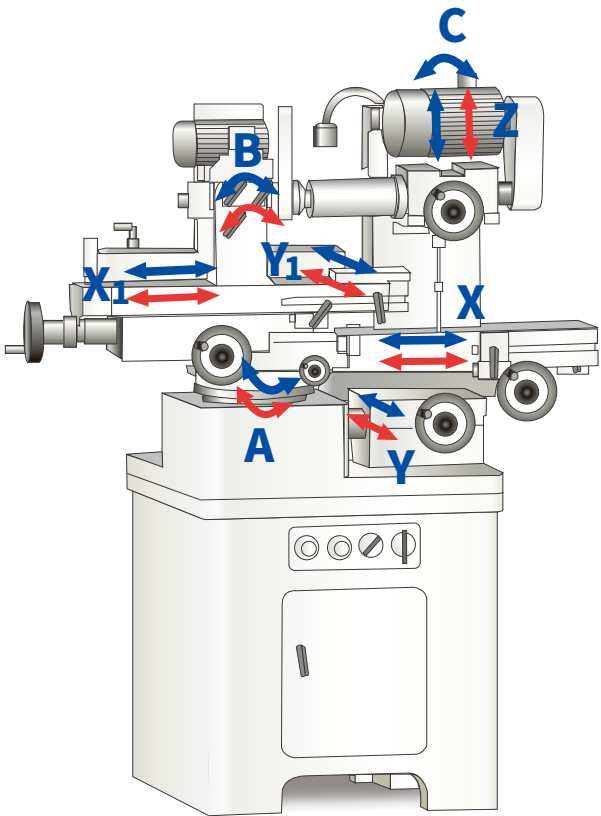
The Monaset tool grinder is capable of performing multiple grinding operations in a single clamping, it saves set up time and ensures the concentricity.



We attach great importance to the concept of assembly and operation of each part of MONASET tool grinder, so that the machine can accurately regrind the parts with complex shapes, it also can be used to produce the small Carbide/HSS tools.

An excellent grinder for irregular and complex form milling cutters and parts. The multiple grinding can be done under a single clamping condition, saving a lot of set up time in replacing accessories and improving efficiency.

Features

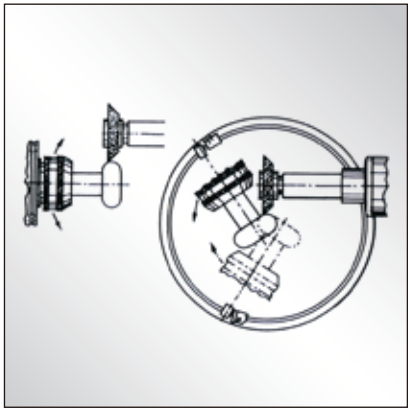


Ideal for production of small Carbide/HSS tools
The MONASET tool grinder has the function of versatile grinding and can complete all process in a single clamping, saving assembly time and ensuring the concentricity.

The adjustable workhead angle can be rotated 210° in the horizontal plane, allowing the workpiece to be ground from different directions.

The workhead stroke can be easily adjusted with a hand wheel. It has been proven to be an ideal device applied for radius grinding.

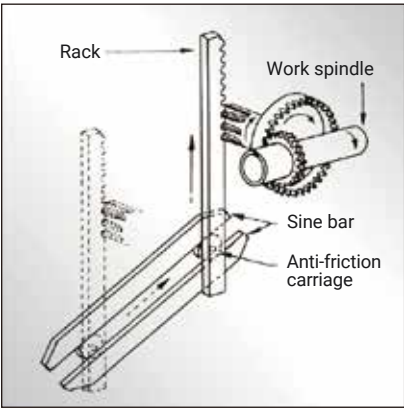
CM-2 7-Axis **CM-A 8-Axis**



The assembly of rotating disc and guide rails of MONASET tool grinder provides you with multi-directional grinding of workpieces, high-speed and precision grinding of various sizes as well as arc grinding of concave and convex workpieces.



The helix angle adjustment device integrated into the machine can be adjusted by the handle, used for regrinding helix angle.



The spiral mechanism can produce a variety of variable leads.

CCD Camera System



CCD Camera System (CM-A)
 The CM-A machine is equipped with linear scale and 1/2" C.C.D. camera system. The operation is more convenient while proceeding the precision positioning for process.

On-line measuring the tool radius and angle on C.C.D system, the production efficiency and yield can be greatly improved. Especially for regrinding the small tool's angles, radius and form tools, full functionality provided.

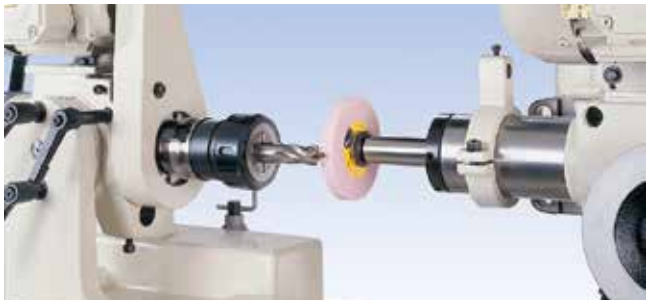
- For irregular and complex tools as well as parts regrinding.
- On-line measuring system
 (24" magnification for full screen : 10x – 85x)
- Tool comparison software (with DXF import)



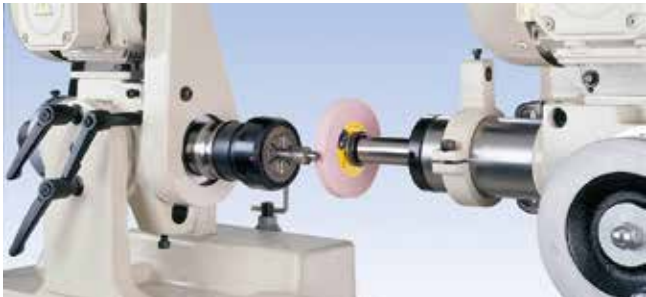
Application



Spiral Flute Grinding



Outer Diameter Grinding



End Face Grinding



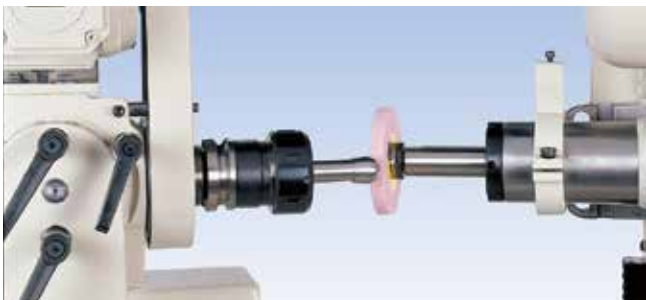
Side Milling Cutter Grinding



Form Cutter Grinding



Cylindrical Milling Cutter Grinding

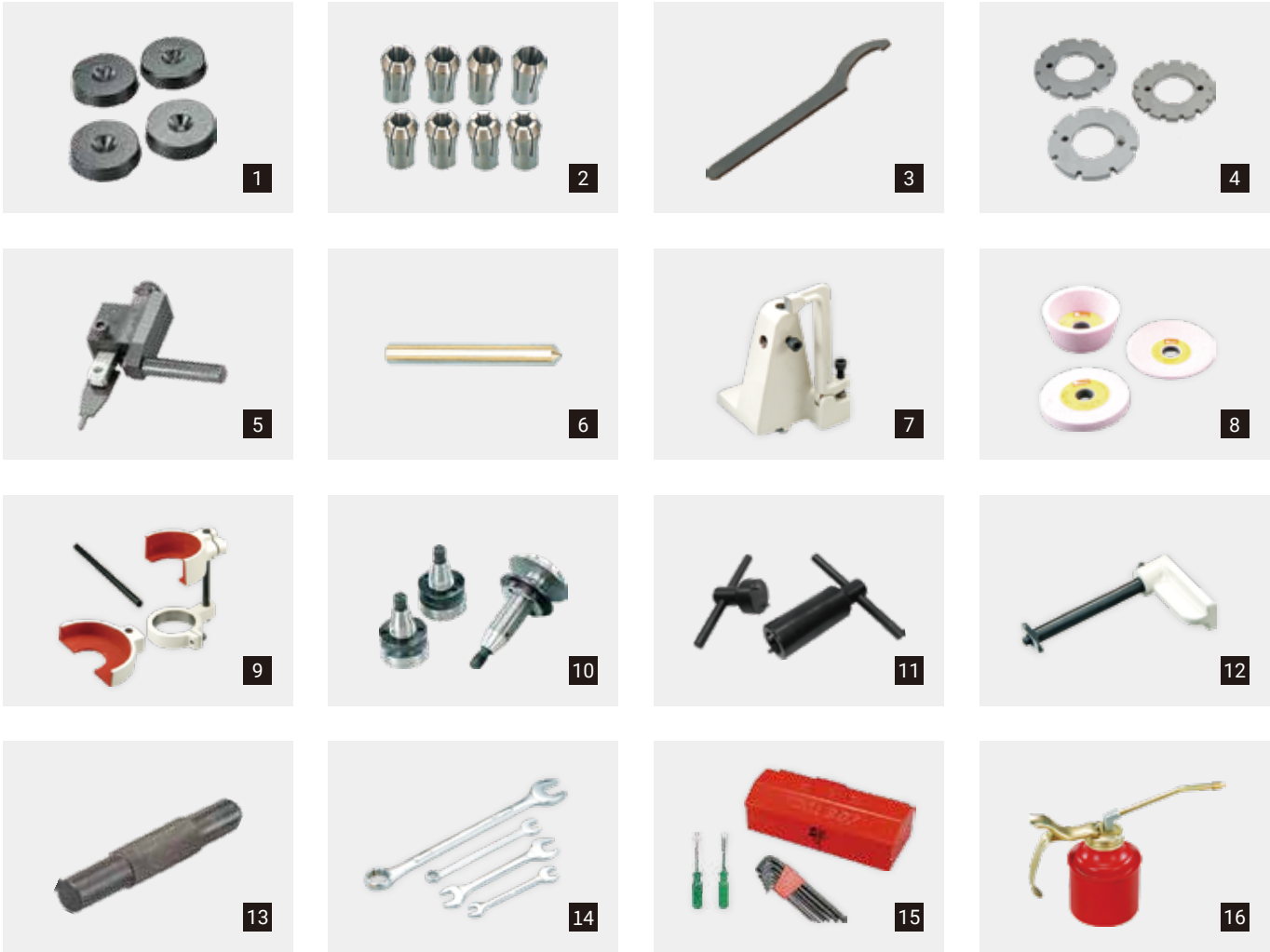


Radius Grinding



Adjustable Tailstock Support Unit (opt.)

Standard Accessories



1.Levelling Blocks	10.Grinding Wheel Flanges (2 Standard and 1 Extended Flanges)
2.Collets (Ø6/Ø8/Ø10/Ø12/Ø16/Ø20/Ø25/Ø32mm)	11.Wheel Spanner
3.Collet Wrench	12.Toothrest Center Gauge
4.Indexing Plates (8T/10T/12T)	13.Workhead Gauge for Zeroing
5.Spring-loaded Index Pawl for Workhead Indexing Plate	14.Wrench Set
6.Diamond Dressing Tool	15.Tool Box & Adjusting Tool
7.Diamond Dressing Tool Holder or Tool Support Bracket	16.Oil Bottle
8.Grinding Wheels (WA, Including Straight/Cup/Dish Types)	
9.Grinding Wheel Guards with Extension Bar	

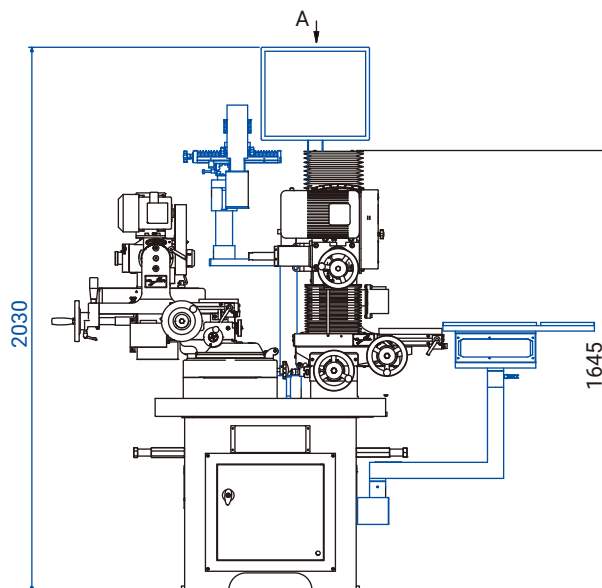
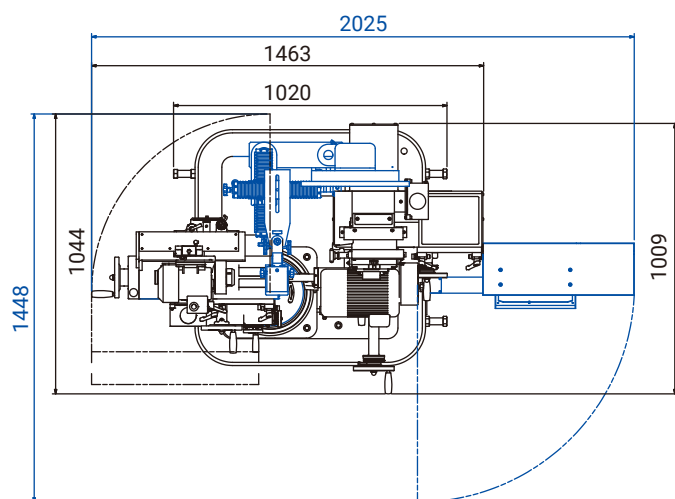
Optional Accessories



1.Indexing Plate- 24T	10.Adjustable Tailstock Support Unit
2.1/2" Wheel Flange and Spanner	11.Dust Collector
3.Wheel Flange with 2 Collets (Ø3/Ø6mm) for Internal Grinding	12.Wet Grinding Attachment
4.ER11 Collet Set (Ø3/Ø2/Ø1mm) with Wrench & Extension Bar	13.Dry and Wet Coolant Tank (45L; 1/2 HP)
5.Wheelhead Toothrest Set wth Extension Bar	14.Dry and Wet Coolant Tank (80L; 1/2 HP) with Magnetic Device
6. 4" Six-jaw Chuck for Workhead	15.Frequency inverter of Grinding Wheel Spindle (1/2HP/1 HP/2 HP)
7.Grinding Device for Large Face Milling Cutters	16.Upgrade Motor of Grinding Wheel Spindle (1 HP/2 HP)
8.Lath Tool Grinding Attachment	17.CE Safety Device
9.Tool Support Bracket	18.Safety Shield
	19.Transformer 3kva (If voltage is not 220V or 380V, the item is needed)

Specification/Model		CM-2	CM-A
Workhead	Max. Swing Diameter	Ø304 mm	Ø304 mm
	Max. Collet Clamping Diameter	Ø32 mm	Ø32 mm
	Min. Collet Clamping Diameter	Ø5 mm	Ø5 mm
	Max. Helix Angle	60°	60°
	Max. Distance Between Collet Nut and Tailstock Center	135 mm	135 mm
Workhead Stroke	X1-axis - Slide Travel	130 mm	130 mm
	Y1-axis - Offset Slide Travel	100 mm	100 mm
	Front of Center	50 mm	50 mm
	Rear of Center	50 mm	50 mm
Adjustment of Workhead Angle	A-axis - Rotation of Horizontal Plane	±105° (210°)	±105° (210°)
	B-axis - Rotation of Vertical Plane	±40° (80°)	±40° (80°)
Grinding Wheel Head	Grinding Wheel Diameter	100 mm	100 mm
Grinding Wheel Head Stroke	X-axis - Left-Right Slide Travel	110 mm	110 mm
	Y-axis - Total Front-to-Rear Slide Strokes	180 mm	180 mm
	Z-axis - Total Vertical Slide Stroke	240 mm	240 mm
	C-axis - Swivel Angle	-	±15°(30°)
Spindle Speed	Workhead Speed	370/440 rpm (50/60 Hz)	370/440 rpm (50/60 Hz)
	Grinding Wheelhead Speed	4000/6000/8000 rpm	4000/6000/8000 rpm
Motor	Workhead AC	1/4 HP (0.186 kw)	1/4 HP (0.186 kw)
	Grinding Wheelhead AC	1/2 HP (0.373 kW)	1 HP (0.75 kW)
Dimension	Dimensions (W x D x H)	1450 x 1463 x 1645 mm	2070 x 2025 x 2030 mm
	Weight	970 kg	1070 kg

※ All specifications are subject to change without notice.



※ CM-A machine layout includeds blue lines.

Unit : mm

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