CUTTERMASTERS



Machines for Machinists Product Lineup

CUTTERMASTER Professional Journeyman Tool Grinder



Engineering and Prototyping - 2353 Ridgecrest Place, Ottawa ON K1H 7V4 Manufacturing and Distribution - 810 Proctor Ave, Ogdensburg NY 13669 Call us 1 (800) 417-2171

CUTTERMASTER Professional Tool Grinders at a Glance

CUTTERMASTER Professional Traditional Tool and Cutter Grinders all feature powerful Toycen DC Whisper Drive variable speed motor and control, and plug in to regular 110V (220V available) outlet.

CM-01 Mill Master - Basic



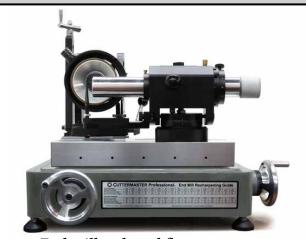
- End mill ends and flutes
- 3800 RPM DC motor

JXT Journeyman Tower



- **Toycen Infinite Single Motor Tower**
- End mill ends and flutes
- End gash, hoggers, set screw flats, more...
- **Toycen Radius Air Bearing (optional)**

CM-01V



- End mill ends and flutes
- Variable speed DC motor

CM-01P Tool Maker



- **Toycen Infinite Twin Motor Tower**
- **Toycen Radius Air Bearing**
- End mill ends and flutes
- Corner radius (bull nose and ball nose)
- End gash, hoggers, set screw flats, more...

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Tradesman DC Grinders At a Glance





Tradesman 6" Machinist Dual and Single Shaft

The Tradesman Machinist comes in single and dual shaft versions. The Tradesman Machinist can be configured to grind Weldon set screw flats, neck reductions, corner rads, countersinks, uni-bits, reamers and more.



Tradesman 8"

The original Tradesman, the Tradesman 8 is our most popular grinder for the wood turning community. A pair of our CBN Precision Plated grinding wheels: 80 and 180 make this grinder an all-round multi purpose grinder. Use our Tormek bracket to use your favorite jigs - from knives, scissors and planer blades to carbon fiber and plastics. Add a belt sander. Ready for Wolverine by One-Way.

Tradesman Edge

Designed for fabricators and knife makers the Tradesman Edge uses a geared belt reduction to drive the 8" or 10" grinding wheels. This provides even greater torque at low speeds and a lower bottom rpm of 200. Combine any combination of belt sanding attachments and grinding wheels for your baddest.





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TOYCEN CUTTERMASTER Professional

Tool and Cutter Grinders

Tradesman Machinist



T6

Tradesman 6 with Super-abrasive CBN and diamond precision plated wheels for HSS and carbide. Add attachments for

- Weldon set screw flats
- Neck reduction
- Carbide and HSS cut off
- Lathe tools
- Carbide inserts
- Corner rads, bull nose
- Reamers
- Unibits
- Countersinks
- Belt sander



Conventional grinders with conventional wheels don't grind carbide very well. Fifty percent of the effort, energy and torque in the grinding process is wasted in wheel wear and consumption --- and lots of noise.

The Tradesman with Cuttermasters Precision Plated Superabrasive wheels is different. Available in single-wheel T6NC (Neck and Cut) and dual-wheel, T6

Flat and sharp grinding surface, great for shaping tools, quiet, powerful variable speed and no bucket of water on the front. And its quiet! We have a patent on Low Speed High Feed grinding. With the Tradesman, it is not like using other grinders, period. You can grind carbide tools or Teflon on the same wheel. This is because at 500 RPM, with no run out, there's nothing threatening about it. Grind anything.

GRIND ANYTHING WITH THE MACHINIST ACCESSORIES







T-WF V-Block for Flats

CM-06 DCS Drills and Countersinks

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PROUDLY MADE IN NORTH AMERICA

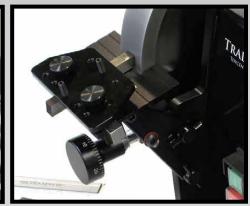
Tradesman Machinist DC Variable Speed Bench Grinder



Neck Reduction and T-Cutter



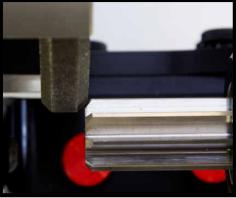
Carbide Cut Off



Mitre Rest with Micro Feed



Corner Radius (Bull Nose)



Reamers



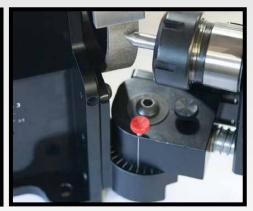
Step Drills



Unibits / Step Drills



Countersinks



Conical Points



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Tradesman Edge with Geared Belt Reduction

T-Edge

Sharpeners Dream

8" and 10" CBN Wheels



Edge 810



Edge Belt

50-2000RPM Reversing

Water Bath - Mount your Tormek Wheels and attachments



Edge 12



Attachments on wheel or belt



Base machine without wheels or work rests



Micro-Adjust Feed Rest

Power and Precision

- DC variable speed, plug in to any 120V AC outlet (220V available)
- Geared belt drive for unstoppable torque at low rpm
- Add Water Bath Kit or Dual Belt Kit
- Belts position from vertical to horizontal no tools required
- 150 to 3000 rpm, Reversing
- Trizact belts from apex to near hone of 6 micron, acheive sharpness of 185 Bess
- Hone with leather belt or 8" felt wheel
- Cordless (option)

Wheel diameter	8" and 10" or belt
Voltage	110V or 240V(opt.)
Frequency	60Hz
Rated power	400W
Wheel speed	150-1500 rpm
Height at 10" guard	11"
Width at 10" guards	15"
Depth	9.5"
Wheel center height	5.5"
Shaft diameter	5/8" or 7/8" or 12mm
Shaft concentricity	.0002" (5μm)

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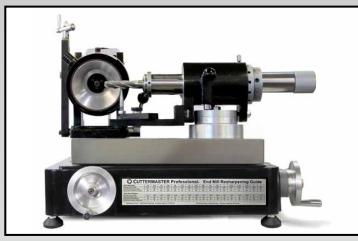


CUTTERMASTER Professional Mill Master

Basic End Mill Grinder

CM-01

Specifications



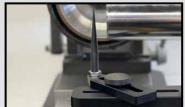
Easy Flutes and Ends

Air Bearing Stroke	10.5" (266.7mm)
Air Bearing Swing Over Table	9.8"(248.92)
Cutting Tool Capacity	2" shank, 9.8" O.D.
Flute Length	10.5"
T-Slot Dimension	0.8" (20.32mm) x 0.5" (12.7mm) x 0.67" (17.018mm)
X-Axis Table Travel	6" (152.4mm)
Y-Axis Table Travel	3" (76.2mm) + slides 6"(152.4mm)
X-Axis Table Working Space	16.5" (419.1mm) x 5.5" (139.7mm)
Y-Axis Table Working space	13" (330.2) x 5.5" (139.7)
Wheel	Any tool grinding wheel
Motor Tilt	+35° -10°
Motor	3800 rpm, 350 W, Diode Bridge

Operations and Accessories



Flute Sharpening



Quick Set Tool Rest



Corner Radius and Ball Nose



Reduced Neck Grinding



Reamer Sharpening



Countersink, Chamfer **Tool Sharpening**



Tool Cut Off



Digal Read Out

CM-01

The tried and true CM-01 is designed to be easy to set up and easy to use when grinding and re-grinding modern cutting tool materials and geometries.

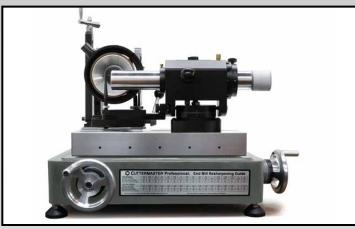
- Single Speed DC motor. New for 2021
- Roller burnished air bearing
- Sharpen end mill ends and flutes
- Attachments for countersinks, step drills and more
- Includes collet set and two aluminum oxide wheels
- Wrenchless tool rest, one hex key for all other points



CUTTERMASTER Professional Basic End Mill Grinder

The Machine that Started it All

Specifications



Easy Flutes and Ends

Air Bearing Stroke	6.5" (10.5" optional)
Air Bearing Swing Over Table	9.8"(248.92)
Cutting Tool Capacity	2" shank, 9.8" O.D.
Flute Length	10.5"
T-Slot Dimension	0.8" (20.32mm) x 0.5" (12.7mm) x 0.67" (17.018mm)
X-Axis Table Travel	6" (152.4mm)
Y-Axis Table Travel	3" (76.2mm) + slides 6"(152.4mm)
X-Axis Table Working Space	16.5" (419.1mm) x 5.5" (139.7mm)
Y-Axis Table Working space	13" (330.2) x 5.5" (139.7)
Wheel	Any tool grinding wheel
Motor Tilt	+35° -10°
Motor	400 - 4000 rpm, 500 W

Operations and Accessories



Flute Sharpening



Easy Center Cutting Ends



Corner Radius and **Ball Nose**



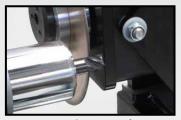
Reduced Neck Grinding



Reamer Sharpening



Countersink ,Chamfer **Tool Sharpening**



Tool Cut Off



Tap Sharpening

CM-01V

The tried and true CM-01V is designed to be easy to set up and easy to use when grinding and re-grinding modern cutting tool materials and geometries.

- DC variable speed motor is positionable 360°
- Roller burnished air bearing
- Sharpen end mill ends and flutes
- Attachments for countersinks, step drills and more



CUTTERMASTER Professional Tool Maker, Twin

The CUTTERMASTER Professional Tool Maker Twin, End Mill and Tool Grinder has been designed to get the job done. Easy to use and fast to set up with the dual wheel, variable speed, reversing DC motor head. Ideal for tool making, regrinding or tool modifications (switch between wheel types on the fly).

- Infinitely positionable twin motor tower
- Radius air bearing for sharpening bull nose and ball nose end mills
- Sharpen end mill ends, flutes, inside roughers, annular cutters, HSS and carbide cut off Grind flat set screw flats, neck
- Attachments for countersinks, step drills, flats, neck and more

Operations and Accessories



Corner Radius (Bull and Ball Nose)



Countersinks



Flat Set Screw Flats / Chamfers / Neck Reduction



Easy Ends and Flutes



x-axis Lever Slide



Hog Roughers



Digital Read Out

CM-01P Tool Maker Single complete with Toycen Base, Toycen Radius Air Spindle, Variable Speed DC Reversing Infinite Whisper Drive Tower and Control, 7 Piece 5C Collet Set, Maintenance Tool Set, Operators Manual, Toycen Book on End Mills. Grinding wheels not included\$7,745.00

CM-01P Specifications

Air Bearing Stroke	6.5" (10.5" optional)
Air Bearing Collet	Standard 5C
Cutting Tool Capacity	2" shank, 9.8" O.D.
Flute Length	10.5"
Working Space /Travel	0.8" x 0.5" x 0.67"
x-Axis Table Size	16.5" x 5.625" table
y-Axis Table Size	16.5" x 5.625" table
Tool Grinding Wheel	Any
Motor Tilt	Infinite
Motor	400 - 4000 rpm, 500 W

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CUTTERMASTER Professional Journeyman

The CUTTERMASTER Professional Journeyman Tool Grinder is the latest grinder in our line-up. Easy to use and fast to set up, it features a single wheel, variable speed, reversing DC motor head. Ideal for tool making, tool sharpening or tool modifications.

- Infinitely positionable single motor tower
- Sharpen end mill ends, flutes, inside roughers, annular cutters
- Grind flat set screw flats, neck reductions
- HSS and carbide cut off
- Attachments for countersinks, step drills and more



Operations and Accessories



Corner Radius (Bull and Ball)



Countersinks



Set Screw Flats / Chamfers / Neck Reduction



Easy Ends and Flutes

JXT Specifications



Digital Read Out



Hog Roughers

Air Bearing Stroke	6.5" (10.5" optional)
Air Bearing Collet	Standard 5C
Cutting Tool Capacity	2" shank, 9.8" O.D.
Flute Length	10.5"
Working Space /Travel	0.8" x 0.5" x 0.67"
x-Axis Table Size	16.5" x 5.625" table
y-Axis Table Size	16.5" x 5.625" table
Tool Grinding Wheel	Any. Arbor 5/8", 1-1/4"
Motor Tilt	Infinite
Motor	400 - 4000 rpm, 500 W

CUTTERMASTER Professional 2020 Journeyman is the new standard, Toycen Infinite Single Motor Tower Variable Speed reversing Whisper Drive DC Motor, aluminum oxide wheel, tool kit, 7pc 5C collet set, air filter and water separator, user



CUTTERMASTER Professional Journeyman Radius JXTR

The CUTTERMASTER Professional Journeyman Tool Grinder -Radius is the JXT with the Toycen Radius Air Bearing (for end mill ends, flutes and corner radius. Easy to use and fast to set up, it features a single wheel, variable speed, reversing DC motor head. Ideal for tool making, tool sharpening or tool modifications.

- Infinitely positionable single motor tower
- Radius air bearing for sharpening bull nose and ball nose end mills
- Sharpen end mill ends, flutes, inside roughers, annular cutters
- Grind flat set screw flats, neck reductions
- HSS and carbide cut off
- Attachments for countersinks, step drills and more

Operations and Accessories



Hog Roughers



Countersinks



Set Screw Flats / Chamfers / Neck Reduction



Easy Ends and Flutes

JXTR Specifications



Digital Read Out



Corner Radius (Bull and Ball)

Air Bearing Stroke	6.5" (10.5" optional)
Air Bearing Collet	Standard 5C
Cutting Tool Capacity	2" shank, 9.8" O.D.
Flute Length	10.5"
Working Space /Travel	0.8" x 0.5" x 0.67"
x-Axis Table Size	16.5" x 5.625" table
y-Axis Table Size	16.5" x 5.625" table
Tool Grinding Wheel	Any. Arbor 5/8", 1-1/4"
Motor Tilt	Infinite
Motor	400 - 4000 rpm, 500 W

CUTTERMASTER Professional 2020 Journeyman is the new standard, Toycen Infinite Single Motor Tower Variable Speed reversing Whisper Drive DC Motor, aluminum oxide wheel, tool kit, 7pc 5C collet set, air filter and water separator, user



CUTTERMASTER Professional Tool and Cutter Grinding System CM-01P TRS







Easy Ends and Flutes



Flute Gumming



Countersinks / Step Drills



EC313 Drill Grinder 3-13mm



Set Screw Flats / Chamfers / Neck Reduction



Bull Nose / Ball Nose Corner Radius



Tradesman Neck and Cut Off Grinder



Countersinks / Step Drill Cam Set

CM-01P Tool Grinder complete with Toycen Universal Base, Toycen MK2 Radius Air Spindle, Toycen Variable Speed, Reversing Infinite Twin Whisper Drive DC Motor Tower and Control, Machine Stand / Cabinet, EC313 1/8-1/2in Precision Chuck Drill Grinder, 7 Piece 5C Collet Set, Maintenance Tool Set, Operators Manual, CBN and Diamond 11V9C Advanced cup wheels, Spindle Mounted Braked wheel truing device, Toycen book on end mills, Journeyman Countersink and Step drill cam set CM10S Bench Storage Cabinet.



CUTTERMASTER Professional Tool Grinder - Radius



Easy Flutes, Square and Ball Ends, Rads

CM-01DCR

The CM-01DCR Radius, with Toycen Radius Air Spindle, eliminates the need for an add-on radius attachment. The Radius Air is both a linear bearing for flutes and ends and a radius spindle for ball and bull nose. Combined with the JX Motor base (full rotation) Reduces setup times.

- Toycen Radius Air Bearing (bull nose, ball nose)
- DC variable speed motor is positionable 360°
- Sharpen end mill ends and flutes
- Grind flat set screw flats, neck reductions
- HSS and carbide cut off
- Attachments for countersinks, step drills and

Operations and Accessories



Flute Sharpening



Compatible with Quick Set Riser for height adjustment



Corner Radius (Bull and Ball Nose)



Reduced Neck and Weldon Flat Grinding



Reamer Sharpening



Countersink, Chamfer Tool



Tool Cut Off



Tap Sharpening

CM-01DCR Specifications

Air Bearing Stroke	6.5" (266.7mm)
Air Bearing Swing Over Table	9.8"(248.92)
Cutting Tool Capacity	2" shank, 9.8" O.D.
Flute Length	6.5"
T-Slot Dimension	0.8" (20.32mm) x 0.5" (12.7mm) x 0.67" (17.018mm)
X-Axis Table Travel	6" (152.4mm)
Y-Axis Table Travel	3" (76.2mm) + slides 6"(152.4mm)
X-Axis Table Working Space	16.5" (419.1mm) x 5.5" (139.7mm)
Y-Axis Table Working space	13" (330.2) x 5.5" (139.7)
Wheel	Any tool grinding wheel
Motor Tilt	+35° -10°
Motor	400 - 4000 rpm, 500 W



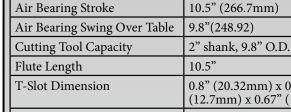
Specifications

CUTTERMASTER Professional Basic End Mill Grinder

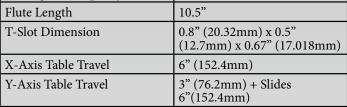
The Machine that Started it All

CM-01DC

16.5" (419.1mm) x 5.5"



X-Axis Table Working Space



(139.7mm) 13" (330.2) x 5.5" (139.7) Y-Axis Table Working space Wheel Any tool grinding wheel

Motor Tilt +35° -10° Motor 400 - 4000 rpm, 500 W

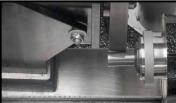


Easy Flutes and Ends

Operations and Accessories



Flute Sharpening



Tapered Weldon Flat Grinding



Corner Radius and Ball Nose



Reduced Neck Grinding



Reamer Sharpening



Countersink ,Chamfer **Tool Sharpening**



Tool Cut Off



Tap Sharpening

CM-01DC

The tried and true CM-01DC is designed to be easy to set up and easy to use when grinding and re-grinding modern cutting tool materials and geometries.

- DC variable speed motor is positionable 360°
- Roller burnished air bearing
- Sharpen end mill ends and flutes
- Attachments for countersinks, step drills and more

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TOYCEN CUTTERMASTER Professional

Tool and Cutter Grinders

Production Support Grinding Wheel Package for End Mills



CM-PS1

This is our recommended wheel package for end mill ends, flutes and rads. Two resin bond cup wheels and a spindle mounted wheel truing device will keep you set up for carbide and high speed steel tool grinding. Standard is one CBN and one diamond. Avaiable in both 4-1/8" (115mm) and 5" (125mm), we generally recommend the 4" for standard tool grinders like the CM-01DC because of the clearance benefits of a smaller diameter. The 5" wheel is standard on our tower grinders.

CM-PS1-115 4-1/8" cup wheel and truer package CM-PS1-125 5" cup wheel and truer package

Production Support Grinding Wheel and Cam Set kit for Countersinks



CM-PS2

This is the recommended kit for countersinks: a 5" CBN (or diamond for carbide) plated face wheel and countersink grinding cam set. The cams fit over the standard CUTTERMASTER air spindle. Six piece cam set for zero, one, two, three, four, and six flute countersinks with two clearance options for each

Zero and 1-Flute, two cams: .02" and .03" lift 2-Flute, two cams: .04" and .065"lift 3-Flute, two cams: .31 and .062" lift

CM-PS2 5" CBN face wheel and six piece cam set CM-PS2D with diamond face wheel instead of CBN

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Tool and Cutter Grinders

Timed-Chuck Tool Grinders at a Glance

Timed-Chuck Tool Grinders work by timing your drill or end mill to a tool holder that is cycled through multiple ports to achieve complex end geometries. These grinders are tough, easy to use, and will ensure you always have sharp tools.

Drill Point Grinders

EC-313 3/16" to 1/2" (3-13mm) Chuck-Type DS-220MK2 1/8" to 3/4" (2-20mm) Advanced DS-1332 1/2" to 1-1/4" (13mm to 32mm) DS-232 1/8" to 1-1/4" (2mm to 32mm)

End Mill End Grinders

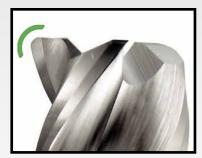
GS-6 1/8" to 1/2" (2-13mm) End Mill Ends ES-1332 1/8" to 3/4" (2-20mm) End Mill Ends

Combination and Miscellaneous Grinders

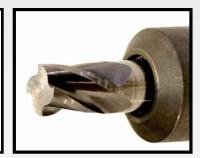
CS-320D 1/8" to 3/4" (2-20mm) Drill Points, End Mill Ends

ERM2 Annular Cutter Grinder 9/16"-2" dia. GS-13N (Collet Type) ER-32 7/8" thru-bore

GS-13N (ChuckType) 3" dia. capacity, 5/8" thru-spindle







Grinders for End Mill Ends, Corner Radius (bull nose), Carbide Cut Off, Neck Reduction, Drill Points

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Drill Point Grinder

EC313

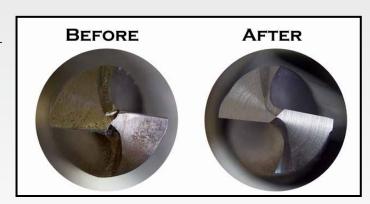
3mm to 13mm (1/8" to 1/2")

Powerful and accurate, the GS-1 is perfect for the shop floor, ready to keep your tools sharp so that you are not down due to a dull or broken drill Easy to learn and perfect split point ends every time.



EC313 Chuck-Type Drill Grinder

- Chucks the drill instead of using collets
- Grinds drills 2mm to 13mm (1/8" to 1/2") diameter (Expandable to 5/8" EC313X)
- Creates 90° to 140° point angle
- Creates variable split point geometry S / N / X and XR type
- Adjustable depth-of-cut for split point geometry
- Grinds both High Speed Steel and Carbide drill bits with the same wheel
- Includes 12pc collet set (DS213 includes 10 pc.
- Machine size: 26cm x 16cm x 19cm x 8kg



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Tool and Cutter Grinders

Drill Point Grinder

3mm to 13mm (1/8" to 1/2")

GS-1

Powerful and accurate, the GS-1 is perfect for the shop floor, ready to keep your tools sharp so that you are not down due to a dull or broken drill Easy to learn and perfect split point ends every time.

Specifications



Drill Diameter	2mm - 13mm
Point Angle	90 °- 140°
Power Supply	AC110V 50/60Hz AC220V (Opt.)
RPM of Motor	5300rpm
Grinding Wheel	DS-C200
Weight	N.W 8kg / G.W 9kg
Machine Size	L:28.6cm W:13.3cm H:15.5cm
Packing Size	L:31.5cm W:14.0cm H:16.5cm
Type of Thinning	X Thinning
Standard Accessories	12pc ER-20 Collet Set ER-20 Collet Chuck Metal Shim .1mm x 2pcs / .3mm x 1pc Hexagonal Wrench 3mm x 1pc/ 4mm x 1pc
Optional Diamond Wheel for Carbide Drills	DS-D200
Optional Expansion to 5/8"	ER25 Collet Chuck and 14, 15mm



GS-1 Drill Point Grinder

- Grinds drills 2mm to 13mm (1/8" to 1/2") diameter (Expandable to 5/8" EC313X
- Creates 90° to 140° point angle
- Creates variable split point geometry S / N / X and XR type
- Adjustable depth-of-cut for split point geometry
- Grinds both High Speed Steel and Carbide drill bits with the same wheel
- Includes 12pc collet set (DS213 includes 10 pc.
- Machine size: 26cm x 16cm x 19cm x 8kg



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Tool and Cutter Grinders

Drill Point Grinder DS220 MK2

3mm to 20mm (1/8" to 3/4")



DS220 MK2

- DS220 MK2 Grinds drills 2mm to 20mm (1/16" to 3/4") diameter
- Expandable to 1"
- Creates 82-175° tip angles in several geometries with full back-split
- Creates variable split point geometry
- Grinds both High Speed Steel and Carbide.
- Solid Steel construction with built-in tool storage drawer
- Machine size: 26cm x 16cm x 19cm x 8kg
- Advanced 1A1 Wheels common both sides allows for wider faces and reduced wheel cost

Drill Diameter	2mm - 20mm
Point Angle	60 °- 170°
Power Supply	AC110V 50/60Hz AC220V (Opt.)
RPM of Motor	5300rpm
Grinding Wheel	DS-C200, DS-C200F
Weight	N.W 8kg / G.W 9kg
Machine Size	L:28.6cm W:13.3cm H:15.5cm
Packing Size	L:31.5cm W:14.0cm H:16.5cm
Type of Thinning	X Thinning
Standard Accessories	ER20 and 25 collet set
Optional Diamond Wheel for Carbide Drills	DS-D200, DS-D200F
Optional Expansion to 5/8"	ER25 Collet Chuck and 14, 15mm collet

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Large Drill Point Grinder

13mm to 32mm (1/2" to 1-1/4")

DS-1332D



DS-1332

- Sharpens drills 13mm to 32mm (1/2" to 1 1/4") diameter
- Creates 90° to 140° point angle
- Creates variable split point geometry S / N / X and XR type
- Adjustable depth-of-cut for split point geome-
- Includes 20pc collet set and tool storage
- Machine size: 35cm x 27cm x 17cm x 17kg



Specifications

Cutting Tool Capacity	3/16 to 3/4" (5-20mm)
# Flutes	2, 3, 4 and 6-flute
Cutting Angle Concavity	0° to 3°
Flute Length	n/a
Lip clearance	6°
Grinding Wheel 2 pc. ESD200	ESD200 for ends (CBN avail.)
Collets included	ER-20, 25
Center Cutting Depth	Adjustable
Voltage	110V (220V available)
Construction	Steel, steel cabinet
Machine dimensions	14x 7x 9" (36 x 18 x 23cm)
Machine weight	33lbs (15kg)

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Full Range Drill Point Grinder

13mm to 32mm (1/2" to 1-1/4")

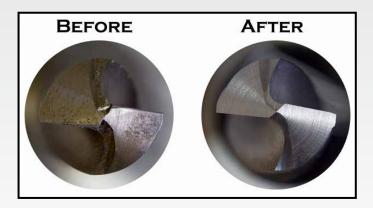






DS-1332

- Sharpens drills 2mm to 32mm (1/8" to 1 1/4") diameter
- Creates 90° to 140° point angle
- Creates variable split point geometries
- Adjustable depth-of-cut for split point geometry
- Includes 32pc collet set
- Machine size: 45cm x 27cm x 19cm x 25kg



Specifications

Cutting Tool Capacity	3/16 to 3/4" (5-20mm)
# Flutes	2, 3, 4 and 6-flute
Cutting Angle Concavity	0° to 3°
Flute Length	n/a
Lip clearance	6°
Grinding Wheel 2 pc. ESD200	ESD200 for ends (CBN avail.)
Collets included	ER-20, 25
Center Cutting Depth	Adjustable
Voltage	110V (220V available)
Construction	Steel, steel cabinet
Machine dimensions	14x 7x 9" (36 x 18 x 23cm)
Machine weight	33lbs (15kg)

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Tool and Cutter Grinders

End Mill End Grinder

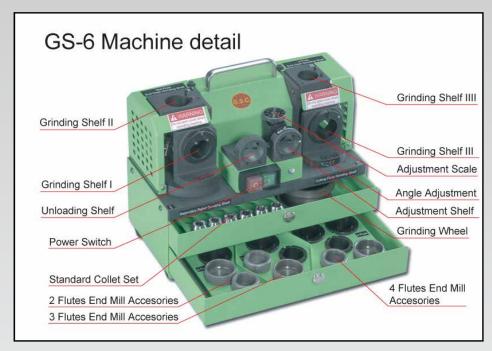
1/8" to 1/2" (3-13mm)
Best Machine for Small End Mills

GS-6

Powerful and accurate, the GS6 is perfect for the shop floor, ready to keep your tools sharp so that you are not down due to a dull or broken end mill. Easy to learn and perfect ends every time.







GS-6

- End mill End Grinder
- 1/8" to 1/2" diameter
- Expandable to 5/8" (GS-6X)
- 2, 3, 4 and 6-flute end mills
- Includes collet set, 4pc diamond grinding wheel set
- Easy to operate, around one minute cycle-time

Replacement wheels available in CBN or diamond GS-6 A SD 200, Wheel A GS-6 B SD 200, Wheel B

GS-6 C SD 200, Wheel C GS-6 F SD 200, Wheel F

Specifications

Cutting Tool Capacity	1/8" to 1/2" (3-13mm)
# Flutes	2, 3, and 4
Cutting Angle Concavity	0° to 3°
Flute Length	n/a
Lip clearance	6°
Grinding Wheel 4pc. Diamond 200 grit	GS-6 SD A, B, C F
Collets included	ER-20
Center Cutting Depth	Adjustable
Voltage	110V (220V available)
Construction	Steel, steel cabinet
Machine dimensions	14x 7x 9" (36 x 18 x 23cm)
Machine weight	33lbs (15kg)

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End Mill End Grinder

1/2" to 1/2" (13-32mm)

ES-1332

Powerful and accurate, the ES1332 is perfect for the shop floor, ready to keep your tools sharp so that you are not down due to a dull or broken end mill. Easy to learn and perfect ends every time.



ES-1332

- **End mill End Grinder**
- 1/2" to 1-1/4" diameter
- 2, 3, 4 and 6-flute end mills
- Includes collet set, CBN grinding wheel (diamond available)
- Easy to operate, around one minute cycle-time

Specifications

	<u>-</u>
Cutting Tool Capacity	1/2" to 1-1/4" (13-32mm)
# Flutes	2, 3, 4 and 6-flute
Cutting Angle Concavity	0° to 3°
Flute Length	n/a
Lip clearance	6°
Grinding Wheel ESC150	ESD150 Diamond for carbide ESC150 CBN for HSS available
Collets included	ER-25
Center Cutting Depth	Adjustable
Voltage	110V (220V available)
Construction	Steel, steel cabinet
Machine dimensions	14x 7x 9" (36 x 18 x 23cm)
Machine weight	33lbs (15kg)

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Tool and Cutter Grinders

Annular Cutter Grinder ERM2







ERM2

Cuttermasters teams up with Beiping to bring their Annular cutter grinder to our North American customers. Our ACG1450 is the very popular ERM2, built for us, to a new specification with changes in wheel speed, wheel shape, operating voltages, and guarantee. We think you will like it.

The ACG1450 Annular Cutter provides a substantial return on investment in any shop with dull annular cutters. Decreasing new tool expense, and eliminating production time loss due to dull cutters, the ACG1450 is easy to use, has

Specifications

	_
Cutting Tool Capacity	L:2" Dia: Ø 9/16" - Ø2.0 "
# Teeth	4, 5, 6, 7, 8, 9, 10
Grinding Wheel 1pc.	ERM2 C100 (CBN) ERM2 D100 (Diamond available)
Dividing Discs	5pcs (T-6, 7, 8, 9, 10)
RPM	2600RPM
Voltage	110V
Construction	Steel
Machine dimensions	18cm x 16cm x 14cm
Machine weight	75bs (34kg)

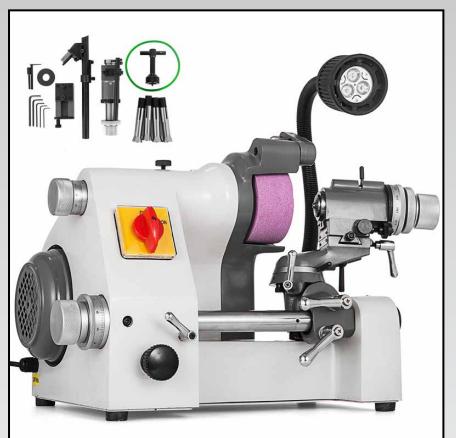
a small foot print and a heavy-duty construction for industrial tool sharpening. Simple to set up, anyone can sharpen high speed steel or carbide annular cutters with ease. The

robust (80 pound) construction & efficient design enable easy operation to sharpen annular cutters with precision.

An intuitive laser alignment system makes set up easy. Includes four dividing discs, laser pen, one CBN plated grinding wheel, written instructions, and customer service. Capacity up to 4" diameter.

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5C Single Lip Cutter Grinder CM-U35C





Finally, we thought we had better offer a small universal and single lip cutter grinder. Our research found that the CM-U35C Single Lip Grinder is the best machine of its class out there, and is good for almost anything in the right hands.

Includes

- aluminum oxide and diamond 6A2 Wheels
- attachments for lathe tools, end mills, drills
- optional: 11V9 S Diamond Tapered Cup for SL Cutter Grinders

Max.Clamping Capacity	Φ 16/28 mm
Max. Grinding Capacity	Ф 25 mm
Taper Angle	0° ~180°
Relief Angle	0° ~45°
Negative Angle	0° ~25°
Spindle Rotary Speed	5000 RPM
Cup grinding wheel	100x50x20mm
Motor	1/2 HP,380V,1/4Hp,220V,50/60Hz
Weight	46kg/60kg
Packing Size	550x440x400mm

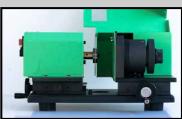
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Tool Cut Off and Neck Reduction Grinder GS-13N

Very Popular



GS-13N with Necking Wheel



GS-13N with Cut Of



Cut off end mill

GS-13 Cut Off and Neck Grinding Machine

- Cuts off and neck grinds tools from 3mm to 21mm (1/8" to 7/8")* diameter
- Tool rotates to decrease cutting time and temperature
- Cutting time: approximately 60 seconds
- Includes one CBN or diamond neck wheel. two diamond cut off wheels (for carbide and 5 resin cut off wheels (for high speed
- Machine size: 38cm x 23cm x 22cm x 22kg
- *GS13 Chuck Type 3 inch, 3 Jaw Chuck, has 5/8" thru-spindle and up to 3" capacity
- *GS-13 Collet type is ER-32, has 7/8" thru-bore and 1/8" to 7/8" capacity

Specifications

Cutting Tool Capacity	3/16 to 3/4" (5-20mm)
# Flutes	2, 3, 4 and 6-flute
Cutting Angle Concavity	0° to 3°
Flute Length	n/a
Lip clearance	6°
Grinding Wheel 2 pc. ESD200	ESD200 for ends (CBN avail.)
Collets included	ER-20, 25
Center Cutting Depth	Adjustable
Voltage	110V (220V available)
Construction	Steel, steel cabinet
Machine dimensions	14x 7x 9" (36 x 18 x 23cm)
Machine weight	33lbs (15kg)

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Combination End Mill Ends and Drill Points 3/16" to 3/4" (5-20mm Mill, 3-20mm Drill) **CS-320**

CS-320 Combination Drill Point and End Mill End

- End Mill End Grinder 5 to 20mm (3/16" to 3/4") diameter. 2, 3, 4 and 6-flute end mills
- Drill Point Grinder 3 to 20mm (3/16" to 3/4") diameter
- Creates 90° to 140° drill point angle
- Adjustable depth-of-cut for split point geometry (drills)
- Adjustable depth-of-cut for gash (end
- Includes 23pc collet set and two grinding wheels for both HSS and carbide tools.
- Steel tool cablinet for tool and wheel storage

Specifications

Cutting Tool Capacity	Drills 1/8" to 3/4" (3-20mm) Mills 3/16" to 3/4" (5-20mm)
# Flutes	2, 3, 4 and 6-flute
Cutting Angle Concavity	0° to 3°
Flute Length	n/a
Lip clearance	6°
Grinding Wheels 2pc CBN for drills diamond for mills	DSC200 (diamond available) ESD200 (CBN available)
Collets included	ER-20 and ER25
Center Cutting Depth	Adjustable
Voltage	110V (220V available)
Construction	Steel, steel cabinet
Machine dimensions	18x 7x 9" (45 x 27 x 19cm)
Machine weight	33lbs (25kg)

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CUTTERMASTER Professional DC Motors and Accessories

DC Motors and Motor Heads

Turn your tool grinder into a CUTTERMASTER Professional by upgrading the motor with a Toycen DC Motor and Control System. DC gives you the ability to choose the correct speed for your modern tool grinding needs. Choose one of our DC Tool Grinder Motor heads powered by the Toycen Whisper Drive DC Control. These DC motors plug in to normal 110VAC (220V available) and mount regular tool grinder wheels.

CM-JX CM-TwinT Basic DC Motor Head for CM-01DC, Great for End Mill Ends and Flutes

Toycen Infinite Twin DC Tower. Dual wheeled. Motor lifts for more set ups (roughers, gash,...) CM-Tower Toycen Infinite Single DC Tower. Single wheeled. Motor lifts for more set ups (roughers, gash,...)

Motorized ER32 Spindle for neck reduction (o.d.) and tool cut off. (Tool holder). CM-ER32M



CM-JX Basic DC Motor



CM-UT Twin Tower



CM-JXT Journeyman Tower (single)



CM-ER32M Motorized Spindle

Usefull Additions to the CUTTERMASTER Motor

If you want to modernize your old CUTTERMASTER these additions greatly improve the versatility of the old motor heads.

JX-Upgrade

Traditional 1970s CUTTERMASTER (MG, FCG, CM-01) and CM-01DC have the motor fixed in

line with y-axis.

JX-Upgrade gives CUTTERMASTERs the modified motor lock T-nut to allow the motor to rotate

for more set ups. Self installable.

CM-Riser

Motor Riser for fluting and end gash operations. Traditional 1970s CUTTERMASTER (MG,

FCG) doesn't have the height for end gash and getting inside flutes of hoggers. Riser sits under the

motor and gives lots of height options.

CM-01VM

350W variable speed DC motor and control. Bolts on to any CUTTERMASTER.



CM-01VM Variable Speed DC Motor and Control



JX-Upgrade Modified Motor Lock Nut



CM-Riser Motor Riser Plate



CUTTERMASTER Professional Tool Holders and Accessories

Tool Holders - Air Bearing for Flutes (o.d), Also Ends, Rads...

Our air bearings are roller burnished which is an improvement on the originals which were honed. Upgrade your old air bearing with a complete new unit or, if the air channels are plugged, just a new spindle upper housing. The Toycen Radius Air Bearing is a combination radius grinder and air bearing, for bull nose and ball nose end mills.

CM-02R Toycen Radius Air Bearing (Bull Nose/Ball Nose, Flutes, Ends, Necks, More...)

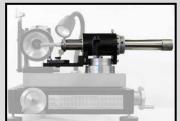
CM-02AU Toycen Air Bearing Upgrade- housing/tube assy. roller burnished Recommended fix for old air bearings with plugged air channel

Cuttermaster Air Bearing Fixture Assembly, Complete with CM-A22B shelf assembly, roller CM-02A

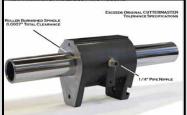
burnished



CM-02R Radius Air Bearing



CM-02A Air Bearing



CM-02A Air Bearing Upgrade



CM-03D Radius Attachment

Tool Holders For Neck Reduction, Weldon Set Screw Flats, Carbide Cut Off, Drills and Countersinks...

These attachments either replace your air spindle or are mounted to it to help you grind other tool features like corner radius (bull and ball nose), Flat Weldon set screw flats, Countersinks, big drills and more.

Motorized ER32 spindle for neck reduction (o.d.) and tool cut off CM-ER32M

CM-03 Radius Attachment for bull nose and ball nose

CM-06B Large Drill Holder

CM-06DCS Drill and Countersink Sharpening Attachment

Work holding Fixture CM-11

Shank, Flat, Cut Off Fixture for tool grinder JX-SFC

JX-XAE LARGE END MILL EXTENSION Kit (for 8" Flutes)



IX-SFC Cut Off Neck Flat **Fixture**



CM-06B Large Drill Holder



JX-XAE X-Axis Spindle Extension



CM-ER32M Motorized Spindle



Digital Read Out for Cuttermaster-style Machines CM-DRO



CUTTERMASTER Professional JXT with CM-DRO Digital Read Out Linear Scales and Display

Digital Read Out for CUTTERMASTER style machines. Most operations from end mill ends and flutes to corner rads can be greatly facilitated by having the coordinates of your tool and grinding wheel known to tenths of a thousandth of an inch. The CM-DRO consists of two linear scales (six inch and eight inch), a two-axis display, mounting brackets and hardware kit to set up your CUTTERMASTER tool grinder with digital read-out.



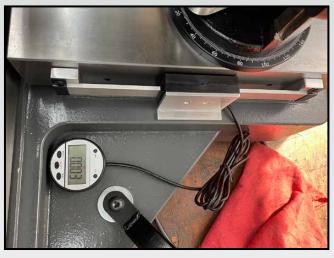
TOYCEN CUTTERMASTER Professional®

Magnetic Digital Read Out for Cuttermaster-style Machines CM-MDRO









Magnetic Digital Read Out for CUTTERMASTER style machines. Most operations from end mill ends and flutes to corner rads can be greatly facilitated by having the coordinates of your tool and grinding wheel known to tenths of a thousandth of an inch.

The CM-MDRO consists of one linear scale which can be used to monitor position of the x or y axis. Easy to install and use. The reader head is mounted to the scale and sealed from contamination. The scale is magnetic and can be mounted wherever is convenient for the operator.

Mounts on just about any tool grinder.

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TOYCEN CUTTERMASTER Professional®

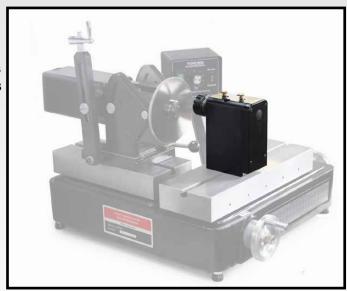
ER32 Motorized Spindle

Mounts to any table with T-Slot. For cylinder like neck Grinds like neck reductions and cut off CM-ER32M



Motorized Collet Chuck, CM-ER32

- Desgned for production use grinding of cylinders such as carbide and HSS end mill neck reductions and tool cut off
- ER32 collet chuck driven by a timing belt and small 24V DC motor
- All-day use
- Collet chucks selected for accuracy
- Bolt to any table with T-slot in
- Taper run-out less than .0005" x or y direction
- Plug in to 110V(220) or battery powered
- Includes 10pc ER32 collet set (1/8"-7/8")

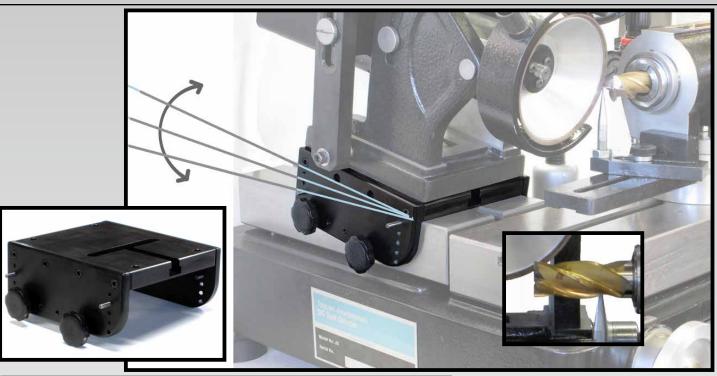


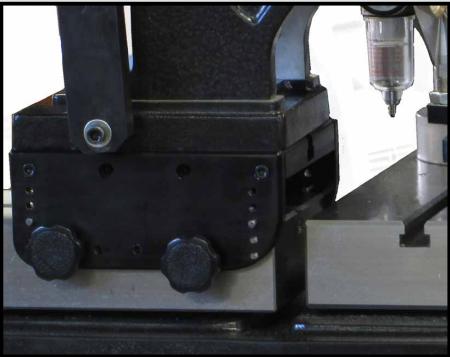
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PROUDLY MADE IN

Quick Set Riser for CUTTERMASTER

CM-Riser





Height Adjustment

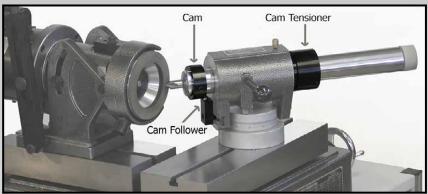
Flat Grinding Flute inside and outside and Gash

(Tower-like operation without a tower)

Motor Riser for fluting and end gash operations. Traditional 1970s CUT-TERMASTER (MG, FCG) doesn't have the height for end gash and getting inside flutes of hoggers. Riser sits under the motor and gives lots of height options.

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Countersink and Tap Sharpening Cam Sets for CUTTERMASTER



The Cuttermasters Countersink Grinding Cam Sets consists of cams, cam tensioner and cam follower. Each cam type is available with one or two ranges of lift (clearance).

The cams are available in four cam types zero/1-flute, two/four-flute (step drills), three/ six flute, and four/eight flute. The cams and tensioner are designed to slide over the spindle tube of the CUTTERMASTER CM-02A Air Bearing.

CM-CSB **4 Piece Basic Cam Set**



- Zero and 1-Flute, two cams: .01" and .03" lift
- 3-Flute, two cams: .031" and .062" lift
- Cam follower and cam tensioner for CUT-TERMASTER CM-02A Air Spindle

Recommeded Grinding Wheel for Countersinks:



We recommend a face wheel with enough area to cover the cutting lip of your countersink. Our CBN (or diamond for carbide) face wheels are perfect for countersinks and are available in 5" and 6" diameter, CM-5C180F Also see our Prodction Support Package CM-PS2 (six cams and face wheel)

9 Piece Journeyman Cam Set



- Zero and 1-Flute, two cams: .02" and .03" lift
- 2-Flute, three cams: .015, .04" and .065" lift
- 3-Flute, three cams: .025, .031" and .062" lift
- 4-Flute, one cam: .084" lift
- Cam follower and cam tensioner for CUTTEMAS TER CM-02A Air Spindle

Packages and Accessories

Production Support Package CM-PS2 Journeyman Full Cam Set, CSFT CM-CSJ Four Piece Basic Cam Set, CSFT CM-CSB CBN 5" Face Wheel CM-5C180F Cam Tensioner CM-CST Cam Follower CM-CSF Cam Tensioner and follower CM-CSFT

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TOYCEN CUTTERMASTER Professional®

Radius Air Bearing

CM-02R









End Mill Ends and Flutes



Ball Nose Bull Nose

Grind any bull nose or ball nose corner radius with the Radius Air Bearing, as well as other features such as ends and flutes.

The CM-02R Radius Air Spindle was designed for the CUTTERMASTER Professional CM-01P and is compatible with other CUTTERMASTER type grinders such as the JX, CM-01 or any grinder with t-slot attachment.

The CM-02R combines a high accuracy air spindle with the capabilities of the CM-03 Radius Attachment.



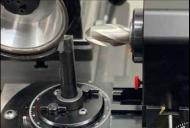
Radius Attachment

CM-03D

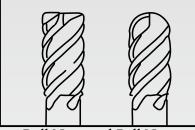




Use on any grinder with T-Slot



High accuracy corner radius

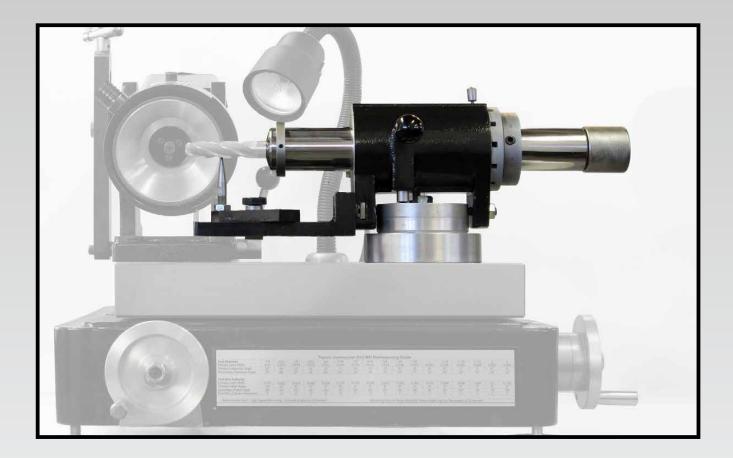


Bull Nose and Ball Nose

Grind any bull nose or ball nose corner radius with the CM-03D Radius Attachment. The CM-03D Radius Attachment is made in Canada and is compatible with any CUTTER-MASTER Tool Grinder such as the CM-01, MG-30, HDT-30 or any grinder with t-slot attachment.



Air Bearing for Cuttermaster and Most machines **CM-02A**

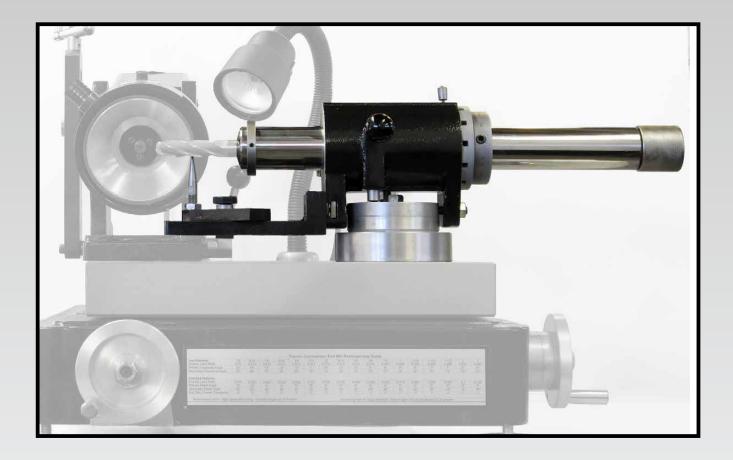


The CM-02 Air Spindle for CUTTERMASTER and CUTTERMASTER type machines is a fluid air bearing that floats on a cusion of air when air is applied. This is what allows the operator to create helical grinds, like the outside diamter of an end mill or router bit. It is an improvement over the original air bearing supplied with the CM-01 and MG-30 CUTTERMASTERs, in that the bushing is roller burnished and provides greater tolerance.

To upgrade your existing CM-02A (if blocked airways or damage is hindering performance), you can purchase our CM-02A Upgrade (may be a preferable solution to a new complete CM-02A Air Bearing Assembly. The upgrade consists of the main spindle and upper spindle housing.



Air Bearing for Cuttermaster and Most machines CM-02AL



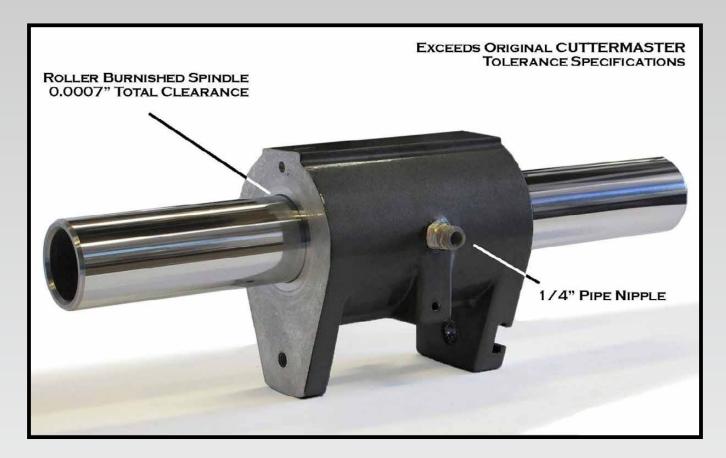
This CM-02AL air spindle has a longer tube with a stroke length of 10" as opposed to the 6.5" stroke of the updated CM-02A.

The CM-02 Air Spindle for CUTTERMASTER and CUTTERMASTER type machines is a fluid air bearing that floats on a cusion of air when air is applied. This is what allows the operator to create helical grinds, like the outside diamter of an end mill or router bit. It is an improvement over the original air bearing supplied with the CM-01 and MG-30 CUTTERMASTERs, in that the bushing is roller burnished and provides greater tolerance.

To upgrade your existing CM-02A (if blocked airways or damage is hindering performance), you can purchase our CM-02A Upgrade (may be a preferable solution to a new complete CM-02A Air Bearing Assembly. The upgrade consists of the main spindle and upper spindle housing.



NEW MAIN AIR SPINDLE BODY AND HOUSING CM-02A Upgrade



The CM-02A Air Spindle Upgrade for CUTTERMASTER and CUTTERMASTER type machines replaces the main body and spindle of the air bearing. It is an improvement over the original air bearing supplied with the CM-01 and MG-30 CUTTERMASTERs, in that the bushing is roller burnished and provides greater tolerance (0.0007").

If you have blocked airways in your main housing or if your spindle is too loose or is damaged, our air spindle upgrade may be a preferable solution to a new complete CM-02A Air Bearing Assembly.

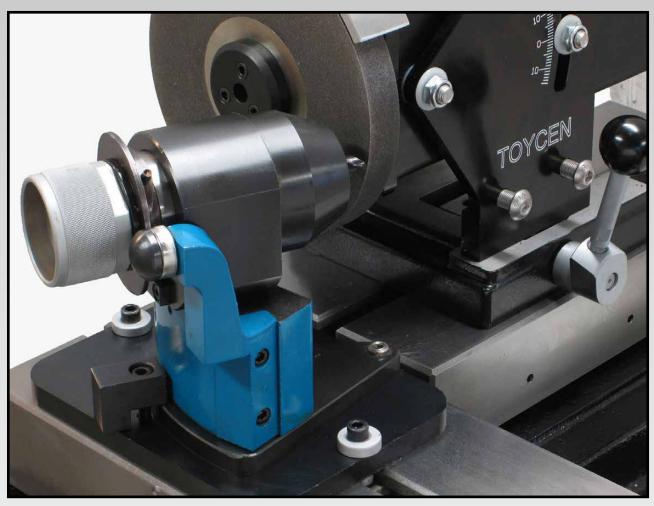
This kit only provides the main housing and spindle, the remaining parts are transferred from your existing air spindle (base, collars, handles, etc).





Drill Grinding Attachment

CM-06





- **CM-06 Drill Grinding Attachment**
- Sharpens drills from 3 to 22mm (1/8" to 7/8")
- Easily adjustable point angle
- Thru hole in chuck allows for any drill length
- Set up and sharpen in less than two minutes

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www.cuttermasters.com or email: cuttermaster@gmail.com

CUTTERMASTERS Tool and Cutter Grinders

Drill Grinding and Countersink Attachment CM-06 DCS



- Sharpens drills from 3 to 22mm (1/8" to 7/8")
- Easily adjustable point angle
- Thru hole in chuck allows for any drill length
- Set up and sharpen in less than two minutes





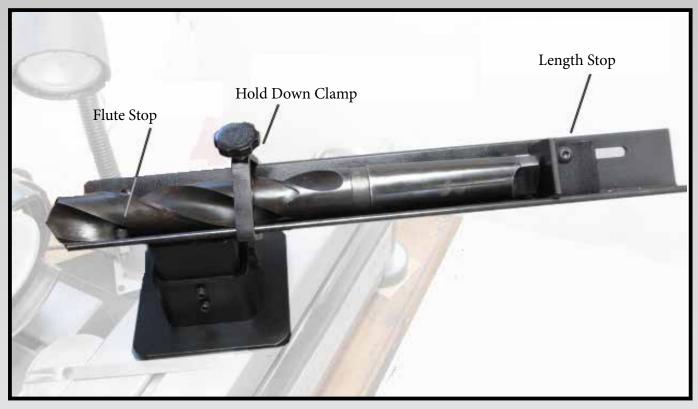
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www.cuttermasters.com or email: cuttermaster@gmail.com

Tool and Cutter Grinders

Large Drill Grinding Attachment

CM-06B

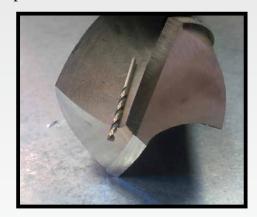


- This fixture is designed to bolt onto all CUTTERMASTER type machines or other tool grinders.
- For sharpening all large drills and core drills
- Angle adjustment from 180 to 100 degrees

Instructions: Bolt the CM-06B to the x-axis table with T-nuts provided. Load the drill as shown in the picture. Set the flutes so that the cutting lips are horizontal. Fix the drill rotation with the flute stop and length with

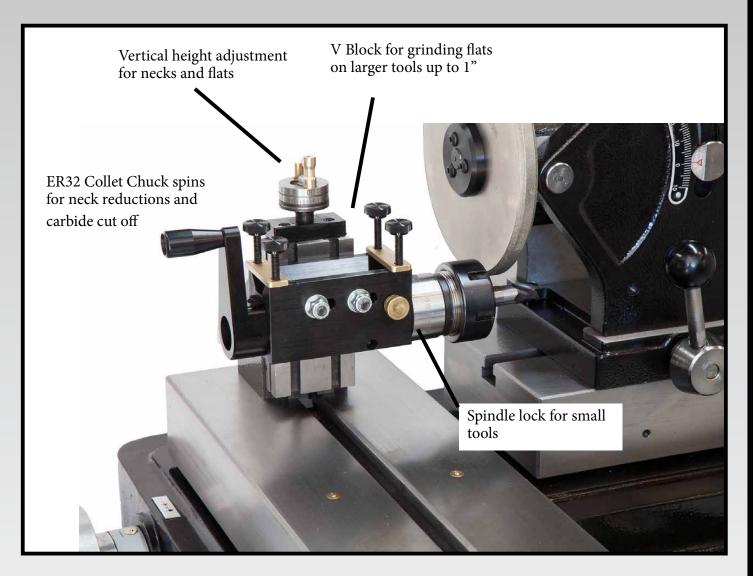
length stop. Set the tip angle by rotating the fixture, then lock in place with the hold down clamp. Set the motor angle to the desired angle (using a face wheel or tapered cup wheel, 6°-9° for primary 10°-15° for secondary). Primary lip width should be 1/8" to 3/16" width like the picture







Shank, Flat and Cut Off **Fixturé** JX SFC



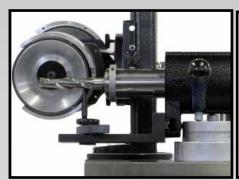


Set Screw Flat, neck Reduction and carbide cut off

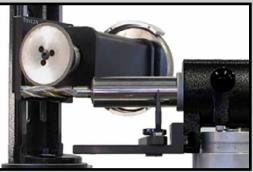
The CUTTERMASTER was not designed with set screw flats or neck reductions so we created this fixture to make these operations possible. The z-axis adjustment allows the tool to be held below the wheel so that truly flat, Weldon set screw flats can be achieved. Use this fixture for necks and cut off as well as to avoid wearing out your air spindle.

Universal Tower for CUTTERMASTER

CM-UT



Easy Ends, Flutes



MULTI AXIS, **DUAL WHEEL**



DC WHISPER DRIVE CONTROL

Toycen DC Drives for CUTTERMASTER are an upgrade to the venerable, 1972 CUTTERMASTER to a configuration that is more useful for modern cutting tool materials and geometries.

The Universal DC Tower will mount on any tool grinder, is reversible, variable speed and produces ten times the torque of the standard 1/3 HP motor (5 Foot Pounds @ 1000 rpm). This eliminates tool burning by facilitating heavy cuts at greatly reduced RPM, cutting grinding times in half on some tools.

The Tower is an infinitely variable speed and powerful wheel head with the Toycen DC Drive System. It can replace the CUTTERMASTER motor and control and fits the CUTTER-MASTER models FCG- 30, CM-01, CMX, HDT-30 or any tool grinder with a table and T slot. It comes complete with controler and is available in 110V and 220V.

This revolutionary product was designed and built in our own shop. Now you can grind reduced necks and flats on carbide shanks, and sharpen reamers, saws, annular cutters, hogger mills, taps, side and face cutters, countersinks and step drills

on your CUTTERMASTER.

Jeff Toycen,

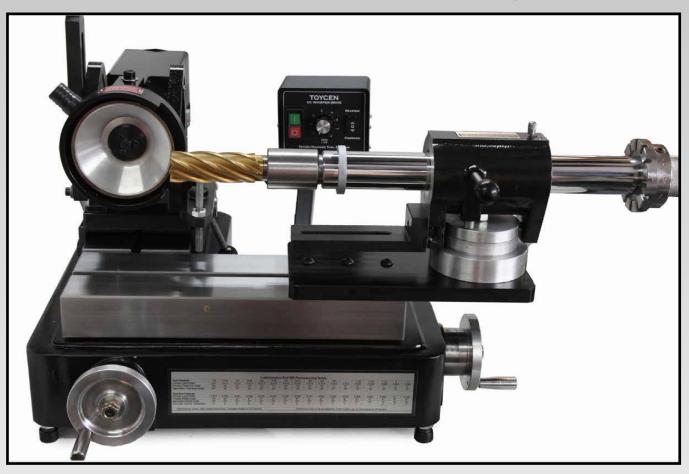
Toycen Industries





X-Axis Extension Kit

JX-XAE



Increase the maximum flute length of your tool grinder with the JX-XAE *x*-Axis Extension Kit. By mounting the stylus to the motor, and extending the *x*-axis way, long flute lengths are acheivable. This kit includes the JX-Riser and requires the Journeyman motor (or JX-upgrade), which unlike the original CUTTER-MASTER motor, can pivot.



Use with Riser



Notes

