

# GANG TOOLING-For Hardinge Style Slide Lathes

## MULTI-POSITION TOOL HOLDERS *Ideal For Parts Less Than 1" Diameter!*

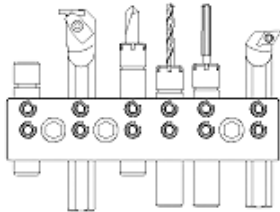
Direct bolt on to 1/2" or 3/4" center height or adaptable to any height using riser adapters on page 98. A range of tools and holders that best suit the "Gang Tool" style of machining have been selected to provide the best use of space without compromising the rigidity or functionality of your machine tool. Each tool & tool holder integrates with a collet system, boring bar or square tool, to provide a rigid platform producing quality parts. The tool holders featured can be used alone or with a combination of other holders. Achieve Fast change-overs with multi position holders using the down-loadable tool offset capabilities of your control. Thicker tool holders provide long thread engagement on 3/4" bores.



**Add More Tools  
To Your Table!**

**Direct Bolt Onto:**  
Hardinge CHNC Style Turrets • Omni-Turn  
CMS • Upgrade Technologies

**Riser Adapters Required for:**  
Hyundai • Kia • Mazak • Daewoo  
Washino • Hardinge GT27 • Ameri-Tech



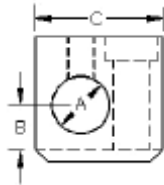
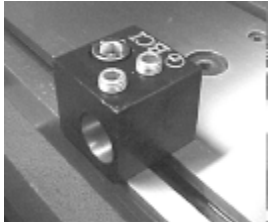
- FEATURES & BENEFITS:**
- Fast change over
  - Reduced set-up time
  - Made of hardened steel
  - Alloy bolts and chrome plated anchoring nuts for positive location of tools
  - Can be used alone or in combination with other holders
  - Custom spacing also available

\*All machines referenced are trademarks of their respective manufacturers.

**In This Section...**

Turning & Facing Holders	pg 104	Combo Turning & Threading	pg 107
Extension Heads	pg 105	Axial Approach Knurling Holder	pg 107
Combo Turn Heads	pg 105	Side Knurling Tool	pg 107
Replaceable Cut-off T-Blade Heads	pg 105	Revolving Stops	pg 107
Tap Bushings	pg 106	Threading Die Holder	pg 108
Live Tooling Holders	pg 105	Drill Holder, Adjustable Center	pg 106
Riser Systems for spindle center height machines	pg 106	Drill Holder, Fixed Center	pg 106
Tap Holder, Adjustable Center	pg 106	ER Collet Holders	pg 107
Tap Holder, Fixed Center	pg 106	Cam-type Bar Puller	pg 108
Turning Tools	pg 107		

## SINGLE POSITION HOLDERS

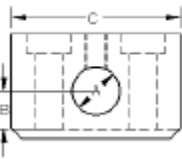
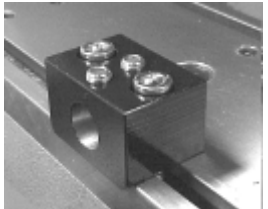


**FEATURES:**

- Ideal for mounting tools for odd sized work.
- These holders let you set the spacing on any sized work.
- Great for use with Posi-lock holders.
- Use a single position for bar stops.
- Great for drilling applications.

Description	A	B	C	Part Number	Price
3/8" Center 5/8" Bore right hand	.6250	.3750	1.500	EC-TBS-1356	\$78.40
3/8" Center 5/8" Bore left hand	.6250	.3750	1.500	EC-TBS-1357	\$78.40
1/2" Center 5/8" Bore right hand	.6250	.5000	1.500	EC-TBS-1456	\$78.40
1/2" Center 5/8" Bore left hand	.6250	.5000	1.500	EC-TBS-1457	\$78.40
1/2" Center 3/4" Bore right hand	.7500	.5000	1.500	EC-TBS-1466	\$88.20
1/2" Center 3/4" Bore left hand	.7500	.5000	1.500	EC-TBS-1467	\$88.20
3/4" Center 3/4" Bore right hand	.7500	.7500	1.500	EC-TBS-1666	\$98.00

## SINGLE POSITION HOLDERS-HEAVY DUTY

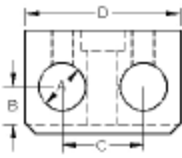
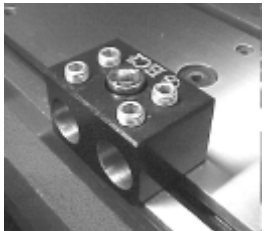


**FEATURES:**

- Designed for heavier cuts.
- Double hold down bolts provide extra clamping for heavy turning and boring.
- Great for tangential type turning.

Description	A	B	C	Part Number	Price
1/2" Center 5/8" Bore Heavy Duty	.6250	.500	2.220	EC-TBS-1450	\$93.10
1/2" Center 3/4" Bore Heavy Duty	.7500	.500	2.220	EC-TBS-1460	\$98.00
3/4" Center 3/4" Bore Heavy Duty	.7500	.750	2.200	EC-TBS-1660	\$117.60

## 2 POSITION HOLDERS

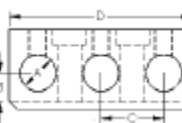


**FEATURES:**

- Ideal for holding 2 boring bars, or a center drill and drill in 1 holder.
- Easy change over for modular tooling.
- Use with a 6 or 8 position for non changing tools.

Description	A	B	C	D	Part Number	Price
3/8" Center 5/8" Bore	.6250	.3750	1.250	2.200	EC-TBS-2354	\$93.10
1/2" Center 5/8" Bore	.6250	.5000	1.250	2.200	EC-TBS-2454	\$93.10
1/2" Center 3/4" Bore	.7500	.5000	1.250	2.200	EC-TBS-2464	\$102.90
3/4" Center 3/4" Bore	.7500	.7500	1.250	2.200	EC-TBS-2664	\$122.50

## 3 POSITION HOLDERS



**FEATURES:**

- This tool is ideal for mounting groups of tools for drilling, turning or boring work.
- 3 spacing for optimum tool plate spacing.

Description	A	B	C	D	E	Part Number	Price
3/8" Center 5/8" Bore	.6250	.5000	1.250	3.500	1.250	EC-TBS-3354	\$102.90
1/2" Center 5/8" Bore	.6250	.5000	1.250	3.500	1.250	EC-TBS-3454	\$102.90
1/2" Center 3/4" Bore	.7500	.5000	1.250	3.500	1.250	EC-TBS-3464	\$112.70
3/4" Center 3/4" Bore	.7500	.7500	1.250	3.500	1.250	EC-TBS-3664	\$132.30

**Call Us Or Visit Our Website For Our Complete Selection!**

# GANG TOOLING-For Hardinge Style Slide Lathes

D

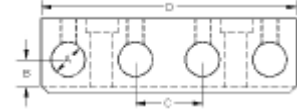


## 4 POSITION HOLDERS



### FEATURES:

- A versatile mid size holder.
- Even spacing to accommodate any operations.
- Available in 5/8" or 3/4" bore.



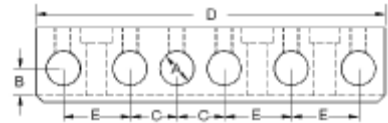
Description	A	B	C	D	Part Number	Price
1/2" Center 5/8" Bore	.6250	.5000	1.250	4.750	EC-TBS-4454	\$151.90
1/2" Center 3/4" Bore	.7500	.5000	1.250	4.750	EC-TBS-4464	\$161.70

## 6 POSITION HOLDERS



### FEATURES:

- Perfect for a repeat production run on a wide range of work.
- 6 tool positions allow for the exact spacing you need
- Overall length of 6.5" allows flexibility on big setups.



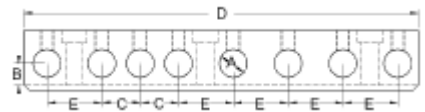
Description	A	B	C	D	E	Part Number	Price
3/8" Center 5/8" Bore	.6250	.3750	.8750	6.500	1.250	EC-TBS-6350	\$235.20
1/2" Center 5/8" Bore	.6250	.5000	.8750	6.500	1.250	EC-TBS-6450	\$235.20
1/2" Center 3/4" Bore	.7500	.5000	.8750	6.500	1.250	EC-TBS-6460	\$269.50
3/4" Center 3/4" Bore	.7500	.7500	.8750	6.500	1.250	EC-TBS-6660	\$289.10

## 8 POSITION HOLDERS



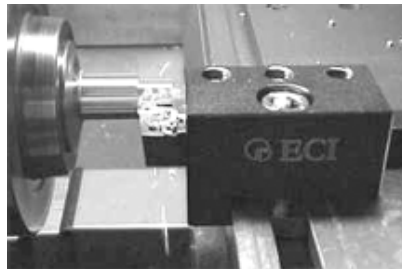
### FEATURES:

- This holder is perfect for a repeat production run on a wide range of work.
- 8 tool positions allow for the exact spacing you need.
- Overall length of 9" allows flexibility on big setups.



Description	A	B	C	D	E	Part Number	Price
3/8" Center 5/8" Bore	.6250	.3750	.8750	9.000	1.250	EC-TBS-8350	\$313.60
1/2" Center 5/8" Bore	.6250	.5000	.8750	9.000	1.250	EC-TBS-8450	\$313.60
1/2" Center 3/4" Bore	.7500	.5000	.8750	9.000	1.250	EC-TBS-8460	\$367.50

## TURNING/FACING HOLDERS



### FEATURES:

- Turn and face with the same tool.
- Accepts 0.500" or 0.750" shank square tools
- Cut down on unnecessary additional tools
- Offered in right or left hand to accommodate any application.
- Solid positive lock down directly to the table for deeper cuts.
- Eliminates chatter and harmonics.
- Recommended inserts: 80 deg diamond, triangle or trigon

Size	Type	Width	Part Number	Price
1/2" square	Right	1.250	EC-TBA-1446	\$78.40
1/2" square	Left	1.250	EC-TBA-1447	\$78.40
3/4" square	Right	1.500	EC-TBA-1666	\$88.20
3/4" square	Left	1.500	EC-TBA-1667	\$88.20

## ADAPTER BUSHINGS



### FEATURES:

- Large clearance holes for positive locking from screw to shaft.
- .0002" concentricity.
- Fits all tool station bolt patterns.

For Larger Bushings and Turret Lathe Bushings, Please See Pages 238-241.



Size	Part Number	Price
3/4" to 5/8"	EC-ABR-3458	\$24.50
3/4" to 1/2"	EC-ABR-3412	\$24.50
5/8" to 1/2"	EC-ABR-5812	\$24.50
5/8" to 3/8"	EC-ABR-5838	\$24.50

Call Us Today For All Of Your Machine Tool Needs!

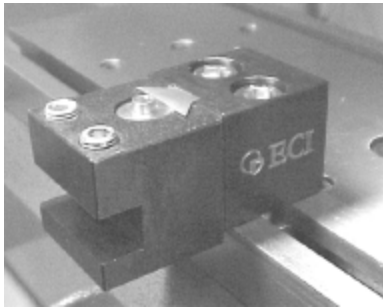
# GANG TOOLING-For Hardinge Style Slide Lathes

D

## POSI-LOCK DOVETAIL SYSTEM

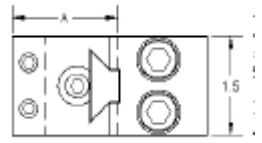
This system allows you to mount universal posts and just change the heads! The dovetail plate is drawn back to the post with two cap head bolts from the rear, creating a solid, vibration free, heavy duty holder! To adjust center, simply loosen the rear bolts, insert a hex key in the jack screw, center the tool and lock it back in place. Patent Pending.

### EXTENSION HEADS



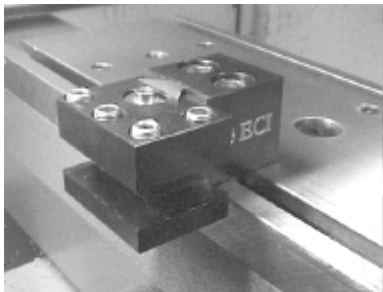
#### FEATURES:

- Compact-Post is only 1.50" wide.
- Double cap head bolts for solid lock down to the table.
- Vibration free double bolted dovetail.
- Can be used on either side of the work piece.
- Fine adjustment leveling screw for precise centering.
- Holds square tools up to 0.5".
- All components are hardened alloy steel.



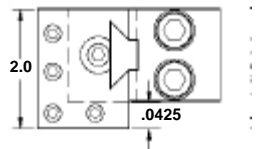
Description	A	Part Number	Price
Post & dovetail 1/2" center height	-	EC-PPS-0150	\$93.10
Post & dovetail 3/4" center height	-	EC-PPS-0175	\$102.90
1" extension for 1/2" square turning tool	1.625	EC-PEX-2100	\$93.10
2" extension for 1/2" square turning tool	2.625	EC-PEX-2200	\$112.70
3" extension for 1/2" square turning tool	3.625	EC-PEX-2300	\$122.50

### COMBO TURN HEADS



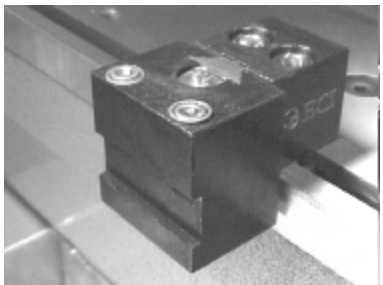
#### FEATURES:

- Accepts up to 0.50" square tools
- Used in turning and / or facing.
- Available in right or left hand to accommodate any application.
- Fine adjustment leveling screw for precise centering.
- Easy change over for modular tooling.
- Could be used to hold 2 tools.



Description	Part Number	Price
Combo holder for 1/2" square turning and/or facing / right hand	EC-PST-2106	\$112.70
Combo holder for 1/2" square turning and/or facing / left hand	EC-PST-2107	\$112.70
Post & dovetail 1/2" center height	EC-PPS-0150	\$93.10
Post & dovetail 3/4" center height	EC-PPS-0175	\$102.90

### REPLACEABLE BLADE CUT-OFF HEAD



#### FEATURES:

- Accepts 0.04" to 0.125" wide blades. 5/8" to 11/16" high
- Position on far side of table to conserve space.
- Right or left hand approach.
- Sturdy design insures straight cuts.
- Fine adjustment leveling screw for precise centering.
- Easy change over for modular tooling.
- Post sold separately.

Description	Part Number	Price
Straight 11/16" T blade cut-off holder	EC-PCO-2160	\$93.10
Post & dovetail 1/2" center height	EC-PPS-0150	\$93.10
Post & dovetail 3/4" center height	EC-PPS-0175	\$102.90



### 3 POSITION HEAD



#### FEATURES:

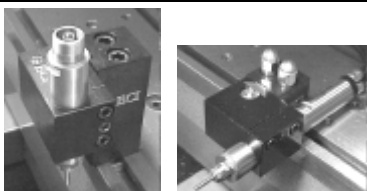
- Use three drills or other tools only taking 2" of space.
- Uses 1/2" standard bushings.
- Fine adjustment leveling screw for precise centering.
- Post sold separately.

Description	Part Number	Price
Compact 3 close spacing 1/2" bushing drill holder	EC-PDA-3040	\$122.50
Post & dovetail 1/2" center height	EC-PPS-0150	\$93.10
Post & dovetail 3/4" center height	EC-PPS-0175	\$102.90



### LIVE TOOLHOLDERS ALSO AVAILABLE!

Please Call For More Information



Call Us Or Visit Our Website For Our Complete Selection!

# GANG TOOLING-For Hardinge Style Slide Lathes

D

## RISER ADAPTERS



Every inch of your X travel is precious space, especially when doing intricate parts with many operations. When working with a 1 1/2+ spindle bore machine, one needs not only rigidity, but efficient use of table space. Large OEM holders address the rigidity but use a lot of area, as they are mounted directly to the machine table and must achieve a stretch of 85mm (3.346") to the spindle center. Our riser adapter systems used with the 3/4" & 1/2" center height tooling, provides: 1) More than doubling the quantity of tools, 2) a rigid work platform, 3) And a much broader selection of tooling options. Easy bolt on to all 85, 55, or 35 mm spindle center height machines.

**EC-ROP-8517 (85mm)** A one piece design for general use. It covers the entire useable X travel of the machine, utilizing the 1/2" or 3/4" center height tooling. **For use on Daewoo, Kia, & Hyundai machines.**

**EC-ROP-8512** A one piece design for use with a sub spindle. It covers 12" of useable X travel while allowing the sub spindle to operate. Also utilizing the 3/4" center height tooling only. **For use on Daewoo, Kia, & Hyundai machines.**

**EC-ROP-5512 (55mm)** A one piece design for general use. Two of these units covers the entire useable X travel of the machine, utilizing the 3/4" center height tooling. **For use on some Mazak machines.**

**EC-ROP-3517 (35mm)** A one piece design for general use. It covers the entire useable X travel of the machine, utilizing the 1/2" center height tooling. **For use on some Wasino machines.**



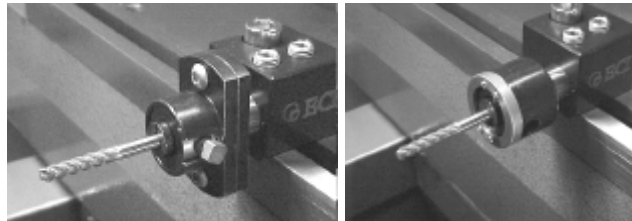
**If your machine or center height is not listed here, call us for pricing. We can adapt to any gang turn lathe.**



\*All machines referenced are trademarks of their respective manufacturers.

Description	Height	Part Number	Price
Daewoo & Hundai -12" long riser for spindle center & sub-spindle	85mm	EC-ROP-8512	\$686.00
Daewoo & Hundai -17" long riser	85mm	EC-ROP-8517	\$735.00
Wasino Riser using 1/2" center tooling	35mm	EC-ROP-3517	\$637.00
Mazak Riser using 3/4" center tooling	55mm	EC-ROP-5512	\$686.00

## TAP HOLDERS



Adjustable Center Tap Holder

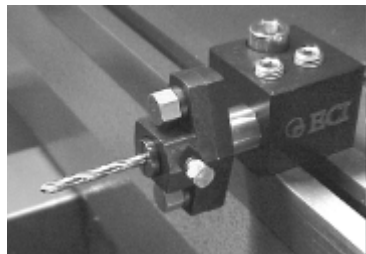
Fixed Center Tap Holder

### FEATURES:

- Non-releasing type.
- 0.625 (5/8) shank diameter.
- Black oxide finish and ground shank.
- Smooth slide floating inner sleeve
- Spring load set for wide range of taps.
- Tap sizes 0-80 thru 1/2 -13.
- Adjustable head for exact centering on Adjustable Center Model.
- Fixed Center Model provides a "floating" fixed center.
- Uses standard 1/2" tap bushings.

Description	Part Number	Price
Adjustable Center Tap Holder	EC-ATJ-2050	\$122.50
Fixed Center Tap Holder	EC-ATF-2050	\$122.50

## DRILL HOLDERS-ADJUSTABLE CENTER

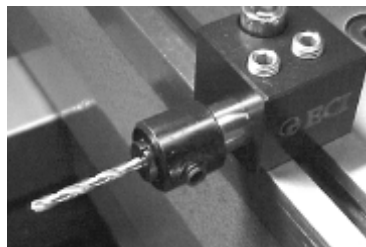


### FEATURES:

- 5/8" shank diameter.
- Secure, center locking bolts.
- Accepts standard 1/2" bushings.
- Thru hole in shank for deep drill insertion.
- Head adjusts for exact centering.
- Hardened alloy steel hardware.
- Provides a rigid platform for positive drilling.
- Can be used for small drill operations to achieve accurate centering.

Description	Part Number	Price
5/8" shank, 1/2" OD bushing size	EC-ADJ-2050	\$63.70

## DRILL HOLDERS-FIXED CENTER



### FEATURES:

- Allows leveling of Z offset on small drills.
- Quick setting on fixed center.
- Two sizes for wide range of drilled diameters.
- Uses 1/2" standard bushes (ADF-2050)
- Thru hole allows deeper insertion for long drills.
- Large set screw for positive gripping. (No push-back).
- Machined on common center 0.0002 max run out.

Description	Part Number	Price
5/8" shank, 1/2" OD bushing size	EC-ADF-2050	\$34.30

## TAP BUSHINGS



### FEATURES:

- 8 piece set 0-80 thru 1/2"-13
- Split for easy insertion.
- Square drive for positive locking.
- Twist-torque design won't pull out.
- Hardened alloy steel.



OD	Range	Set Qty	Part Number	Price
1/2"	0-80 thru 1/2-13	8	EC-ABT-2100	\$147.00

**Call Us Today For All Of Your Machine Tool Needs!**

# GANG TOOLING-For Hardinge Style Slide Lathes

D

## ER COLLET EXTENSIONS

Straight Shank Holders

USST



Mini Nut



ER Collets are located on pages 155-157

Collet Series	Shank Length	Shank Dia	Part Number	Price Each
ER 11	6.20"	.500	ST-05-11ER6	\$61.00
			ST-06-11ER6	\$69.00
ER 16	2.50"	.750	ST-07-16ER2	\$60.00
			ST-07-16ER4	\$65.00
ER 20	2.50"	.750	ST-07-20ER2	\$60.00

Our Complete Selection Of Collet Extensions Is Located On Page 167.

## TURNING AND THREADING TOOLS

ECL

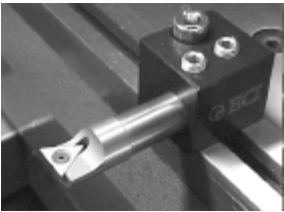


### FEATURES:

- 5/8" shank.
- A real space and time saver.
- Turn and thread with one tool without reversing the spindle.
- Front and back turning possible by changing the threading insert.
- Hex key wrench included.
- Rigid, well supported.
- Hardened alloy steel.

Uses Inserts	Part Number	Price
TPGB-321 & TNMA-32NV	EC-AST-4152	\$122.50

## BORING BARS



### FEATURES:

- Steel shank boring bar
- 3/8 to 3/4 shank sizes available
- Uses TPG\_ style inserts, located on page 224
- Steel, Heavy Metal and Carbide Boring Bars Also Available! Large selection located on pages 279-297

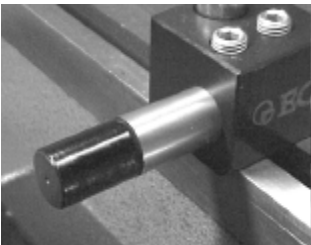


Boring Bars are located on pages 279-297

Shank	Min. Bore	OAL	Insert Type	Part Number	Price
3/8	.500	6	TPGG-22	BBT-1010	\$36.00
1/2	.625	6	TPGG-22	BBT-1015	\$36.00
5/8	.750	6	TPGG-22	BBT-1020	\$45.00
3/4	1.000	10	TPGG-33	BBT-1025	\$53.00

## REVOLVING STOPS

ECL

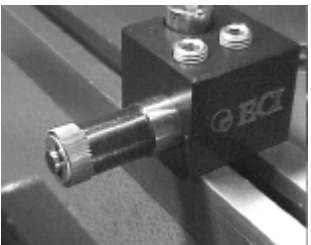


### FEATURES:

- Smooth rotating head and positive stopping action insures precise feed outs with out the need for facing.
- Can withstand severe conditions and still outperform other types on the market.
- Available in 5/8", 3/4" or 1" diameter shank.

Shank Dia	Part Number	Price
5/8"	EC-ARS-0050	\$34.30
3/4"	EC-ARS-0060	\$44.10
1"	EC-ARS-0080	\$49.00

## KNURLING TOOLS



Side Knurling Tool

Axial Approach Knurling Tool

### FEATURES:

- The perfect tool when space is an issue.
- Knurl from either side to save travel time.
- Quick change c-clip release.
- Hardened alloy steel.
- Uses GK series knurls (not included).



Knurls are located on pages 432-436.

Description	Shank	Knurl ID	Part Number	Price
Side approach, for GK knurls	Square	.250	EC-AKR-0375	\$55.13
Axial approach, for GK / KN knurls	5/8"	.250	EC-AKA-6250	\$29.40
Axial approach, for GK / KN knurls	3/4"	.250	EC-AKA-7500	\$34.30
Axial approach, for PH knurls	3/4" HD	.500	EC-AKA-7501	\$37.73

## DRILL BUSHINGS

ECL



### FEATURES:

- 3 sets available in each size-fraction, wire, & letter.
- Split for easy insertion.
- Banded to prevent loss.
- Hardened alloy steel.

Additional Drill Bushings Are Located on Pages 464-467.

OD	Range	Set Qty	Part Number	Price
1/2"	5/64 thru 3/8	20	EC-ABD-2140	\$220.50
1/2"	#1 thru #47	47	EC-ABD-2141	\$431.20
		26	EC-ABD-2142	\$292.04
5/8"	3/32 thru 1/2	30	EC-ABD-2150	\$292.04
5/8"	#1 thru #41	41	EC-ABD-2151	\$436.10
5/8"		26	EC-ABD-2152	\$292.04

Call Us Or Visit Our Website For Our Complete Selection!

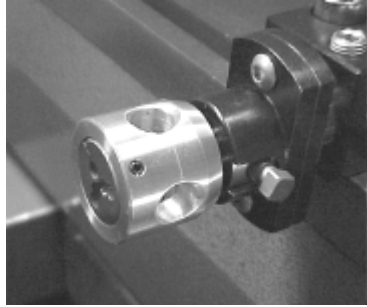
2005-06 Product Catalog

107

# GANG TOOLING-For Hardinge Style Slide Lathes

D

## THREADING DIE HOLDER



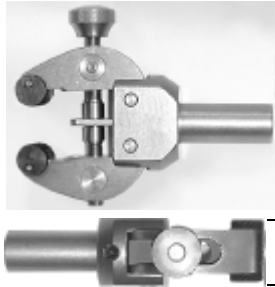
### FEATURES:

- Allows threading of long small diameter threads.
- Oil wash cross holes for proper lubrication.
- 5/16" shank (also fits swiss automatics)
- Made from strong aircraft aluminum.
- Use with sliding tap holder, (not included)
- Uses 13/16" button dies.
- A great solution for single pointing small diameter threads, while maintaining the versatility to thread up to 5/16"-18.
- Initially developed for Swiss cam automatics.

Description	Part Number	Price
Threading die holder, for small fine longer threads	EC-BDH-1316	\$34.30

## COMPACT BAR PULLER

**Takes Only 3/4" Of Space!**



### FEATURES:

- Grip range of .050" to 1.50"- will handle a wide range of materials with no tools required for adjustments.
- "Cam Grip" jaws roll on to the material with less loading on the lathe than other bar puller designs.
- Compact bar puller releases with a simultaneous X and Z movement.
- Made of stainless steel and brass-ensures long life and corrosion protection.
- Cam grippers are hardened tool steel.
- Available with standard 5/8" round shaft.

Description	Part Number	Price
Cam Action Bar Puller	EC-ABP-0050	\$289.10

**ALSO AVAILABLE!**

MADE IN THE USA

**Gang Tool Bar Puller Kit:**

- 10 grippers (3/16"-3/4" x 1/16 inc)
- 5/8 shank-Grippers mount directly to shank

**DTC-BARPULLKIT7 Kit Price: \$346.00**

## GANG TOOL MACHINING ADVANTAGES



When we purchase machine tools, we want the best range of features, at the best price, so we generally buy more than we need, just in case that the big job comes in, but we have to make sacrifices for that flexibility. With gang tool lathes that generally means that the larger standard holders are great for that big job, (because the machine manufacturer has to provide for the maximum load that you can put on the tools.) But for the small work, we are always looking for room to load that last tool. This is where you can benefit the most. If you can stack the tools closer together for parts under 1" you can:

- **Get more tools on the plate**
- **Change over setups quickly**
- **Be more flexible on the small jobs**

Most turning tools are square shank, but you can get the same results by using boring bars for turning. There are other benefits also, you can cut inside the part and outside with 1 tool, plus a boring bar takes up a lot less room on the tool plate. You can stack 2 bars back to back for outside turning and threading. Consider that most jobs 1" & under, on a gang tool lathe run up to 3" long, and you can overhang a boring bar 4 times its diameter. A 3/4" boring bar is not over extended for that application. (3/4" x 4 = 3")

### MULTI-HOLE HOLDERS

When drilling you can use a multi tool holder and stack your drills close together. Combining groups of tools simplifies setup greatly. An NC spot drill (900 point), a drill, and a tap holder provide an ideal 3 position group for many jobs. Simply swapping a drill and tap and a quick change over is achieved. When choosing a threading tool, a grooving style holder (Top notch style) can provide a quick change from grooving to threading inserts. Combining turning & grooving bars in a 3 position holder can allow fast rough and finish of the front & back of a part in a small table space. The setup shown requires a spindle direction change, this can be solved by using a left hand boring bar running upside down. A two position holder is ideal for a simple center drill & drill. ER11 or ER16 collet holders offer great flexibility for drill holding.

### CUT-OFF TOOLS

Cutoff tools for large diameter holders require a deep throat to accommodate 1" diameters, if your part is less than 0.5" diameter a thin grooving insert works well. This allows a 5/8" or 3/4" bar for cutoff, saving almost an inch of table space. The boring bar cutoff can also be used in a multi-position holder

### LONGER PARTS

Sometimes a longer part requires machining using 2 holders, this can be achieved easily. This example shows the ability to turn a longer part, or perhaps a tough material that required more rigid tooling than a boring bar. This setup lends itself to form tooling to decrease cycle times even further. Either tool can be upside down so that a change of spindle direction is not required.

### 4, 6, & 8 POSITION HOLDERS

If your parts require frequent repeat setups a large capacity holder can save time and money. Load your tools once in the holder, setup your offsets and at the end remove the tool holder with the tools still mounted. The next time this part is required, simply load the holder onto the plate and locate it against a known stop, load the offsets from the last time it was setup. And you are ready to run. (On most CNC controls you can download the offsets to a PC or load the offset data in a program that is after the M30 end of program) simply run the stored offset program to load the tool data.

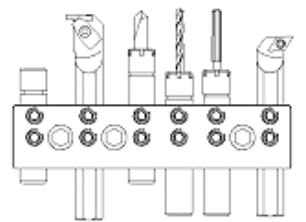
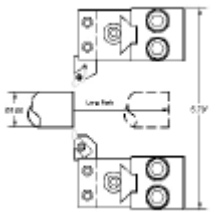
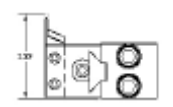
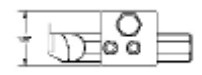
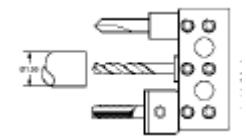
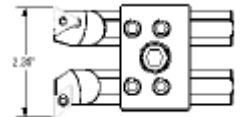
This method of setup may seem expensive (saving tools on the shelf) but let us evaluate these numbers:

- 1 eight position holder = \$314.00
- 6 tools at \$150.00 each = \$900.00
- Total tool cost = \$1214.00

If your setup labor rate is \$80.00 hour and a new setup takes 2.5 hours typical setup cost is \$200.00  
The next setup should take 10 minutes to load the new tool bar and run offset section of program.  
Saving you \$190.00 per setup. Pay back is achieved at 6.4 setups. The more complex the setup the faster the payback time. If a 6 position holder is used payback is even faster (lower holder cost).

This example can be used as a basis for your payback time.

\*All machines referenced are trademarks of their respective manufacturers.



**Call Us Today For All Of Your Machine Tool Needs!**