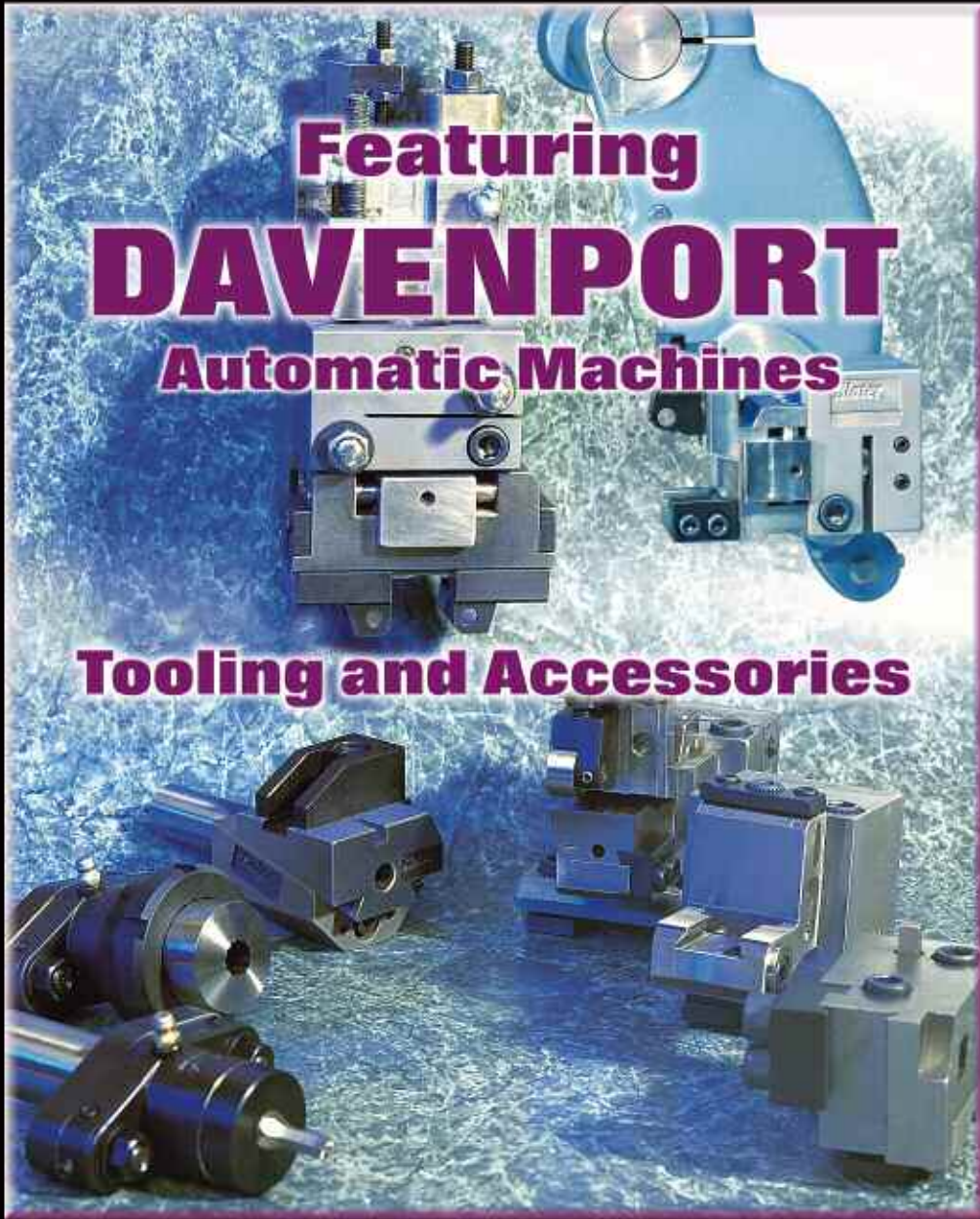


Order Direct From The Manufacturer



# Tooling Catalog



Precision  
Tool  
Holders

Circular  
Forming

Dovetail  
Forming

Flat  
Forming

Knurling

Recessing

Shaving

Skiving

# Order: 586-465-5000

Fax: 586-465-3030 • Mon.-Fri. 8a.m. till 5 p.m. EST

**A**t Slater Tools, our Primary Focus is to design, manufacture and deliver the finest, most competitive tools for the turning industry. We will continue doing this by combining qualified dedicated people with state of the art technology. Our service and quality is the best! From the moment you call us - Our Goal Is To Please. Our courteous sales staff is trained to answer your questions and to assist you in your tooling requirements.



Built For Speed

Accuracy

#### Order Factory Direct

8 a.m. to 5 p.m. EST. Monday thru Friday. Submit by fax 24 hours a day.  
Stock orders placed before 5 p.m. qualify for shipment that same day.

#### Credit / Payment Terms

Same day shipping available for all approved credit. Call for faxable credit forms.  
All sales subject to terms and conditions of Slater Tools. Open accounts are net 30 days or C.O.D.

For your convenience Slater Tools accepts:  
Visa, MasterCard, American Express and various purchase cards.



#### Replacement Parts

Available from stock for immediate delivery.

#### Factory Repairs

Price quotes and delivery time will be submitted for your approval.

#### Return Policy

Full credit for all unused merchandise returned within 30 days of invoiced date.  
All returns require a return goods authorization number.

#### Web Site:

<http://www.slatertools.com>

#### E-Mail

[direct@slatertools.com](mailto:direct@slatertools.com)

Efficiency

Order: **586-465-5000**  
Fax: **586-465-3030**



# Table Of Contents

	Page
<b>first position [“A”] front slide</b> <i>Forming • Skiving</i> .....	2
<b>second position [“B”] rear slide</b> <i>Forming • Knurling • Shaving • Skiving</i> .....	3
<b>third position [“C”]</b> <i>Knurling • Shaving • Skiving</i> .....	4
<b>machine accessories</b> <i>Slater Swing Arm • Slater Vertical Slide</i> .....	5
<b>fourth position [“D”]</b> <i>Circular Forming • Dovetail Forming • Flat Forming</i> <i>Knurling • Shaving • Skiving</i> .....	6-7
<b>turret mount</b> <i>Boring • Recessing • Rotary Broaching</i> .....	8
<b>tool holder mounting blocks</b> <i>Knurling • Shaving • Skiving</i> .....	9
<b>technical/engineering data</b>	
<i>Forming</i> .....	12-13
<i>Knurling</i> .....	14-15
<i>Recessing</i> .....	16-18
<i>Skiving</i> .....	19
<i>Shaving</i> .....	20-27



Order: **586-465-5000**  
Fax: **586-465-3030**

Order direct from the manufacturer

Order:

**586-465-5000**

Fax:

**586-465-3030**

e-mail: [direct@slatertools.com](mailto:direct@slatertools.com)

# first position ["A"] front slide



## Adjustable Forming Dovetail Tool Holder

*Direct Mount*

**For use with 5/8" or 7/8" Model "B" Davenport**

Forming dovetail toolholders use dovetail-shape tooling. Tool sharpening is quick and will not affect tool profile.

**Order #  
FDT-7530**

Dovetail Size = 5/8"



## Forming Dovetail Blanks

*Hardened and Ground*

More information regarding material and dimensions on blanks available. Refer to page 25.



## Skiving Dovetail Tool Holder

*Shown with Mounting Block*

**For use with 5/8" or 7/8" Model "B" Davenport**

Skiving dovetail holders are used with dovetail tooling to obtain exceptionally smooth finishes.

**Order #  
SDH-0110**      **Mounting Block #  
STR-7110**

Capacity = 3/4"

Mounting Diameter = 1"

Dovetail Size = 5/8"



## Skiving Dovetail Blanks

*Hardened and Ground*

Conversion for shaving blanks information on page 31.



## Forming Circular Blanks

*Pin-Type - Hardened and Ground*

Forming circular blanks are suited for heavy roughing cuts. The configuration helps to dissipate heat from the cutting edge. Refer to page 25 for more information.

### FOR TECHNICAL DATA ON ALL TOOL HOLDERS AND BLOCKS REFER TO TABLE OF CONTENTS

#### Shaving with Slater Tools

**Size Control** Shaving guarantees tolerances of +/- .0005. The head of shave tool holder floats on the work piece, this action compensates for machine index errors and loose spindles. All diameters that are shaved together are concentric with each other even if formed separately in different positions. These are errors which the forming operation cannot overcome. The machine is up-dated . . . given new life. It is possible to make or quote jobs once beyond capability of machine.

**Quick Tool Changes** Loose jaw permits easy tool removal. When setting the holder there is no hunting for center, reposition tool flush with face of holder and lock. The tangent point of the roll will be in line with face of holder within .001.

**Finish** .006/.010 stock removal in shaving operation improves finish and increases sales potential . . . this could eliminate a secondary grind operation where grinding was for size control only. Holder would pay for itself in a short time.

**Flexibility of Tooling** Round shank gives a wide range of application. It mounts on various automatics, hand screw machines or turret lathes. Taper is removed quickly and easily. There are three roll holder stations, and four styles of roller back rests. Outer two stations permit any two independently adjustable roller back rests to be used side by side on the same holder.

**Ruggedness** Large diameter pins widely spaced, positioned on both sides of heavy duty spring solidly supports tool on widest shaving cuts and shoulder shaving. Deep shoulder shaving requires use of extra stop nut to prevent tool from digging in.

**Versatility** It is two holders in one. Body and shank can be locked together to use as a skive tool holder as shown in the technical data regarding shaving.

**Longer Machine Life** Since holder must go to center of spindle or beyond, there is no need to set positive stop on slide. Save on set-up time, and reduce cost of maintenance repair parts such as cams, cam rolls and pins.

**2**

Order: **586-465-5000**

Fax: **586-465-3030**

**SLATER TOOLS**™

Order direct from the manufacturer

Order: **586-465-5000**

Fax: **586-465-3030**

e-mail: [direct@slatertools.com](mailto:direct@slatertools.com)

# second position ["B"] rear slide



## Adjustable Forming Dovetail Tool Holder

*Direct Mount*

For use with 5/8" or 7/8" Model "B" Davenport  
Forming dovetail toolholders use dovetail-shape tooling. Tool sharpening is quick and will not affect tool profile.

Order # **FDT-7535**

Dovetail Size = 5/8"



## Skiving Dovetail Tool Holder

*Shown with Mounting Block*

For use with 5/8" or 7/8" Model "B" Davenport  
Skiving dovetail holders are used with dovetail tooling to obtain exceptionally smooth finishes.

Order # **SDH-0110** Mounting Block # **STR-7110**

Capacity = 3/4"  
Dovetail Size = 5/8"  
Mounting Diameter = 1"



## Shaving Dovetail Tool Holder

*Round Shank Type*

For use with 5/8" Model "B" Davenport

Order # **SDT-7120** Mounting Block # **STB-7110**

Capacity = 0" to 5/8"

Dovetail Size = 1/2"  
Shank Diameter = 1"



## Shaving Dovetail Tool Holder

*Round Shank Type*

For use with 5/8" or 7/8" Model "B" Davenport

Order # **SDT-7125** Mounting Block # **STB-7110**

Capacity = 1/4" to 7/8"

Dovetail Size = 1/2"  
Shank Diameter = 1"



## Knurling Tool Holder

*Round Shank Type*

For use with 5/8" or 7/8" Model "B" Davenport

Order # **KTC-8420** Mounting Block # **KTB-7119**

Capacity = 1/8" to 7/8"  
Shank Diameter = 1"



### FOR TECHNICAL DATA ON ALL TOOL HOLDERS AND BLOCKS REFER TO TABLE OF CONTENTS

**Forming with Slater Tools** Keep in mind every job has its own unique conditions, and each condition calls for a different type of form tool. To form at the tools full potential you need to familiarize yourself with several individual features of the application -shape of work, width and depth of cut, for rough forming or finishing operations, location of toolholder in relation to other tools in the set-up, type of material, speeds and feeds at which the work is done.

**Circular** The circular form toolholders are especially suited for heavy roughing cuts. Highly efficient due to the ability to resharpen on the top - up to 270° of its circumference.

**Dovetail** This vertical toolholder can be used with either a narrow or wide tool for roughing or finishing cuts. Most commonly used for straight shoulder work where a clearance angle has been ground on the tool. Generally popular because it adapts to several positions on the machine producing a variety of work.

**Flat** Most useful for simple forming, grooving, facing, necking, and on work which does not require grinding a profile on the tool. Holds a clear advantage where a dovetail or circular toolholder would be less practical.



Order: **586-465-5000**

Fax: **586-465-3030**

**3**

Order direct from the manufacturer

Order:

**586-465-5000**

Fax:

**586-465-3030**

e-mail: [direct@slatertools.com](mailto:direct@slatertools.com)

# third position ["C"]



## Knurling Tool Holder

*Round Shank Type (Slater Swing Arm)*  
For use with 5/8" or 7/8" Model "B" Davenport

**Order # KTC-8420**      **Mounting Block # KTB-7119**

Capacity = 1/8" to 7/8"  
Shank Diameter = 1"



## Knurling Tool Holder

*Index Plate Mounting Type*  
For use with 5/8" or 7/8" Model "B" Davenport

**Order # KTC-7210**

Capacity = 1/8" to 7/8"



## Shaving Dovetail Tool Holder

*Round Shank Type*  
For use with 5/8" Model "B" Davenport

**Order # SDT-7120**      **Mounting Block # STB-7510**

**Capacity = 0" to 5/8"**

Dovetail Size = 1/2"  
Shank Diameter = 1"



## Shaving Dovetail Tool Holder

*Round Shank Type*  
For use with 5/8" or 7/8" Model "B" Davenport

**Order # SDT-7125**      **Mounting Block # STB-7510**

**Capacity = 1/4" to 7/8"**

Dovetail Size = 1/2"  
Shank Diameter = 1"



## Shaving Dovetail Tool Holder

*Index Plate Mounting Type*  
For use with 5/8" Model "B" Davenport

**Order # SDT-7720**

**Capacity = 0" to 5/8"**

Dovetail Size = 1/2"



## Shaving Dovetail Tool Holder

*Index Plate Mounting Type*  
For use with 5/8" or 7/8" Model "B" Davenport

**Order # SDT-7725**

**Capacity = 1/4" to 7/8"**

Dovetail Size = 1/2"



## Skiving Dovetail Tool Holder

*(Slater Swing Arm)*  
For use with 5/8" or 7/8" Model "B" Davenport  
Skiving dovetail holders obtain exceptionally smooth finishes.

**Order # SDH-0110**      **Mounting Block # STR-7510**

Capacity = 3/4"  
Dovetail Size = 5/8"  
Mounting Diameter = 1"



Order direct from the manufacturer

Order:

**586-465-5000**

Fax:

**586-465-3030**

e-mail: [direct@slatertools.com](mailto:direct@slatertools.com)

# machine accessories



## Slater Swing Arm

*Third "C" Position*

For use with 5/8" or 7/8" Model "B" Davenport  
Suited for holder blocks in third position  
allowing operator versatility of holder use.

Order #

**SSA-7103**



Tooling options available for Third "C" Position:

Knurling  
Mounting Block#  
**KTB-7119**

Shaving  
Mounting Block#  
**STB-7510**

Skiving  
Mounting Block#  
**STR-7510**



## Slater Universal Vertical Slide

*Fourth "D" Position*

For use with 5/8" or 7/8" Model "B" Davenport

Order #

**SVS-7340**

Update your Davenport with Slater Tools universal type slide. It will give you a new approach to tooling, eliminating the need for special tooling or semi-standard setups. No alterations are required for mounting. No adjustments of other stations are needed to work with a stationary 4th position slide.

It will enable you to save time on initial job setups, on minor adjustments during job runs, and when changing from one job to another. It accepts up to six various toolholders.

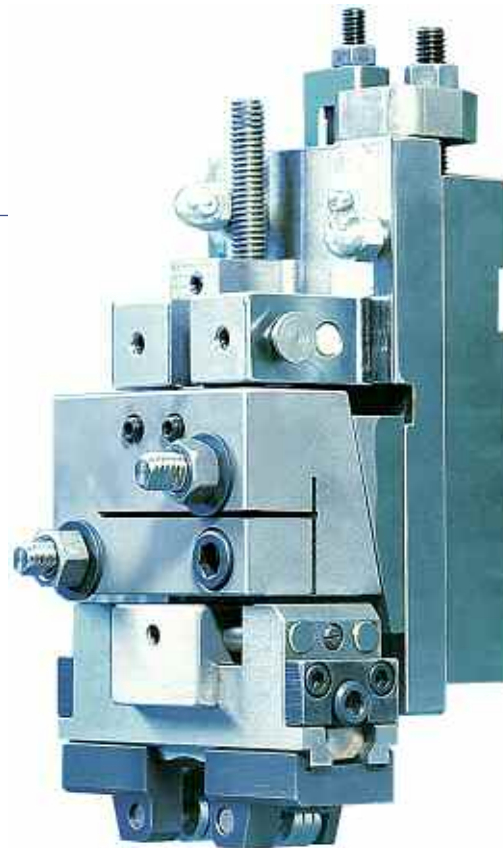
Tooling options available for Fourth "D" Position:

**Circular, Dovetail, and Flat Forming tool holders mount direct to Slater Vertical Slide**

Knurling  
Mounting Block#  
**STB-7610**

Shaving  
Mounting Block#  
**STB-7610**

Skiving  
Mounting Block#  
**STR-7610**



Shown with Knurl Tool Holder



Order: **586-465-5000**

Fax: **586-465-3030**

**5**

Order direct from the manufacturer

Order:

**586-465-5000**

Fax:

**586-465-3030**

e-mail: [direct@slatertools.com](mailto:direct@slatertools.com)

# fourth position ["D"]



## Forming Circular Tool Holder

*Slater Vertical Slide*

For use with 5/8" or 7/8" Model "B" Davenport

Forming circular toolholders use circular tooling which is used for heavy forming cuts.

Order #

**FCT-7920**

Circular Tool = 2" Diameter



## Forming Circular Blanks

*Pin-Type - Hardened and Ground*

Forming circular blanks are suited for heavy roughing cuts. The configuration helps to dissipate heat from the cutting edge. Refer to page 25 for more information.



## Forming Dovetail Tool Holder

*Slater Vertical Slide*

For use with 5/8" or 7/8" Model "B" Davenport

Forming dovetail toolholders use dovetail-shape tooling. Tool sharpening is quick and will not affect tool profile.

Order #

**FDT-7230**

Dovetail = 5/8"



## Forming Dovetail Blanks

*Hardened and Ground*

More information regarding material and dimensions on blanks available. Refer to page 25.



## Flat Forming Tool Holder

*Slater Vertical Slide*

For use with 5/8" or 7/8" Model "B" Davenport

Forming flat toolholders use tool bit tooling.

Order #

**FFT-7850**

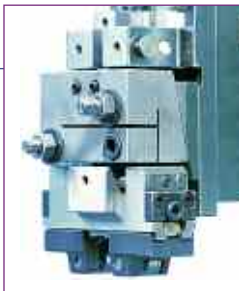
Tool Bit Size = 1/2" square



## Turning Tool Bits

*Hardened and Ground*

More information regarding material and dimensions on tool bits available. Refer to page 25.



## Knurling Tool Holder

*Round Shank Type (Slater Vertical Slide)*

For use with 5/8" or 7/8" Model "B" Davenport

Order #

**KTC-7410**

Capacity = 1/8" to 7/8"  
Shank Diameter = 1"

Mounting Block #

**STB-7610**



## Knurling Tool Holder

*Index Plate Mounting Type*

For use with 5/8" or 7/8" Model "B" Davenport

Order #

**KTC-7210**

Capacity = 1/8" to 7/8"





### Shaving Dovetail Tool Holder

*Index Plate Mounting Type*  
For use with 5/8" Model "B" Davenport

**Order #**  
**SDT-7720**

**Capacity = 0" to 5/8"**  
Dovetail Size = 1/2"



### Shaving Dovetail Tool Holder

*Index Plate Mounting Type*  
For use with 5/8" or 7/8" Model "B" Davenport

**Order #**  
**SDT-7725**

**Capacity = 1/4" to 7/8"**  
Dovetail Size = 1/2"



### Shaving Dovetail Tool Holder

*Round Shank Type (Slater Vertical Slide)*  
For use with 5/8" Model "B" Davenport

**Order #** **SDT-7120**      **Mounting Block #** **STB-7610**

**Capacity = 0" to 5/8"**  
Dovetail Size = 1/2"  
Shank Diameter = 1"



### Shaving Dovetail Tool Holder

*Round Shank Type (Slater Vertical Slide)*  
For use with 5/8" or 7/8" Model "B" Davenport

**Order #** **SDT-7125**      **Mounting Block #** **STB-7610**

**Capacity = 1/4" to 7/8"**  
Dovetail Size = 1/2"  
Shank Diameter = 1"



### Skiving Dovetail Tool Holder

*Round Shank Type (Slater Vertical Slide)*  
For use with 5/8" or 7/8" Model "B" Davenport  
Skiving dovetail holders obtain exceptionally smooth finishes.

**Order #** **SDH-0110**      **Mounting Block #** **STR-7610**

Capacity = 3/4"  
Dovetail Size = 5/8"  
Mounting Diameter = 1"



### Shaving Dovetail Blanks

*Hardened and Ground*  
Shaving blanks information can be found on page 35.



### Skiving Dovetail Blanks

*Hardened and Ground*  
Conversion for skiving blanks information on page 31.

## FOR TECHNICAL DATA ON ALL TOOL HOLDERS AND BLOCKS REFER TO TABLE OF CONTENTS

**Skiving with Slater Tools.** Skiving tool holders from Slater Tools are for single & multiple spindle automatics and turret lathes. You can now make your toughest cuts within seconds. Here are a few tips to keep in mind before beginning your application.

**Front rake angle for a high speed steel tool -**  
Start with a 20° angle for steels (Max. 30°).  
Start with a 15° angle for non-ferrous materials (Max. 25°).  
Feed rates start at double form tool feed rate.

**Front rake angle for a carbide tool -**  
Start with a 10° angle for steels (Max. 30°).  
Start with a 15° angle for non-ferrous (Max. 25°).  
Feed rates start at triple form tool feed rate.



**Order: 586-465-5000**  
**Fax: 586-465-3030**



Order direct from the manufacturer

Order: **586-465-5000**

Fax: **586-465-3030**

e-mail: [direct@slatertools.com](mailto:direct@slatertools.com)

# turret mount



## Boring Bar Tool Holder

*Ruggedly Built For Heavy Cuts*  
For use with 5/8" or 7/8" Model "B" Davenport  
Used to hold boring bars in place while producing close tolerance bores. High precision head designed for accurate pre-set tooling and production work.  
All working parts hardened and ground.

Order # **BBH-0230**

Tool Diameter = 5/8"  
Shank Diameter = 3/4"



## Recess Tool Holder

*Maintain Precision Limits*  
For use with 5/8" or 7/8" Model "B" Davenport  
Holder equipped with draw bar that holds the top slide of the holder in place to activate the upward cutting of a recess tool.

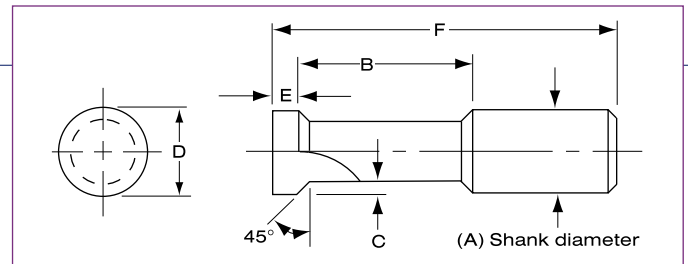
Order # **RTH-7910** Draw Bar # **RTD-7100**

Tool Diameter = 3/8"  
Shank Diameter = 3/4"

## Recess Tool Blanks

Used to make internal grooves, undercuts and chamfers.  
Pre-notched at 90°, and centers provided at both ends.  
Hardened and Ground - Ready To Use.

A	B	C	D	E	F
3/8	3/4	.050	.310	.100	1-1/2
3/8	3/4	.060	.380	.120	1-1/2



## Rotary Broach Tool Holder

*Slater Tools Provide A Complete Line Of Tools and Holders*

For use with 5/8" or 7/8" Model "B" Davenport

### Broaching Theory

Welcome to the world of rotary broaching, a Slater Tools exclusive, fast, and accurate method of producing internal and external polygon forms on the end of a work piece while the machine spindle is rotating. Utilizing a free broach rotation and shear angle geometry results in less thrust force than conventional broaching. The Rotary Broaching Toolholder is used on any CNC or manual turning, milling, drilling or screw machine, and can be mounted in any position on your machine.

### Holder Use and Operation

In a turning or screw machine, the holder is stationary while its internal live spindle, along with the end cutting broach tool, rotates with and is driven by the workpiece rotation. While rotating with the work spindle, the end cutting broach tool's pressure and contact points are continually changing on the workpiece (a wobbling-type action) making broached forms easier to produce.

### Support Data

Maintenance and trouble-shooting data are shipped with each holder order.

### Sharpening of Broaches

Broach sharpening is available by Slater Tools, with same day shipping.

### Broach Depth

The recommended maximum broach depth is 1.5 x smallest dimension of form. When a broach depth exceeds the recommended maximum, Slater Tools offers an attachment for multi-spindle machines. This attachment is synchronized with the spindle via a splined shaft, driven by pick off gears, and mounts directly to the main tool endslide of a screw machine.

### Broach Toolholders

Slater Tools offers various holder sizes, available with straight and morse taper shanks.

### Broach Blanks

All internal blanks have centers provided. External and internal blanks are hardened and ground. A design and manufacturing guide is sent with each Broach Blank order.

### Replacement Parts or Factory Repairs

Replacement parts for Slater Tool's Rotary Broaching Tool Holders are available from stock for immediate delivery. Same day shipping for factory repairs. Price quotes and delivery time will be submitted for your consideration and authorization.

**8**

Order: **586-465-5000**

Fax: **586-465-3030**



Order direct from the manufacturer

Order:

**586-465-5000**

Fax:

**586-465-3030**

e-mail: [direct@slatertools.com](mailto:direct@slatertools.com)

# tool holder blocks



## Knurling Tool Holder Block

Second "B" Position  
For use with 5/8" or 7/8" Model "B" Davenport

Order #  
**KTB-7119**  
1" Bore



## Knurling Tool Holder Block

Third "C" Position (Slater Swing Arm)  
For use with 5/8" or 7/8" Model "B" Davenport

Order #  
**KTB-7519**  
1" Bore



## Shaving Tool Holder Block

Second "B" Position  
For use with 5/8" or 7/8" Model "B" Davenport

Order #  
**STB-7110**  
1" Bore



## Skiving Tool Holder Riser

First "A" and Second "B" Position  
For use with 5/8" or 7/8" Model "B" Davenport

Order #  
**STR-7110**  
1" Bore



## Shaving Tool Holder Block

Third "C" Position (Slater Swing Arm)  
For use with 5/8" or 7/8" Model "B" Davenport

Order #  
**STB-7510**  
1" Bore



## Skiving Tool Holder Riser

Third "C" Position (Slater Swing Arm)  
For use with 5/8" or 7/8" Model "B" Davenport

Order #  
**STR-7510**  
1" Bore



## Shaving Tool Holder Block

Fourth "D" Position (Slater Vertical Slide)  
For use with 5/8" or 7/8" Model "B" Davenport

Order #  
**STB-7610**  
1" Bore



## Skiving Tool Holder Riser

Fourth "D" Position (Slater Vertical Slide)  
For use with 5/8" or 7/8" Model "B" Davenport

Order #  
**STR-7610**  
1" Bore



Order: **586-465-5000**


Fax: **586-465-3030**

# Notes

Area with horizontal dotted lines for taking notes.



---



# Technical / Engineering Data



Order: **586-465-5000**  
Fax: **586-465-3030**

**11**

# FORMING

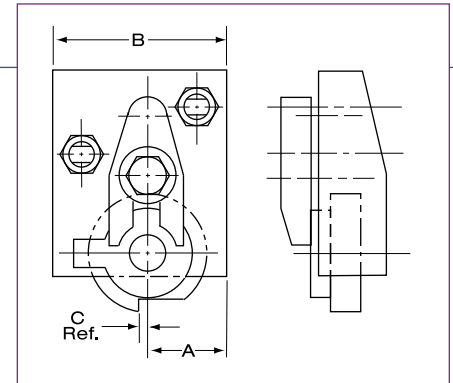
## Forming Circular Tool Holder

Slater Vertical Slide

For use with 5/8" or 7/8" Model "B" Davenport

Forming circular toolholders use circular tooling which is used for heavy forming cuts.

Order # **FCT-7920**



Machine Model	Position	Circular Tool Size	A	B	C
Model "B"	4th / "D"	2" Max.	1-1/2	3	1/8

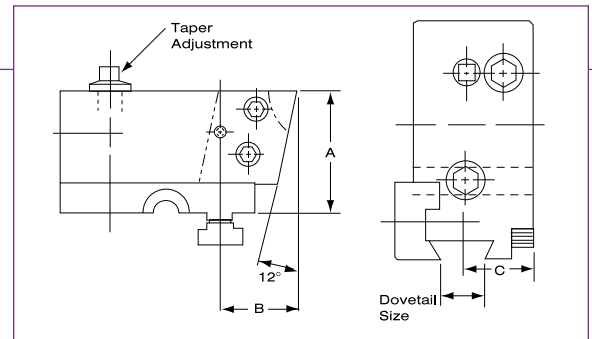
## Forming Dovetail Tool Holder

Direct Mount

For use with 5/8" or 7/8" Model "B" Davenport

Forming dovetail toolholders use dovetail-shape tooling. Tool sharpening is quick and will not affect tool profile.

Order # **FDT-7530**



Machine Model	Position	Dovetail Size	A	B	C
Model "B"	1st / "A"	5/8	1.825	1-3/16	3/4

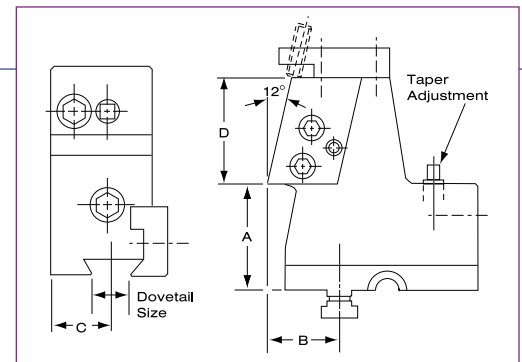
## Forming Dovetail Tool Holder

Direct Mount

For use with 5/8" or 7/8" Model "B" Davenport

Forming dovetail toolholders use dovetail-shape tooling. Tool sharpening is quick and will not affect tool profile.

Order # **FDT-7535**



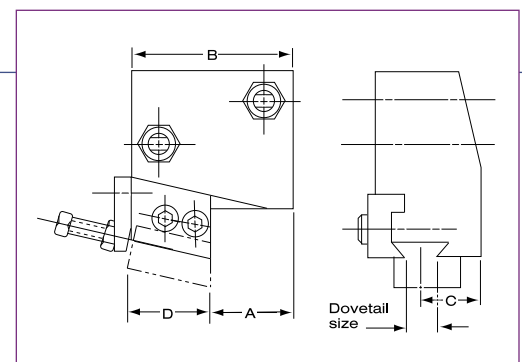
Machine Model	Position	Dovetail Size	A	B	C	D
Model "B"	2nd / "B"	5/8	1.825	1-3/16	3/4	1-13/16

## Forming Dovetail Tool Holder

Direct Mount to Slater Vertical Slide

For use with 5/8" or 7/8" Model "B" Davenport

Order # **FDT-7230**



Machine Model	Position	Dovetail Size	A	B	C	D
Model "B"	4th / "D"	5/8	1-1/2	3	1-11/64	1-1/2

## Flat Forming Tool Holder

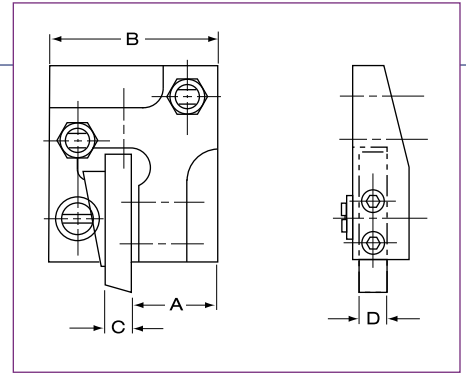
Slater Vertical Slide

For use with 5/8" or 7/8" Model "B" Davenport

Forming flat toolholders use tool bit tooling. there are two styles.

Order #

**FFT-7850**

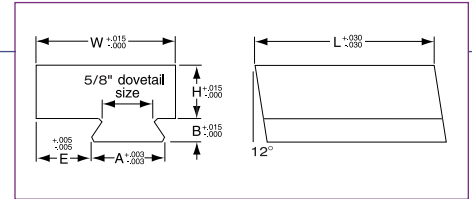


Machine Model	Position	Tool Bit Size	A	B	C
Model "B"	4th/"D"	1/2 x 1/2 x 2	1-1/2	3	1/2

## Forming Dovetail Blanks

Hardened and Ground

H	W	L	A	B	E	M-42	T-15	76 PM
1	1	1-3/4	.951	.297	1/32	<b>FDB-7330</b>	<b>FDB-7630</b>	<b>FDB-7830</b>
1	1-1/4	1-3/4	.951	.297	9/32	<b>FDB-7335</b>	<b>FDB-7635</b>	<b>FDB-7835</b>
1	1-1/2	1-3/4	.951	.297	17/32	<b>FDB-7339</b>	<b>FDB-7639</b>	<b>FDB-7839</b>



## Forming Circular Blanks

Pin Type - Hardened and Ground [2" Dia. • 9/16" Center Hole]



**M-42**

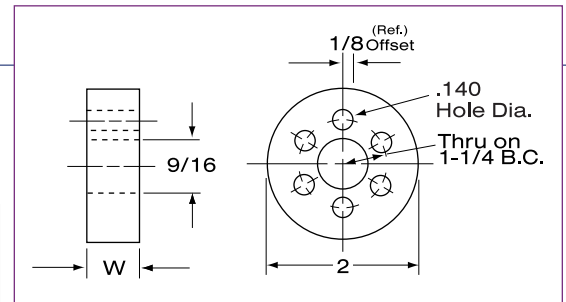
**T-15 PM**

**76 PM**

Width	Order No.
3/8	<b>FCB-7422</b>
5/8	<b>FCB-7425</b>
7/8	<b>FCB-7427</b>

Width	Order No.
3/8	<b>FCB-7722</b>
5/8	<b>FCB-7725</b>
7/8	<b>FCB-7727</b>

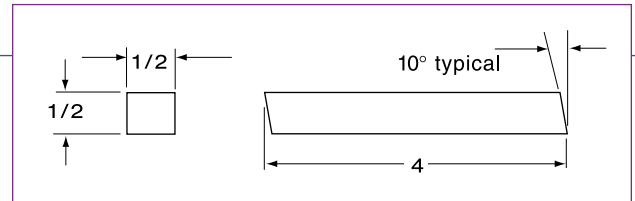
Width	Order No.
3/8	<b>FCB-7922</b>
5/8	<b>FCB-7925</b>
7/8	<b>FCB-7927</b>



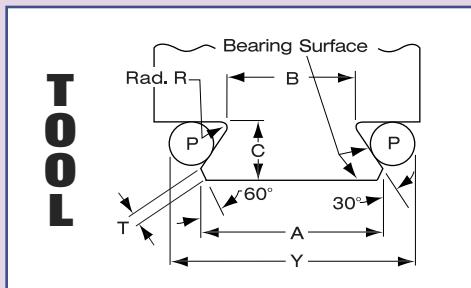
## Turning Tool Bits

Hardened and Ground

Used for single point turning.



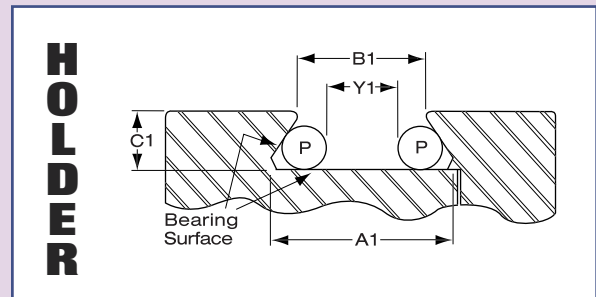
## Tool & Tool Holder Dimensions for Form & Shave Tool Holder



Size	B	C	A	Y	P	R	T
1/2	.481	13/64	.715	.993	3/16	1/32	1/32
5/8	.609	19/64	.951	1.292	1/4	1/32	1/16

Constant Factors For 30° angle	
P	D
1/2	.875 .3415
5/8	.250 .6830

Dovetail Size	Y=B+D	Y1=A1-D
Sharp Corner Dimension	A=B+CF	A1=B1+C/F
Dimension for Dovetail of Roll	B=A-CF	B1=A1-C/F
Formula Aids for Dovetail	D=P (COTAN. $\frac{90^\circ\text{-ANGLE}}{2}$ ) +P	
	F=2 TAN. ANGLE=1.1547	



Size	B1	C1	A1	Y1
1/2	.500	3/16	.716	.2045
5/8	.625	9/32	.951	.268



Order: **586-465-5000**

Fax: **586-465-3030**

**13**

Order direct from the manufacturer

Order: **586-465-5000**

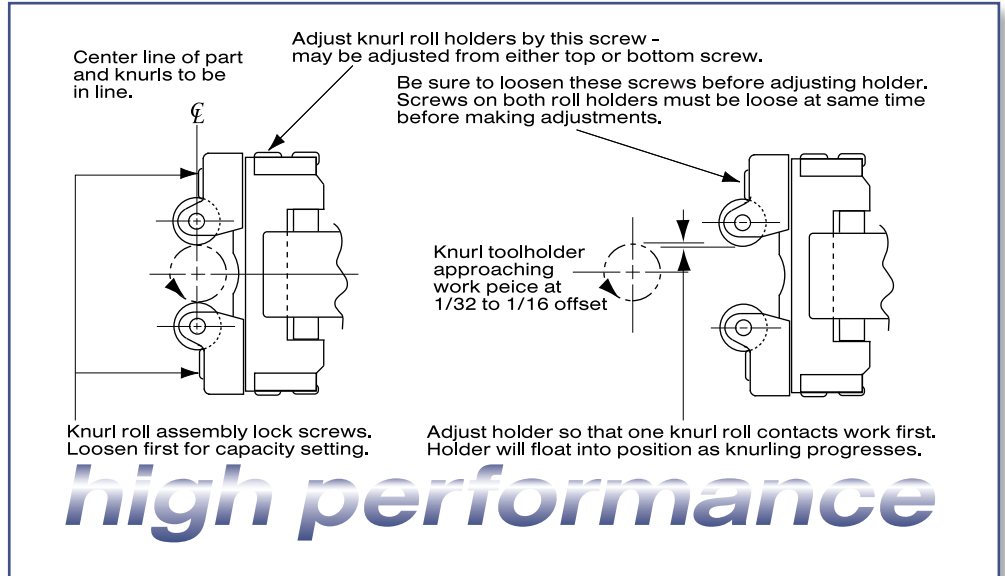
Fax: **586-465-3030**

e-mail: [direct@slatertools.com](mailto:direct@slatertools.com)

# KNURLING

## Accuracy

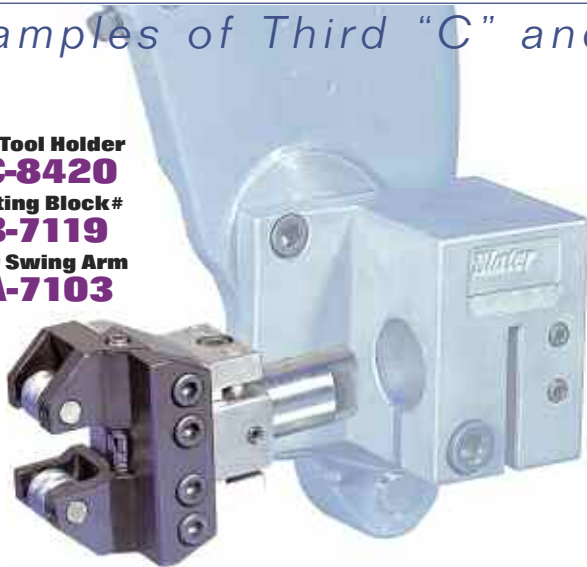
You get precision knurling and burnishing when you use Slater Tools Knurling Toolholders, because you are getting features and production advantages not found in any other tool holders. These knurl tool holders are of the straddle-type, which tangentially feeds to center from the cross slide of the automatic or turret lathe. Adapter blocks allow the holders to fit most makes, models, and size of machines. Holder assemblies are designed to compensate for any slight misalignment with centerline of the spindle. Size control is made easy through simultaneous adjusting of both knurl roll holders. Slater Tools straddle-type knurl holders increase machine life and save on setup time and maintenance costs. No extra expense for tooling, these tool holders use standard, commercially available knurl rolls!



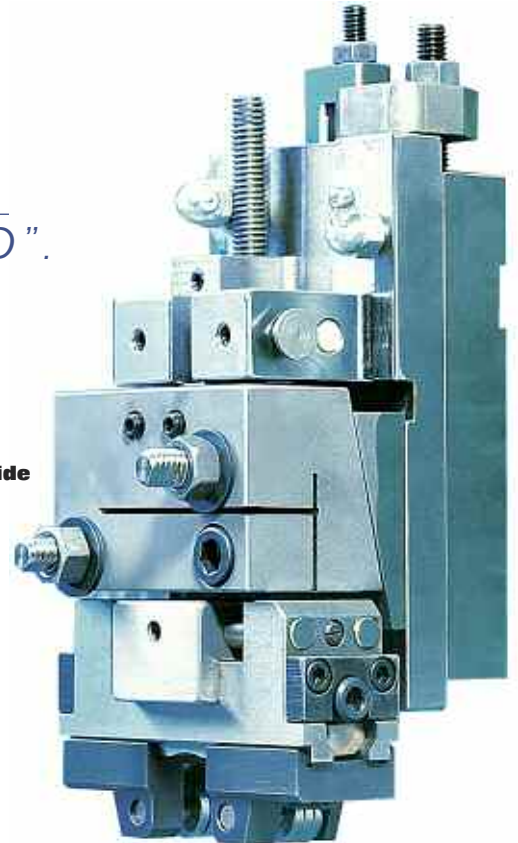
## Slater Swing Arm and Vertical Slide

*Examples of Third "C" and Fourth "D".*

**Knurl Tool Holder**  
**KTC-8420**  
**Mounting Block#**  
**KTB-7119**  
**Slater Swing Arm**  
**SSA-7103**



**Knurl Tool Holder**  
**KTC-7410**  
**Mounting Block#**  
**STB-7610**  
**Slater Vertical Slide**  
**SVS-7340**



**14**

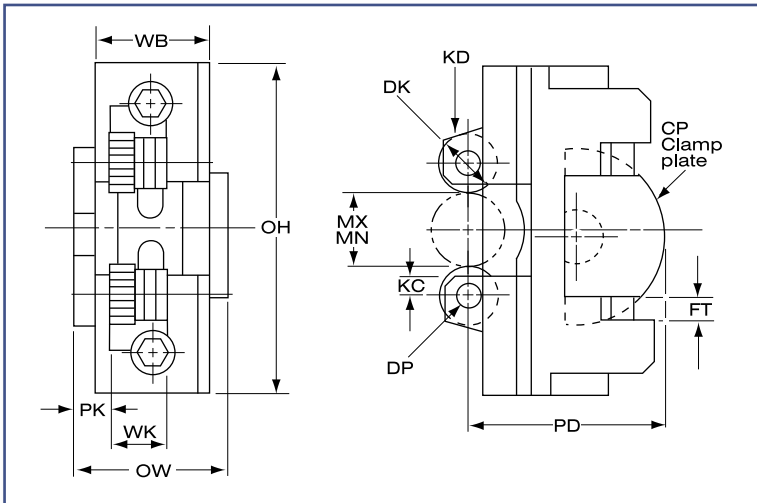
Order: **586-465-5000**  
Fax: **586-465-3030**





## Knurling Tool Holder

### Index Plate Type



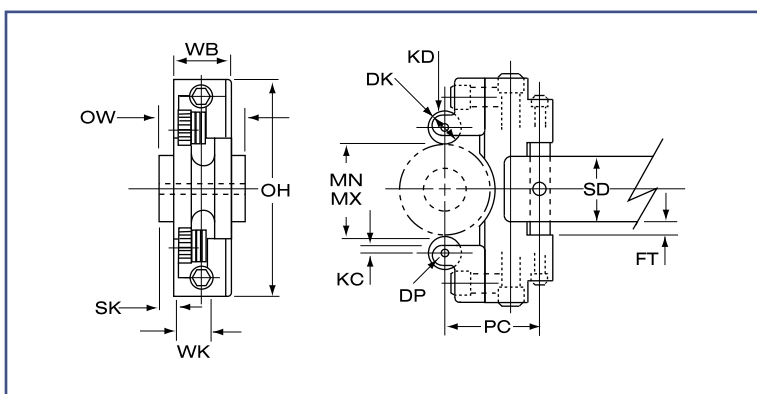
Order Number		<b>KTC-7210</b>
(MX)	Max. Capacity	7/8
(MN)	Min. Capacity	1/8
(OH)	Overall Height	3-3/4
(OW)	Overall Width	1-3/4
(CP)	Clamp Plate Dia.	2.00
(WB)	Width of Body	1-1/4
(WK)	Max. Width of Knurl	5/8
(DK)	Max. Dia. of Knurl	7/8
(KD)	Max. Knurl Dia. w/Max. Stock	3/4
(KC)	Knurl Clearance	7/32
(DP)	Dia. Pin in Knurl	1/4
(PK)	Dist. from Plate to Knurl	13/32
(PD)	Distance to Plate	2-1/4
(FT)	Float Travel	5/32

Cross-slide knurling toolholders are used to make straight, spiral or diamond knurls. Knurl rolls not furnished with holder.



## Knurling Tool Holder

### Shank Type



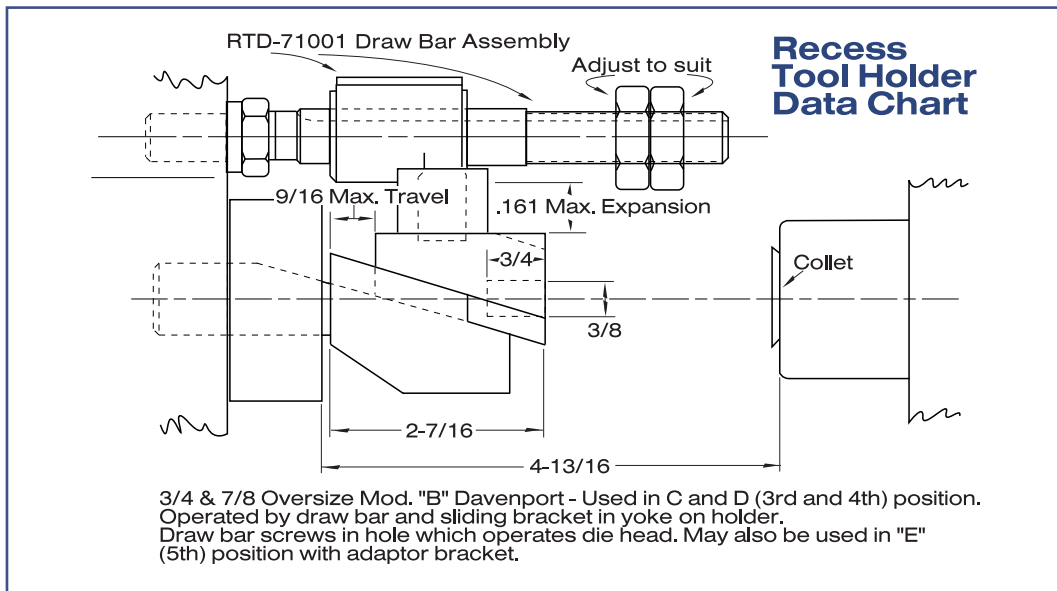
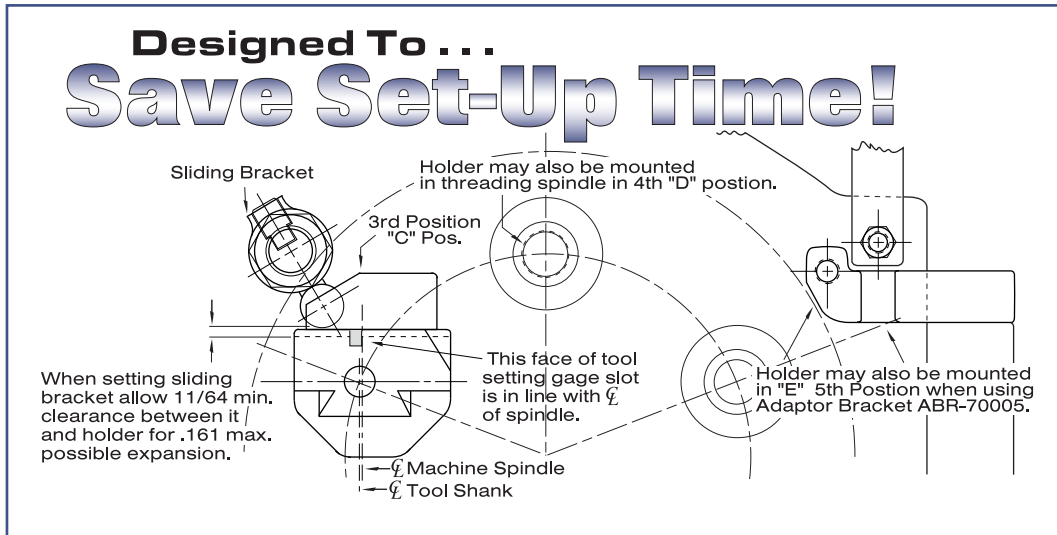
Order Number		<b>KTC-7410</b>
(MX)	Max. Capacity	7/8
(MN)	Min. Capacity	1/8
(OH)	Overall Height	3-3/4
(OW)	Overall Width	1-3/4
(SD)	Shank Diameter	1
(WB)	Width of Body	1-1/4
(WK)	Max. Width of Knurl	5/8
(DK)	Max. Dia. of Knurl	7/8
(KD)	Max. Knurl Dia. w/Max. Stock	3/4
(KC)	Knurl Clearance	7/32
(DP)	Dia. Pin in Knurl	1/4
(SK)	Dist. from Shank to Knurl	13/32
(PC)	Distance to Pin CL	1-13/16
(FT)	Float Travel	5/32

Cross-slide knurling toolholders are used to make straight, spiral or diamond knurls. Knurl rolls not furnished with holder.

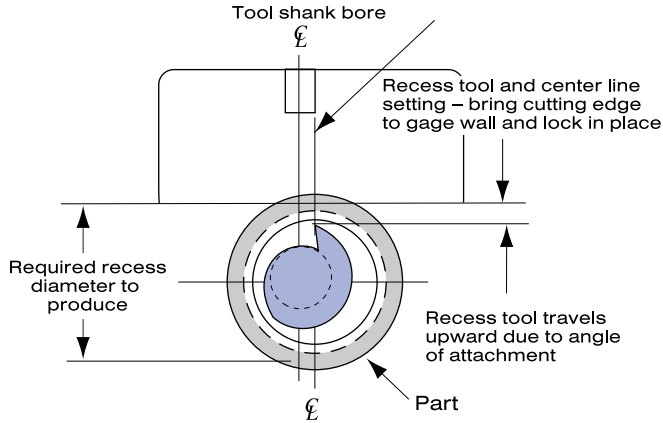
# RECESSING

## Multi-Tasking

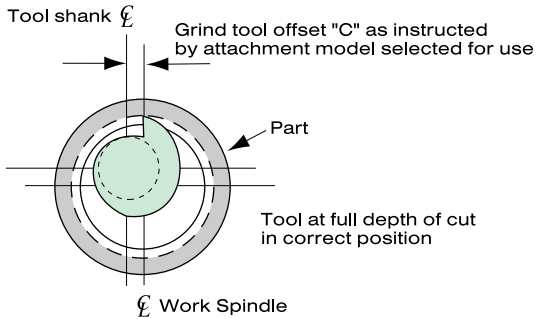
These tool holders are ruggedly built for wide and accurate recessing. Except for the shank, they are hardened and ground throughout. Tapered gib allows accurate adjustment for wear. Round shank type recess tool holders may be used for internal forming, as well as grooving and chamfering. Round shank type recess tool holder may also be used for undercuts which cannot be reached by a standard tool working from the main tool slide. The holder may be actuated in several ways, one by a draw bar anchored to a bracket built on to the cross slide or frame of the machine, or by a stop rod in the holder contacting a turned diameter of the part piece.



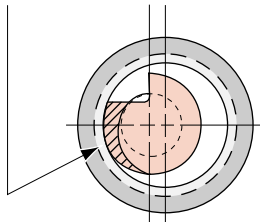
**HOOK RAKE TOOL GEOMETRY**



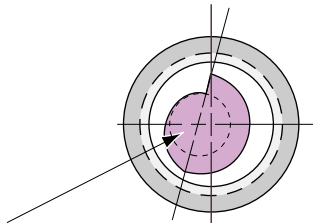
**STANDARD STRAIGHT RAKE TOOL GEOMETRY**



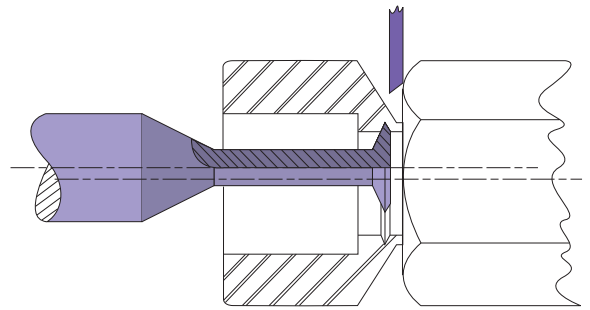
Remove shaded area by hand grinding, tool shank will rub due to lack of clearance



Properly ground tool with cutting edge offset according to size of holder provides peripheral clearance needed on circular tools.



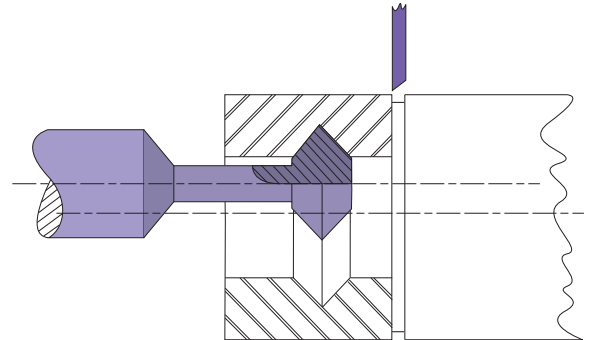
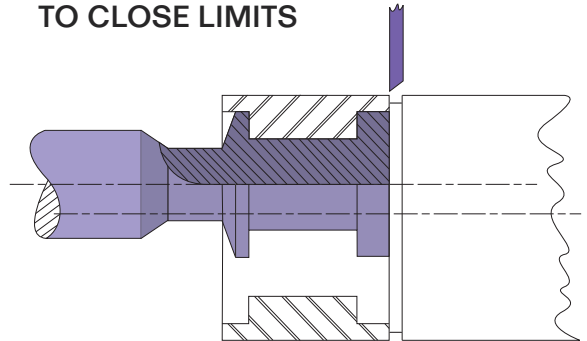
Cutting edge ground to centerline of tool shank when rotated to centerline of work gives negative rake. Suggested on softer materials when negative rake is desired.



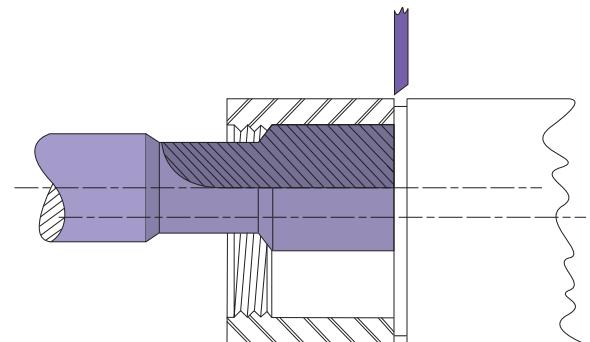
**RECESS CHAMFER BEFORE CUTOFF**

When recessing adjust recess tool from line of cut-off blade to .005 beyond (maximum) .002 to .005 flat on crest of recess tool.

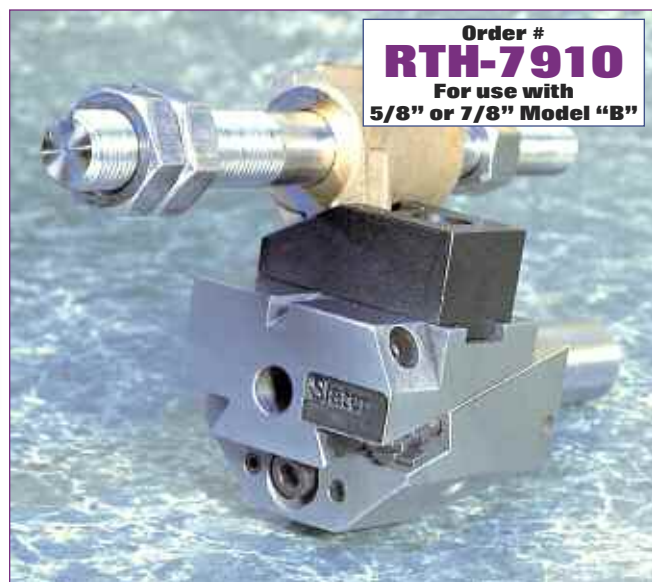
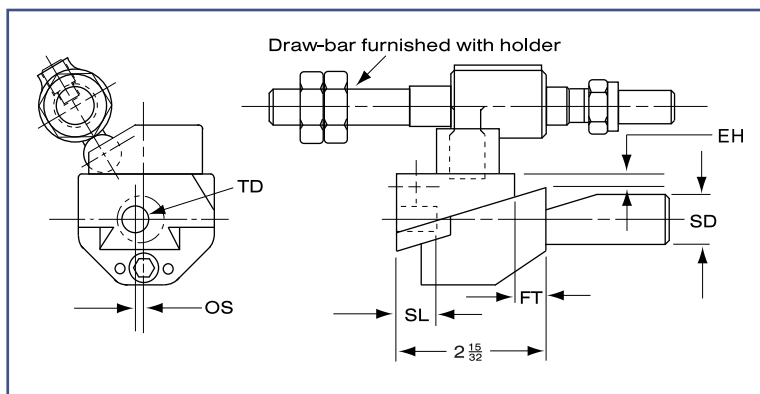
**RECESS & SIZING SHOULDER TO CLOSE LIMITS**



**RECESS "V" GROOVE**



# Recessing Tool Holder



(TD)	Tool Diameter	3/8
(SD)	Shank Diameter	3/4
(OS)	Tool Offset from Shank	.031
(FT)	Forward Travel	.562
(EH)	Expansion Height	.161
(SL)	Shank Length of Tool	3/4

Recess tool draw-bars hold the top slide of the recess holder in place to activate the upward cutting of a recess tool. Holder comes equipped with draw bar. Replacement Order No. **RTD-71001**.

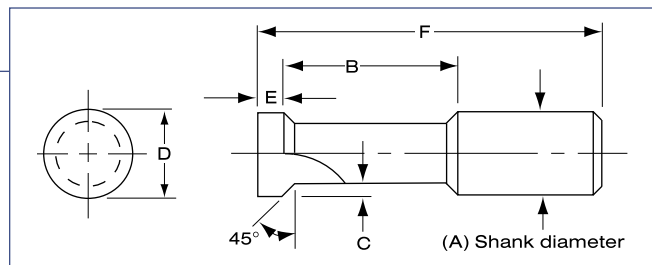
## Recess Tool Blanks

### Hardened and Ready To Use



Used to make internal grooves, undercuts and chamfers. Pre-notched at 90°, and centers provided at both ends.

A	B	C	D	E	F
3/8	3/4	.050	.310	.100	1-1/2
3/8	3/4	.060	.380	.120	1-1/2



### How to set holder after

## Maintenance

### Step 1

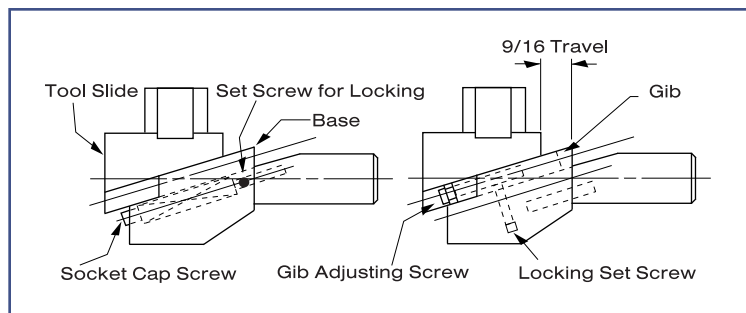
- Assemble tool slide on base with spring and socket head cap screw set to 9/16 travel of tool holder.
- Lock set screw to hold socket head cap screw in place.
- Allow taper gib to be quite loose.

### Step 2

- Compress holder in vise or on an arbor press to 9/16 travel.
- Tighten gib adjusting screw until gib will hold tool slide in maximum travel position.

### Step 3

- Clamp shank of base in vise.
- Loosen gib adjusting screw very slowly until holder snaps open.
- Tighten locking set screw to hold gib adjusting screw in place.
- Holder is ready for use.



**18**

Order: **586-465-5000**  
Fax: **586-465-3030**

**SLATER TOOLS**™

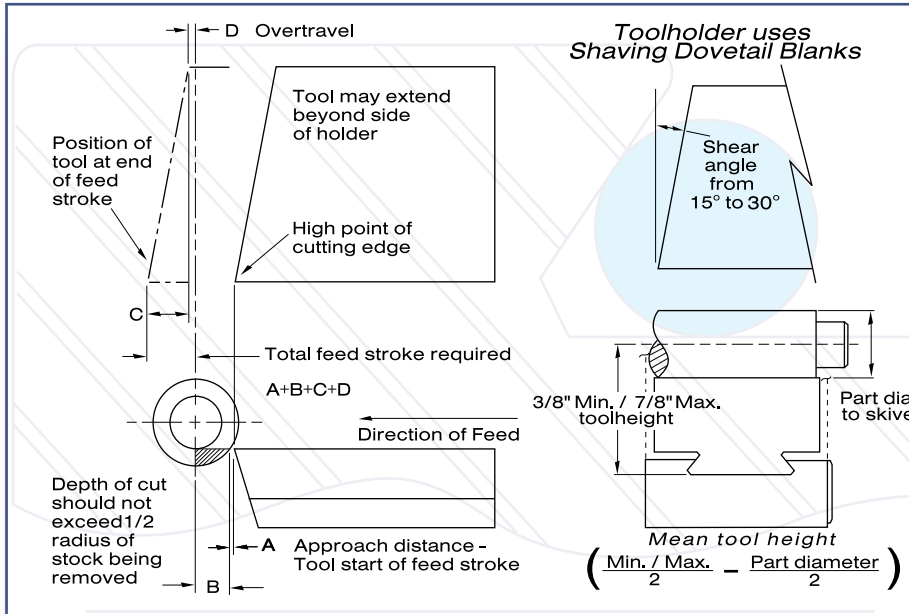
Order direct from the manufacturer

Order: **586-465-5000**

Fax: **586-465-3030**

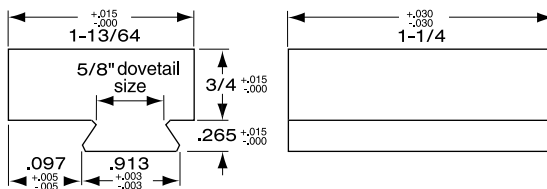
e-mail: [direct@slatertools.com](mailto:direct@slatertools.com)

# SKIVING



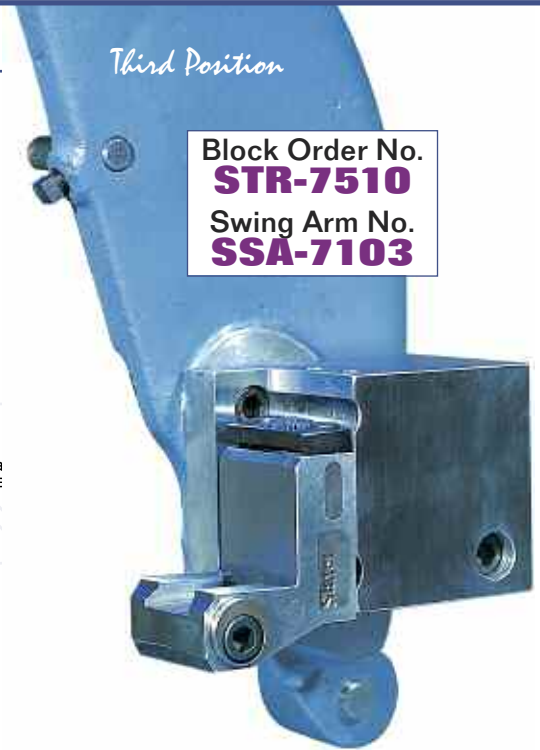
**SHAVING DOVETAIL BLANKS**

- M-42**  
**SDB-0433**
- T 15**  
**SDB-0733**
- 76 PM**  
**SDB-0933**



Third Position

Block Order No. **STR-7510**  
Swing Arm No. **SSA-7103**



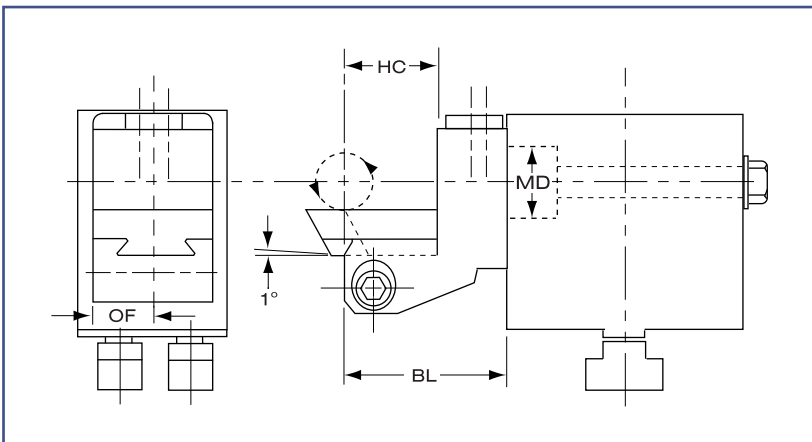
For Use In Fourth "D" Position  
Block Order No. **STR-7610**  
Vertical Slide No. **SVS-7340**

Front rake angle for a high speed steel tool -  
Start with a 20° angle for steels (Max. 30°).  
Start with a 15° angle for non-ferrous materials (Max. 25°).  
Feed rates start at double form tool feed rate.

Front rake angle for a carbide tool -  
Start with a 10° angle for steels (Max. 30°).  
Start with a 15° angle for non-ferrous (Max. 25°).  
Feed rates start at triple form tool feed rate.

## Skiving Dovetail Tool Holder

### Shank Type



Block Order No. **STR-7110**  
First "A" and Second "B" Positions



Order Number	<b>SDH-0110</b>
Max. Capacity	7/8
Min. Capacity	3/8
(MD) Mounting Diameter	1
(BL) Body Length	1-7/8
(DT) Dovetail Size	5/8
(HC) Holder Clearance	1
(OF) Offset	3/4

Skiving dovetail holders are used with dovetail tooling to obtain exceptionally smooth finishes.



Order: **586-465-5000**  
Fax: **586-465-3030**

**19**

## Force 'E' Factor

As a roller contacts the workpiece, forward motion of the cross slide combined with resistance of the float spring creates a diagonal pushing effect against the work piece. The direction of this force, as shown in Figure 1, is along a line passing through the centers of the roll and the work piece.

The diagonal force "E" is an inherent characteristic of all floating, roller-controlled tool holders of this type. At the start of the shaving operation, some sideways force is necessary. As the roller climbs the arc of the work piece toward the vertical center line, more of the force is downward. To visualize the effect consider in Figure 1 a grossly exaggerated condition in which the roll contacts the part at the "w" axis. Angle 'R' would be 90-degrees; all pressure would be sideways. When the cut is complete and the roll lies on the "x" axis, angle "C" becomes perpendicular, and no sideways force exists.

If we are to shave the best accuracy and finish, the holder must be adjusted to keep angle 'R' as small as possible. Doing so calls for use of rolls with most suitable diameter, careful adjustment of holder float height, and leaving only a small amount of stock to be shaved.

**When a shaving tool gives trouble, almost always the fault lies in one of the following items, all of which have an effect on the "Force E" conditions:**

1. Chattering or varying form tools in station ahead of shaving position
2. Tools or rolls not clamped tightly.
3. Cutting edge of shave tool not on tangent line of roller..
4. Shave tool contacting work piece before roller does.
5. Work length, or small diameters, requires auxiliary supporting device.

While it may be possible to accomplish short, stiff parts, Force 'E' becomes a vital factor on long shaved surfaces, or when stock diameter is small. If a fine finish is required, and tolerances are close, it is usually advisable to support the work piece opposite the shave tool in some way. On a multiple-spindle machine, a tool slide roller rest, mounted as shown in Figure 2, is probably simplest.

This, however, raises a problem: As the shaving decreases the work diameter, how can the support be maintained? One solution is to use a tapered roll . The smaller tapered section of the support picks up the unshaved diameter, while the larger, straight area behind takes over as the diameter decreases. Another solution is to use a carbide pad, shown in Figure 3.

By designing the support taper correctly, and setting its holder at the proper point on the tool slide, the shaving operation can be supported throughout the operation. Under ideal conditions, no more than .010 of stock should be shaved away. However very shallow grooves or minor steps need not be designed into the forming tool; usually they can be shaved without trouble and in many cases, it is advisable to do so. On the other hand, the form should be wide enough to clear both sides of the shave tool; if it is not, the shave may rub, climb into the cut, and grab. Those who have seen this happen need no further explanation of the possible consequences.

Chatter or Vibration, from another tool in the machine, can be transmitted to a shaving tool. It should be kept in mind that a shave tool is deliberately designed to follow a previously established contour; it is not intended to round up egg shaped O.D.'s or correct eccentricity of a diameter.

If the formed surface is chattered, the shave tool roller will attempt to follow the chatter marks. For this reason, the preparatory cuts should bring the diameter to be shaved into proper condition. However, if Force E is great enough to spring the workpiece off the spindle line even briefly, it may set up the harmonic condition which produces a chattered finish. The solution, as mentioned earlier, is an outboard support, or a change in tool design, which reduces the side stress on the workpiece.

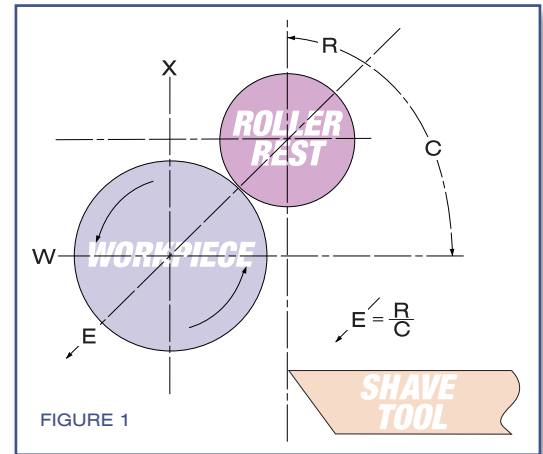


FIGURE 1

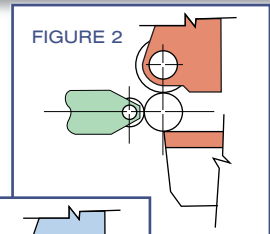


FIGURE 2

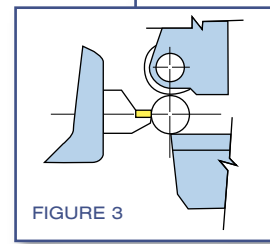


FIGURE 3

**Here are some other common sources of a chattering condition:**

1. Tool set ahead of center.
2. A sticky, or jerky, cross-slide action.
3. Worn, out-of-round roller.
4. Roller of wrong diameter for job.
5. Not enough front rake on shave tool, start with one to two degrees rake, increase up to 15 degrees as required until chatter stops.  
This is possible on straight cuts only.  
Shave tools with deep profiles would require correcting depths of steps to hold size.
6. Cross-slide cam or linkage worn or loose.
7. Spindle bearings in machine are worn or need adjustment.
8. Surface speed and feed may be incorrect for the job. Make slight changes to determine if this is the case.
9. Float spring on shave holder is not tight enough.
10. Guide pin bore's out of round.

**Summary**

On any machine in good condition, shaving will produce diameters which are round, and on size within +/- .0005. Contours can be produced which otherwise would be possible only by tracing. By its nature, shaving can almost always be completed in less revolutions than an end-working operation; hence shaving seldom is the limiter on cycle time. Shaving also has its built-in diameter controls; it does not rely on exact cross slide stroke length for accuracy, and to a certain extent, it can compensate for index or spindle errors. If holders, and the machines, are in good condition, and if properly designed, correctly ground tools are used at appropriate feeds and speeds, shaving gives minimum trouble. If trouble occurs, look to the Force "E" factor. Simple as it seems, control of Force "E" is the key to efficient shaving.

## Tool Design / Constant "A"

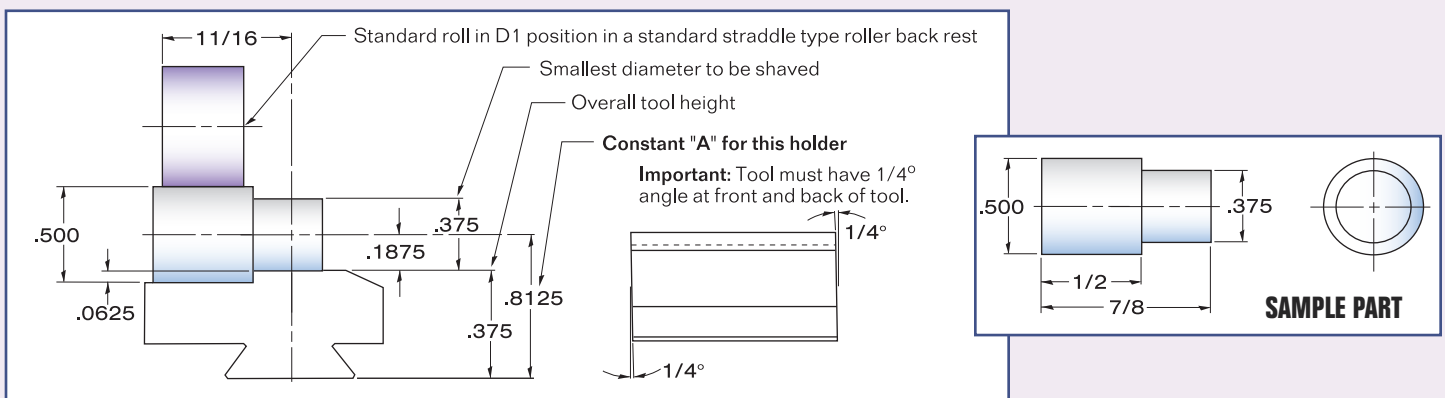
For any one particular holder there is a constant "A" figured from the bottom of the tool to the centerline of the work. This constant is computed according to size of dovetail and the capacity of the holder as follows:

- For the 1/2 inch size dovetail the constant is equal to 3/8 inch plus 1/2 the capacity of the holder being used.
- For the 5/8 to 1-1/2 inch size dovetail inclusive the constant is equal to 1/2 inch plus 1/2 the capacity of the holder being used.
- For the 1-5/8 inch size dovetail the constant is equal to 3/4 inch plus 1/2 the capacity of the holder being used.

With this constant "A" the overall height of the tool may be figured. From constant "A" subtract one half the smallest diameter to be shaved. The remainder is the overall height of the tool and all steps are dimensioned down from this surface. (Note: No correction for 1/4 degree front clearance is needed on steps of shave tool). The overall tool height may vary by plus or minus 1/32 inch. Adjustment in the holder compensate for this variation in tool height. Be sure to position the roll on part to be shaved to obtain the best supporting surface.

The length of the tool is obtained directly from the tooling chart. It is important that the face and heel of the shave tool be ground with the 1/4 degree angle as shown.

**Example:** Shave the .500 and .375 diameters of the part shown at right, using a SDT-7120, 5/8 size Slater shave tool holder.



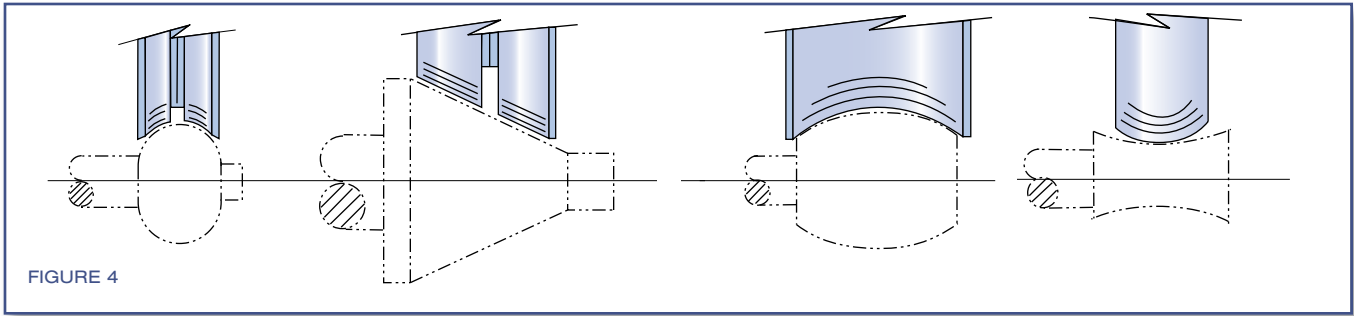


FIGURE 4

### Roll Design

As nearly as possible, the roller should be over the center of the cut (refer to samples at bottom of page). This is easier if a shop has on hand a variety of right-hand, left-hand and on-center roll holders. There are numerous varieties of roll position, and each application calls for a different usage.

When radiused surfaces are shaved, a straight, cylindrical roller will give only line contact, and may leave a pressure mark. On the other hand, a roll contoured exactly like the part may bind on contact with the unshaved surface. The best answer is shown in Figure 4, where the radius of the roll is slightly greater than that of the part. In a concave situation, the reverse would be true; the roll's radius should be less than that on the workpiece.

In shaving a taper, rolls may skid, due to the differential between the various diameters of roll and work piece. There are two logical solutions: (1) use split rollers side by side in the same holder; (2) use one tapered roller in a tilted holder. While the second suggestion calls for a specially designed roller back rest, it is generally the best.

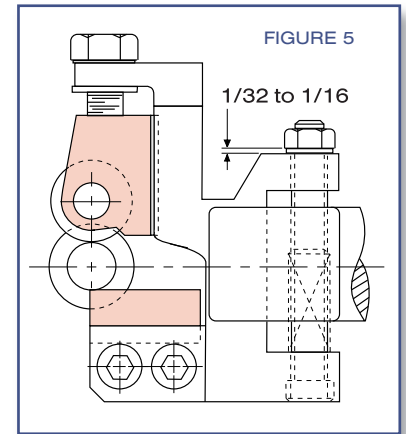


FIGURE 5

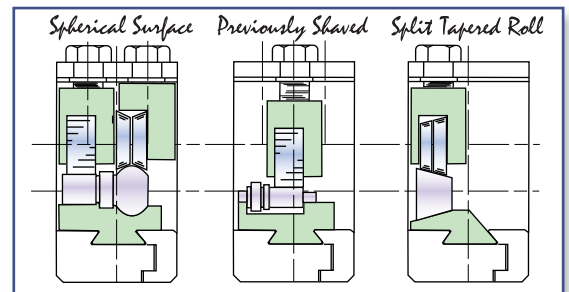
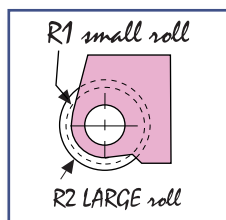
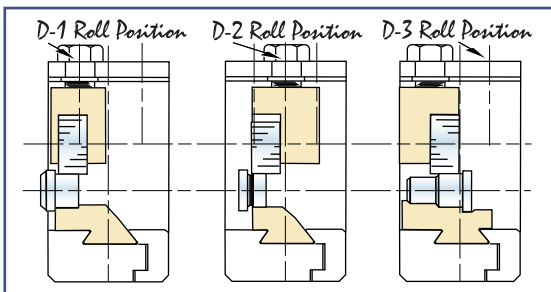
### Shaving Shoulders and Grooves

If the tool must work close to a deep shoulder, a stop device, like the one shown in Figure 5, controls the upward travel of the tool and insures against tool-grabbing. As holder advances toward stock center, the tool digs into shoulder and body is raised to an unsuitable clearance. This improper shaving condition will not allow roll to contact part and guide tool in its proper cutting path, but rather allows tool to advance unguided. This will damage dovetail tool or break work piece. It is possible tool may raise holder to a point where body would ram shank. If this happens, damage will occur to the shave tool holder. Note the stop nut limits travel, but does not interfere with the float of the holder on the spring.

Actual jobs shaved with **SLATER TOOLS** shave tool holders. Standard rolls and roller back rests may be positioned, and adjusted to shave the contours of many parts usually associated with special rolls and roller back rests. Standard roller back rests may be placed in any of 3 positions for both straddle and offset type roller back rests. (7/16 shave tool holder have 2 roller positions only.) A combination of any 2 roller back rests may be used in the D-1 and D-3 positions for all shave tool holders. Tools are located on the dovetail in the holder after part has been positioned for support by the roll. Special ground rolls are needed for tapered and spherical surfaces. Extra wide roller back rests are made on order only. Undercuts, if not too deep (.010-.020) may be shaved in without forming.

### ▼▼▼▼ IMPORTANT: ▼▼▼▼

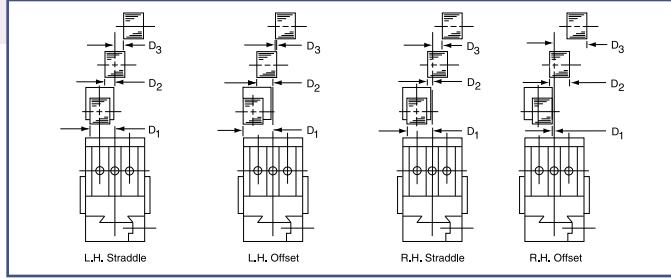
Shave tool holders come equipped with large diameter roller and left hand offset type roller back rest, unless otherwise specified.





# Shaving Roll Position

Universal Usage (Figures shown are for standard design)



## Engineering Data

		Holder No. SDT-7120 & SDT-7720	Holder No. SDT-7125 & SDT-7725
L.H. Straddle	D 1	39/64	39/64
	D 2	N/A	N/A
	D 3	7/64	7/64
L.H. Offset	D 1	45/64	45/64
	D 2	N/A	N/A
	D 3	1/64 Right	1/64 Right
R.H. Straddle	D 1	31/64	31/64
	D 2	N/A	N/A
	D 3	15/64	15/64
R.H. Offset	D 1	1/64 Left	1/64 Left
	D 2	N/A	N/A
	D 3	45/64	45/64
Standard Wide	D 1	N/A	N/A
	D 2	3/8	3/8
	D 3	N/A	N/A

## Shaving Roller Rests - Standard Design

### Small and Large Rolls - Subassemblies

	Left Hand Straddle	Right Hand Straddle	Standard Wide
	<b>Left Hand Straddle</b> Holder Capacity	<b>Right Hand Straddle</b> Holder Capacity	<b>Standard Wide</b> Holder Capacity
	5/8 Dia. x Width	5/8 Dia. x Width	5/8 Dia. x Width
	7/8 Dia. x Width	7/8 Dia. x Width	7/8 Dia. x Width
	<b>Small Rolls</b> Order No. <b>SRR-0010</b>	<b>Small Rolls</b> Order No. <b>SRR-0050</b>	<b>Small Rolls</b> Order No. <b>SRR-0090</b>
	N/A	N/A	N/A
	5/8 x 3/8 N/A	5/8 x 3/8 N/A	5/8 x 1 N/A
	5/8 x 3/8 N/A	5/8 x 3/8 N/A	5/8 x 1 N/A



Various styles allow for correct positions per part specifications.

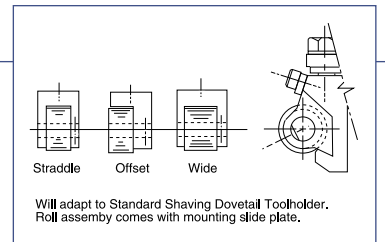
	Left Hand Offset	Right Hand Offset
	<b>Left Hand Offset</b> Holder Capacity	<b>Right Hand Offset</b> Holder Capacity
	5/8 Dia. x Width	5/8 Dia. x Width
	7/8 Dia. x Width	7/8 Dia. x Width
	<b>Small Rolls</b> Order No. <b>SRR-0030</b>	<b>Small Rolls</b> Order No. <b>SRR-0070</b>
	N/A	N/A
	5/8 x 3/8 N/A	5/8 x 3/8 N/A
	5/8 x 3/8 N/A	5/8 x 3/8 N/A

## Shaving Vari-Position Rests

Variable Movement For Standard Design 5/8" and 7/8" Holders  
Roll holders can be reversed from left to right hand positioning.

Order No.	Straddle Roll <b>SVR-0010</b>	Offset Roll <b>SVR-0030</b>	Wide Roll <b>SVR-0090</b>
Dia. x Width	5/8 x 3/8	5/8 x 3/8	5/8 x 1

Shaving vari-position rests are used for unlimited positions by sliding the roll assembly into place, then locking.

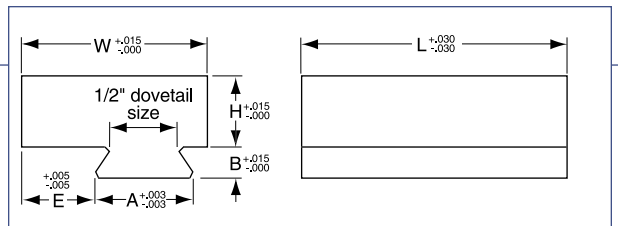


## Shaving Dovetail Blanks

Hardened and Ground



H	W	L	A	B	E	M-42	T-15	76 PM
3/4	1-3/16	1-1/16	.715	.203	.331	<b>SDB-0417</b>	<b>SDB-0717</b>	<b>SDB-0917</b>



Shaving dovetail blanks are ready to be finished form ground to part specifications. Produce extremely close tolerances on the work piece previously machined.

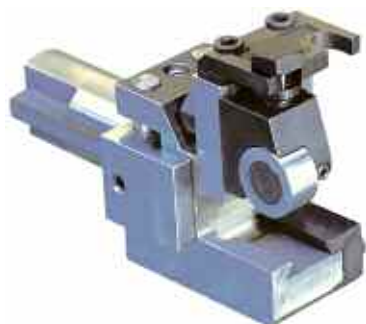
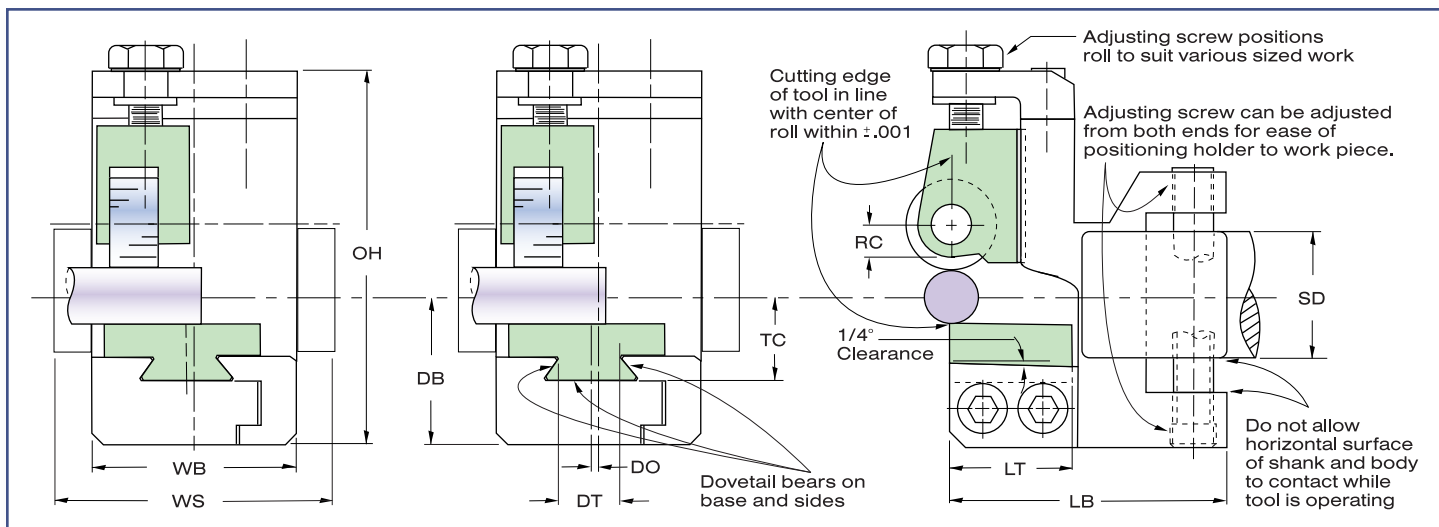


Order: **586-465-5000**  
Fax: **586-465-3030**

**23**

# Shaving Dovetail Tool Holder

## Round Shank Type



**Order #**  
**SDT-7120**  
For use with  
**5/8" Model "B"**

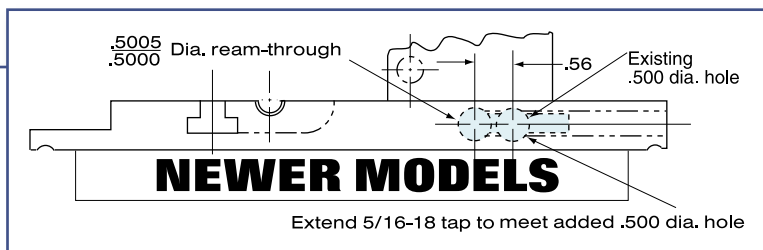
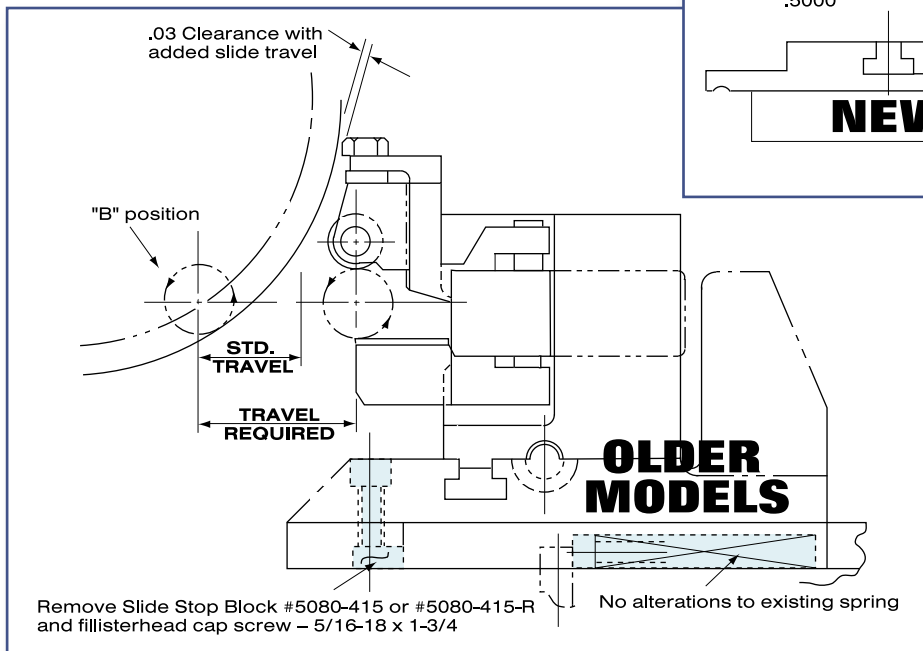
**Order #**  
**SDT-7125**  
For use with  
**5/8" or 7/8" Model "B"**

### Tooling Chart

Order Number	SDT-7120	SDT-7125
Max. Capacity	5/8	7/8
Min. Capacity	0	1/4
(OH) Overall Height	2-29/32	3-5/32
(WS) Width of Shank	1-3/16	1-3/16
(WB) Width of Body	1-5/16	1-5/16
(DB) Depth Below	1-3/16	1-5/16
(RC) Roll Clearance	7/32	7/32
(LB) Length of Body	2-1/4	2-1/4
(LT) Length of Tool	1-1/16	1-1/16
(DT) Dovetail Size	1/2	1/2
(SD) Shank Diameter	1	1
(TC) Tooling Constant	11/16	13/16
(DO) Dovetail Offset from CL	3/32	3/32

Shaving dovetail toolholders are used to secure extremely close tolerances by removing up to .010 in. of stock over a portion of the work piece that has been previously machined.

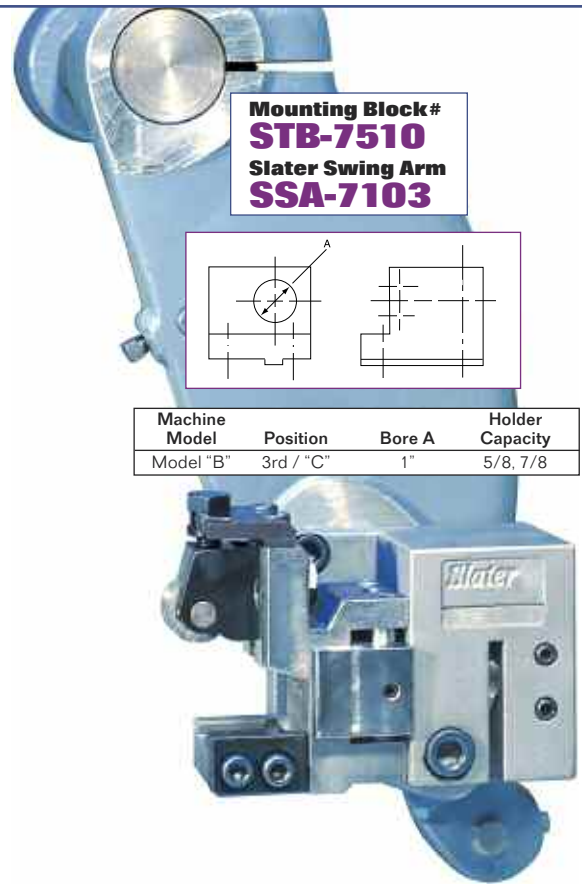
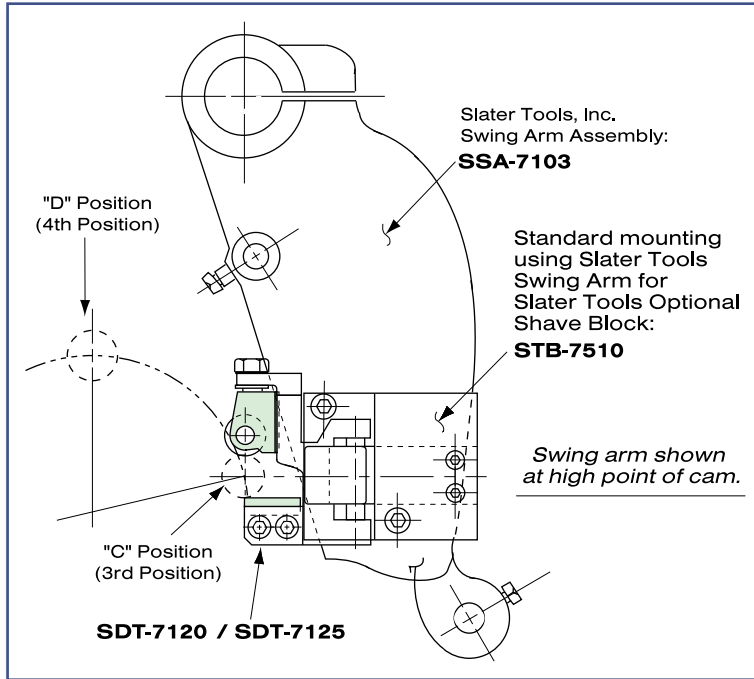
## 2nd ("B") Position - Cross Slide



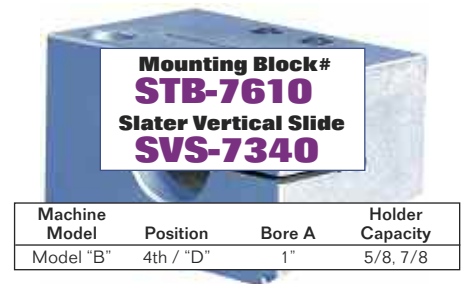
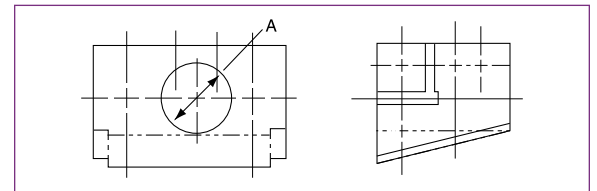
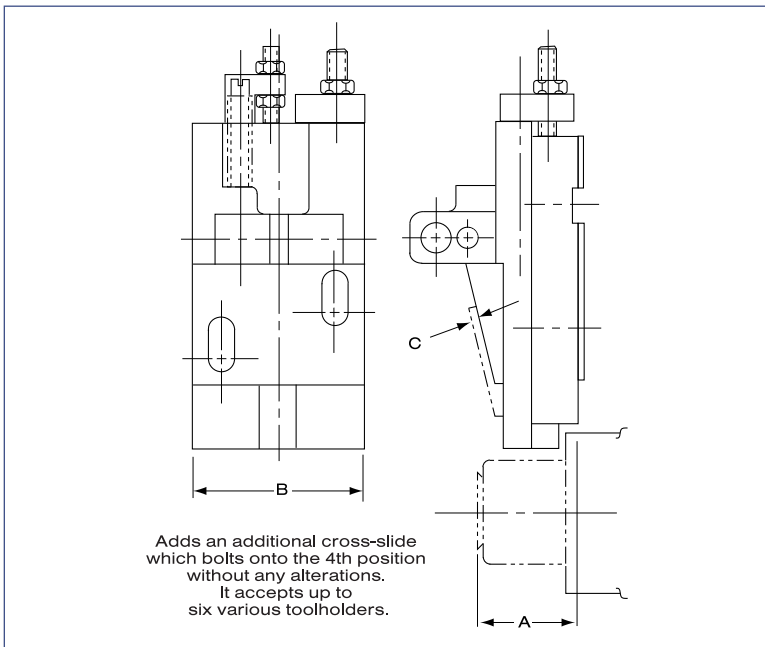
Machine Model	Position	Bore A	Holder Capacity
Model "B"	2nd / "B"	1"	5/8, 7/8



## 3rd ("C") Position - Slater Swing Arm



## 4th ("D") Position - Slater Vertical Slide

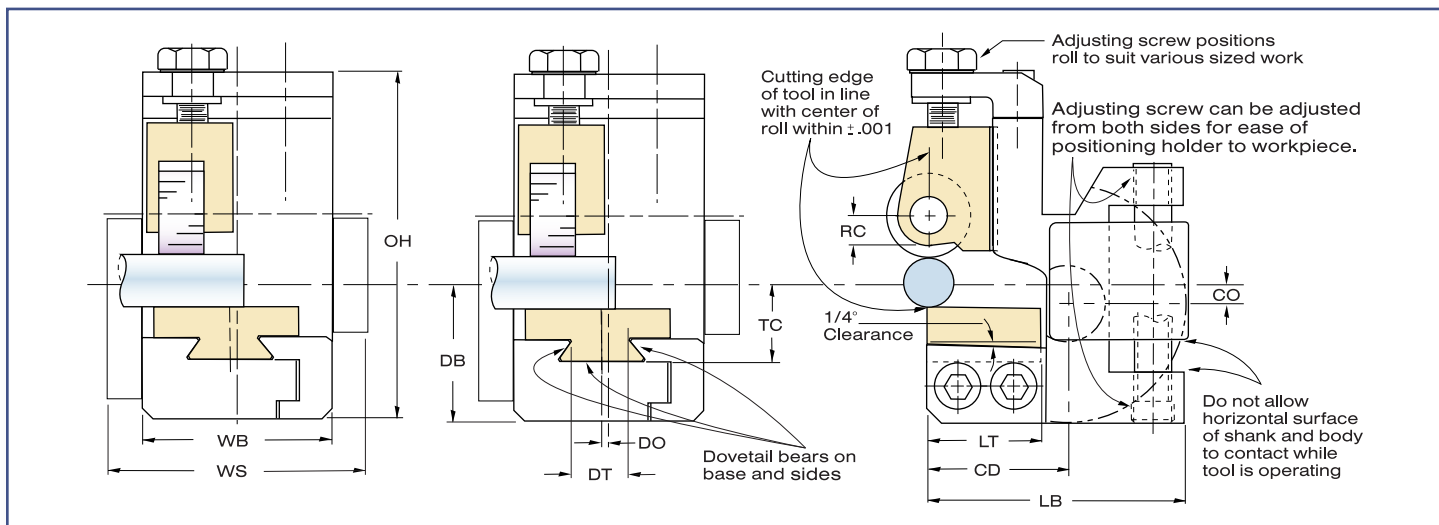


Machine Model	Position	A	B	C
Model "B"	4th / "D"	1-23/32	3	1/8

Update your Davenport with Slater Tools universal type slide. It will give you a new approach to tooling, eliminating the need for special tooling or semi-standard setups. No alterations are required for mounting. No adjustments of other stations are needed to work with a stationary 4th position slide. It will enable you to save time on initial job setups, on minor adjustments during job runs, and when changing from one job to another.

# Shaving Dovetail Tool Holder

## Index Plate Type



### Tooling Chart

	Order Number	SDT-7720	SDT-7725
	Max. Capacity	5/8	7/8
	Min. Capacity	0	1/4
(OH)	Overall Height	2-7/8	3-5/32
(WS)	Width of Shank	1-3/4	1-3/4
(WB)	Width of Body	1-5/16	1-5/16
(DB)	Depth Below	1-3/16	1-5/16
(RC)	Roll Clearance	7/32	7/32
(LB)	Length of Body	2-1/4	2-1/4
(LT)	Length of Tool	1-1/16	1-1/16
(DT)	Dovetail Size	1/2	1/2
(SD)	Centerline Offset	1/8	1/8
(TC)	Tooling Constant	11/16	13/16
(DO)	Dovetail Offset from CL	3/32	3/32
(CD)	Center Distance	1-1/4	1-1/4



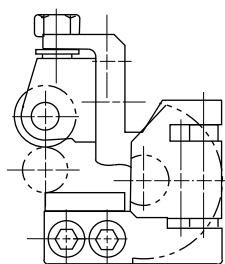
Order #  
**SDT-7720**  
For use with  
5/8" Model "B"

Order #  
**SDT-7725**  
For use with  
5/8" or 7/8" Model "B"

Shaving dovetail toolholders are used to secure extremely close tolerances by removing up to .010 in. of stock over a portion of the work piece that has been previously machined.

### 2nd ("B") Position

O.E.M. Cross Slide

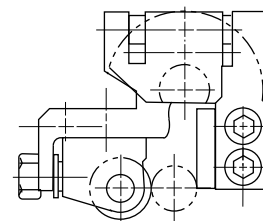


"D" Position  
(4th Position)

"C" Position  
(3rd Position)

### 3rd ("C") Position

O.E.M. Swing Arm



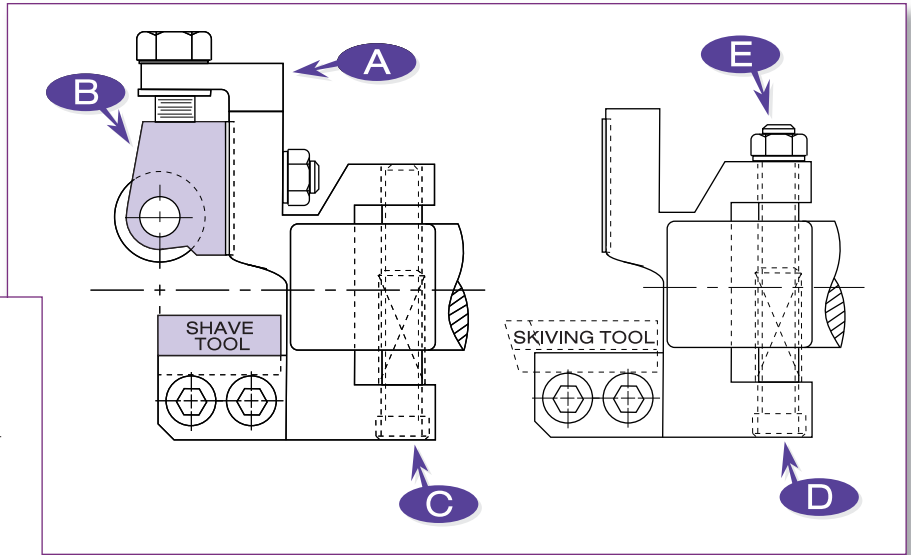
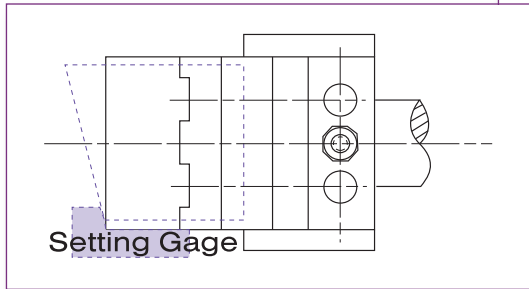
### 4th ("D") Position

O.E.M. Vertical Slide

## Instructions on how to convert Shaving Tool Holder to Skiving Tool Holder

To convert shaving tool holder to skiving tool holder, follow these easy steps:

- Remove pressure plate "A"
- Remove roller back rest "B"
- Remove socket head cap screw "C"
- Replace "C" with longer screw "D"
- Add lock nut "E"
- Use setting gage to set tool and maintain the same diameter on the work piece as before sharpening.
- Adjust screw "D" to position tool to skive desired dia. of work.
- After adjustment is made, lock in place with nut "E".



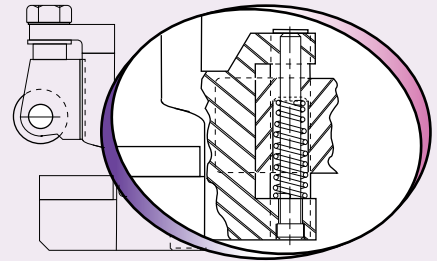
### Spring Maintenance

**fast! easy! efficient!**

To reassemble after replacing spring, be sure to replace pilot pins in exact same holes from which they were removed and in the same direction.

**NOTE: Bottleneck Spring Only.**

When replacing spring be sure that small diameter of spring is at top as shown.



 SLATER TOOLS™

Order: 586-465-5000

Fax: 586-465-3030

**27**

*Call Us Today For Additional Product Information!*

**Acme • New Britain • Cone • Wickman**

**Brown & Sharpe • Warner & Swasey**

**Greenlee • Tornos Bechler**

**CNC and Manual**



*The Name Alone Is A Guarantee Of Accuracy.*



**Factory Direct**

**Order: 586-465-5000**

**Fax: 586-465-3030**

**Proven Performance**

**Visit our website at [www.slatertools.com](http://www.slatertools.com)**

No part of this catalog may be reproduced in any matter without the expressed written permission of Slater Tools Incorporated. No responsibility accepted for errors or omissions of any kind, which are subject to correction.