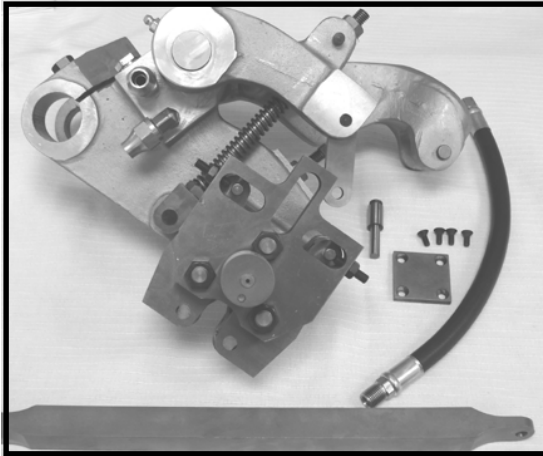


3RD POSITION THREAD ROLL ATTACHMENT FOR DAVENPORT MACHINES

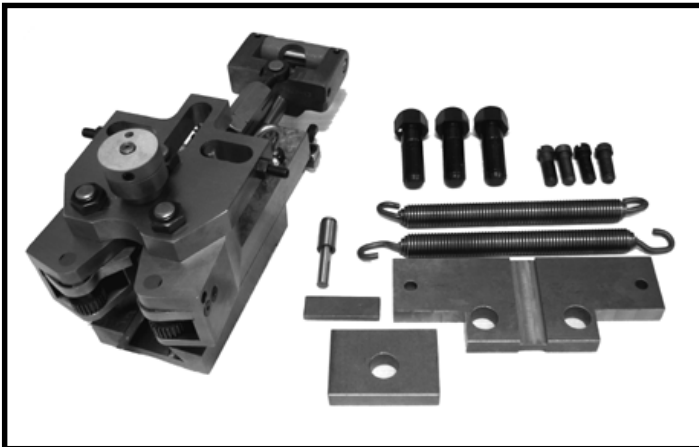


- The 3rd Position Thread Roll Attachment (1431-SA-SOMMA) is connected to a special swing arm casting with 2 thread rolls.
- The swing arm feeds the attachment until the rolls are on center with the blank diameter of the work piece.
- The attachment feeds the rolls inward on the center line of the work piece.
- When the threads are formed, the roll arms are released.
- The attachment returns to the home position.

Cat. No.
1431-SA-SOMMA



4TH POSITION THREAD ROLL ATTACHMENT FOR DAVENPORT MACHINES



- The 4th Position Thread Roll Attachment (1421-SA-SOMMA) is connected to a slide with 2 thread rolls.
- The slide feeds the attachment until the rolls are on center with the blank diameter of the work piece.
- The attachment feeds the rolls inward on the center line of the work piece.
- When the threads are formed, the roll arms are released.
- The attachment returns to the home position.

Cat. No.
1421-SA-SOMMA



5TH POSITION COUNTERSINK ATTACHMENT FOR DAVENPORT MACHINES

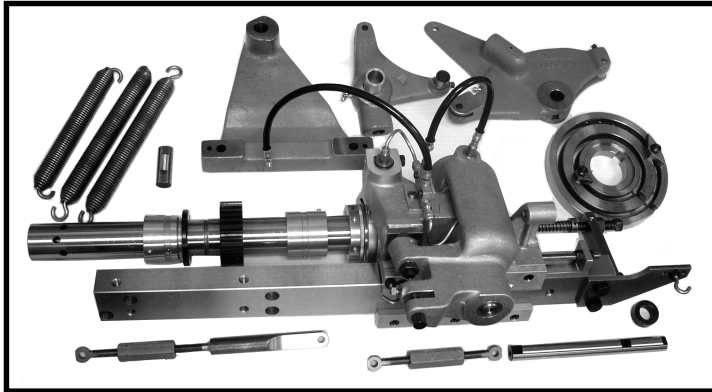


- Consists of a cam operated arm.
- Can be mounted with any kind of left hand end working tool (ie countersinks, drill, turning tools, reamers, etc.)
- After cutoff, the arm is positioned in front of the burring spindle. The workpiece can then be fed into the desired tool.

Cat. No.
1263-119-1-SA-SOMMA



5TH POSITION STATIONARY HEAD BURRING ATTACHMENT FOR DAVENPORT MACHINES



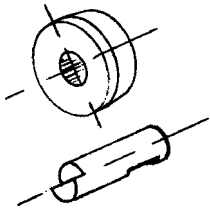
There is a chucking mechanism on the burring spindle that can be actuated at any time during the cycle. This facilitates the use of this attachment.



Cat. No.
1263-5-10-SA-SOMMA

ROLLERS AND PINS FOR BOYAR-SCHULTZ TURNING TOOLS

* Fit all Boyar-Schultz RT, LT, RTC Turning Tools * Made of 52100 Heat Treated Steel * Precision ground all over



TAPERED ROLLS

CAT. NO.	USED ON	O.D.	I.D.	WIDTH
	00RT			
BSR-5020	00LT/00C	5/16	5/32	3/16
BSR-5120	0RT/0LT/0C	1/2	1/4	1/4
BSR-5220	2RT-2LT-2C	5/8	1/4	1/4
BSR-5720	000RT	9/32	1/8	3/16

PINS

CAT. NO.	USED ON	DIA.	LENGTH
	00RT		
BSP-5025	00LT/00C	5/32	17/32
BSP-5125	0RT/0LT/0C	1/4	23/32
BSP-5225	2RT/2LT/2C	1/4	27/32
BSP-5725	000RT	1/8	17/32

SHAVE TOOL ROLL SPACERS FOR 5/16" DIAMETER ROLL PINS

Package of 14 assorted width 5/16" I.D. spacers for positioning shave tool roll.
Can be used on C.J. Winter, Schlitter, Slater, Somma, Davenport and other holders with 5/16" dia. roll pins.

Cat. No.
SP-ROLL PKG



HARDENED 52100 STEEL
- GROUND ALL OVER

ROLLS FOR DOVETAIL SHAVE TOOL HOLDERS

Cat. No.	O.D.	I.D.	Width	C'Bore
62-5-5-RL	1"	3/8	11/16	--
62-5-4-RL	1-1/4"	3/8	11/16	--
62-5-5A-RL	1"	1/2	11/16	1/8 x 3/4
62-4-4A-RL	1-1/8"	1/2	11/16	1/8 x 3/4
62-5-4A-RL	1-1/4"	1/2	11/16	1/8 x 3/4

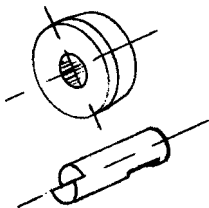
ROLLS FOR SOMMA BOX TOOLS

Cat. No.	O.D.	I.D.	Width
ATT00-6	.250	.125	.156
ATT0-6	.432	.188	.250
ATT2-6	.500	.250	.375

ROLLS FOR SOMMA SHAVE TOOL HOLDERS

Cat. No.	O.D.	I.D.	Width
QCDS-3A	.875	.312	.375
QCDS-3A-1/2	.875	.312	.500

ROLLER & PIN SETS FOR SOMMA TURNING TOOLS



Cat. No.	O.D.	I.D.	C'Bore	Width	Pin Length
TT00RBR-1	.556	.284	.050 X .375	.250	15/32
TT1RBR-1	.615	.315	.062 X .375	.312	19/32
TT2RBR-1	.740	.378	.067 X .450	.375	23/32
TT3RBR-1	.865	.440	.067 X .560	.375	23/32

CAM ROLLERS AND PINS

- **HEAT TREATED ALLOY STEEL**
For hardness and long life.



- **PRECISION-MADE**
Pin O.D., Roll O.D. & I.D.
ground for accuracy and
smooth operation.

*Also used on
Slotting Attachments

CHECK DIMENSIONAL REQUIREMENTS AND ORDER BY CATALOG NO.

MACHINE USED ON	Cat. No.	Part Name	Used On	B&S Ref. No.	Outside Diameter	Inside Diameter	Length or Width	Cotter Pin or Flat
No. 00 Prior to Serial #128582	*M3963	Pin	Lead Lever & Cross Slides	91-90-83/645	.250	—	1.062	Flat
	M3982	Roller	Lead Lever & Cross Slides	91-215-8	.500	.250	.312	—
	M3965	Pin	Cross & Vertical Slides	91-90-83/700	.250	—	1.062	Cotter Pin
	M3969	Pin	Lead Lever & Cross Slides	91-90-83	.250	—	1.250	Flat
No. 00 Begins with Serial #12852 and #542-00-3300	*M3973	Pin	Lead Lever	91-90-705	.250	—	1.312	Cotter Pin
	M3961	Pin	Cross Slide Some Machines	91-90-645	.250	—	1.000	Flat
	*M3984	Roller	Lead Lever, Cross & Vertical Slides	91-215-211	.500	.250	.375	—
	M3971	Pin	Lead Lever, Cross & Vertical Slides Some Machines	91-90-738	.250	—	1.250	Cotter Pin
No. 0 Prior to Serial #8020	*M3963	Pin	Lead Lever & Cross Slides	91-90-83	.250	—	1.062	Flat
	M3967	Pin	Cross Slide Some Machines	91-90-83	.250	—	1.125	Flat
	*M3986	Roller	Lead Lever & Cross Slides	91-215-9	.562	.250	.375	—
No. 0 Begins with Serial #8020	*M3973	Pin	Lead Lever	91-90-705/738	.250	—	1.312	Cotter Pin
	M3965	Pin	Cross & Vertical Slides	91-90-83/700	.250	—	1.062	Cotter Pin
	*M3988	Roller	Lead Lever, Cross & Vertical Slides	91-215-212	.562	.250	.437	—
	*M3971	Pin	Cross & Vertical Slides Some Machines	91-90-738	.250	—	1.250	Cotter Pin
	*M3986	Roller	Lead Lever, Cross & Vertical Slides Some Machines	91-215-9	.562	.250	.375	—
No. 2 Prior to Serial #7351	*M3975	Pin	Lead Lever & Cross Slides	91-90-82	.312	—	1.187	Flat
	*M3990	Roller	Lead Lever & Cross Slides	91-215-3	.625	.312	.437	—
No. 2 Begins with Serial #7351 and #542-2-3100	*M3977	Pin	Lead Lever*, Cross & Vertical Slides (*Except 542-2-3100)	91-90-752	.312	—	1.312	Cotter Pin
	*M3992	Roller	Lead Lever, Cross & Vertical Slides	91-215-220	.625	.312	.500	—
	M3979	Pin	Lead Lever (Begins Serial 542-2-3100)	42-17185-99	.312	—	1.833	Cotter Pin
No. 2 Ultramatic	M3981	Pin	Lead Lever	42-17185-1	.312	—	2.015	Cotter Pin
	M3994	Roller	Lead Lever	42-21653	.625	.312	.625	—

STEEL CAM BLANKS

For lead, cross-slide and vertical attachment on automatic screw machines. Blanks are 1020 steel, with finished center hole, locating hole, graduated in hundredths and face ground and blued for easy scribing.

STEEL ROUGH CAM BLANKS

Blanks are 1020 steel, with finished center hole and locating hole - but without graduations or bluing. Saving for cam makers who do not require these features. Face ground for scribing.



**GROUND
BOTH SIDES**

STEEL FULL CAM BLANKS				
MACHINE SIZE	CAT. NO.	DIA.	WIDTH	I.D.
No. 00 B&S	CB00-4.5	4-1/2	1/4	1"
	CB00-5	5	1/4	1"
	CB00-5.5	5-1/2	1/4	1"
No. 0 B&S	CB0-6	6	5/16	1-1/8
	CB0-7	7	5/16	1-1/8
No. 2 B&S	CB2-7	7	3/8	1-1/4
	CB2-8	8	3/8	1-1/4
	CB2-9	9	3/8	1-1/4
	CB2-10	10	3/8	1-1/4

STEEL ROUGH CAM BLANKS				
MACHINE SIZE	CAT. NO.	DIA.	WIDTH	I.D.
No. 00 B&S	RCB00-4.5	4-1/2	1/4	1"
	RCB00-5	5	1/4	1"
	RCB00-5.5	5-1/2	1/4	1"
No. 0 B&S	RCB0-6	6	5/16	1-1/8
	RCB0-7	7	5/16	1-1/8
No. 2 B&S	RCB2-7	7	3/8	1-1/4
	RCB2-8	8	3/8	1-1/4
	RCB2-9	9	3/8	1-1/4
	RCB2-10	10	3/8	1-1/4

CAMS SHOULD BE CARBURIZED AND DEEP CASE HARDENED FOR LONGEST LIFE.



NON-ADJUSTABLE COLLARS FOR ROUND SHANK TURRET TOOLS

These Tool Collars are locked in place by two set screws at a determined place on the tool and left in place to be used in any preset type tooling application. These collars are hardened and ground and are 3/4" wide.



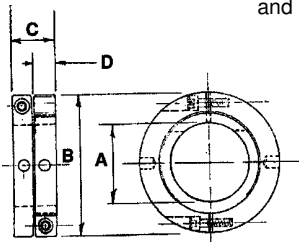
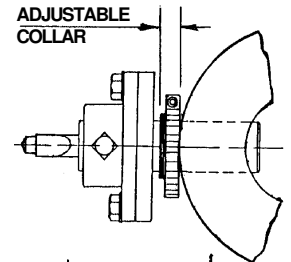
CAT. NO.	I.D.	O.D.
COL-1.00	1"	2"
COL-1.25	1-1/4"	2-1/4"
COL-1.50	1-1/2"	2-1/2"
COL-2.00	2"	2-3/4"
COL-2.25	2-1/4"	3"
COL-2.50	2-1/2"	3-1/4"

CAT.NO.	I.D.	O.D.
COL-25MM	25MM	2"
COL-32MM	32MM	2-1/4"
COL-40MM	40MM	2-1/2"
COL-45MM	45MM	2-3/4"
COL-50MM	50MM	3"
COL-60MM	60MM	3-1/4"



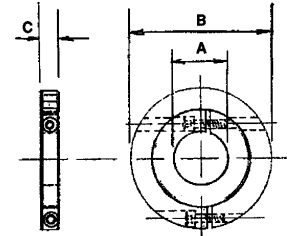
MICROMETER ADJUSTABLE COLLARS (SPLIT TYPE) FOR ROUND SHANK TURRET TOOLS

- Eliminates "Brass Hammer" adjustments
- Easy lengthwise tool adjustments by .001" increments
- Makes all tools presettable
- Clamps onto shank at desired location and allows 1/16" to 1/8" adjustment
- Tools can be removed from turret without losing setting
- Split clamp inner ring locks onto tool shank without marring
- Split clamp outer dial rotates freely and locks in place for positive adjustment



TYPE M

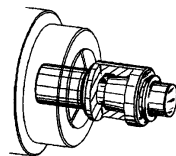
Cat No.	A	B	C Min.	C Max.	D	Type
MAS-.625	5/8	1-5/8	.230	9/32	--	S
MAS-.75	3/4	2"	.265	11/32	--	S
MAS-1.0	1"	2"	7/16	17/32	7/32	M
MAS-1.5	1-1/2	2-5/8	13/16	15/16	7/16	M
MAS-1.75	1-3/4	3"	13/16	15/16	7/16	M
MAS-2.0	2"	3-5/16	13/16	15/16	7/16	M
MAS-2.25	2-1/4	3-9/16	13/16	15/16	7/16	M



ACCESSORIES

SLOTING BUSHING ADAPTERS

SIMPLIFIES machining of B&S Slotting Bushings.
GUARANTEES that all boring operations will be true with taper shank of the bushing.
ELIMINATES the need for indicating.



MACHINE SIZE	CAT. NO.	SHANK DIA.	LENGTH
#00	SBA00	1/2"	1-3/4"
#0	SBA0	5/8"	1-7/8"
#2	SBA2	3/4"	2"
#2	SBA22	7/8"	2"

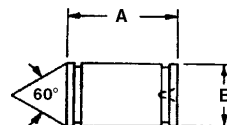
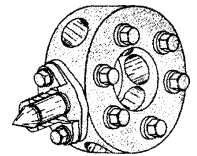


CENTERING TOOL

Saves time...Takes the Guesswork Out of Tool Alignment!

An invaluable aid for the setup man and operator. Saves time, and provides greater accuracy for lining-up floating tool holders when using such tools as flat bottom drills, counter-bores, reamers, trepanning tools, die heads, tap-holders, etc...

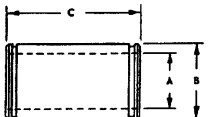
Made of quality material - heat-treated for long service. Centering angle is ground true with body.



CAT. NO.	MACHINE SIZE	DIMENSIONS	
		A	B
CT00	#00	7/8"	1/2"
CT0	#2	1-1/16"	5/8"
CT2	#2	1-13/32"	1"

TURRET BUSHINGS

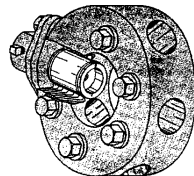
EXTENDS TURRET-TO-SPINDLE CAPACITY of B&S and similar automatic screw machines.



Permits use of smaller tools in larger machines. Shorter body length of smaller size tools means less cut-down, resulting in higher cam lobes.



CAT. NO.	MACHINE SIZE	DIMENSIONS		
		A	B	C
TB000	#00 to #0	5/8"	3/4"	1-5/16"
TB002	#00 to #2	5/8"	1"	1-5/8"
TB02	#0 to #2	3/4"	1"	1-5/8"
TB23	--	1"	1-1/4"	1-3/4"

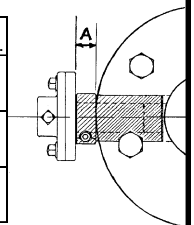


TURRET TOOL ADAPTER

Designed so that the combined body length of adaptor & drill holder equals the body length of the drill holder of the machine used (i.e. body length of tool adaptor plus #0 drill holder is equal to body length of #2 drill holder).



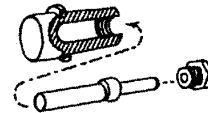
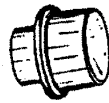
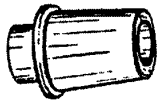
CAT. NO.	MACHINE SIZE	HOLE SIZE	SHANK SIZE	SHANK LENGTH	"A" DIM.
TA000	#00 to #0	5/8"	3/4"	1-1/2"	3/8"
TA002	#00 to #2	5/8"	1"	2"	1/2"
TA02	#0 to #2	3/4"	1"	2"	1/2"



SLOTING BUSHINGS FOR BROWN & SHARPE AUTOMATICS

- TAPER SHANKS OF ALL BUSHINGS ARE GROUND
- MADE OF C1117 STEEL

- SHOULD BE CASE HARDENED .005" DEEP AFTER MACHINING FOR BEST RESULTS



STYLE A -- Standard Slotting Bushing with hole in shank.

STYLE C -- Has larger head end to accommodate larger capacities of later model machines.

STYLE D -- For use in later model H.S. #00 machines. Same as Style "A", except with shortened shank to fit lighter swing arm of H.S. machines.

STYLE E -- Has same diameter head as Style C, except head length is longer, as follows:
#00 -- 5/8, #0 -- 3/4, #2 -- 1", #22 -- 1-1/8.

STYLE F -- No. 00 only Used for small work where the ejection slot in bushing would prevent effective holding.

STYLE B -- Same as Style "A", except WITHOUT hole in shank.

Maximum sizes bushings can pick up:
#00 -- 7/16, #0 -- 5/8, #2 -- 3/4, #22 -- 7/8.
(Note: The #00 size is also available with short shank. When ordering specify "#00 Style C -- SHORT SHANK")

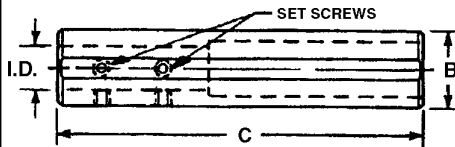
SOMMA	B&S REF. NO.
SB00-A	42-14598-99
SB00-D	42-6640-99
SB0-A	42-14600-99
SB2-A	42-14602-99
SB2-C	42-14603-99
SB22-A	42-14602-1
SB22-C	42-14603-1

SLOTING BUSHING CATALOG NUMBERS

Machine Size	Style A	Style B	Style C	Style C Short	Style D	Style E	Style F
#00 B&S	SB00-A	SB00-B	SB00-C	SB00-C-S	SB00-D	SB00-E	SB00-F
#0 B&S	SB0-A	SB0-B	SB0-C	—	—	SB0-E	—
#2 B&S	SB2-A	SB2-B	SB2-C	—	—	SB2-E	—
#2 B&S*	SB22-A	SB22-B	SB22-C	—	—	SB22-E	—

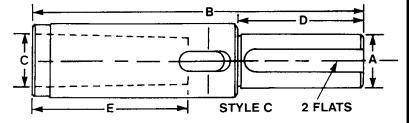
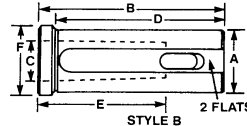
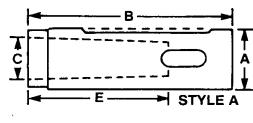
* NOTE: SB22 Bushings are for #2B&S Automatic Screw Machines starting with Serial No. 542-2-3100.

BORING BAR SLEEVES



B	C	I.D. Size / Cat. No.														
		1/4	5/16	3/8	1/2	5/8	3/4	7/8	1"	1-1/4	1-1/2	1-3/4	2"	2-1/2		
3/4	5"	53339	53400	53392	53393											
1"	6"			53401	53402											
1-1/2	7"			53411	53412	53413	53414									
1-1/2	8"							53415	53416							
1-3/4	8"							53422	53426	53423						
2"	9"					53421	53425	53432	53433	53434	53435					
2-1/2	10"						53431	53432	53433	53434	53435					
3"	11-1/2"						53441	53442		53443	53444	53445				
4"	14"									53450	53451	53452	53453	53454		
												53460	53461	53462	53463	

TAPER DRILL SOCKETS SUPERIOR DESIGN/PREMIUM QUALITY



These taper drill sockets are hardened, precision ground, and concentric within .0002 of an inch. They fit directly into tool holders and turrets to positively drive all morse taper shank tools, drills, reamers, and counterbores.

The straight shank style "A" taper drill sockets are manufactured in limited quantities and sizes. Please contact our courteous sales staff for availability and pricing information. Select the O.D. size that fits your machine and order from the chart below.

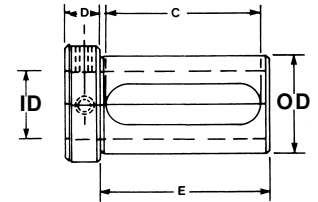
CAT. NO.	STYLE	SHANK DIA. A	B	MORSE TAPER C	D	E	F
MT1-0075	A	3/4	3-1/4	No. 1	2.313	2-3/16	1
*MT1-1000	B	1	3-3/4	No. 1	3.125	2-3/16	1-1/4
*MT2-1000	B	1	3-3/4	No. 2	3.125	2-5/8	1-1/4
*MT1-1250	B	1-1/4	4	No. 1	3.375	2-3/16	1-1/2
*MT2-1250	B	1-1/4	4	No. 2	3.375	2-5/8	1-1/2
*MT3-1250	B	1-1/4	4	No. 3	4.000	3-1/4	1-1/2
*MT1-1500	B	1-1/2	5	No. 1	4.375	2-3/16	1-3/4
*MT2-1500	B	1-1/2	5	No. 2	4.375	2-5/8	1-3/4
*MT3-1500	B	1-1/2	5	No. 3	4.375	3-1/4	1-3/4
*MT4-1500	B	1-1/2	5-3/4	No. 4	4.375	4-1/8	1-3/4
*MT1-1750	B	1-3/4	5-3/4	No. 1	5.125	2-3/16	2
*MT2-1750	B	1-3/4	5-3/4	No. 2	5.125	2-5/8	2
*MT3-1750	B	1-3/4	5-3/4	No. 3	5.125	3-1/4	2
*MT4-1750	B	1-3/4	5-3/4	No. 4	4.375	4-1/8	2

* Item available in style "A". Call for price and availability.

CAT. NO.	STYLE	SHANK DIA. A	B	MORSE TAPER C	D	E	F
MT5-1750	C	1-3/4	11-1/8	No. 5	4-1/4	5-1/4	2-3/8
MT2-2000	B	2	6-1/8	No. 2	5-1/2	2-5/8	2-1/4
MT3-2000	B	2	6-1/8	No. 3	5-1/2	3-1/4	2-1/4
MT4-2000	B	2	6-1/8	No. 4	5-1/2	4-1/8	2-1/4
MT5-2000	C	2	11-1/8	No. 5	4-1/4	5-1/4	2-3/8
MT2-2500	B	2-1/2	5-3/4	No. 2	5-1/8	2-5/8	2-3/4
MT3-2500	B	2-1/2	6-5/8	No. 3	6	3-1/4	2-3/4
MT4-2500	B	2-1/2	6-5/8	No. 4	6	4-1/8	2-3/4
MT5-2500	B	2-1/2	7-5/8	No. 5	7	5-1/4	2-3/4
MT4-3000	B	3	6-5/8	No. 4	6	4-1/8	3-3/8
MT5-3000	B	3	7-5/8	No. 5	7	5-1/4	3-3/8
MT4-2250	B	2-1/4	6-5/8	No. 4	6	4-1/8	2-1/2
MT5-2250	B	2-1/4	7-5/8	No. 5	7	5-1/4	2-1/2
MT4-2750	B	2-3/4	6-5/8	No. 4	6	4-1/8	3
MT5-2750	B	2-3/4	7-5/8	No. 5	7	5-1/4	3

TYPE Z TOOLHOLDER BUSHING

The most flexible Toolholder Bushing for all types of CNC Turning Centers, Turret Lathes and Chuckers. The Elongated Slot gives the user a complete interchangeability with all brands of equipment. The added Set Screws in the Head allow for increased rigidity. The bushings are hardened and precision ground concentric. Can also be used for Preset Tooling. Select the O.D. size that fits your machine and order from the chart below.



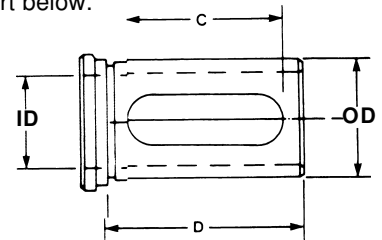
SERIES	SPECIFY CHOICE		CHOOSE FROM STANDARD I.D. SIZES SHOWN		SPECIFY LENGTH CHOICE DIM. E & C							
	CAT. NO.	O.D.	O.D.	INCH	METRIC	Z (STD)		ZS (SHORT)		ZL (LONG)		D
*6840	3/4"	20MM		1/4, 5/16, 3/8, 1/2	6, 8, 10, 12	2-1/2"	2-3/8"					
*6841	1"	25MM		1/4, 5/16, 3/8, 1/2, 5/8, 3/4	8, 10, 12, 16, 20	2-3/4"	2-3/8"					1/2"
*6842	1-1/4"	32MM		3/8, 1/2, 5/8, 3/4, 7/8, 1"	10, 12, 16, 20, 25	3"	2-5/8"	2-1/4"	1-7/8"	3-3/4"	3-1/8"	5/8"
*6843	1-1/2"	40MM		3/8, 1/2, 5/8, 3/4, 7/8, 1", 1-1/4	10, 12, 16, 20, 25, 32	3-1/4"	2-7/8"	2-1/2"	2-1/8"	4"	3-5/8"	3/4"
*6844	1-3/4"	45MM		1/2, 5/8, 3/4, 7/8, 1", 1-1/4, 1-1/2	12, 16, 20, 25, 32, 40	3-1/2"	3-1/8"	2-3/4"	2-3/8"	4-1/4"	3-7/8"	3/4"
*6845	2"	50MM		1/2, 5/8, 3/4, 7/8, 1, 1-1/4, 1-1/2, 1-3/4	12, 16, 20, 25, 32, 40, 45	3-3/4"	3-1/2"	3"	2-5/8"	4-1/2"	4-1/8"	3/4"
*6846	2-1/2"	65MM		5/8, 3/4, 7/8, 1, 1-1/4, 1-1/2, 1-3/4, 2, 2-1/4	16, 20, 25, 32, 40, 45, 50	4-1/4"	3-7/8"	3-1/2"	3-1/8"	5"	4-5/8"	3/4"
*6847	3"	80MM		1", 1-1/4, 1-1/2, 1-3/4, 2", 2-1/4, 2-1/2	25, 32, 40, 50, 60, 65	4-3/4"	4-3/8"	3-3/4"	3-3/8"	5-3/4"	5-3/8"	3/4"
*6848	3-1/2"	90MM		1-1/4, 1-1/2, 1-3/4, 2", 2-1/4, 2-1/2, 3"	32, 40, 50, 60, 65	5-1/2"	4-7/8"	4-1/2"	3-7/8"	6-1/2"	5-7/8"	1"
*6849	4"	100MM		1-1/2, 1-3/4, 2", 2-1/4, 2-1/2, 3"	40, 50, 60, 65, 80	6-1/4"	5-5/8"	5"	4-3/8"	7-1/2"	4-3/8"	1"

NOTE: SERIES CATALOG NUMBERS SHOWN ARE FOR INCH O.D./ I.D. COMBINATIONS.

FOR BUSHINGS WITH ANY METRIC DIMENSIONS ADD A LETTER **M** TO THE CATALOG NUMBER TO ORDER, SPECIFY SERIES CAT. NO., O.D. AND I.D. SIZE AND LENGTH CHOICE-Z, ZS OR ZL

TYPE C TOOLHOLDER BUSHING

This CNC Type C Bushing is designed for universal use on all CNC turning machines to adapt a wide variety of Boring Bars, Drills, Reamers and Shank type tools. Precision machine hardened and ground concentric; made in the U.S.A. - BUILT TO LAST! Select the O.D. size that fits your machine and order from the chart below.



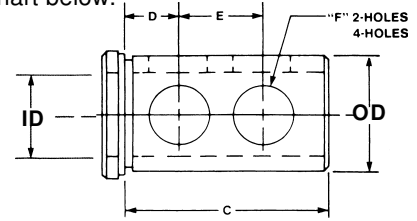
SERIES	SPECIFY CHOICE		CHOOSE FROM STANDARD I.D. SIZES SHOWN		SPECIFY LENGTH CHOICE DIM. C & D				
	CAT. NO.	O.D.	O.D.	INCH	METRIC	C (STD)		CS (SHORT)	
*6810	3/4"	20MM		1/4, 5/16, 3/8, 1/2	6, 8, 10, 12	1-1/2"	2"	1-1/8"	1-1/2"
*6811	1"	25MM		1/4, 5/16, 3/8, 1/2, 5/8, 3/4	8, 10, 12, 16, 20	2-3/8"	2-3/4"	1-3/8"	1-3/4"
*6812	1-1/4"	32MM		3/8, 1/2, 5/8, 3/4, 7/8, 1"	10, 12, 16, 20, 25	2-3/4"	3-1/4"	1-3/4"	2-1/8"
*6813	1-1/2"	40MM		3/8, 1/2, 5/8, 3/4, 7/8, 1, 1-1/4	10, 12, 16, 20, 25, 32	3"	3-3/8"	2-1/8"	2-1/2"
*6814	1-3/4"	45MM		1/2, 5/8, 3/4, 7/8, 1, 1-1/4, 1-1/2	12, 16, 20, 25, 32, 40	3-1/8"	3-1/2"	2-5/8"	3"
*6815	2"	50MM		1/2, 5/8, 3/4, 7/8, 1, 1-1/4, 1-1/2, 1-3/4	12, 16, 20, 25, 32, 40, 45	3-5/8"	4"	3"	3-1/2"
*6816	2-1/2"	65MM		3/4, 1, 1-1/4, 1-1/2, 1-3/4, 2, 2-1/4	20, 25, 32, 40, 45, 50	4-1/8"	4-1/2"	3-1/2"	4"
*6817	3"	80MM		1, 1-1/4, 1-1/2, 1-3/4, 2, 2-1/4, 2-1/2	25, 32, 40, 45, 50, 60, 65	4-5/8"	5"	4-1/8"	4-1/2"
*6818	3-1/2"	90MM		1, 1-1/4, 1-1/2, 1-3/4, 2, 2-1/4, 2-1/2, 3"	25, 32, 40, 45, 50, 60, 65	5"	5-3/4"	4-3/4"	5-1/4"

NOTE: SERIES CATALOG NUMBERS SHOWN ARE FOR INCH O.D./ I.D. COMBINATIONS.

FOR BUSHINGS WITH ANY METRIC DIMENSIONS ADD A LETTER **M** TO THE CATALOG NUMBER TO ORDER, SPECIFY SERIES CAT. NO., O.D. AND I.D. SIZE AND LENGTH CHOICE-C OR CS

TYPE J TOOLHOLDER BUSHING

This Type J Toolholder Bushing, with long solid body, has clearance holes so that you can clamp directly on the tool with set screws for positive alignment of the cutting edge of the tool. They are hardened and precision ground concentric. Select the O.D. size that fits your machine and order from the chart below.



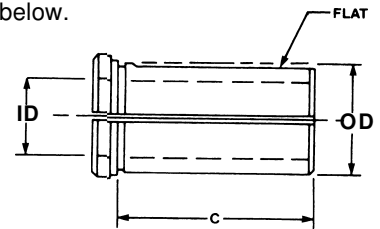
SERIES CAT. NO.	SPECIFY CHOICE		CHOOSE FROM STANDARD I.D. SIZES SHOWN				F		
	O.D.	O.D.	INCH	METRIC	C	D	E	NO. HOLE	DIA HOLE
*6819	3/4"	20MM	1/4, 5/16, 3/8, 1/2	6, 8, 10, 12	1-1/2"	3/8"	13/16"	2	3/8"
*6820	1"	25MM	3/8, 1/2, 5/8, 3/4	10, 12, 16, 20	1-3/4"	7/16"	7/8"	2	5/8"
*6821	1-1/4"	32MM	3/8, 1/2, 5/8, 3/4, 7/8, 1	10, 12, 16, 20, 25	2-1/8"	5/8"	1"	2	3/4"
*6822	1-1/2"	40MM	3/8, 1/2, 5/8, 3/4, 7/8, 1, 1-1/4	10, 12, 16, 20, 25, 32	2-1/2"	11/16"	1-1/8"	2	7/8"
*6823	1-3/4"	45MM	1/2, 5/8, 3/4, 7/8, 1, 1-1/4, 1-1/2	12, 16, 20, 25, 32, 40	3"	3/4"	1-1/4"	2	7/8"
*6824	2"	50MM	1/2, 5/8, 3/4, 7/8, 1, 1-1/4, 1-1/2, 1-3/4"	12, 16, 20, 25, 32, 40, 45	3-1/2"	3/4"	1-1/2"	2	1"
*6825	2-1/2"	65MM	3/4, 7/8, 1, 1-1/4, 1-1/2, 1-3/4, 2, 2-1/4"	20, 25, 32, 40, 45, 50	4"	7/8"	1-3/4"	2	1-1/4"
*6826	3"	80MM	1, 1-1/4, 1-1/2, 1-3/4, 2, 2-1/4, 2-1/2"	25, 32, 40, 45, 50, 60, 65	4-1/2"	1"	2"	4	1-1/4"
*6827	3-1/2"	90MM	1, 1-1/4, 1-1/2, 1-3/4, 2, 2-1/4, 2-1/2, 3	25, 32, 40, 45, 50, 60, 65	5-1/4"	1-1/4"	2-1/2"	4	1-1/4"

NOTE: SERIES CATALOG NUMBERS SHOWN ARE FOR INCH O.D./ I.D. COMBINATIONS.

FOR BUSHINGS WITH ANY METRIC DIMENSIONS ADD A LETTER M TO THE CATALOG NUMBER TO ORDER, SPECIFY SERIES CAT. NO., O.D. AND I.D. SIZE

TYPE B TOOLHOLDER BUSHING

These split Type B Bushings are manufactured with flexible manufacturing systems, for all Types and sizes of CNC Lathes and Chucks; are Heat Treated and precision ground concentric. It is used to adapt Drills, Boring Bars, and other Shank Tools. Select the O.D. size that fits your machine and order from the chart below.



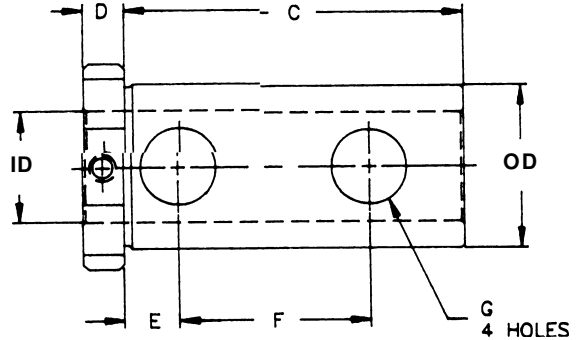
SERIES CAT. NO.	SPECIFY CHOICE		CHOOSE FROM STANDARD I.D. SIZES SHOWN		C
	O.D.	O.D.	INCH	METRIC	
*6801	3/4"	20MM	1/4, 5/16, 3/8, 1/2	6, 8, 10, 12	1-1/2"
*6802	1"	25MM	3/8, 1/2, 5/8, 3/4	10, 12, 16, 20	1-3/4"
*6802.5	1-1/4"	32MM	3/8, 1/2, 5/8, 3/4, 7/8, 1	10, 12, 16, 20, 25	2-1/8"
*6803	1-1/2"	40MM	3/8, 1/2, 5/8, 3/4, 7/8, 1, 1-1/4	10, 12, 16, 20, 25, 32	2-1/2"
*6804	1-3/4"	45MM	1/2, 5/8, 3/4, 7/8, 1, 1-1/4, 1-1/2	10, 12, 16, 20, 25, 32, 40	3"
*6805	2"	50MM	1/2, 5/8, 3/4, 7/8, 1, 1-1/4, 1-1/2, 1-3/4"	12, 16, 20, 25, 32, 40	3-1/2"
*6806	2-1/2"	65MM	1/2, 5/8, 3/4, 7/8, 1, 1-1/4, 1-1/2, 1-3/4, 2, 2-1/4"	20, 25, 32, 40, 45, 50	4"
*6807	3"	80MM	1, 1-1/4, 1-1/2, 1-3/4, 2, 2-1/4, 2-1/2"	25, 32, 40, 45, 50, 60, 65	4-1/2"
*6808	3-1/2"	90MM	1, 1-1/4, 1-1/2, 1-3/4, 2, 2-1/4, 2-1/2, 3	25, 32, 40, 45, 50, 60, 65	5-1/4"

NOTE: SERIES CATALOG NUMBERS SHOWN ARE FOR INCH O.D./ I.D. COMBINATIONS.

FOR BUSHINGS WITH ANY METRIC DIMENSIONS ADD A LETTER M TO THE CATALOG NUMBER TO ORDER, SPECIFY SERIES CAT. NO., O.D. AND I.D. SIZE

TYPE LB TOOLHOLDER BUSHING

This Type LB Toolholder Bushing with long solid body, has four clearance holes so that you can clamp directly on the tool with Set Screws for positive alignment of the cutting edge of the tool. Manufactured to include clearance notches for coolant. They are hardened and precision ground concentric. Select the O.D. size that fits your machine and order from the chart below.



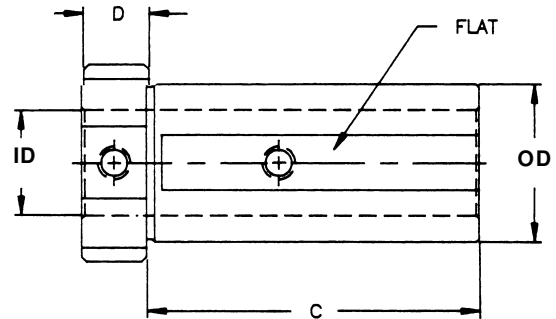
SERIES CAT. NO.	SPECIFY CHOICE		CHOOSE FROM STANDARD I.D. SIZES SHOWN		C	D	E	F	G
	O.D.	O.D.	INCH	METRIC					
*6858	1-1/4"	32MM	3/8, 1/2, 5/8, 3/4, 7/8, 1	10, 12, 16, 20, 25	3-1/8"	3/8"	1/2"	1-3/4"	5/8"
*6859	1-1/2"	40MM	3/8, 1/2, 5/8, 3/4, 7/8, 1, 1-1/4	10, 12, 16, 20, 25, 32	3-1/8"	3/8"	1/2"	1-3/4"	5/8"
*6860	2"	50MM	1/2, 5/8, 3/4, 7/8, 1, 1-1/4, 1-1/2, 1-3/4	12, 16, 20, 25, 32, 40, 45	4-1/2"	1/2"	1/2"	2-3/4"	11/16"

NOTE: SERIES CATALOG NUMBERS SHOWN ARE FOR INCH O.D./ I.D. COMBINATIONS.

FOR BUSHINGS WITH ANY METRIC DIMENSIONS ADD A LETTER M TO THE CATALOG NUMBER TO ORDER, SPECIFY SERIES CAT. NO., O.D. AND I.D. SIZE

TYPE LBF TOOLHOLDER BUSHING

These Type LBF Type Bushings are manufactured with a flat for clamping the Toolholder and two set screws for clamping a variety of Drills, Boring Bars and other Shank Tools. Equipped with two clearance notches for coolant, they are Heat Treated and precision ground concentric. This Universal Style is good for Coolant Through the Tool applications due to its solid configuration. Select the O.D. size that fits your machine and order from the chart below.



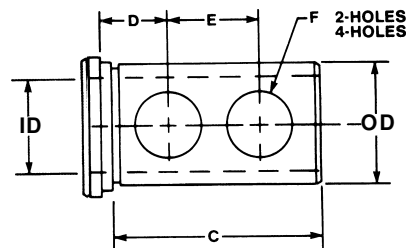
SERIES CAT. NO.	SPECIFY CHOICE		CHOOSE FROM STANDARD I.D. SIZES SHOWN		C	D
	O.D.	O.D.	INCH	METRIC		
*6863	1-1/4"	32MM	3/8, 1/2, 5/8, 3/4, 7/8, 1	10, 12, 16, 20, 25	2.812	5/8"
*6864	1-1/2"	40MM	3/8, 1/2, 5/8, 3/4, 7/8, 1, 1-1/4	10, 12, 16, 20, 25, 32	3.156	5/8"
*6865	2"	50MM	1/2, 5/8, 3/4, 7/8, 1, 1-1/4, 1-1/2, 1-3/4	12, 16, 20, 25, 32, 40, 45	3.750	3/4"

NOTE: SERIES CATALOG NUMBERS SHOWN ARE FOR INCH O.D./ I.D. COMBINATIONS.

FOR BUSHINGS WITH ANY METRIC DIMENSIONS ADD A LETTER M TO THE CATALOG NUMBER TO ORDER, SPECIFY SERIES CAT. NO., O.D. AND I.D. SIZE

TYPE DD TOOLHOLDER BUSHING

With the combination of the industry standard "B" style split bushing and "J" set screw clearance bushing design, we have set a precedent with its new innovative "DD" Double Duty bushing. This new improved "DD" bushing with clearance holes and split milled flat can be used as a conventional "B" style or "J" style bushing. Select the O.D. size that fits your machine and order from the chart below.



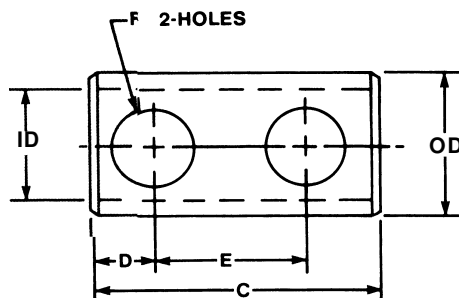
SERIES CAT. NO.	SPECIFY CHOICE		CHOOSE FROM STANDARD I.D. SIZES SHOWN		C	D	E	F	
	O.D.	O.D.	INCH	METRIC				NO. HOLE	DIA HOLE
*6830	1-1/2"	40MM	3/8, 1/2, 5/8, 3/4, 7/8, 1, 1-1/4	10, 12, 16, 20, 25, 32	2-1/2"	11/16"	1-1/8"	2	7/8"
*6831	1-3/4"	45MM	1/2, 5/8, 3/4, 7/8, 1, 1-1/4, 1-1/2	12, 16, 20, 25, 32, 40	3"	3/4"	1-1/4"	2	7/8"
*6832	2"	50MM	1/2, 5/8, 3/4, 7/8, 1, 1-1/4, 1-1/2 1-3/4"	12, 16, 20, 25, 32, 40 45	3-1/2"	3/4"	1-1/2"	2	1"
*6833	2-1/2"	65MM	1/2, 5/8, 3/4, 7/8, 1, 1-1/4, 1-1/2 1-3/4, 2, 2-1/4"	20, 25, 32, 40, 45, 50	4"	7/8"	1-3/4"	2	1-1/4"
*6834	3"	80MM	1, 1-1/4, 1-1/2, 1-3/4, 2, 2-1/4, 2-1/2"	25, 32, 40, 45, 50, 60 65	4-1/2"	1"	2"	4	1-1/4"
*6835	3-1/2"	90MM	1-1/2, 1-3/4, 2, 2-1/4, 2-1/2, 3"	25, 32, 40, 45, 50, 60 65	5-1/4"	1-1/4"	2-1/2"	4	1-1/4"

NOTE: SERIES CATALOG NUMBERS SHOWN ARE FOR INCH O.D./ I.D. COMBINATIONS.

FOR BUSHINGS WITH ANY METRIC DIMENSIONS ADD A LETTER M TO THE CATALOG NUMBER TO ORDER, SPECIFY SERIES CAT. NO., O.D. AND I.D. SIZE

TYPE L TOOLHOLDER BUSHING

All "L" style bushings are shoulder-less, have set screw clearance holes opposite the slot and have a split with a flat on the O.D. "L" Style Bushings are used to adapt drills, boring bars and shank tools to any size in a standard turret or toolholder. We have a full selection and assortment of these bushings. Select the O.D. size that fits your machine and order from the chart below.



SERIES CAT. NO.	SPECIFY CHOICE		CHOOSE FROM STANDARD I.D. SIZES SHOWN		C	D	E	F	
	O.D.	O.D.	INCH	METRIC				NO. HOLE	DIA HOLE
*6850	1-1/2"	40MM	3/8, 1/2, 5/8, 3/4, 7/8, 1, 1-1/4	10, 12, 16, 20, 25, 32	3"	3/4"	1-5/8"	2	7/8"
*6851	1-3/4"	45MM	1/2, 5/8, 3/4, 7/8, 1, 1-1/4, 1-1/2	12, 16, 20, 25, 32, 40	3"	3/4"	1-5/8"	2	7/8"
*6852	2-1/4"	60MM	5/8, 3/4, 1, 1-1/4, 1-1/2, 1-3/4, 2	16, 20, 25, 32, 40, 50	4-1/2"	7/8"	2"	2	1"
*6853	2-3/4"	70MM	3/4, 1, 1-1/4, 1-1/2, 1-3/4, 2, 2-1/4"	20, 25, 32, 40, 50	4-1/2"	7/8"	2"	2	1"

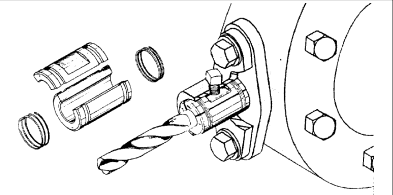
NOTE: SERIES CATALOG NUMBERS SHOWN ARE FOR INCH O.D./ I.D. COMBINATIONS.

FOR BUSHINGS WITH ANY METRIC DIMENSIONS ADD A LETTER M TO THE CATALOG NUMBER TO ORDER, SPECIFY SERIES CAT. NO., O.D. AND I.D. SIZE

NEW & IMPROVED!

NOW AVAILABLE:

- METRIC ID AND SPECIAL ID BUSHINGS, AT SAME PRICE AS EQUIVALENT FRACTIONAL SIZE, MINIMUM QUANTITIES MAY APPLY.
- METRIC ID SIZES NOW LISTED.
- 1-1/4" OD TAP AND DRILL BUSHINGS/PRICE ON APPLICATION
- 1-1/2" OD TAP AND DRILL BUSHINGS/PRICE ON APPLICATION



ACCURATE, LONG-LASTING, TIGHT-GRIPPING

UNIQUE DESIGN -- Bushing grips the drill around three-quarters of its circumference, and fits the hole in the floating holder in the same manner. Result? More accurate fitting and line-up of drill and bushing.

***Note: Thin wall bushings have only 1 split instead of 2 and have no retainer springs.**

POSITIVE OPERATION -- Entire length of bushing firmly clamps drill shank. Less chance of drill being pushed back.

HEAT-TREATED FOR LONG LIFE -- Made of quality carburizing steel and heat-treated (not merely cyanided). The only split-type bushing of its type that is ground after heat-treating.

RETAINING SPRINGS

Bushing Size	Cat. No.
#00	MB00-RS
#0	MB0-RS
#2	MB2-RS

BUSHING DIMENSIONS

#00	1/2" O.D. x 3/4" Long
#0	5/8" O.D. x 7/8" Long
#2	1" O.D. x 1-1/4" Long

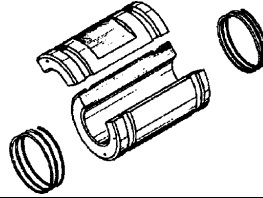
DRILL HOLDER BUSHING SETS AND TAP HOLDER BUSHING SETS NOW AVAILABLE

- NOW YOU CAN ORDER COMPLETE SETS OF DRILL HOLDER BUSHINGS AND TAP HOLDER BUSHINGS, PACKAGED IN A CONVENIENT STORAGE CASE. THE PRICE OF A SET IS 10% LESS THAN WHEN EACH BUSHING IS ORDERED SEPARATELY.
- DRILL BUSHING SETS INCLUDE 1 EACH OF ALL BUSHINGS LISTED BELOW BY COLUMN.

#00 DRILL BUSHINGS 1/2" OD X 3/4" LONG

FRACTIONAL	LETTER	NUMBER			METRIC			
MB00-1/64	MB00-A	MB00-#1	MB00-26	MB00-51	MB00-0.35MM	MB00-1.80MM	MB00-4.40MM	MB00-7.70MM
MB00-1/32	MB00-B	MB00-2	MB00-27	MB00-52	MB00-0.38MM	MB00-1.85MM	MB00-4.50MM	MB00-7.80MM
MB00-3/64	MB00-C	MB00-3	MB00-28	MB00-53	MB00-0.40MM	MB00-1.90MM	MB00-4.60MM	MB00-7.90MM
MB00-1/16	MB00-D	MB00-4	MB00-29	MB00-54	MB00-0.42MM	MB00-1.95MM	MB00-4.70MM	MB00-8.00MM
MB00-5/64	MB00-E	MB00-5	MB00-30	MB00-55	MB00-0.45MM	MB00-2.00MM	MB00-4.80MM	MB00-8.10MM
MB00-3/32	MB00-F	MB00-6	MB00-31	MB00-56	MB00-0.48MM	MB00-2.05MM	MB00-4.90MM	MB00-8.20MM
MB00-7/64	MB00-G	MB00-7	MB00-32	MB00-57	MB00-0.50MM	MB00-2.10MM	MB00-5.00MM	MB00-8.30MM
MB00-1/8	MB00-H	MB00-8	MB00-33	MB00-58	MB00-0.55MM	MB00-2.15MM	MB00-5.10MM	MB00-8.40MM
MB00-9/64	MB00-"I"	MB00-9	MB00-34	MB00-59	MB00-0.60MM	MB00-2.20MM	MB00-5.20MM	MB00-8.50MM
MB00-5/32	MB00-J	MB00-10	MB00-35	MB00-60	MB00-0.62MM	MB00-2.25MM	MB00-5.30MM	MB00-8.60MM
MB00-11/64	MB00-K	MB00-11	MB00-36	MB00-61	MB00-0.65MM	MB00-2.30MM	MB00-5.40MM	MB00-8.70MM
MB00-3/16	MB00-L	MB00-12	MB00-37	MB00-62	MB00-0.70MM	MB00-2.35MM	MB00-5.50MM	MB00-8.80MM*
MB00-13/64	MB00-M	MB00-13	MB00-38	MB00-63	MB00-0.75MM	MB00-2.40MM	MB00-5.60MM	MB00-8.90MM*
MB00-7/32	MB00-N	MB00-14	MB00-39	MB00-64	MB00-0.80MM	MB00-2.45MM	MB00-5.70MM	MB00-9.00MM*
MB00-15/64	MB00-O	MB00-15	MB00-40	MB00-65	MB00-0.85MM	MB00-2.50MM	MB00-5.80MM	MB00-9.10MM*
MB00-1/4	MB00-P	MB00-16	MB00-41	MB00-66	MB00-0.90MM	MB00-2.60MM	MB00-5.90MM	MB00-9.20MM*
MB00-17/64	MB00-Q	MB00-17	MB00-42	MB00-67	MB00-0.95MM	MB00-2.70MM	MB00-6.00MM	MB00-9.30MM*
MB00-9/32	MB00-R	MB00-18	MB00-43	MB00-68	MB00-1.00MM	MB00-2.80MM	MB00-6.10MM	MB00-9.40MM*
MB00-19/64	MB00-S*	MB00-19	MB00-44	MB00-69	MB00-1.05MM	MB00-2.90MM	MB00-6.20MM	MB00-9.50MM*
MB00-5/16	MB00-T*	MB00-20	MB00-45	MB00-70	MB00-1.10MM	MB00-3.00MM	MB00-6.30MM	MB00-9.60MM*
MB00-21/64	MB00-U*	MB00-21	MB00-46	MB00-71	MB00-1.15MM	MB00-3.10MM	MB00-6.40MM	MB00-9.70MM*
MB00-11/32	MB00-V*	MB00-22	MB00-47	MB00-72	MB00-1.20MM	MB00-3.20MM	MB00-6.50MM	MB00-9.80MM*
MB00-23/64*	MB00-W*	MB00-23	MB00-48	MB00-73	MB00-1.25MM	MB00-3.30MM	MB00-6.60MM	MB00-9.90MM*
MB00-3/8*	MB00-X*	MB00-24	MB00-49	MB00-74	MB00-1.30MM	MB00-3.40MM	MB00-6.70MM	MB00-10.00MM*
MB00-25/64*	MB00-Y*	MB00-25	MB00-50	MB00-75	MB00-1.35MM	MB00-3.50MM	MB00-6.80MM	MB00-10.20MM*
MB00-13/32*	MB00-Z*			MB00-76	MB00-1.40MM	MB00-3.60MM	MB00-6.90MM	MB00-10.50MM*
MB00-27/64*				MB00-77	MB00-1.45MM	MB00-3.70MM	MB00-7.00MM	MB00-10.80MM*
MB00-7/16*				MB00-78	MB00-1.50MM	MB00-3.80MM	MB00-7.10MM	MB00-11.00MM*
MB00-29/64*				MB00-79	MB00-1.55MM	MB00-3.90MM	MB00-7.20MM	MB00-11.20MM*
MB00-15/32*				MB00-80	MB00-1.60MM	MB00-4.00MM	MB00-7.30MM	MB00-11.50MM*
MB00-31/64*					MB00-1.65MM	MB00-4.10MM	MB00-7.40MM	MB00-11.80MM*
					MB00-1.70MM	MB00-4.20MM	MB00-7.50MM	MB00-12.00MM*
					MB00-1.75MM	MB00-4.30MM	MB00-7.60MM	MB00-12.20MM*
MB00-1SET	MB00-2SET	MB00-3SET	MB00-4SET	MB00-5SET	MB00-6SET	MB00-7SET	MB00-8SET	MB00-9SET

**NOTE: Thin wall bushings have only 1 split instead of 2 and have no retainer springs.*



Drill Bushing Sets include 1 each of all bushings listed on this page by column. The sets are packaged in a convenient storage case. The price for a set is 10% less than when each bushing is ordered separately.

#0 DRILL BUSHINGS 5/8" OD X 7/8" LONG									
FRACTIONAL	LETTER	NUMBER			METRIC				
MB0-1/16	MB0-A	MB0-#1	MB0-26	MB0-51	MB0-0.35MM	MB0-1.60MM	MB0-3.60MM	MB0-6.50MM	MB0-9.40MM
MB0-5/64	MB0-B	MB0-2	MB0-27	MB0-52	MB0-0.38MM	MB0-1.65MM	MB0-3.70MM	MB0-6.60MM	MB0-9.50MM
MB0-3/32	MB0-C	MB0-3	MB0-28	MB0-53	MB0-0.40MM	MB0-1.70MM	MB0-3.80MM	MB0-6.70MM	MB0-9.60MM
MB0-7/64	MB0-D	MB0-4	MB0-29	MB0-54	MB0-0.42MM	MB0-1.75MM	MB0-3.90MM	MB0-6.80MM	MB0-9.70MM
MB0-1/8	MB0-E	MB0-5	MB0-30	MB0-55	MB0-0.45MM	MB0-1.80MM	MB0-4.00MM	MB0-6.90MM	MB0-9.80MM
MB0-9/64	MB0-F	MB0-6	MB0-31	MB0-56	MB0-0.48MM	MB0-1.85MM	MB0-4.10MM	MB0-7.00MM	MB0-9.90MM
MB0-5/32	MB0-G	MB0-7	MB0-32	MB0-57	MB0-0.50MM	MB0-1.90MM	MB0-4.20MM	MB0-7.10MM	MB0-10.00MM
MB0-11/64	MB0-H	MB0-8	MB0-33	MB0-58	MB0-0.55MM	MB0-1.95MM	MB0-4.30MM	MB0-7.20MM	MB0-10.20MM
MB0-3/16	MB0-I	MB0-9	MB0-34	MB0-59	MB0-0.60MM	MB0-2.00MM	MB0-4.40MM	MB0-7.30MM	MB0-10.50MM
MB0-13/64	MB0-J	MB0-10	MB0-35	MB0-60	MB0-0.62MM	MB0-2.05MM	MB0-4.50MM	MB0-7.40MM	MB0-10.80MM
MB0-7/32	MB0-K	MB0-11	MB0-36	MB0-61	MB0-0.65MM	MB0-2.10MM	MB0-4.60MM	MB0-7.50MM	MB0-11.00MM*
MB0-15/64	MB0-L	MB0-12	MB0-37	MB0-62	MB0-0.70MM	MB0-2.15MM	MB0-4.70MM	MB0-7.60MM	MB0-11.20MM*
MB0-1/4	MB0-M	MB0-13	MB0-38	MB0-63	MB0-0.75MM	MB0-2.20MM	MB0-4.80MM	MB0-7.70MM	MB0-11.50MM*
MB0-17/64	MB0-N	MB0-14	MB0-39	MB0-64	MB0-0.80MM	MB0-2.25MM	MB0-4.90MM	MB0-7.80MM	MB0-11.80MM*
MB0-9/32	MB0-O	MB0-15	MB0-40	MB0-65	MB0-0.85MM	MB0-2.30MM	MB0-5.00MM	MB0-7.90MM	MB0-12.00MM*
MB0-19/64	MB0-P	MB0-16	MB0-41	MB0-66	MB0-0.90MM	MB0-2.35MM	MB0-5.10MM	MB0-8.00MM	MB0-12.20MM*
MB0-5/16	MB0-Q	MB0-17	MB0-42	MB0-67	MB0-0.95MM	MB0-2.40MM	MB0-5.20MM	MB0-8.10MM	MB0-12.50MM*
MB0-21/64	MB0-R	MB0-18	MB0-43	MB0-68	MB0-1.00MM	MB0-2.45MM	MB0-5.30MM	MB0-8.20MM	MB0-12.80MM*
MB0-11/32	MB0-S	MB0-19	MB0-44	MB0-69	MB0-1.05MM	MB0-2.50MM	MB0-5.40MM	MB0-8.30MM	MB0-13.00MM*
MB0-23/64	MB0-T	MB0-20	MB0-45	MB0-70	MB0-1.10MM	MB0-2.60MM	MB0-5.50MM	MB0-8.40MM	MB0-13.20MM*
MB0-3/8	MB0-U	MB0-21	MB0-46	MB0-71	MB0-1.15MM	MB0-2.70MM	MB0-5.60MM	MB0-8.50MM	MB0-13.50MM*
MB0-25/64	MB0-V	MB0-22	MB0-47	MB0-72	MB0-1.20MM	MB0-2.80MM	MB0-5.70MM	MB0-8.60MM	MB0-13.80MM*
MB0-13/32	MB0-W	MB0-23	MB0-48	MB0-73	MB0-1.25MM	MB0-2.90MM	MB0-5.80MM	MB0-8.70MM	MB0-14.00MM*
MB0-27/64	MB0-X	MB0-24	MB0-49	MB0-74	MB0-1.30MM	MB0-3.00MM	MB0-5.90MM	MB0-8.80MM	MB0-14.25MM*
MB0-7/16	MB0-Y	MB0-25	MB0-50	MB0-75	MB0-1.35MM	MB0-3.10MM	MB0-6.00MM	MB0-8.90MM	MB0-14.50MM*
MB0-29/64*	MB0-Z			MB0-76	MB0-1.40MM	MB0-3.20MM	MB0-6.10MM	MB0-9.00MM	MB0-14.75MM*
MB0-15/32*				MB0-77	MB0-1.45MM	MB0-3.30MM	MB0-6.20MM	MB0-9.10MM	MB0-15.00MM*
MB0-31/64*				MB0-78	MB0-1.50MM	MB0-3.40MM	MB0-6.30MM	MB0-9.20MM	MB0-15.25MM*
MB0-1/2*				MB0-79	MB0-1.55MM	MB0-3.50MM	MB0-6.40MM	MB0-9.30MM	MB0-15.50MM*
MB0-33/64*				MB0-80					
MB0-17/32*									
MB0-35/64*									
MB0-9/16*									
MB0-37/64*									
MB0-19/32*									
MB0-39/64*									
MB0-1SET	MB0-2SET	MB0-3SET	MB0-4SET	MB0-5SET	MB0-6SET	MB0-7SET	MB0-8SET	MB0-9SET	MB0-10SET



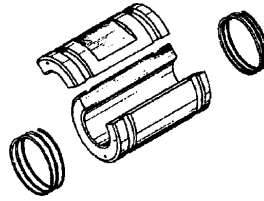
NOW YOU CAN CALL



SOMMA TOOL IF YOU NEED...

**BROWN & SHARPE
OR WARNER & SWASEY
TOOLING & REPAIR PARTS**

****NOTE: Thin wall bushings have only 1 split instead of 2 and have no retainer springs.**



Drill Bushing Sets include 1 each of all bushings listed on this page by column. The sets are packaged in a convenient storage case. The price for a set is 10% less than when each bushing is ordered separately.

#2 DRILL BUSHINGS 1" OD X 1-1/4" LONG							
FRACTIONAL			LETTER		NUMBER		
MB2-1/16	MB2-25/64	MB2-23/32	MB2-A	MB2-N	MB2-#1	MB2-22	MB2-43
MB2-5/64	MB2-13/32	MB2-47/64	MB2-B	MB2-O	MB2-2	MB2-23	MB2-44
MB2-3/32	MB2-27/64	MB2-3/4	MB2-C	MB2-P	MB2-3	MB2-24	MB2-45
MB2-7/64	MB2-7/16	MB2-49/64*	MB2-D	MB2-Q	MB2-4	MB2-25	MB2-46
MB2-1/8	MB2-29/64	MB2-25/32*	MB2-E	MB2-R	MB2-5	MB2-26	MB2-47
MB2-9/64	MB2-15/32	MB2-51/64*	MB2-F	MB2-S	MB2-6	MB2-27	MB2-48
MB2-5/32	MB2-31/64	MB2-13/16*	MB2-G	MB2-T	MB2-7	MB2-28	MB2-49
MB2-11/64	MB2-1/2	MB2-53/64*	MB2-H	MB2-U	MB2-8	MB2-29	MB2-50
MB2-3/16	MB2-33/64	MB2-27/32*	MB2-I	MB2-V	MB2-9	MB2-30	MB2-51
MB2-13/64	MB2-17/32	MB2-55/64*	MB2-J	MB2-W	MB2-10	MB2-31	MB2-52
MB2-7/32	MB2-35/64	MB2-7/8*	MB2-K	MB2-X	MB2-11	MB2-32	MB2-53
MB2-15/64	MB2-9/16	MB2-57/64*	MB2-L	MB2-Y	MB2-12	MB2-33	MB2-54
MB2-1/4	MB2-37/64	MB2-29/32*	MB2-M	MB2-Z	MB2-13	MB2-34	MB2-55
MB2-17/64	MB2-19/32	MB2-59/64*			MB2-14	MB2-35	MB2-56
MB2-9/32	MB2-39/64	MB2-15/16*			MB2-15	MB2-36	MB2-57
MB2-19/64	MB2-5/8	MB2-61/64*			MB2-16	MB2-37	MB2-58
MB2-5/16	MB2-41/64	MB2-31/32*			MB2-17	MB2-38	MB2-59
MB2-21/64	MB2-21/32	MB2-63/64*			MB2-18	MB2-39	MB2-60
MB2-11/32	MB2-43/64				MB2-19	MB2-40	MB2-61
MB2-23/64	MB2-11/16				MB2-20	MB2-41	MB2-62
MB2-3/8	MB2-45/64				MB2-21	MB2-42	MB2-63
MB2-1SET	MB2-2SET	MB2-3SET	MB2-7SET	MB2-8SET	MB2-4SET	MB2-5SET	MB2-6SET

#2 DRILL BUSHINGS 1" OD X 1-1/4" LONG						
METRIC						
MB2-1.20MM	MB2-2.25MM	MB2-4.10MM	MB2-6.20MM	MB2-8.30MM	MB2-11.00MM	MB2-16.25MM
MB2-1.25MM	MB2-2.30MM	MB2-4.20MM	MB2-6.30MM	MB2-8.40MM	MB2-11.20MM	MB2-16.50MM
MB2-1.30MM	MB2-2.35MM	MB2-4.30MM	MB2-6.40MM	MB2-8.50MM	MB2-11.50MM	MB2-16.75MM
MB2-1.35MM	MB2-2.40MM	MB2-4.40MM	MB2-6.50MM	MB2-8.60MM	MB2-11.80MM	MB2-17.00MM
MB2-1.40MM	MB2-2.45MM	MB2-4.50MM	MB2-6.60MM	MB2-8.70MM	MB2-12.00MM	MB2-17.25MM
MB2-1.45MM	MB2-2.50MM	MB2-4.60MM	MB2-6.70MM	MB2-8.80MM	MB2-12.20MM	MB2-17.50MM
MB2-1.50MM	MB2-2.60MM	MB2-4.70MM	MB2-6.80MM	MB2-8.90MM	MB2-12.50MM	MB2-18.00MM
MB2-1.55MM	MB2-2.70MM	MB2-4.80MM	MB2-6.90MM	MB2-9.00MM	MB2-12.80MM	MB2-18.50MM
MB2-1.60MM	MB2-2.80MM	MB2-4.90MM	MB2-7.00MM	MB2-9.10MM	MB2-13.00MM	MB2-19.00MM
MB2-1.65MM	MB2-2.90MM	MB2-5.00MM	MB2-7.10MM	MB2-9.20MM	MB2-13.20MM	MB2-19.50MM*
MB2-1.70MM	MB2-3.00MM	MB2-5.10MM	MB2-7.20MM	MB2-9.30MM	MB2-13.50MM	MB2-20.00MM*
MB2-1.75MM	MB2-3.10MM	MB2-5.20MM	MB2-7.30MM	MB2-9.40MM	MB2-13.80MM	MB2-20.50MM*
MB2-1.80MM	MB2-3.20MM	MB2-5.30MM	MB2-7.40MM	MB2-9.50MM	MB2-14.00MM	MB2-21.00MM*
MB2-1.85MM	MB2-3.30MM	MB2-5.40MM	MB2-7.50MM	MB2-9.60MM	MB2-14.25MM	MB2-21.50MM*
MB2-1.90MM	MB2-3.40MM	MB2-5.50MM	MB2-7.60MM	MB2-9.70MM	MB2-14.50MM	MB2-22.00MM*
MB2-1.95MM	MB2-3.50MM	MB2-5.60MM	MB2-7.70MM	MB2-9.80MM	MB2-14.75MM	MB2-22.50MM*
MB2-2.00MM	MB2-3.60MM	MB2-5.70MM	MB2-7.80MM	MB2-9.90MM	MB2-15.00MM	MB2-23.00MM*
MB2-2.05MM	MB2-3.70MM	MB2-5.80MM	MB2-7.90MM	MB2-10.00MM	MB2-15.25MM	MB2-23.50MM*
MB2-2.10MM	MB2-3.80MM	MB2-5.90MM	MB2-8.00MM	MB2-10.20MM	MB2-15.50MM	MB2-24.00MM*
MB2-2.15MM	MB2-3.90MM	MB2-6.00MM	MB2-8.10MM	MB2-10.50MM	MB2-15.75MM	MB2-24.50MM*
MB2-2.20MM	MB2-4.00MM	MB2-6.10MM	MB2-8.20MM	MB2-10.80MM	MB2-16.00MM	MB2-25.00MM*
MB2-9SET	MB2-10SET	MB2-11SET	MB2-12SET	MB2-13SET	MB2-14SET	MB2-15SET

UNIQUE DESIGN -- Bushing grips the tap around three-quarters of its circumference, and fits the hole in the floating holder in the same manner. Result? More accurate fitting and line-up of tap and bushing.

***Note: Thin wall bushings have only 1 split instead of 2 and have no retainer springs.**

POSITIVE OPERATION -- Entire length of bushing firmly clamps tap shank. Less chance of tap being pushed back.
HEAT-TREATED FOR LONG LIFE -- Made of quality carburizing steel and heat-treated (not merely cyanided). The only split-type bushing of its type ground after heat-treating.

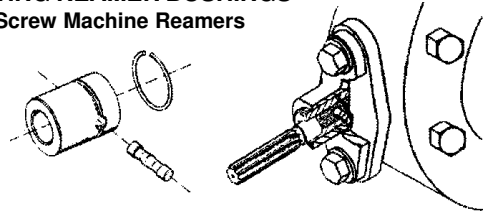
**** NOMINAL OD OF THREAD THAT TAP WILL CUT.
*** FOR TAPS SMALLER THAN #7 USE #0 TAP HOLDER AND TA02 ADAPTER.**

TAP HOLDER BUSHINGS

SIZE OF TAP USED**	TAP SHANK DIA.	#00	#0	#2
		1/2 OD x 3/4 long	5/8 OD x 7/8 long	1" OD x 1-1/4 long
		CAT. NO.	CAT. NO.	CAT. NO.
#0 thru #6	.141	1001	1101	***
#7-#8-5/32	.168	1002	1102	1202
#9-#10-3/16	.194	1003	1103	1203
#12-7/32	.220	1004	1104	1204
#14-1/4	.255	1005	1105	1205
9/32	.286	1006	1106	1206
5/16	.318	1007	1107	1207
11/32	.349	1008	1108	1208
3/8	.381	1009*	1109	1209
13/32-7/16	.323	1010*	1110	1210
15/32	.354	—	1111	1211
1/2	.367	—	1112	1212
17/32	.398	—	1113	1213
9/16	.429	—	1114	1214
19/32	.460	—	1115*	1215
5/8	.480	—	1116*	1216
21/32	.511	—	1117*	1217
11/16	.542	—	1118*	1218
23/32	.573	—	—	1219
3/4	.590	—	—	1220
25/32	.621	—	—	1221
13/16	.652	—	—	1222
27/32	.684	—	—	1223
7/8	.697	—	—	1224
15/16	.760	—	—	1225*
1"	.800	—	—	1226*
1-1/16-1-1/8	.896	—	—	1227*



FULL-FLOATING REAMER BUSHINGS for Stub Screw Machine Reamers



GREATER REAMING ACCURACY - Enables close tolerances to be held - without bellmouth. ONLY THE REAMER FLOATS!

CORRECTS FOR MISALIGNMENT - out of parallelism of turret and spindle...misalignment of hole in workpiece...and inaccuracies in indexing.

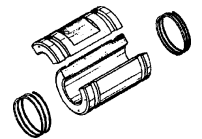
Stub Reamer Size	Machine Size "00" 1/2 O.D.	Distance Reamer Will Project from Face of Floating Holder	Machine Size "0" 5/8 O.D.	Distance Reamer Will Project from Face of Floating Holder	Machine Size "2" 1 O.D.	Distance Reamer Will Project from Face of Floating Holder
	Cat. No.	Holder	Cat. No.	Holder	Cat. No.	Holder
#00 thru #2 .032 .096	RB00-125	3/4 or 1"				
#3 .0961 .126		1" or 1-1/4"				
#4 thru #7 .1261 .251	RB00-250	1-1/4 or 1-1/2"	RB0-250	1-1/4 or 1-5/8"		
#8 THRU #9 .2511 .313		1-1/4 or 1-1/2"		1-1/4 or 1-5/8"		1-1/4 or 1-5/8"
#10 thru #11 .3131 .376	RB00-375	1-1/2 or 1-3/4"	RB0-375	1-1/2 or 1-7/8"	RB2-375	1-1/2 or 1-7/8"
#12 thru #15 .3761 .505			RB0-500	1-1/2 or 1-7/8"	RB2-500	1-1/2 or 1-7/8"
#16 thru #18 .5051 .692					RB2-625	1-3/4 or 2-1/16"
#19 thru #31 .6921 1.510					RB2-750	1-3/4 or 2-1/16"

REAMER BUSHING PARTS

BUSHING NO.	TORQUE PIN	RETAINING SPRING
RB00-125	RB00-125-TP	RB00-RS
RB00-250	RB00-250-TP	RB00-RS
RB00-375	RB00-375-TP	RB00-RS
RB0-250	RB0-250-TP	RB0-RS
RB0-375	RB0-375-TP	RB0-RS
RB0-500	RB0-500-TP	RB0-RS
RB2-375	RB2-375-TP	RB2-RS
RB2-500	RB2-500-TP	RB2-RS
RB2-625	RB2-625-TP	RB2-RS
RB2-750	RB2-750-TP	RB2-RS

BUSHINGS FOR SOMMA TOOL REAMER HOLDERS (page 72)

REAMER SETS	
00REAMER SET	SET OF 12 #00 REAMER BUSHINGS
0REAMER SET	SET OF 13 #0 REAMER BUSHINGS
2REAMER SET	SET OF 16 #2 REAMER BUSHINGS

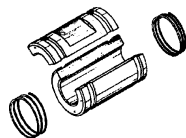


PIPE TAP BUSHINGS

1/16	.312	1050	1150	1250
1/8	.437	1051	1151*	1251
1/4	.562	—	1152*	1252
3/8	.701	—	—	1253
1/2	.688	—	—	1254
5/8	.813	—	—	1255
3/4	.907	—	—	1256*

TAP BUSHING SETS

00TAPSET	= 1001 thru 1051
0TAPSET	= 1101 thru 1152
2ATAPSET	= 1202 thru 1214
2BTAPSET	= 1215 thru 1227
2CTAPSET	= 1250 thru 1256



RETAINING SPRINGS FOR ABOVE BUSHINGS

_____	MB00-RS	MB0-RS	MB2-RS
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- The sets are packaged in a convenient storage case.
- The price for a set is 10% less than when each bushing is ordered separately.