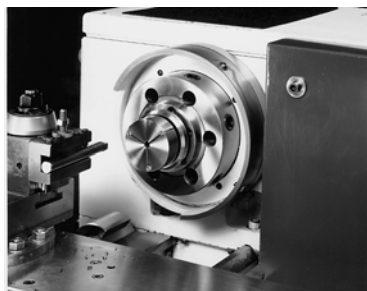


5C WORKHOLDING FOR LATHES

C

LATHE CHUCKS
LIVE CENTERS

5C STEP COLLETS For O.D. Workholding



- 5C Step Collets allow large diameter parts to be held in a 5C collet.
- The head can be easily bored out to the desired size.
- 1-1/4" head thickness allows for a 1" bore depth.
- Made from 1144 steel-can be hardened

ROYAL
PRODUCTS

Head Dia	Pilot Dia	Pin Dia	Part Number	Price Each
2"	1/4"	1/8"	ROY-20020	\$109.00
3"	5/16"	1/4"	ROY-20022	\$143.00
4"	5/16"	1/4"	ROY-20024	\$223.00
5"	5/16"	1/4"	ROY-20025	\$289.00
6"	5/16"	1/4"	ROY-20026	\$373.00

VICE ACCESSORIES
VICE JAWS

5C EXPANDING COLLETS

EAGLE ROCK



MADE IN THE
USA

For I.D. Workholding



Dia	Min. Length	Mach. Dia	Part Number	Price Each
SET- Includes 1 ea of below			AI-51-5C-001	\$176.70
Replacement Collets				
1/2"	1"	.250"	AI-51-5C-0500-1	\$36.00
1"	1"	.437"	AI-51-5C-1000-1	\$36.00
1-1/2"	1"	.750"	AI-51-5C-1500-1	\$36.00
2"	1"	.750"	AI-51-5C-2000-1	\$64.13

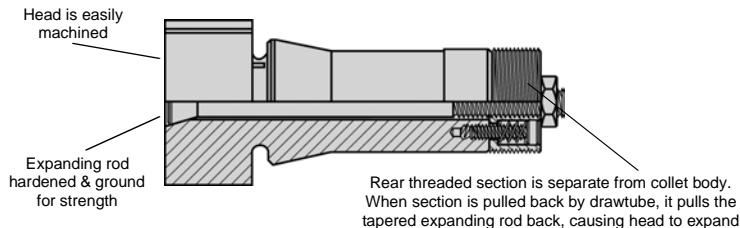
STRAIGHT SHANK
COLLET HOLDERS

5C INTERNAL EXPANDING COLLETS

For ID Workholding

ROYAL
PRODUCTS

5C Internal Expanding Collets grip on the inside diameter of a workpiece, enabling the complete OD to be turned. The accu-length design ensures precise workpiece positioning - no z-axis movement. The collet head is easily turned to the required size, and can be re-machined as necessary. Concentricities of 0.0002" can typically be achieved using Royal 5C Expanding Collets. These collets are manufactured from 1144 steel that can be hardened after machining for wear resistance.



Replacement Expanding Rods

Head Dia	Head Length	Part Number	Price Each
3/4"	1"	ROY-20135	\$30.00
1"	1"	ROY-20136	\$30.00
1-1/2"-6"	1"	ROY-20130	\$30.00
1-1/2"-6"	1-1/2"	ROY-20131	\$22.00
1-1/2"-6"	2"	ROY-20132	\$22.00

Nom. Head Dia	Head Length	Mach Range Min-Max	Part Number	Price Each
3/4"	1"	1/4" - 11/16"	ROY-20100	\$99.00
1"	1"	7/16" - 15/16"	ROY-20101	\$99.00
1-1/2"	1"	3/4" - 1-7/16"	ROY-20102	\$99.00
1-1/2"	1-1/2"	3/4" - 1-7/16"	ROY-20103	\$109.00
1-1/2"	2"	3/4" - 1-7/16"	ROY-20104	\$110.00
2"	1"	3/4" - 1-15/16"	ROY-20107	\$114.00
2"	1-1/2"	3/4" - 1-15/16"	ROY-20108	\$120.00
2"	2"	3/4" - 1-15/16"	ROY-20109	\$137.00
2-1/2"	1"	3/4" - 2-7/16"	ROY-20112	\$140.00
3"	1"	3/4" - 2-15/16"	ROY-20117	\$153.00
5"	2"	3/4" - 4-15/16"	ROY-20127	\$296.00
6"	2"	3/4" - 5-15/16"	ROY-20128	\$331.00

LATHE BUSHINGS
DRILL CHUCKS

CARBIDE INSERTS
THREADING/GROOVING

EXPANDING ARBORS

Machinable
An effective and economical means for internal chucking. Easy machinability and operation. The 8 piece set includes a wooden stand.

EAGLE ROCK
For I.D. Workholding

MADE IN THE
USA



Dia	Mach. Dia	b	c	d	e	Part Number	Price Each
1/4	.0135	3	1/4	-	-	AI-52-0250	\$15.11
3/8	.200	3	1/2	-	-	AI-52-0375	\$15.11
1/2	.200	3	1/2	-	-	AI-52-0500	\$15.11
5/8	.250	3	7/8	-	-	AI-52-0625	\$17.86
3/4	.250	4	7/8			AI-52-0750	\$20.81
7/8	.360	4	1-1/4			AI-52-0875	\$20.81
1	.360	4	1-1/4			AI-52-1000	\$23.28
1-1/4	.360	4	1-1/4	1	1-1/2	AI-52-1250	\$28.98
1-1/2	.360	4	1-1/4	1	1-1/2	AI-52-1500	\$45.13
1-3/4	.360	4	1-1/4	1	1-1/2	AI-52-1750	\$56.53
2	.360	4	1-1/4	1	1-1/2	AI-52-2000	\$57.76
2-1/2	.360	4	1-1/4	1	1-1/2	AI-52-2500	\$101.08
8 Pc Set		1/8 thru 1 1/4				AI-52-0001	\$84.17
3 Pc Set		1 1/2, 1 3/4, 2				AI-52-0002	\$136.80

CUTTING TOOLS
MACHINERY

PRECISION TOOLS
DEBURRING

COOLANT/FLUIDS
TOOL STORAGE

Call Us Or Visit Our Website For Our Complete Selection!

2010-11 Master Catalog

109

EXPANDING MANDRELS/5C EXPANDING COLLETS



EXPANDING MANDRELS

This expanding mandrel can be used with standard collets, vises, jaw chucks and many other special fixtures and are machinable by the customer. Multiple expanding mandrels are also used in other special fixtures for holding multiple workpieces 'side by side'. Provides an expanding lathe mandrel to locate and chuck work from the bore for light secondary operations using your present machine tools.

FEATURES:

- Requires no special adapters
- Can be used with 5c collets or standard Jaw Chucks
- Can be used with vises or special fixtures
- Actuated manually via hex head draw bolt
- Available from 5/16" to 6" diameter
- Available from 1" to 2" expandable length
- Machinable by customer to desired diameter
- No draw back gives positive location



Mach. Range Min-Max	Arbor Length	Shank	Part Number	Price Each
5/16" - 5/8"	1"	3/8"	DTC-MMX	\$30.00
1/2" - 1 1/4"	1"	3/4"	DTC-MM1	\$34.00
1/2" - 1 1/4"	1-1/2"	3/4"	DTC-MM2	\$39.00
3/4" - 2"	1-1/2"	3/4"	DTC-MM3	\$48.00
3/4" - 3 3/4"	2"	1"	DTC-MM4	\$89.00
3/4" - 4 3/4"	2"	1"	DTC-MM5	\$392.00
3/4" - 6 1/4"	2"	1"	DTC-MM6	\$426.00

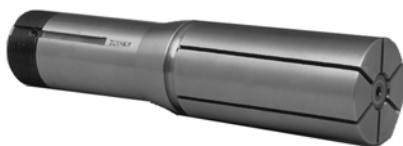
5C EXPANDING COLLETS

These expanding collets are machinable and designed for use with standard air collet or hydraulic cylinders or other collet fixtures. Expanding collets hold on the inside diameters or inside dimensions of workpieces. They provides an expanding member to locate and hold work from the inside, using your present 5c, 16c and 3j equipment - lathes, milling machines, grinders, fixtures, etc. with no extra attachments. Accuracy within .0005 is not unusual and the expanding collet enables you to hold close shoulder tolerances. Also available for 3J and 16C collets.

Also Available For 3J & 16C Collets!



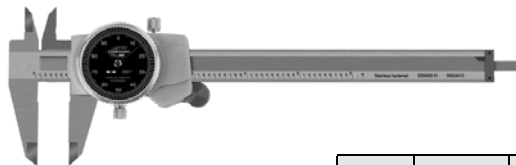
- Requires no special adapters
- Rigid one piece body / mandrel construction
- Actuated by machine draw tube or collet fixture
- Machinable by customer to desired diameter
- No draw back gives positive end length
- Special expanding collet configurations available
- Internal collet chucking
- Economical and accurate



Unmachined Diameter	Mach. Dia. Range	Mandrel Length	Part Number	Price Each
1/2"	.250 - .468	1"	DTC-CC410	\$49.00
13/16"	.437 - .800	1"	DTC-CC710	\$49.00
1-1/2"	.750 - 1.437	1"	DTC-CC1510	\$49.00
		1-1/2"	DTC-CC1515	\$69.00
		2"	DTC-CC1520	\$94.00
		2-1/2"	DTC-CC1525	\$106.00
2"	.750 - 1.937	3"	DTC-CC1530	\$111.00
		1"	DTC-CC2010	\$82.00
		1-1/2"	DTC-CC2015	\$103.00
		2"	DTC-CC2020	\$117.00
2-1/2"	.750 - 2.437	2-1/2"	DTC-CC2025	\$136.00
		3"	DTC-CC2030	\$149.00
		1"	DTC-CC2510	\$103.00
		1-1/2"	DTC-CC2515	\$111.00
3"	.750 - 2.937	2"	DTC-CC2520	\$136.00
		2-1/2"	DTC-CC2525	\$149.00
		3"	DTC-CC2530	\$157.00
		1"	DTC-CC3010	\$132.00
3-3/4"	.750 - 3.687	1-1/2"	DTC-CC3015	\$142.00
		2"	DTC-CC3020	\$153.00
		2-1/2"	DTC-CC3025	\$170.00
		3"	DTC-CC3030	\$181.00
5"	.750 - 4.937	1"	DTC-CC3710	\$142.00
		1-1/2"	DTC-CC3715	\$153.00
		2"	DTC-CC3720	\$170.00
		2-1/2"	DTC-CC3725	\$174.00
6"	.750 - 5.937	3"	DTC-CC3730	\$196.00
		2"	DTC-CC5020	\$286.00
		2"	DTC-CC6020	\$300.00

DIAL CALIPERS

- 4-way measuring
- Solid stainless steel construction
- Silky smooth movement throughout the entire range
- .100" range per revolution
- .001" reading dial face
- Supplied with inspection report and shop hardened case



For More Information, Please See Our Measuring Tools Section On Pages 507-540.

Range	Dial Face	Jaw Length	Thumbwheel	Part Number	Set Price
0-6"	Black	1.6"	Without	BS-46789	\$66.50
0-6"	White	1.6"	With	BS-46790	\$66.50
0-8"	White	2"	With	BS-46791	\$82.65
0-12"	White	2.5"	With	BS-46792	\$111.15

Call Us Today For All Of Your Machine Tool Needs!

CHUCK JAWS
LATHE WORKHOLDING

MACHINE VISES
MAGNETIC CHUCKS

RETENTION KNOBS
ER, DA, TG COLLETS

TOOLHOLDERS
TAP HOLDERS

INDEXABLE DRILLS
TURNING & BORING

ENDMILLS, DRILLS
TAPS & REAMERS

ABRASIVES
MEASURING TOOLS

MRO & SAFETY
FLAT STOCK/DRILL ROD