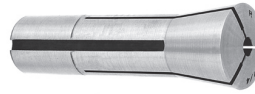


R-8 COLLETS

SERIES 333 : MEDA - SUPERIOR IMPORT
SERIES 330 : BISON (Concentricity guaranteed to 0.0004")



Size	MEDA		BISON	
	Order No.	Price	Order No.	Price
1/32**	1995502		-	
1/16	1995104		7169005	
3/32	1995106		7169010	
1/8	1995108		7169012	
5/32	1995110		7169015	
3/16	1995112		7169018	
7/32	1995114		7169020	
1/4	1995116		7169025	
9/32	1995118		7169028	
5/16	1995120		7169031	
11/32	1995122		7169034	
3/8	1995124		7169037	
13/32	1995126		7169040	
7/16	1995128		7169043	
15/32	1995130		7169046	
1/2	1995132		7169050	
17/32	1995134		7169053	
9/16	1995136		7169056	
19/32	1995138		7169055	
5/8	1995140		7169062	
21/32	1995142		7169065	
11/16	1995144		7169068	
23/32	1995146		7169071	
3/4	1995148		7169075	
25/32	1995150		7169078	
13/16	1995152		7169081	
27/32	1995154		7169084	
7/8	1995156		7169087	
1	1995164		7169099	

Size	MEDA		BISON	
	Order No.	Price	Order No.	Price
2mm	3330002		7169602	
3mm	3330003		7169603	
4mm	3330004		7169604	
5mm	3330005		7169605	
6mm	3331006		7169606	
7mm	3330007		7169607	
8mm	3330008		7169608	
9mm	3330009		7169609	
10mm	3330010		7169610	
11mm	3330011		7169611	
12mm	3330012		7169612	
13mm	3331013		7169613	
14mm	3330014		7169614	
15mm	3330015		7169615	
16mm	3330016		7169616	
17mm	3330017		7169617	
18mm	3330018		7169618	
19mm	3330019		7169619	
20mm	3330020		7169620	

MACHINE TOOL ACCESSORIES

**Limited quantity.

R-8 EMERGENCY COLLET

SERIES 331:

Collets are soft to permit machining to special sizes or shapes. Center hole is 1/16".



Order No. 1990002	
Price	

R-8 COLLET SETS

SERIES 333: MEDA - SUPERIOR IMPORT
SERIES 330: BISON (Concentricity guaranteed to 0.0004")



Range	No. of Pieces	MEDA		BISON**	
		Order No.	Price	Order No.	Price
1/8 - 3/4 x 8ths	6	3330006		-	
1/8 - 7/8 x 16ths	13	3330013		7169113	
1/8 - 7/8 x 32nds*	25*	3330025		7169127*	
2-20mm x 1mm	19	3331019		7169669	

*BISON Set: 1/16 - 7/8 x 32nds; 27pc.

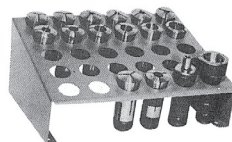
**BISON sets include stand.



While we show some of the most popular **COLLETS** we can supply many more styles. See our website or inquire.

R-8 COLLET RACK

SERIES 333 :



Collets not included.

Holds 48 collets and can also be used to store arbors, end mill adaptors, shell end mill arbors and any R-8 material. Collets not included. Dimensions: 12-1/2" H x 15-1/2" W x 8" deep.

Order No. 1995007	Price	
-------------------	-------	--

R-8 COLLET TOOL TRAY

SERIES 333:



Holds 13 R-8 collets or any other R8 tools. Made of sturdy aluminum casting which does not scratch. Has 2 rows with holes under 1". Attaches to any milling machine by 2 screws (supplied). Dimensions: approx. 14" Wide x 9" Depth. Design of tray permits dirt and chips to fall through.

Order No. 1995000	Price	
-------------------	-------	--

R-8 COLLET RACK

SERIES 333:



Collets not included.

Easily mounts on machine with 2 screws (supplied). Holds 12 collets. Flip down cover to protect tools from dirt.

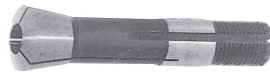
Order No. 1995010	Price	
-------------------	-------	--

3-C & 3-AT COLLETS

SERIES 334: 3-C ROUND
SERIES 336: 3-AT ROUND



3-C ROUND



3-AT ROUND

Size	3-C	3-AT	Price
	Order No.	Order No.	
1/16	2000104	2005104	
5/64	2000105	2005105	
3/32	2000106	2005106	
7/64	2000107	2005107	
1/8	2000108	2005108	
9/64	2000109	2005109	
5/32	2000110	2005110	
11/64	2000111	2005111	
3/16	2000112	2005112	
13/64	2000113	2005113	
7/32	2000114	2005114	
15/64	2000115	2005115	
1/4	2000116	2005116	
17/64	2000117	2005117	
9/32	2000118	2005118	
19/64	2000119	2005119	
5/16	2000120	2005120	
21/64	2000121	2005121	
11/32	2000122	2005122	
23/64	2000123	2005123	
3/8	2000124	2005124	
25/64	2000125	2005125	
13/32	2000126	2005126	
27/64	2000127	2005127	
7/16	2000128	2005128	
29/64	2000129	2005129	
15/32	2000130	2005130	
31/64	2000131	2005131	
1/2	2000132	2005132	
9/16*	2000136	-	

*LIMITED QUANTITY.

MORSE TAPER COLLETS (M.T.2 AND M.T.3)

SERIES 651: ROUND

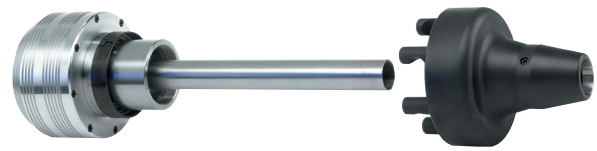


M.T.2		
Size	Order No.	Price
1/8	6510008	
3/16	6510012	
1/4	6510016	
5/16	6510020	
3/8	6510024	
7/16	6510028	
1/2	6510032	

M.T.3		
Size	Order No.	Price
1/8	6515008	
3/16	6515012	
1/4	6515016	
5/16	6515020	
3/8	6515024	
7/16	6515028	
1/2	6515032	
9/16	6515036	
5/8	6515040	
11/16	6515044	

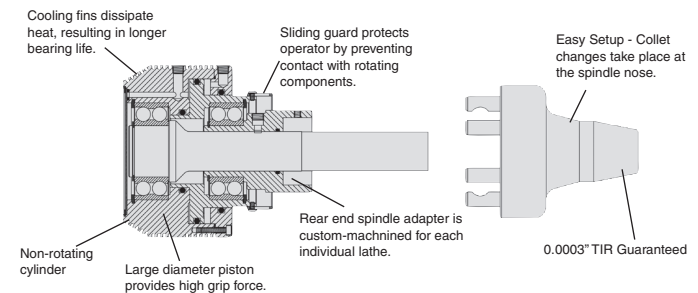
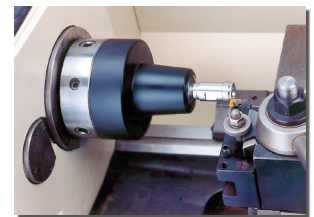
5C PNEUMATIC COLLET CLOSERS - FOR MANUAL LATHES & GRINDERS

SERIES 450:



- The Royal 5C Pneumatic Collet Closer enables 5C collets to be used on any manual lathe or workhead.
- This new model, based upon Royal's 50+ years of collet closer experience, has been designed for heavy use under the most demanding manufacturing conditions.
- Fast opening/closing action makes the Royal pneumatic collet closer a great choice for high production applications.
- Closer is very easy to actuate, resulting in minimal worker fatigue and maximum productivity.
- The air cylinder incorporates a large diameter piston, providing strong grip force on the workpiece.
- Royal 5C Pneumatic Collet Closer incorporates several modern safety features designed to help shops meet OSHA and NIOSH requirements. Unlike other collet closers, there are no exposed rotating parts on the outboard side of the machine.
- Pneumatic collet closer assembly includes air cylinder, custom-machined rear end spindle adapter, drawtube, and cam-lock collet adapter. Air controls sold separately.

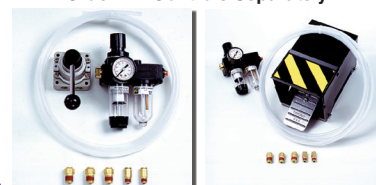
Drawtube Capacity (in.)	1.06
Cylinder O.D. (in.)	5.94
Max. Operating Speed (rpm)*	4,000*
Max. Air Pressure (psi)	90
Piston Surface Area (sq. in.)	14.72
Max. Drawtube Force (lbs.)	1,325
Max. Clamping Force (lbs.)	4,520



Pneumatic Collet Closer Assembly		
For Lathes With Spindle Nose Type	Order No.	Price
A-3 or D1-3	5017200	\$1,924.70
A-4 or D1-4	5017201	\$2,016.85
A-5 or D1-5	5017202	\$2,217.30
A-6 or D1-6	5017203	\$2,416.80
A-8 or D1-8	5017204	\$2,750.25
Haas TL-1*	5017210	\$2,056.75
Haas TL-2*	5017211	\$2,217.30

* Haas TL-1 and TL-2 are registered trademarks of Haas Automation, Inc.

Order Air Controls Separately



Description	Order No.	Price
Air Control Kit w/ Hand Valve	5016001	\$298.00
Air Control Kit w/ Foot Valve	5016002	\$469.00

5-C COLLETS

(With internal threads)
SERIES 328: MEDA-SUPERIOR IMPORT
SERIES 329: BISON



Concentricity guaranteed to 0.0004".

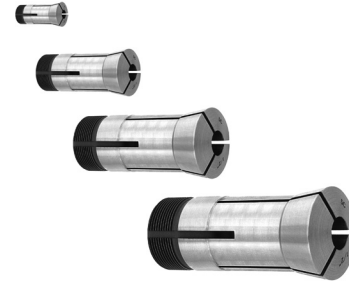
Made of specially selected steels, carefully heat treated and ground to ensure utmost precision and positive spring tension.



5-C COLLET SETS

Range	No. of Pieces	MEDA		BISON*	
		Order No.	Price	Order No.	Price
1/8 - 1-1/8 x 8ths	9	3280009		-	
1/16 - 1-1/8 x 16ths	18	3280018		7168168	
1/16 - 1-1/8 x 32nds	35	3280035		7168185	
1/16 - 1-1/8 x 64ths	69	3280069		7168190	
3-26mm x 1mm	24	3280024		7168674	

*BISON includes stand.

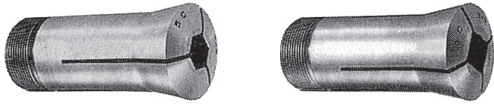


Size	MEDA		BISON		Size	MEDA		BISON	
	Order No.	Price	Order No.	Price		Order No.	Price	Order No.	Price
3/64	-		7168002		19/32	1990138		7168072	
1/16	1990104		7168004		39/64	1990139		7168074	
5/64	1990105		7168006		5/8	1990140		7168076	
3/32	1990106		7168008		41/64	1990141		7168078	
7/64	1990107		7168010		21/32	1990142		7168080	
1/8	1990108		7168012		43/64	1990143		7168082	
9/64	1990109		7168014		11/16	1990144		7168084	
5/32	1990110		7168016		45/64	1990145		7168086	
11/64	1990111		7168018		23/32	1990146		7168088	
3/16	1990112		7168020		47/64	1990147		7168090	
13/64	1990113		7168022		3/4	1990148		7168092	
7/32	1990114		7168024		49/64	1990149		7168094	
15/64	1990115		7168026		25/32	1990150		7168096	
1/4	1990116		7168028		51/64	1990151		7168098	
17/64	1990117		7168030		13/16	1990152		7168100	
9/32	1990118		7168032		53/64	1990153		7168102	
19/64	1990119		7168034		27/32	1990154		7168104	
5/16	1990120		7168036		55/64	1990155		7168106	
21/64	1990121		7167038		7/8	1990156		7168108	
11/32	1990122		7168040		57/64	1990157		7168110	
23/64	1990123		7168042		29/32	1990158		7168112	
3/8	1990124		7168044		59/64	1990159		7168114	
25/64	1990125		7168046		15/16	1990160		7168116	
13/32	1990126		7168048		61/64	1990161		7168118	
27/64	1990127		7168050		31/32	1990162		7168120	
7/16	1990128		7168052		63/64	1990163		7168122	
29/64	1990129		7168054		1	1990164		7168124	
15/32	1990130		7168056		1-1/64	1990165		7168126	
31/64	1990131		7168058		1-1/32	1990166		7168128	
1/2	1990132		7168060		1-3/64	1990167		7168130	
33/64	1990133		7168062		1-1/16	1990168		7168132	
17/32	1990134		7168064		1-5/64	1990169		7168134	
35/64	1990135		7168066		1-3/32	1990170		7168136	
9/16	1990136		7168068		1-7/64	1990171		7168138	
37/64	1990137		7168070		1-1/8	1990172		7168140	

Size	MEDA		BISON		Size	MEDA		BISON		Size	MEDA		BISON	
Order No	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	Order No.	Price	
3mm	3280003		7168603		11mm	3280011		7168611		19mm	3280019		7168619	
4mm	3280004		7168604		12mm	3280012		7168612		20mm	3280020		7168620	
5mm	3280005		7168605		13mm	3280013		7168613		21mm	3280021		7168621	
6mm	3280006		7168606		14mm	3280014		7168614		22mm	3280022		7168622	
7mm	3280007		7168607		15mm	3280015		7168615		23mm	3280023		7168623	
8mm	3280008		7168608		16mm	3280016		7168616		24mm	3282024		7168624	
9mm	3282009		7168609		17mm	3280017		7168617		25mm	3280025		7168625	
10mm	3280010		7168610		18mm	3282018		7168618		26mm	3280026		7168626	

5-C COLLETS

SERIES 328: MEDA - SUPERIOR IMPORT



HEXAGON			SQUARE	
Size	Order No.	Price	Order No.	Price
1/8	3290208		3300308	
3/16	3290212		3300312	
1/4	3290216		3300316	
5/16	3290220		3300320	
3/8	3290224		3300324	
7/16	3290228		3300328	
1/2	3290232		3300332	
9/16	3290236		3300336	
5/8	3290240		3300340	
11/16	3290244		3300344	
3/4	3290248		3300348	
13/16	3290252		-	
7/8	3290256		-	

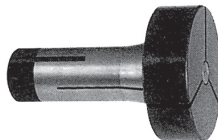
5-C CLUTCH (STEP) COLLETS

SERIES 332:



With soft machineable head.

Diameter	Order No.	Price
2	1990502	
3	1990503	
4	1990504	
5	1990505	
6	1990506	



SOLID COLLET STOP

SERIES 341:



Fits all 5-C collets with standard internal thread.

Order No. 2015000	Price	
-------------------	-------	--

UNIVERSAL COLLET STOP SET

SERIES 342:



Fits directly into collet and acts as either a solid stop or ejector stop with no distortion of collet.

Set includes stop body with spring ejector assembly, (1) each 1/4" and 1/2" diameter ejector, (1) each 1/4" and 1/2" diameter solid stop, and (2) extra springs.

Order No. 2020000	Price	
-------------------	-------	--

EMERGENCY COLLETS

SERIES 331:



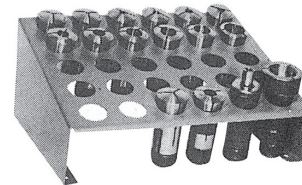
Collets are soft to permit machining to special sizes or shapes. Center hole is 1/16".



Style	Type	Order No.	Price
5-C	Steel	1990000	
5-C	Brass	1990001	
5-C	Nylon	1990003	

5-C COLLET RACK

SERIES 328:



Collets not included.

Holds up to 30 collets. Strongly made of 18 gage steel. Dimensions: 9-1/2 x 12", 5-1/2" high at one end and 2-1/2" at other end. Weight: 3 lbs. Baked enamel finish for easy cleaning and protection. Can be hung on wall or set on shelf or work bench.

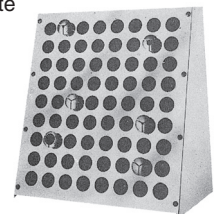
Order No. 1990030	Price	
-------------------	-------	--

5-C COLLET HOLDERS

SERIES 328:



Made of durable heavy gage aluminum. Double plate construction. Selects collets instantly and retains collets firmly. Can be set on machine or bench or mounted on wall.



5-C TYPE Collets not included.

Holds 72 collets. Dimensions : 12-3/4" H x 15-1/2" W x 8-1/2" deep.

Order No. 1990072	Price	
-------------------	-------	--

In addition to the Collets we show in this catalogue, many other styles such as:

- B&S Taper #10
- B&S Taper #21
- B&S Taper #40
- B&S Taper #7
- B&S Taper #9
- &
- 2A, 4C, 6K

are available; please inquire.

5-C EXPANDING COLLETS

SERIES 326:



EAGLE ROCK



MEDA
Superior Import

5-C EXPANDING COLLET SETS

4 Piece Set allows "internal chucking" within the range .250" through 1.937". Heads are machinable. Shanks are precision ground to maintain concentricity with ±.0005".

Size	Range	MEDA		EAGLE ROCK	
		Order No.	Price	Order No.	Price
1	.250 - .468	1980001		3260121	
2	.437 - .800	1980002		3260110	
3	.750 - 1.437	1980003		3260112	
4	.750 - 1.937	1980004		3261201	
Complete set of 4 on a wooden rack.					
1-4	.250 - 1.937	1980005		3260005	

The most effective and accurate means of internal chucking for short runs to mass production. Once seated in spindle and machined to size, these collets can hold concentricity well within .0005". Applicable on any manual or CNC Lathe, Milling Machine or Grinder with a 5C spindle. Machinable to any configuration within their stock and minimum machinable diameters. Collets with diameters 4" and larger have a lock ring for greater stability and accuracy while machining to their specific application.

EAGLE ROCK

Dia.	Lgth.	Min. Mach. Dia.	Order No.	Price
1/2"	1"	.250"	3260121	
1/2"	*2"	.250"	3260122	
1/2"	*3"	.250"	3260123	
1"	1"	.437"	3260110	
1"	*2"	.437"	3260120	
1"	*3"	.437"	3260130	
1-1/2"	1"	.750"	3260112	
1-1/2"	1-1/2"	.750"	3261121	
1-1/2"	2"	.750"	3261122	
1-1/2"	2-1/2"	.750"	3261212	
1-1/2"	3"	.750"	3261123	
2"	1"	.750"	3261201	
2"	1-1/2"	.750"	3262212	
2"	2"	.750"	3262203	
2"	2-1/2"	.750"	3262221	
2"	3"	.750"	3262230	
2-1/2"	1"	.750"	3262121	
2-1/2"	1-1/2"	.750"	3262122	
2-1/2"	2"	.750"	3262120	
2-1/2"	2-1/2"	.750"	3262222	
2-1/2"	3"	.750"	3262123	
3"	1"	.750"	3263010	
3"	1-1/2"	.750"	3263015	
3"	2"	.750"	3263020	
3"	2-1/2"	.750"	3263025	
3"	3"	.750"	3263030	
4"	1"	.750"	3264010	
4"	1-1/2"	.750"	3264012	
4"	2"	.750"	3264020	
4"	2-1/2"	.750"	3264212	
4"	3"	.750"	3264030	
5"	2"	.750"	3265020	
6"	2"	.750"	3266020	

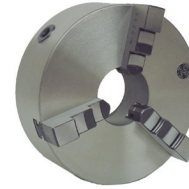
* Extended 5C Expanding Collets - Made for holding delicate or long and narrow parts or where there is a machine clearance problem. Machinable to any dimension within their range, only the front (1" long) expands.

THREE-JAW SELF-CENTERING UNIVERSAL LATHE CHUCKS

SERIES 995:

MEDA
Superior Import

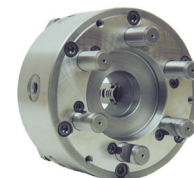
Reversible 2 piece jaws except where noted



Plain Back

Chuck Dia.	Thru Hole	Order No.	Price
3"	.630"	2670003	
4"	.866"	2670004	
5"	1.181"	2670005	
6"	1.575"	2670006	
8"	2.559"	2670008	
10"	3.150"	2670010	
12"	3.937"	2670012	

* 2 sets of solid jaws.



D-1 Type Mount

Chuck Dia.	Spindle	Thru Hole	Order No.	Price
6"	D1-4	1.575"	2670604	
8"	D1-4	1.969"	9670804	
8"	D1-6	1.969"	2670806	
10"	D1-6	2.756"	2671006	
12"	D1-6	3.937"	2671206	
12"	D1-8	3.937"	2671208	

THREE-JAW SELF CENTERING THREADED BACK UNIVERSAL CHUCKS

SERIES 995:

MEDA
Superior Import

5" & 6" x 1-1/2" - 8



5" or 6" Diameter 3-Jaw Universal Lathe Chuck, Plain Back. 2 sets of hardened and ground jaws for inside and outside holding. Chuck Key. High quality cast iron body.

Plus 5" or 6" x 1-1/2"-8 Back Plate made for the chuck (Chuck can be used by itself or with included back plate.)

5" Order No. 2670512	Price	
----------------------	-------	--

6" Order No. 2670612	Price	
----------------------	-------	--