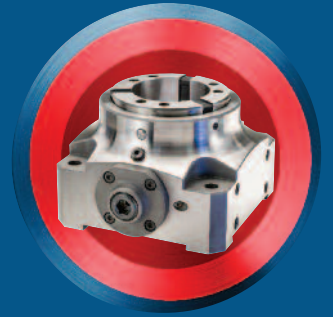
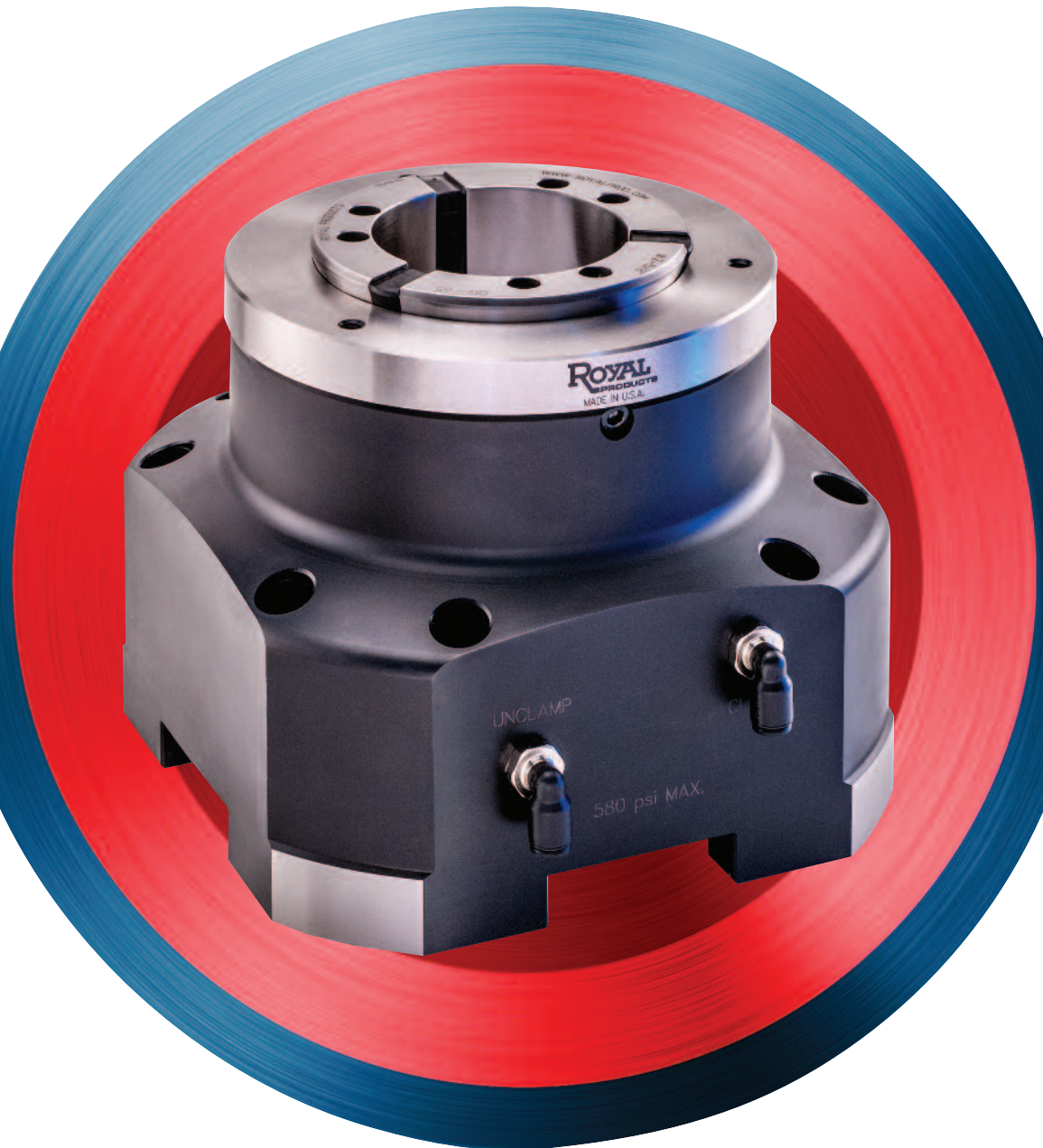
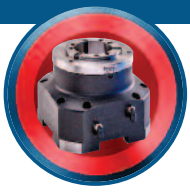




# COLLET FIXTURES, CHUCKS AND COLLETS FOR

- MACHINING CENTERS
- ROTARY TABLES
- MANUAL LATHES
- GRINDERS





# ROYAL QUICK-GRIP™ POWER-BLOCK™ HYDRAULIC COLLET FIXTURES

## Extremely Fast Collet Changes

Changing collets on a Royal Quick-Grip™ Power-Block™ takes just a few seconds. A unique hook and groove design for securing collets is used instead of traditional threads.

## Wide Gripping Range

Royal Quick-Grip™ Collets have a 0.062" gripping range (+/- 0.031"), enabling them to accommodate undersized and oversized bar stock.

## Flexible

The face of the Royal Power-Block™ is precision-ground and includes tapped holes, enabling the use of custom stops, locators, etc.

## Heavy-Duty Construction

Body and piston are hardened to Rc 61-63 for maximum rigidity and durability.

## Low Maintenance

Oversized evacuation slots on all four sides enable chips to be easily flushed clear on bore-thru applications.

## Tool Clearance Optimized

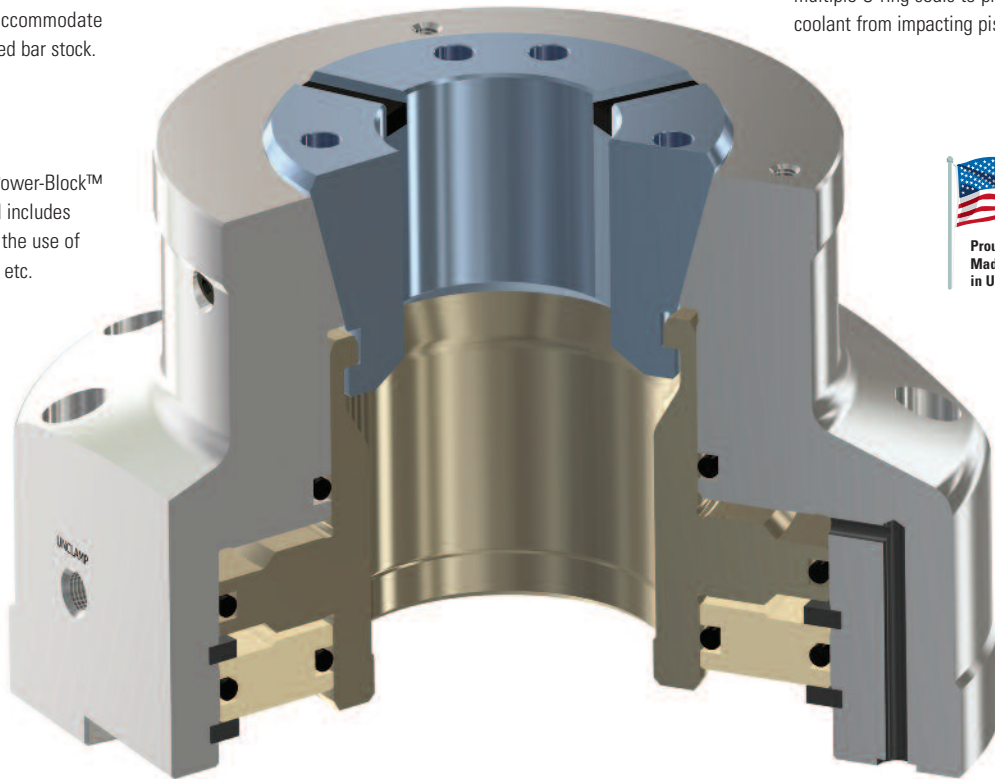
Slim nose diameter offers **better tool clearance compared to vises and other prismatic workholding devices.**

## Extreme Grip Force

The gripping segments of Royal Quick-Grip™ collets always remain parallel to the workpiece over their full length, ensuring grip force is evenly distributed. This is a **significant advantage for thin-walled parts that are susceptible to crushing.**

## Completely Sealed

Lubricated for life, these fixtures incorporate multiple O-ring seals to prevent chips and coolant from impacting piston movement.



## Dual-Port Actuation

All units are equipped with hydraulic ports on both the side and bottom surface of the fixture, offering **actuation flexibility for both fixed and rotary table applications.**

## Custom Collet Profiles

One of the greatest advantages of this workholding system is in Royal's ability to supply custom collet profiles for odd-shaped second-op gripping. See example on adjacent page.

## Precision Mounting

Internal bore and external OD are both precision-ground, offering flexibility while **ensuring accurate, repeatable mounting to plates, tombstones, etc.**

Note – Collets and installation tool sold separately

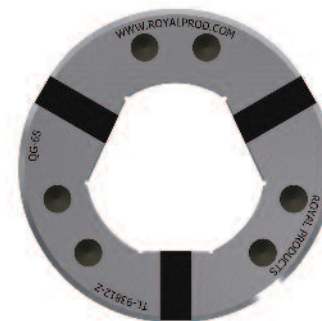
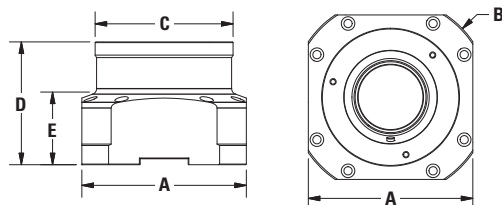
# ROYAL QUICK-GRIP™ POWER-BLOCK™ HYDRAULIC COLLET FIXTURES



- ❑ Royal Power-Block™ Collet Fixtures bring the full functionality of our Quick-Grip™ CNC Collet Chucks to your vertical and horizontal machining centers.
- ❑ These fixtures incorporate many of the same great features as our Quick-Grip™ CNC Collet Chucks, including ten-second collet changes and the use of parallel-grip collets with a full .062" clamping range.
- ❑ **A great alternative to traditional vises and fixtures** – especially for long, thin parts, or those with asymmetrical external features.
- ❑ Units are designed to be actuated via hydraulic pressure, and may also be actuated pneumatically for lighter-duty applications.
- ❑ Engineered for use in both stationary and rotary-table applications. **Caution – not for use on lathes or grinders above 60 rpm!**
- ❑ Heavy-duty all steel construction with a large double-acting piston for high clamping force.
- ❑ Configured with both side and bottom ports for plumbing flexibility.
- ❑ Multiple units can be plumbed in series for single-source actuation.
- ❑ Mounting face is precision-ground for perpendicularity to centerline.
- ❑ **Ideal for high-production vertical and horizontal milling applications.**
- ❑ For use with Royal Quick-Grip™ collets and installation tools (pages 16, 18-29).

## Power-Block™ Grip Force Specifications

MODEL	MAX INPUT HYDRAULIC PRESSURE (psi.)	MAX AXIAL FORCE (lbs.)	MAX CLAMPING FORCE (lbs.)
QG-42	580	7,865	17,980
QG-65	580	10,115	23,600
QG-80	580	11,240	25,850
QG-100	580	14,610	33,720



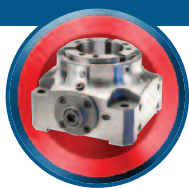
When paired with a custom-profile Quick-Grip™ collet, the Royal Power-Block™ can help you optimize your workholding for parts that aren't well-suited to traditional vises or prismatic fixtures.

## Royal Quick-Grip™ Power-Block™ Hydraulic Collet Fixtures

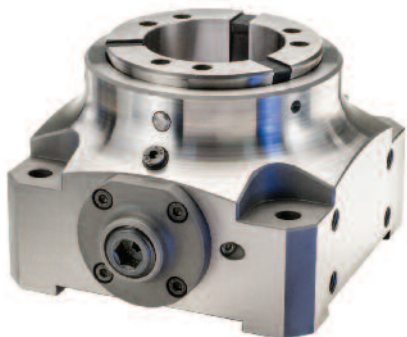
MODEL	CAPACITY		A (SQUARE)	B (OUTER DIA.)	C	D	E	PART NUMBER	PRICE*
	(ROUND)	(SQUARE)							
QG-42	1.66	1.16	6.06	6.89	4.92	4.72	3.18	43950	<b>\$2,520</b>
QG-65	2.66	1.78	6.85	8.27	5.75	5.12	3.00	43952	<b>2,705</b>
QG-80	3.28	2.03	7.34	8.46	6.30	5.12	3.00	43954	<b>3,045</b>
QG-100	4.03	2.78	9.02	10.63	8.46	5.51	3.38	43956	<b>4,195</b>

\*Collets and installation tool sold separately.



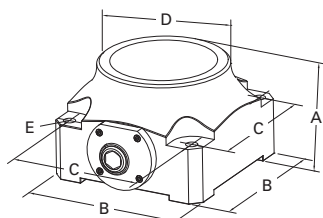


# ROYAL QUICK-GRIP™ MANUAL COLLET FIXTURES FOR 4TH AND 5TH AXIS APPLICATIONS



- Unit is actuated via a hybrid mechanical/hydraulic mechanism.
- Can be used in both stationary and rotary table applications. **Caution – not for use on lathes or grinders above 5 rpm!**
- Many of the same great features as our Quick-Grip™ CNC Collet Chucks, including ten-second collet changes and parallel-grip collets with a full .062" clamping range.
- Pullback design with an internally threaded back plate enables the use of a stop rod.
- Bottom and all four sides are ground for both vertical and horizontal mounting.
- Ideal for high production 4th and 5th axis applications.**
- For use with Royal Quick-Grip™ collets and installation tools (pages 16, 18-29).

## Royal Quick-Grip™ Manual Collet Fixtures



MODEL	CAPACITY		A	B	C	D	E	MAX TIGHTENING TORQUE (ft.-lbs.)	MAX CLAMPING FORCE (lbs.)	PART NUMBER	PRICE*
	ROUND	SQUARE									
QG-42	1.66"	1.16"	3.94	5.12	3.94	3.94	0.43	42	5,125	43900	<b>\$2,962</b>
QG-65	2.66"	1.78"	3.94	5.91	4.72	4.72	0.43	42	6,430	43904	<b>3,140</b>
QG-80	3.28"	2.03"	4.33	6.50	5.31	5.31	0.51	57	7,420	43908	<b>4,319</b>
QG-100	4.03"	2.78"	4.33	7.87	6.69	6.50	0.51	57	9,375	43912	<b>4,664</b>

\*Collets and installation tool sold separately



# ROYAL 5C, 16C, & 3J MANUAL COLLET FIXTURES



- Opened and closed via an internal cam mechanism.
- Accu-Length™ operation – collet and workpiece position remains fixed for precise length control.
- Can be used in both **stationary and rotary table applications**. **Caution – not for use on lathes or grinders above 5 rpm!**
- Special model 62004 bolts directly to Haas HRT-110\* and other small indexers. **Note** – cam bolt is recessed on this model.
- All other models configured for both four and six-slot mounting – 4.125" bolt circle diameter.
- All models include cam wrench.



## Royal 5C, 16C and 3J Manual Collet Fixtures

MODEL	CAPACITY	TYPE	A	B	C	D	E	F	PART NUMBER	PRICE
5C	1 1/16"	Type 1	3.37	2.50	4.95	3.50	1.15	0.75	62002	<b>\$785</b>
5C (for HRT-110)*	1 1/16"	Type 2	4.20	2.50	-	3.50	1.15	-	62004	<b>822</b>
16C	1 5/8"	Type 2	4.95	3.35	-	4.63	1.50	-	62006	<b>1,185</b>
3J	1 3/4"	Type 2	4.95	3.35	-	4.13	1.00	-	62008	<b>1,185</b>

\*Haas and HRT-110 are registered trademarks of Haas Automation, Inc.

