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.

**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.

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

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

**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.

**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.

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

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

**Note – Collets sold separately**
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 (pages 18-29).

Power-Block™ Grip Force Specifications

<table>
<thead>
<tr>
<th>MODEL</th>
<th>MAX INPUT HYDRAULIC PRESSURE (psi.)</th>
<th>MAX AXIAL FORCE (lbs.)</th>
<th>MAX CLAMPING FORCE (lbs.)</th>
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<tr>
<td>QG-42</td>
<td>580</td>
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<td>QG-65</td>
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<td>QG-100</td>
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<td>14,610</td>
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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

<table>
<thead>
<tr>
<th>MODEL</th>
<th>CAPACITY</th>
<th>A (SQUARE)</th>
<th>B (OUTER DIA.)</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>PART NUMBER</th>
<th>PRICE</th>
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<tbody>
<tr>
<td>QG-42</td>
<td>1.66</td>
<td>6.06</td>
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**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 (pages 18-29).

### Royal Quick-Grip™ Manual Collet Fixtures

<table>
<thead>
<tr>
<th>MODEL</th>
<th>CAPACITY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>PART NUMBER</th>
<th>PRICE</th>
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*Collet not included – order separately.

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**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

<table>
<thead>
<tr>
<th>MODEL</th>
<th>CAPACITY</th>
<th>TYPE</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>PART NUMBER</th>
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*Haas and HRT-110 are registered trademarks of Haas Automation, Inc.