

# Powerhold Auto-Offset Chucking Assembly

*Machine two centers in one chucking with Auto-Offset*



**Auto-Offset Advantage.** Often, manufacturers of pneumatic and hydraulic products often require machining an eccentric diameter within a concentric diameter. Conventionally this is accomplished by performing the concentric operations then moving the part to another machine (or a second spindle) to perform the eccentric operations. A special fixture is usually required to provide the correct radial orientation. Now, with Auto-Offset, manufacturers can machine two different centers in one chucking. Not only is this a much faster method, but it also improves part accuracy and reduces scrap. Many customers realize a return on their investment within months. Their finished products perform more efficiently because they are getting a consistent true position tolerance between concentric and eccentric surfaces.

**Offset positioning "on the fly."** Auto-Offset is a precision dovetail slide made of hardened and ground steel that mounts directly to the machine spindle nose. Your workholding device is then mounted on the Auto-Offset, enabling it to slide in one axial direction relative to your offset centerline position. A variety of workholding devices can be used, such as 3-jaw manual or power chucks, collets, and mandrels. The movement to and from the offset position can be done automatically while the work piece is rotating for non-stop production. Auto-Offset may be integrated with the machine's CNC system. The offset dimension is infinitely adjustable from 0" to the required offset amount.

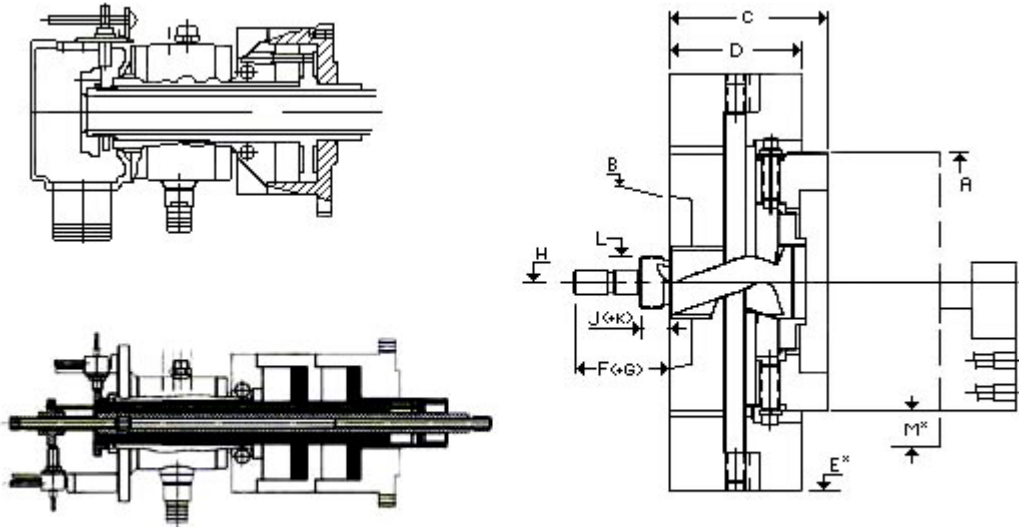
## Technical Features:

- Powered by double or single piston actuators for automatic positioning
- Counterbalanced for vibration-free rotation
- Offset positioning "On The Fly" – never stopping the spindle
- Compatible with a variety of workholding devices (jaw chucks, diaphragm chucks, etc)
- Reduced scrap
- Increased efficiency

| Size | Max RPM (Central) | Max RPM (Offset) |
|------|-------------------|------------------|
| 6"   | 3500              | 3000             |
| 8"   | 2800              | 2500             |
| 10"  | 2500              | 2000             |
| 12"  | 2000              | 1500             |

## Powerhold AUTO-OFFSET Dimensions

- The AUTO-OFFSET is typically a custom built production tool available to suit your machining needs. Please call (800)349-1044 or e-mail [sales@powerholdinc.com](mailto:sales@powerholdinc.com), so we can design an AUTO-OFFSET for your special application.



### Dimensions (in):

| Size  | A                | B                | C     | D              | E                    | F          | G      | H                               | J         | K      | L                                 | M          |
|-------|------------------|------------------|-------|----------------|----------------------|------------|--------|---------------------------------|-----------|--------|-----------------------------------|------------|
|       | Mounting Surface | Taper Mount      | O.A.L | Counter-weight | Max Clearance Radius | + G Stroke | Stroke | Thread                          | +K Stroke | Stroke | Thread                            | Max Offset |
| 6.0"  | 6.3              | A <sub>2</sub> 5 | 4.5   | 3.0            | 10.0                 | 2.28       | 0.78   | <sup>5</sup> / <sub>8</sub> -18 | 0.75      | 0.87   | 1 <sup>1</sup> / <sub>4</sub> -16 | TBD        |
| 8.0"  | 8.5              | A <sub>2</sub> 6 | 4.81  | 3.5            | 10.5                 | 2.28       | 0.94   | <sup>5</sup> / <sub>8</sub> -18 | 0.75      | 0.73   | 1 <sup>1</sup> / <sub>4</sub> -16 | TBD        |
| 10.0" | 9.8              | A <sub>2</sub> 8 | 5.0   | 4.0            | 14.0                 | 2.28       | 0.98   | <sup>3</sup> / <sub>4</sub> -16 | 0.81      | 0.79   | 1 <sup>1</sup> / <sub>2</sub> -16 | TBD        |
| 12.0" | 12.0             | A <sub>2</sub> 9 | 5.5   | 4.5            | 16.0                 | 2.54       | 0.98   | 1.0-16                          | 1.0       | 0.98   | 1 <sup>3</sup> / <sub>4</sub> -16 | TBD        |

*Your Workholding Solutions Company*

**POWERHOLD**

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