

Pos-A-Lock® Collet Arbor Systems

Positrol's Pos-A-Lock collet arbor system consists of a complete line of expanding collet arbors of various designs to solve many workholding applications. Collet arbors are suitable for all machining, grinding, assembly, and inspection operations. Two styles accommodate most requirements. Flanged arbor designs handle high cutting forces and can be mounted on fixtures or machine spindles. Between centers models are available for lower torque applications. Both types are available from stock for immediate delivery.

SETUP AND OPERATION

Simple, fast and easy. With the machine drawbar in the forward most position, the drawbar adapter is installed and locked in place. The spindle adapter is then bolted to the machine spindle with the screws provided. The arbor is then mounted to the spindle adapter with eight screws.

If a work stop is used, align the clearance hole with the expander lock screw. The appropriate collet is installed and the expander inserted. Rotate the expander clockwise until the work piece is a slip fit on the collet. Tighten the expander lock screw so that the

expander can not rotate, but at the same time, allows the expander to move freely in the axial direction.

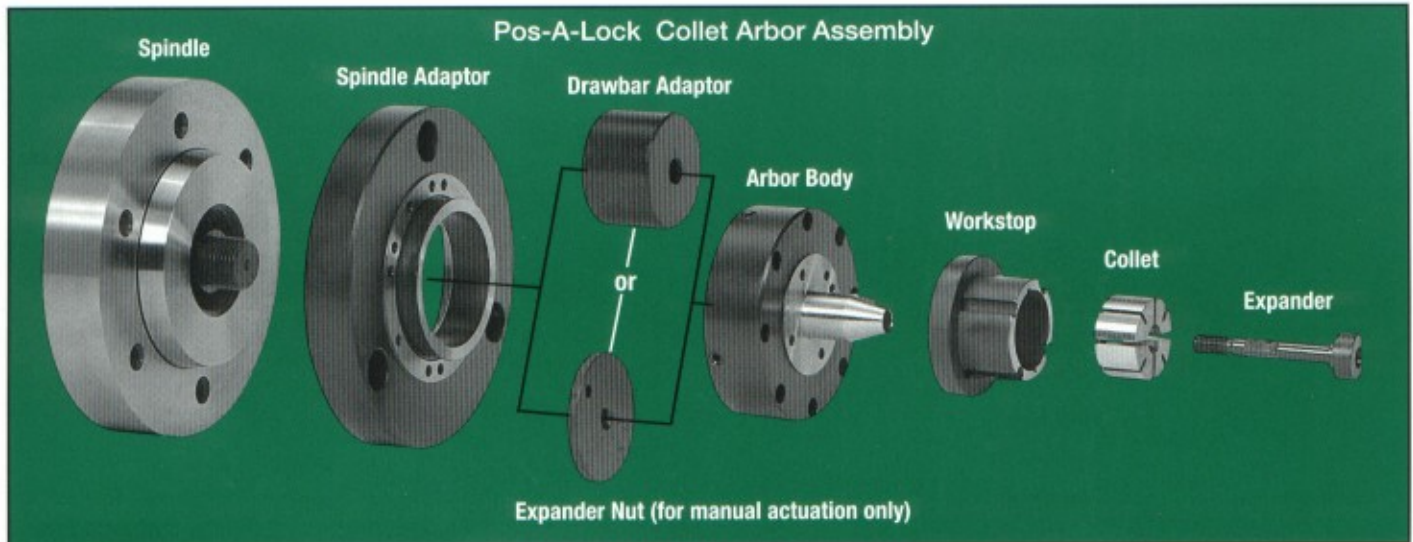
To obtain the desired concentricity, indicate the arbor taper or a master part gripped on the arbor. The arbor mounting screws are loosened slightly to allow the concentricity adjusting screws to move the arbor body into desired alignment. The eight mounting screws are then tightened.

ORDERING INFORMATION

Determine the arbor type best suited for your application or contact one of our application engineers for help. Each arbor assembly consists of an arbor body, expander and an expander nut (for manual applications).

To order:

(1) Specify assembly model number; for individual items see the components page of each arbor type within this catalog; (2) Select the corresponding collet for the arbor assembly; specify the minimum size of the part to be held, (3) Choose the spindle adapter to fit your machine; (4) For a custom work stop; supply part prints, (5) Drawbars can also be manufactured if the spindle and draw-tube information is provided.



SPINDLE ADAPTERS

Pos-A-Lock expanding arbors may be adapted to a variety of standard machine spindles. The Centr-Adjust™ feature provides a means to centralize the arbor in relation to the spindle centerline. Adapters for "A" spindles and flat back spindles are stocked. "B", "D", "L", Morse Taper, and special adapters are available on application. For changes from one arbor to another, consider Positrol's Chuck Change™ system to reduce setup time.

DRAWBAR ADAPTER / EXPANDER NUT

Positrol can provide a custom drawbar adapter for power operated models. An expander nut is supplied for manual arbors.

ARBOR BODIES

Positrol arbor bodies are heat treated, black oxidized and precision ground. On the flange-mounted arbors, a bolt pattern is provided to attach a work stop. Between-Centers models have a whistle notch to serve the same purpose.

WORK STOPS

Two types of work stops are manufactured – each is

designed to suit the application. A compensating stop conforms to an out-of-square part face. Fixed stops are used when a part's locating surface is square to the bore.

COLLETS

Positrol collets are manufactured from the highest quality steel, heat treated and precision ground to guarantee repeatability within .0005" TIR. We offer a wide expansion range overlap to increase versatility and we maintain a large inventory of size ranges from .25" to 6.00" diameter.

If your application requires special collets, we can grind them to your specification, splines, threads, squares, or even stepped diameters. Positrol collets can also be sealed against chip contamination.

EXPANDERS

Specifically designed for Pos-A-Lock arbors, Positrol's expander features a limiting device to prevent collet over expansion as well as anti-rotation flats to inhibit loosening. They are heat treated, black oxidized and ground to precise tolerances.