



Custom Solutions for Citizen Lathes

add flexibility to the machine



Adaptive Guide Bushing Collets

The high cost of ground stock leads some shops to turn to a newer type of guide bushing, the adaptive guide bushing, which permits the use of less costly non-ground stock.

The Citizen adaptive guide bushing system uses air pressure to open and close the guide bushing collet as the size of material being machined changes. Hardinge manufactures double-angle adaptive guide bushing collets in cooperation with Citizen Machinery America for use in Citizen machines that have the adaptive guide bushing kit installed.

- Premium material and heat treat process
- Superior surface finish
- Accuracy to 0.0005" (.0127mm) TIR
- Variation of $\pm .003$ " (.08mm) to accommodate non-ground stock

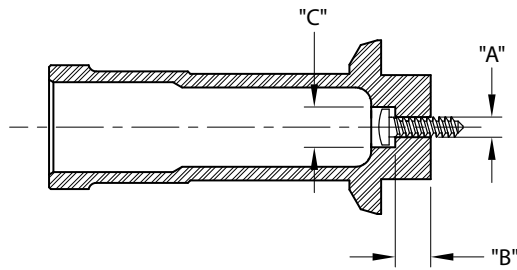
The following information is required to place your order:

Bar Size _____ Bar Tolerance _____ ($\pm .003$ max)
 Bar Material _____ Machine Model _____

** A Citizen Adaptive Guide Bushing Kit must be installed in your machine to permit use of the adaptive guide bushing collet. Kits are available for new machine orders and can also be retrofitted to some existing machines. For more information call Citizen at 201-818-0100. Part numbers are included below.

Overgrip Collets

Overgrip collets, also referred to as over-the-shoulder collets, are used on a pick-off spindle when it is required to clear a shoulder and grip on a smaller diameter beyond. A good example of this type of part would be a screw. Hardinge manufactures TF-25 OG overgrip collets for Citizen M20 and L720 lathes. **The following information is required to place your order:**



Grip Diameter "A" (max .505"/12.8mm) _____
 Grip Length "B" (max .470"/11.9mm) _____
 Part Diameter "C" (max .630"/16.0mm) _____*

* If the "C" dimension is greater than .086"/2.2mm, but less than .118"/3.0mm maximum overgrip, you must purchase an Overgrip Collet Kit from Citizen Machinery America Inc. (201-818-0100). Part numbers are included below.

CITIZEN MACHINERY AMERICA INC

in partnership with Hardinge Inc.

Citizen Machine	Overgrip Collet Hardinge Part No.	Overgrip Collet Kit * Citizen Part No.
A20 (type 7)	—	—
A32	—	—
L720	4613-75-00000003	BD-6015
M20	4613-75-00000003	BD-6015
M32	—	—

Adaptive Guide Bushing Hardinge Part No.	Size	Capacity	Adaptive Guide Bushing Kit ** Citizen Part No.
97Z-1102	20mm	.157-.787" (4-20mm)	GB-A220-0000
97Z-1653	32mm	.236-1.259" (6-32mm)	GB-A332-0000
97Z-1102	20mm	.157-.787" (4-20mm)	GB-L720-0000
97Z-1102	20mm	.157-.787" (4-20mm)	GB-M220-0000
97Z-1653	32mm	.236-1.259" (6-32mm)	GB-M332-0000