## CNC Bar Pullers

## Combo CNC Bar Pullers

## Cut-Off Blade \& Insert

Bar puller accepts many popular brands of holders, but must be slightly modified

| Bar Puller Shank Size <br> (Inch) | Code |
| :---: | :---: | :---: |
| $1 / 2$ or $3 / 4$ | 217056 |
| 1 | 217057 |

## Heavy-Duty CNC Bar Pullers

- Gripping range from $1 / 8^{\prime \prime}$ to $6-1 / 2^{\prime \prime}$ (extra capacity jaws sold separately)
- Gripping force is easily adjusted by altering spring pressure
- Jaws have two gripping surfaces: one side is serrated for increased gripping power, the other side is smooth to help prevent marking
- Smooth side is also used when pulling small diameter stock
- Very easy to set up and use
- Each unit comes with one set of standard jaws and one blank spindle bushing

| Shank | Gripping <br> Range <br> Size <br> (Inch) | Standard <br> Jaws <br> (Inch) | Range <br> Extra <br> Capacity <br> Jaws <br> (Inch) | A <br> (Inch) | B <br> (Inch) | C <br> (Inch) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $3 / 4$ sq. | $1 / 8-2-1 / 4$ | $1-7 / 8-3-3 / 4$ | $3-7 / 8$ | $2-9 / 16$ | $1-1 / 2$ | 217058 |
| 1 sq. | $1 / 8-2-1 / 4$ | $1-7 / 8-3-3 / 4$ | $3-7 / 8$ | $2-9 / 16$ | $1-1 / 2$ | 217059 |
| 1 sq. | $1 / 8-3-1 / 2$ | $1-7 / 8-5-3 / 8$ | $4-3 / 4$ | $2-9 / 16$ | $1-1 / 2$ | 217060 |
| 1 sq. | $1 / 8-3-5 / 8$ | $1-7 / 8-5-1 / 2$ | 5 | $2-3 / 4$ | $1-3 / 4$ | 217061 |
| 1 sq. | $1 / 8-4-7 / 8$ | $1-7 / 8-6-1 / 2$ | $6-3 / 4$ | $2-3 / 4$ | $1-3 / 4$ | 217062 |



## Lathe Mandrels

- Designed for setting up accurately bored or reamed blanks and castings for pulleys, handwheels or hubs, on centers, so that the outside diameter can be turned concentrically with the axis of the hole to which the mandrel is fixed
- Made of hardened steel and accurately ground to size

- Slightly tapered with the size marked at the large end
- Standard taper $0.0005^{\prime \prime}$ per inch
- Sizes under $1^{\prime \prime}$ are 0.0005 " undersize on small end
- Sizes $1-1 / 16^{\prime \prime}$ to $3^{\prime \prime}$ ore $0.001^{\prime \prime}$ undersize on small end

| Diameter (Inch) | Length (Inch) | Code | Diameter (Inch) | Length (Inch) | Code | Diameter (Inch) | Length (Inch) | Code |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1/8 | 2-1/2 | 166101 | 11/16 | 5-3/4 | 166119 | 1-1/2 | 9 | 166137 |
| 5/32 | 3 | 166102 | 23/32 | 6 | 166120 | 1-9/16 | 9-1/4 | 166138 |
| 3/16 | 3 | 166103 | 3/4 | 6 | 166121 | 1-5/8 | 9-1/2 | 166139 |
| 7/32 | 3-3/4 | 166104 | 25/32 | 6-1/4 | 166122 | 1-11/16 | 9-3/4 | 166140 |
| 1/4 | 3-3/4 | 166105 | 13/16 | 6-1/4 | 166123 | 1-3/4 | 10 | 166141 |
| 9/32 | 4 | 166106 | 27/32 | 6-1/2 | 166124 | 1-13/16 | 10-1/4 | 166142 |
| 5/16 | 4 | 166107 | 7/8 | 6-1/2 | 166125 | 1-7/8 | 10-1/2 | 166143 |
| 11/32 | 4-1/4 | 166108 | 29/32 | 6-3/4 | 166126 | 1-15/16 | 10-3/4 | 166144 |
| 3/8 | 4-1/4 | 166109 | 15/16 | 6-3/4 | 166127 | 2 | 11 | 166145 |
| 13/32 | 4-1/2 | 166110 | 31/32 | 7 | 166128 | 2-1/8 | 11-1/2 | 166146 |
| 7/16 | 4-1/2 | 166111 | 1 | 7 | 166129 | 2-1/4 | 12 | 166147 |
| 15/32 | 5 | 166112 | 1-1/16 | 7-1/4 | 166130 | 2-3/8 | 12 | 166148 |
| 1/2 | 5 | 166113 | 1-1/8 | 7 | 166131 | 2-1/2 | 12-1/2 | 166149 |
| 17/32 | 5-1/4 | 166114 | 1-3/16 | 7-3/4 | 166132 | 2-5/8 | 12-1/2 | 166150 |
| 9/16 | 5-1/4 | 166115 | 1-1/4 | 8 | 166133 | 2-3/4 | 13 | 166151 |
| 19/32 | 5-1/2 | 166116 | 1-5/16 | 8-1/4 | 166134 | 2-7/8 | 13 | 166152 |
| 5/8 | 5-1/2 | 166117 | 1-3/8 | 8-1/2 | 166135 | 3 | 13 | 166153 |
| 21/32 | 5-3/4 | 166118 | 1-7/16 | 8-3/4 | 166136 |  |  |  |

