

JACOBS 13mm

Jacobs[®]
CHUCK

Keyed Industrial Chucks 1244

Keyless Industrial Chucks..... 1248

Rubber-Flex® Collet Chucks 1250

Arbors..... 1252

Sleeves, Sockets & Ejecting Drifts .. 1255

Portable Tool Chucks 1256

Special Purpose Chucks 1258

Keys & Accessories 1258

Jacobs® Chucks

CHUCK

Jacobs® chucks, high precision tool holders, arbors, and related accessories have made Jacobs the leading brand of precision tool holding and work holding devices in the world. For more than 100 years, superior grip and accuracy have made Jacobs the industry leader, with Jacobs technology applied to everything from sophisticated CNC machining centers to cordless portable drills. Our commitment to excellence and innovation and continued investment in research and development provide us with the ability to maintain this leadership position.

HAND-TITE® KEYLESS CHUCKS



- Split Bite Jaw increases grip over standard bite chucks by providing more contact with the bit
- Precision Operation meets or exceeds stringent DIN run-out and dimensional specifications
- Material and surface finish combinations result in increased comfort and performance
- Anti-lock Nut prevents chuck from locking open
- Hammerlock® positive locking mechanism prevents loosening in hammer and other high vibration applications
- Provides high mechanical advantage to convert hand tightening torque into superior bit gripping force
- Constructed of high performance material to maximize durability and performance

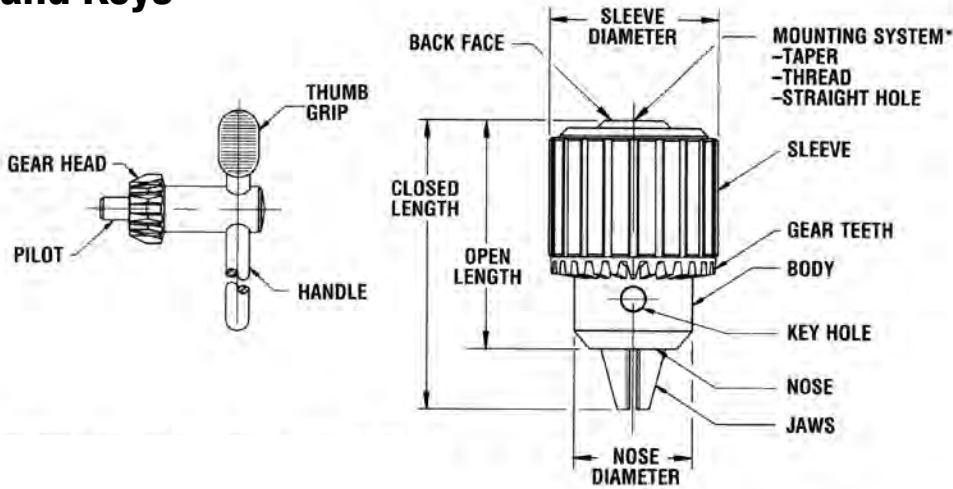
MULTI-CRAFT KEYED CHUCKS



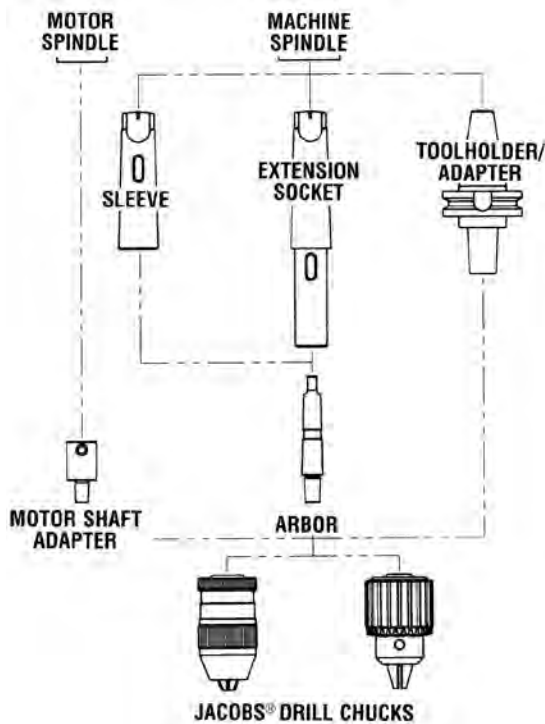
- Most popular chuck sold in the world
- Through-hardened jaws for hard, wear-resistant gripping surfaces
- Time-tested design normally found only in industrial-grade chucks
- Constructed of high quality materials for lasting life and performance

NOMENCLATURE

Chucks and Keys



Tool Holders



TOOL AND WORK HOLDER DEFINITIONS

ARBOR: Chuck mounting device used to adapt standardized chuck mounts to various machine spindle tapers. Arbors are also used to adapt mounts to other rotating devices such as machine spindles and lathes.

SLEEVE: Adapter for arbors when the machine spindle requires a larger taper than is available on the arbor.

EXTENSION SOCKET: Adapting device which increases effective spindle length and provides more flexibility when adapting to various taper sizes.

CENTERS: Support device for a workpiece when unusually long items or extreme accuracy are important. Available generally as rotating (“live”) and stationary (“dead”) designs.

Chuck and Accessory Removal Tools



REMOVAL TOOL DEFINITIONS

EJECTING DRIFT: Hardened steel accessory used to disassemble self-holding taper components.

WEDGES: Tapered steel plates used in pairs to disassemble chucks from arbors and spindles.

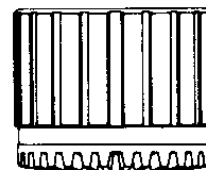
Jacobs® Ball Bearing - Taper Mount

- Ball Bearing Construction Maximizes Gripping Force and Drilling Accuracy
- Jaws Center-Ground for Straightness and Alignment
- One-Piece Sleeve Eliminates Crack Between Driving Teeth Often Found in Other Designs
- Through-Hardened Sleeve Teeth Plus Hardened Nose and Keyholes Provide Outstanding Wear Resistance
- Fluted Sleeve Standard
- Each Chuck 100% Inspected for Performance and Precision
- T.I.R. 0.003" Maximum at Half Capacity



| Cat. No. | UPC No. | Packaging | Model No. | Min. Capacity | Max. Capacity | Mount | Key No. | Closed Length | Open Length | Sleeve Dia. | Product Weight | Shelf Pack Qty. |
|----------|--------------|-----------|-----------|---------------|---------------|-------|---------|---------------|-------------|-------------|----------------|-----------------|
| 30209 | 095456302099 | Boxed | 8-1/2N | 0.040 in | 0.250 in | 2SJT | K30 | 2.41 in | 1.95 in | 1.56 in | 0.63 lb | 1 |
| 30215 | 095456302150 | Boxed | 11N | 0.040 in | 0.375 in | 2JT | K32 | 2.88 in | 2.26 in | 1.93 in | 1.22 lb | 1 |
| 30221D | 095456302211 | Boxed | 14N | 0.040 in | 0.500 in | 3JT | K3 | 3.88 in | 2.97 in | 2.44 in | 2.44 lb | 1 |
| 30227 | 095456302273 | Boxed | 16N | 0.125 in | 0.625 in | 3JT | K4 | 4.31 in | 3.26 in | 2.63 in | 3.20 lb | 1 |
| 30233 | 095456302334 | Boxed | 18N | 0.125 in | 0.750 in | 4JT | K4 | 5.12 in | 3.95 in | 3.01 in | 4.56 lb | 1 |
| 30239D | 095456302396 | Boxed | 20N | 0.375 in | 1.000 in | 5JT | K5 | 5.5 in | 4.23 in | 3.65 in | 7.62 lb | 1 |

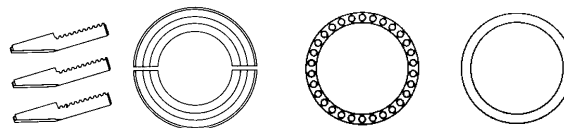
Jacobs® Replacement Parts - Sleeves



| Cat. No. | UPC No. | Packaging | Description | Model No. | Product Weight | Shelf Pack Qty. |
|----------|--------------|-----------|-------------------------------------|-----------|----------------|-----------------|
| 5089D | 095456050891 | Bagged | Replacement Sleeve for Model 8-1/2N | 8-1/2N | 0.20 lb | 1 |
| 5097 | 095456050976 | Bagged | Replacement Sleeve for Model 11N | 11N | 0.30 lb | 1 |
| 5506D | 095456055063 | Bagged | Replacement Sleeve for Model 14N | 14N | 0.52 lb | 1 |
| 5514D | 095456055148 | Bagged | Replacement Sleeve for Model 16N | 16N | 0.70 lb | 1 |
| 5522D | 095456055223 | Bagged | Replacement Sleeve for Model 18N | 18N | 1.08 lb | 1 |
| 5530D | 095456055308 | Bagged | Replacement Sleeve for Model 20N | 20N | 1.64 lb | 1 |

Jacobs® Replacement Parts - Service Kits (Newer Models)

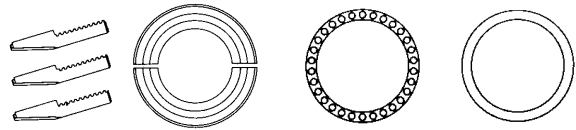
- For the New and Improved Jacobs Super Chuck® That Includes the Service Kit Number on the Chuck Nose
- Kit Includes Jaws, Nut, Caged Bearing, and Thrust Washer



| Cat. No. | UPC No. | Packaging | Description | Model No. | Product Weight | Shelf Pack Qty. |
|----------|--------------|-----------|------------------------------------|-----------|----------------|-----------------|
| 30343 | 095456303430 | Bagged | Chuck Service Kit for Model 8-1/2N | 8-1/2N | 0.14 lb | 1 |
| 30344 | 095456303447 | Bagged | Chuck Service Kit for Model 11N | 11N | 0.20 lb | 1 |
| 30345D | 095456303454 | Bagged | Chuck Service Kit for Model 14N | 14N | 0.45 lb | 1 |
| 30346 | 095456303461 | Bagged | Chuck Service Kit for Model 16N | 16N | 0.66 lb | 1 |
| 30347 | 095456303478 | Bagged | Chuck Service Kit for Model 18N | 18N | 0.90 lb | 1 |
| 30348D | 095456303485 | Bagged | Chuck Service Kit for Model 20N | 20N | 1.68 lb | 1 |

Jacobs® Replacement Parts - Service Kits (Older Models)

- For the Older Models Which Do Not Incorporate the Service Kit Marking on the Chuck Nose
- Kit Includes Jaws, Nut, Caged Bearing, and Thrust Washer



| Cat. No. | UPC No. | Packaging | Description | Model No. | Product Weight | Shelf Pack Qty. |
|----------|--------------|-----------|------------------------------------|-----------|----------------|-----------------|
| 33416 | 095456334168 | Bagged | Chuck Service Kit for Model 8-1/2N | 8-1/2N | 0.14 lb | 1 |
| 33417 | 095456334175 | Bagged | Chuck Service Kit for Model 11N | 11N | 0.20 lb | 1 |
| 33418D | 095456334182 | Bagged | Chuck Service Kit for Model 14N | 14N | 0.45 lb | 1 |
| 33419D | 095456334199 | Bagged | Chuck Service Kit for Model 16N | 16N | 0.66 lb | 1 |
| 33420D | 095456334205 | Bagged | Chuck Service Kit for Model 18N | 18N | 0.90 lb | 1 |
| 33421 | 095456334212 | Bagged | Chuck Service Kit for Model 20N | 20N | 1.68 lb | 1 |

Jacobs® Plain Bearing Taper Mounted - Heavy Duty Model

- Jaws Center-Ground for Absolute Straightness and Alignment
- One-Piece Sleeve Eliminates Crack Between Driving Teeth Often Found in Other Designs
- Through-Hardened Sleeve Teeth, Plus Hardened Nose and Keyholes Provide Outstanding Wear Resistance
- Each Chuck 100% Inspected for Performance and Precision
- T.I.R. .004" Maximum at Half Capacity
- KD Models Have Keyed Drive Feature
- PD Models Have Pin Drive Feature
- 34-33C Has Smooth Sleeve with Locking Collar



| Cat. No. | UPC No. | Packaging | Model No. | Min. Capacity | Max. Capacity | Mount | Key No. | Closed Length | Open Length | Sleeve Dia. | Product Weight | Shelf Pack Qty. |
|----------|--------------|-----------|-----------|---------------|---------------|-------|---------|---------------|-------------|-------------|----------------|-----------------|
| 6223 | 095456062238 | Boxed | 3A | 0.125 in | 0.625 in | 3JT | K3 | 3.81 in | 2.87 in | 2.30 in | 2.10 lb | 1 |
| 6228 | 095456062283 | Boxed | 3KD | 0.125 in | 0.625 in | 3JT | K3 | 4.06 in | 3.12 in | 2.29 in | 2.20 lb | 1 |
| 6230 | 095456062306 | Boxed | 3PD | 0.125 in | 0.625 in | 3JT | K3 | 4.06 in | 3.12 in | 2.29 in | 2.20 lb | 1 |
| 14442 | 095456144422 | Boxed | 34-02 | 0.040 in | 0.500 in | 2JT | K3 | 3.52 in | 2.74 in | 2.04 in | 1.75 lb | 1 |
| 6295D | 095456062955 | Boxed | 34-06 | 0.040 in | 0.500 in | 6JT | K3 | 3.52 in | 2.74 in | 2.04 in | 1.70 lb | 1 |
| 14445 | 095456144453 | Boxed | 34-33 | 0.040 in | 0.500 in | 33JT | K3 | 3.52 in | 2.74 in | 2.04 in | 1.72 lb | 1 |
| 14451 | 095456144514 | Boxed | 34-33C | 0.040 in | 0.500 in | 33JT | K3C | 3.71 in | 2.93 in | 2.00 in | 1.63 lb | 1 |
| 6309D | 095456063099 | Boxed | 36 | 0.18 in | 0.800 in | 3JT | K4 | 4.06 in | 3.14 in | 2.54 in | 3.02 lb | 1 |

Jacobs® Taper Mounted - Medium Duty Model

- Jaws Center-Ground for Absolute Straightness and Alignment
- One-Piece Sleeve Eliminates Crack Between Driving Teeth Often Found in Other Designs
- Through-Hardened Sleeve Teeth, Plus Hardened Nose and Keyholes Provide Outstanding Wear Resistance
- Each Chuck 100% Inspected for Performance and Precision
- T.I.R. .004" Maximum at Half Capacity
- KD Models Have Keyed Drive Feature
- All Model 33 Plain Bearing Chucks are Hammer Capable.



| Cat. No. | UPC No. | Packaging | Model No. | Min. Capacity | Max. Capacity | Mount | Key No. | Closed Length | Open Length | Sleeve Dia. | Product Weight | Shelf Pack Qty. |
|----------|--------------|-----------|-----------|---------------|---------------|-----------------------|---------|---------------|-------------|-------------|----------------|-----------------|
| 6200 | 095456062009 | Boxed | 0 | 0.0135 in | 0.156 in | 0JT | K0 | 1.404 in | 1.100 in | 0.850 in | 0.18 lb | 1 |
| 6206D | 095456062061 | Boxed | 1A | 0.040 in | 0.250 in | 1JT | K1 | 1.920 in | 1.540 in | 1.180 in | 0.32 lb | 1 |
| 33348 | 095456333482 | Boxed | 2 | 0.040 in | 0.375 in | 1JT | K2 | 2.490 in | 2.010 in | 1.420 in | 0.95 lb | 1 |
| 6214D | 095456062146 | Boxed | 2A | 0.040 in | 0.375 in | 2JT | K2 | 2.810 in | 2.170 in | 1.670 in | 0.90 lb | 1 |
| 6279D | 095456062795 | Boxed | 33 | 0.08 in | 0.500 in | 33JT | K32 | 3.210 in | 2.520 in | 1.792 in | 1.16 lb | 1 |
| 6281D | 095456062818 | Boxed | 33KD | 0.08 in | 0.500 in | 33JT | K32 | 3.460 in | 2.770 in | 1.792 in | 1.20 lb | 1 |
| 6291 | 095456062917 | Boxed | 3326A | 0.08 in | 0.500 in | 0.6250 STRAIGHT MOUNT | K32 | 3.540 in | 2.850 in | 1.792 in | 1.28 lb | 1 |

Jacobs® Thread Mounted - Heavy Duty Model

- Jaws Center-Ground for Absolute Straightness and Alignment
- One-Piece Sleeve Eliminates Crack Between Driving Teeth Often Found in Other Designs
- Through-Hardened Sleeve Teeth, Plus Hardened Nose and Keyholes Provide Outstanding Wear Resistance
- Each Chuck 100% Inspected for Performance and Precision
- T.I.R. .004" Maximum at Half Capacity



| Cat. No. | UPC No. | Packaging | Model No. | Min. Capacity | Max. Capacity | Mount | Key No. | Closed Length | Open Length | Sleeve Dia. | Product Weight | Shelf Pack Qty. |
|----------|--------------|-----------|-----------|---------------|---------------|--------|---------|---------------|-------------|-------------|----------------|-----------------|
| 33351 | 095456333512 | Boxed | 3B 1/2 | 0.125 in | 0.625 in | 1/2-20 | K3 | 3.52 in | 2.74 in | 2.04 in | 2.30 lb | 1 |
| 6232D | 095456062320 | Boxed | 3B 5/8 | 0.125 in | 0.625 in | 5/8-16 | K3 | 3.81 in | 2.84 in | 2.29 in | 2.28 lb | 1 |
| 6255D | 095456062559 | Boxed | 7BA 3/8 | 0.04 in | 0.250 in | 3/8-24 | K7 | 2.23 in | 1.74 in | 1.33 in | 0.44 lb | 1 |
| 8859D | 095456088597 | Boxed | 32BA 1/2 | 0.04 in | 0.375 in | 1/2-20 | K32 | 3.05 in | 2.31 in | 1.79 in | 1.10 lb | 1 |
| 6316D | 095456063167 | Boxed | 36B 3/4 | 0.188 in | 0.800 in | 3/4-16 | K4 | 4.12 in | 3.20 in | 2.54 in | 3.06 lb | 1 |
| 6314D | 095456063143 | Boxed | 36B 5/8 | 0.188 in | 0.800 in | 5/8-16 | K4 | 4.12 in | 3.20 in | 2.54 in | 3.10 lb | 1 |

Jacobs® Thread Mounted - Medium Duty Model

- Jaws Center-Ground for Absolute Straightness and Alignment
- One-Piece Sleeve Eliminates Crack Between Driving Teeth Often Found in Other Designs
- Through-Hardened Sleeve Teeth, Plus Hardened Nose and Keyholes Provide Outstanding Wear Resistance
- Each Chuck 100% Inspected for Performance and Precision
- T.I.R. .004" Maximum at Half Capacity
- Models 0 and 1A are Smooth Sleeve.
- All Model 33 Plain Bearing Chucks are Hammer Capable.



| Cat. No. | UPC No. | Packaging | Model No. | Min. Capacity | Max. Capacity | Mount | Key No. | Closed Length | Open Length | Sleeve Dia. | Product Weight | Shelf Pack Qty. |
|----------|--------------|-----------|--------------|---------------|---------------|---------|---------|---------------|-------------|-------------|----------------|-----------------|
| 6204D | 095456062047 | Boxed | 0B 5/16 | 0.0135 in | 0.156 in | 5/16-24 | K0 | 1.53 in | 1.17 in | 0.85 in | 0.13 lb | 1 |
| 6208D | 095456062085 | Boxed | 1B 3/8 | 0.040 in | 0.250 in | 3/8-24 | K1 | 1.95 in | 1.57 in | 1.12 in | 0.32 lb | 1 |
| 6219D | 095456062191 | Boxed | 2BA 3/8 | 0.040 in | 0.375 in | 3/8-24 | K2 | 2.81 in | 2.17 in | 1.67 in | 0.90 lb | 1 |
| 6287D | 095456062870 | Boxed | 33BA 1/2 | 0.08 in | 0.500 in | 1/2-20 | K32 | 3.09 in | 2.43 in | 1.79 in | 1.06 lb | 1 |
| 6283D | 095456062832 | Boxed | 33BA 3/8 | 0.08 in | 0.500 in | 3/8-24 | K32 | 3.09 in | 2.43 in | 1.79 in | 1.10 lb | 1 |
| 6289D | 095456062894 | Boxed | 33BA 5/8 | 0.08 in | 0.500 in | 5/8-16 | K32 | 3.09 in | 2.43 in | 1.79 in | 1.14 lb | 1 |
| 31090 | 095456310902 | Boxed | 41BA 1/2 | 0.040 in | 0.375 in | 1/2-20 | K30 | 2.50 in | 2.05 in | 1.43 in | 0.60 lb | 1 |
| 32282C | 095456322820 | Boxed | 41BA 3/8 | 0.040 in | 0.375 in | 3/8-24 | K30 | 2.50 in | 2.05 in | 1.43 in | 0.60 lb | 1 |
| 31138 | 095456311381 | Boxed | 41BA 3/8 - S | 0.040 in | 0.375 in | 3/8-24 | K30 | 2.50 in | 2.05 in | 1.43 in | 0.62 lb | 1 |

Jacobs® Thread Mounted - Light Duty Model

- Industrial Quality
- Through-Hardened Jaws Provide Hard, Durable Gripping Forces

| Cat. No. | UPC No. | Packaging | Model No. | Min. Capacity | Max. Capacity | Mount | Key No. | Closed Length | Open Length | Sleeve Dia. | Product Weight | Shelf Pack Qty. |
|----------|--------------|-----------|-----------|---------------|---------------|--------|---------|---------------|-------------|-------------|----------------|-----------------|
| 14946 | 095456149465 | Boxed | 24BA-3/8 | 0.063 in | 0.50 in | 3/8-24 | KK | 3.00 in | 2.30 in | 1.72 in | 0.96 lb | 1 |
| 14947 | 095456149472 | Boxed | 26BA-1/2 | 0.063 in | 0.50 in | 1/2-20 | KK | 3.00 in | 2.30 in | 1.72 in | 0.94 lb | 1 |

Jacobs® High Precision Model Taper Mounted

- Precision Tested and Certified to 0.0016" T.I.R Max at Half Capacity
- Self-Tightening Feature Automatically Increases Gripping Force Proportional to Increased Torque to Prevent Tool Shank Slippage
- All Components Exposed to Wear are Completely Hardened to Maintain Accuracy and Extend Chuck Life
- Jacobs® Taper Mount Permits Use on a Wide Range of High Accuracy Drill Presses, Jig Borers, Milling Machines and Production Drilling Equipment
- 2Js Mount is a Short Taper



| Cat. No. | UPC No. | Packaging | Model No. | Min. Capacity | Max. Capacity | Mount | Closed Length | Open Length | Sleeve Dia. | Product Weight | Shelf Pack Qty. |
|----------|--------------|-----------|-------------|---------------|---------------|-------|---------------|-------------|-------------|----------------|-----------------|
| 31121D | 095456311213 | Boxed | JKP 65-J1 | 0.012 in | 0.255 in | 1JT | 2.76 in | 2.44 in | 1.28 in | 0.69 lb | 1 |
| 9679 | 095456096790 | Boxed | JKP 80-J2S | 0.012 in | 0.315 in | 2JS | 2.91 in | 2.64 in | 1.46 in | 0.98 lb | 1 |
| 9681 | 095456096813 | Boxed | JKP 100-J2 | 0.020 in | 0.394 in | 2JT | 3.50 in | 3.19 in | 1.61 in | 0.57 lb | 1 |
| 9680 | 095456096806 | Boxed | JKP 100-J33 | 0.020 in | 0.394 in | 33JT | 3.50 in | 3.19 in | 1.61 in | 0.57 lb | 1 |
| 9683 | 095456096837 | Boxed | JKP 130-J2 | 0.039 in | 0.512 in | 2JT | 3.90 in | 3.46 in | 1.81 in | 2.30 lb | 1 |
| 9684 | 095456096844 | Boxed | JKP 130-J6 | 0.039 in | 0.512 in | 6JT | 3.90 in | 3.46 in | 1.81 in | 2.20 lb | 1 |
| 9682D | 095456096820 | Boxed | JKP 130-J33 | 0.039 in | 0.512 in | 33JT | 3.90 in | 3.46 in | 1.81 in | 2.22 lb | 1 |
| 9685D | 095456096851 | Boxed | JKP 160-J6 | 0.118 in | 0.630 in | 6JT | 4.21 in | 3.74 in | 2.17 in | 2.82 lb | 1 |

Jacobs® High Torque/High Precision Model

- Precision Tested and Certified to .0016" T.I.R. Maximum at Half Capacity
- For Use on CNC Machining Centers in Drilling, Boring, Counter-Boring and Milling Operations Requiring Heavy Penetration
- Furnished with Spanner Wrench to Allow the Application of Supplementary Gripping Torque. Light Tightening Increases Gripping Torque Up to 3 Times Higher Than Hand Tightening
- Resists Tool Loosening on High-Speed Machines with Right Hand Rotation and Instant Spindle Stop.
- 2Js Mount is a Short Taper



| Cat. No. | UPC No. | Packaging | Model No. | Min. Capacity | Max. Capacity | Mount | Closed Length | Open Length | Sleeve Dia. | Product Weight | Shelf Pack Qty. |
|----------|--------------|-----------|-------------|---------------|---------------|-------|---------------|-------------|-------------|----------------|-----------------|
| 30533 | 095456305335 | Boxed | JKT 100-J2 | 0.000 in | 0.394 in | 2JT | 3.50 in | 3.19 in | 1.61 in | 2.03 lb | 1 |
| 30532D | 095456305328 | Boxed | JKT 100-J33 | 0.000 in | 0.394 in | 33JT | 3.50 in | 3.19 in | 1.61 in | 1.76 lb | 1 |
| 30527 | 095456305274 | Boxed | JKT 130-J2 | 0.039 in | 0.512 in | 2JT | 3.90 in | 3.46 in | 1.81 in | 0.00 lb | 1 |
| 30529 | 095456305298 | Boxed | JKT 130-J6 | 0.039 in | 0.512 in | 6JT | 3.90 in | 3.46 in | 1.81 in | 0.00 lb | 1 |
| 30528 | 095456305281 | Boxed | JKT 130-J33 | 0.039 in | 0.512 in | 33JT | 3.90 in | 3.46 in | 1.81 in | 0.00 lb | 1 |
| 31122D | 095456311220 | Boxed | JKT65-J1 | 0.000 in | 0.255 in | 1JT | 2.76 in | 2.44 in | 1.28 in | 1.20 lb | 1 |
| 30526D | 095456305267 | Boxed | JKT80-J2S | 0.000 in | 0.315 in | 2JS | 2.91 in | 2.64 in | 1.46 in | 1.50 lb | 1 |
| 30530D | 095456305304 | Boxed | JKT160-J6 | 0.118 in | 0.630 in | 6JT | 4.21 in | 3.74 in | 2.17 in | 0.00 lb | 1 |

Jacobs® High Torque/High Precision Chucks with Integrated Shank

- High Precision Keyless Drill Chuck - Arbor is Integrated Into the Internal Socket of the Drill Chuck
- This Integrated Design Makes It Impossible for the Arbor and the Drill Chuck to Become Accidentally Separated, Providing a Unit of Greater Rigidity and Precision As a Result of Its Compact Design, Accumulated Run-Out is Reduced to a Minimum
- Self-Tightening Feature Automatically Increases Gripping Force Proportional to Increased Torque to Prevent Tool Shank Slippage. Right Handed Operation Only
- 100% Individually Controlled to Ensure Not to Exceed a Maximum Total Integrated Run-Out of 0.0016 in
- Mounts Available: Morse Tapers, Straight Shanks and R-8



| Cat. No. | UPC No. | Packaging | Model No. | Min. Capacity | Max. Capacity | Mount | Closed Length | Open Length | Sleeve Dia. | Product Weight | Shelf Pack Qty. |
|----------|--------------|-----------|------------|---------------|---------------|-------|---------------|-------------|-------------|----------------|-----------------|
| 31406D | 095456314061 | Boxed | JK 80-MT2 | 0.000 in | 0.315 in | MT2 | 2.83 in | 2.56 in | 1.50 in | 1.35 lb | 1 |
| 31407D | 095456314078 | Boxed | JK 100-MT2 | 0.000 in | 0.394 in | MT2 | 3.23 in | 2.87 in | 1.69 in | 1.81 lb | 1 |
| 31408D | 095456314085 | Boxed | JK 130-MT2 | 0.039 in | 0.512 in | MT2 | 3.62 in | 3.15 in | 1.89 in | 2.65 lb | 1 |
| 31409 | 095456314092 | Boxed | JK 130-MT3 | 0.039 in | 0.512 in | MT3 | 3.62 in | 3.15 in | 1.89 in | 2.47 lb | 1 |
| 31410 | 095456314108 | Boxed | JK 130-MT4 | 0.039 in | 0.512 in | MT4 | 3.54 in | 3.23 in | 1.89 in | 3.72 lb | 1 |
| 31411 | 095456314115 | Boxed | JK 130-R8 | 0.039 in | 0.512 in | R8 | 3.54 in | 3.23 in | 1.89 in | 3.20 lb | 1 |
| 31414 | 095456314146 | Boxed | JK 160-MT3 | 0.118 in | 0.630 in | MT3 | 3.78 in | 3.35 in | 2.13 in | 3.21 lb | 1 |
| 31415 | 095456314153 | Boxed | JK 160-MT4 | 0.118 in | 0.630 in | MT4 | 3.78 in | 3.35 in | 2.13 in | 4.29 lb | 1 |
| 31416 | 095456314160 | Boxed | JK 160-R8 | 0.118 in | 0.630 in | R8 | 3.78 in | 3.35 in | 2.13 in | 3.79 lb | 1 |

Jacobs® Medium Duty Industrial Chucks

- Drill Chucks for Industrial Use (Medium Duty), Available with Threaded Mounts for Professional Portable Drilling Machines and with Taper Fittings for Stationary Drilling Machines
- Automatic Fitting for Efficient, Fast Change of Tools
- Self-Tightening Mechanism Automatically Increases the Grip in Proportion to the Increase in Torque During Drilling
- Fits Tools of Up to 20mm in Diameter.
- Machine Fitting Via DIN0238 of Jacobs Tapers and UNF Thread Fittings



| Cat. No. | UPC No. | Packaging | Model No. | Min. Capacity | Max. Capacity | Mount | Closed Length | Open Length | Sleeve Dia. | Product Weight | Shelf Pack Qty. |
|----------|--------------|-----------|------------|---------------|---------------|--------|---------------|-------------|-------------|----------------|-----------------|
| 33363D | 095456333635 | Boxed | JK 130 1/2 | 0.039 in | 0.512 in | 1/2-20 | 3.74 in | 3.39 in | 1.73 in | 1.58 lb | 1 |
| 33362 | 095456333628 | Boxed | JK 130 3/8 | 0.039 in | 0.512 in | 3/8-24 | 3.74 in | 3.39 in | 1.73 in | 1.60 lb | 1 |
| 33365 | 095456333659 | Boxed | JK 130 J2 | 0.039 in | 0.512 in | 2JT | 3.74 in | 3.39 in | 1.73 in | 1.16 lb | 1 |
| 33366 | 095456333666 | Boxed | JK 130 J6 | 0.039 in | 0.512 in | 6JT | 3.74 in | 3.39 in | 1.73 in | 1.00 lb | 1 |
| 33364 | 095456333642 | Boxed | JK 130 J33 | 0.039 in | 0.512 in | 33JT | 3.74 in | 3.39 in | 1.73 in | 1.16 lb | 1 |

Jacobs® Die Grinder Chucks

- Compact Tap Chuck Designed for Use with Rubber-Flex® Collets Holds Mounted Grinding Burrs and Rotary Files on Pneumatic and Electric Die Grinders
- Compact Design Facilitates Use for a Wide Range of Applications
- Integral Seal Protects Collet Components From Abrasives and Swarf
- Rubber-Flex® Collets (See Rubber-Flex® Information) Furnished Separately for Tools with Collet Seating Cones Built Into Spindles.



| Cat. No. | UPC No. | Packaging | Model No. | Product Weight | Shelf Pack Qty. |
|----------|--------------|-----------|-----------|----------------|-----------------|
| 9756 | 095456097568 | Boxed | 100-61 | 0.09 lb | 1 |

Jacobs® Nut for Die Grinder Chuck

| Cat. No. | UPC No. | Packaging | Description | Model No. | Product Weight | Shelf Pack Qty. |
|----------|--------------|-----------|---------------------------------------------|-----------|----------------|-----------------|
| 12791 | 095456127913 | Boxed | Nut for Die Grinder Chuck, Model No. 100-61 | N100 | 0.02 lb | 1 |

Jacobs® Tap Chuck Collets

- Parallel Jaw Insert Surfaces Exert Uniform, Accurate Gripping Force Up to Three Times Greater Than Can Be Achieved with Split-Steel Collets
- Each Collet Accepts and Precisely Centers a Wide Range of Both Decimal or Metric Diameters (Within Individual Capacity Ranges) to Speed Setups and Increase Machining Productivity
- Durable One-Piece Construction. Synthetic Rubber Retains Flexibility and Resists Deterioration From Heat, Coolants and Cutting Compounds
- Steel Jaw Inserts Precision Ground After Molding Process to Ensure Maximum Gripping Accuracy. Hardened for Greater Wear Resistance Than Split Steel Collets
- Each Collet Bore is Held Concentric to the O.D. Tapers, Front and Back, to Minimize T.I.R.
- Automatically Seals Tool O.D. to Prevent Coolant Flow Through Thus Increasing Tool Wear
- Seals Collets and Machine Spindles to Protect From Abrasive Particles and Swarf



| Cat. No. | UPC No. | Packaging | Model No. | Min. Capacity | Max. Capacity | Contact Length | Cone Angle | Outside Diameter | No. of Inserts | Product Weight | Shelf Pack Qty. |
|----------|--------------|-----------|-----------|---------------|---------------|----------------|------------|------------------|----------------|----------------|-----------------|
| 9747 | 095456097476 | Boxed | J420 | 0.176 in | 0.320 in | 0.500 in | 40 ° | 0.941 in | 6 | 0.02 lb | 1 |
| 9748 | 095456097483 | Boxed | J421 | 0.139 in | 0.257 in | 0.500 in | 40 ° | 0.941 in | 6 | 0.00 lb | 1 |
| 9751 | 095456097513 | Boxed | J422 | 0.253 in | 0.383 in | 0.500 in | 40 ° | 0.941 in | 6 | 0.70 lb | 1 |
| 9817 | 095456098176 | Boxed | J423 | 0.090 in | 0.180 in | 0.500 in | 40 ° | 0.860 in | 4 | 0.02 lb | 1 |
| 9749 | 095456097490 | Boxed | J440 | 0.280 in | 0.500 in | 0.630 in | 45 ° | 1.296 in | 6 | 1.00 lb | 1 |
| 9750D | 095456097506 | Boxed | J441 | 0.176 in | 0.383 in | 0.630 in | 45 ° | 1.296 in | 6 | 0.04 lb | 1 |
| 9867 | 095456098671 | Boxed | J443 | 0.110 in | 0.280 in | 0.620 in | 45 ° | 1.180 in | 4 | 0.04 lb | 1 |

Jacobs® Die Grinder Collets



| Cat. No. | UPC No. | Packaging | Model No. | Min. Capacity | Max. Capacity | Contact Length | Cone Angle | Outside Diameter | No. of Inserts | Product Weight | Shelf Pack Qty. |
|----------|--------------|-----------|-----------|---------------|---------------|----------------|------------|------------------|----------------|----------------|-----------------|
| 9757 | 095456097575 | Boxed | J116 | 0.094 in | 0.177 in | 0.468 in | 26 ° | 0.59 in | 6 | 0.02 lb | 1 |
| 9758 | 095456097582 | Boxed | J117 | 0.177 in | 0.256 in | 0.468 in | 26 ° | 0.59 in | 8 | 0.01 lb | 1 |

Jacobs® Lathe Chuck Collets

- Parallel Jaw Insert Surfaces Exert Uniform, Accurate Gripping Force Up to Three Times Greater Than Can Be Achieved with Split-Steel Collets
- Each Collet Accepts and Precisely Centers a Wide Range of Both Decimal or Metric Diameters (Within the Collet Capacity Range) to Speed Setups and Increase Machining Productivity
- Durable One-Piece Construction. Synthetic Rubber Retains Flexibility and Resists Deterioration From Heat, Coolants and Cutting Compounds
- Steel Jaw Inserts Precision Ground After Molding Process to Ensure Maximum Gripping Accuracy. Hardened for Greater Wear Resistance Than Split Steel Collets
- Each Collet Bore is Held Concentric to the O.D. Tapers, Front and Back, to Minimize T.I.R.
- Automatically Seals Tool O.D. to Prevent Coolant Flow Through Thus Increasing Tool Wear
- Seals Collets and Machine Spindles to Protect From Abrasive Particles and Swarf



| Cat. No. | UPC No. | Packaging | Model No. | Min. Capacity | Max. Capacity | Contact Length | Cone Angle | Outside Diameter | Clearance Diameter | No. of Inserts | Product Weight | Shelf Pack Qty. |
|----------|--------------|-----------|-----------|---------------|---------------|----------------|------------|------------------|--------------------|----------------|----------------|-----------------|
| 9555D | 095456095557 | Bagged | J910 | 0.060 in | 0.125 in | 1.74 in | 26 ° | 2.25 in | 0.6 | 4 | 0.44 lb | 1 |
| 9556D | 095456095564 | Bagged | J911 | 0.125 in | 0.250 in | 1.74 in | 26 ° | 2.25 in | 0.6 | 6 | 0.54 lb | 1 |
| 9557DD | 095456095571 | Bagged | J912 | 0.250 in | 0.375 in | 1.74 in | 26 ° | 2.25 in | 0.6 | 6 | 0.52 lb | 1 |
| 9558D | 095456095588 | Bagged | J913 | 0.375 in | 0.500 in | 1.74 in | 26 ° | 2.25 in | - | 8 | 0.44 lb | 1 |
| 9559D | 095456095595 | Bagged | J914 | 0.500 in | 0.625 in | 1.74 in | 26 ° | 2.25 in | - | 10 | 0.48 lb | 1 |
| 9560D | 095456095601 | Bagged | J915 | 0.625 in | 0.750 in | 1.74 in | 26 ° | 2.25 in | - | 10 | 0.48 lb | 1 |
| 9561 | 095456095618 | Bagged | J916 | 0.750 in | 0.875 in | 1.74 in | 26 ° | 2.25 in | - | 12 | 0.48 lb | 1 |
| 9562 | 095456095625 | Bagged | J917 | 0.875 in | 1.000 in | 1.74 in | 26 ° | 2.25 in | - | 16 | 0.56 lb | 1 |
| 9563 | 095456095632 | Bagged | J918 | 1.000 in | 1.125 in | 1.74 in | 26 ° | 2.25 in | - | 20 | 0.52 lb | 1 |
| 9564 | 095456095649 | Bagged | J919 | 1.125 in | 1.250 in | 1.74 in | 26 ° | 2.25 in | - | 24 | 0.44 lb | 1 |
| 9565D | 095456095656 | Bagged | J920 | 1.250 in | 1.375 in | 1.74 in | 26 ° | 2.25 in | - | 24 | 0.42 lb | 1 |
| 9567 | 095456095670 | Bagged | J921 | 1.375 in | 1.500 in | 1.74 in | 26 ° | 2.25 in | - | 24 | 0.36 lb | 1 |

Jacobs® Morse Taper Jacobs® Taper Arbor

- Adapt Jacobs® Taper To: Morse Tapers, Straight Shanks, Threaded Shanks and Bridgeport® Tapers
- Ideal for Use with Custom Tool and Work Holder Designs and for Specialized Machining Applications



| Cat. No. | UPC No. | Packaging | A0 No. | Mount | Overall Length | Product Weight | Shelf Pack Qty. |
|----------|--------------|-----------|--------|----------------|----------------|----------------|-----------------|
| 7299 | 095456072992 | Boxed | A0101 | 1 Morse X 1JT | 3.38 in | 0.12 lb | 1 |
| 7300 | 095456073005 | Boxed | A0102 | 1 Morse x 2 JT | 3.59 in | 0.16 lb | 1 |
| 7303 | 095456073036 | Boxed | A0106 | 1 Morse x 6JT | 3.72 in | 0.22 lb | 1 |
| 7304 | 095456073043 | Boxed | A0133 | 1 Morse x 33JT | 3.72 in | 0.20 lb | 1 |
| 7306 | 095456073067 | Boxed | A0201 | 2 Morse x 1JT | 3.94 in | 0.30 lb | 1 |
| 7307 | 095456073074 | Boxed | A0202 | 2 Morse x 2JT | 4.16 in | 0.34 lb | 1 |
| 7308D | 095456073081 | Boxed | A0203 | 2 Morse x 3JT | 4.50 in | 0.46 lb | 1 |
| 7309 | 095456073098 | Boxed | A0204 | 2 Morse x 4JT | 4.94 in | 0.76 lb | 1 |
| 7311 | 095456073111 | Boxed | A0206 | 2 Morse x 6JT | 4.28 in | 0.38 lb | 1 |
| 7312 | 095456073128 | Boxed | A0233 | 2 Morse x 33JT | 4.28 in | 0.36 lb | 1 |
| 7313D | 095456073135 | Boxed | A0301 | 3 Morse x 1JT | 4.69 in | 0.60 lb | 1 |
| 7314 | 095456073142 | Boxed | A0302 | 3 Morse x 2JT | 4.94 in | 0.66 lb | 1 |
| 7315 | 095456073159 | Boxed | A0303 | 3 Morse x 3JT | 5.27 in | 0.78 lb | 1 |
| 7316D | 095456073166 | Boxed | A0304 | 3 Morse x 4JT | 5.70 in | 1.08 lb | 1 |
| 7317 | 095456073173 | Boxed | A0305 | 3 Morse x 5JT | 5.94 in | 1.44 lb | 1 |
| 7318 | 095456073180 | Boxed | A0306 | 3 Morse x 6JT | 5.06 in | 0.70 lb | 1 |
| 7319D | 095456073197 | Boxed | A0333 | 3 Morse x 33JT | 5.06 in | 0.68 lb | 1 |
| 7320 | 095456073203 | Boxed | A0402 | 4 Morse x 2JT | 5.91 in | 1.36 lb | 1 |
| 7321 | 095456073210 | Boxed | A0403 | 4 Morse x 3JT | 6.25 in | 1.48 lb | 1 |
| 7322D | 095456073227 | Boxed | A0404 | 4 Morse x 4JT | 6.69 in | 1.82 lb | 1 |
| 7323D | 095456073234 | Boxed | A0405 | 4 Morse x 5JT | 6.91 in | 2.16 lb | 1 |
| 7324D | 095456073241 | Boxed | A0406 | 4 Morse x 6JT | 6.03 in | 1.37 lb | |
| 7325 | 037103475763 | Boxed | A0433 | 4 Morse x 33JT | 6.06 in | 1.37 lb | 3 |
| 7327 | 095456073272 | Boxed | A0503 | 5 Morse x 3JT | 7.50 in | 3.31 lb | 1 |
| 7328D | 095456073289 | Boxed | A0504 | 5 Morse x 4JT | 7.94 in | 3.80 lb | 1 |
| 7329 | 095456073296 | Boxed | A0505 | 5 Morse x 5JT | 8.16 in | 4.06 lb | 1 |

Jacobs® Straight Shank To Jacobs® Taper

- Precision Machined and Ground to Master Gages for Maximum Performance with Jacobs® Drill and Tap Chucks
- Ideal for Use with Custom Tool and Work Holder Designs and for Specialized Machining Applications



| Cat. No. | UPC No. | Packaging | AO No. | Mount | Overall Length | Straight Shank Length (L-1) | Product Weight | Shelf Pack Qty. |
|----------|--------------|-----------|--------|-------------|----------------|-----------------------------|----------------|-----------------|
| 7348D | 095456073487 | Boxed | A4000 | 1/2" x 0JT | 3.094 in | 2.500 | 0.13 lb | 1 |
| 7349 | 095456073494 | Boxed | A4001 | 1/2" x 1JT | 3.312 in | 2.500 | 0.13 lb | 1 |
| 7350 | 095456073500 | Boxed | A4002 | 1/2" x 2JT | 3.531 in | 2.500 | 0.20 lb | 1 |
| 7351 | 095456073517 | Boxed | A4003 | 1/2" x 3JT | 3.875 in | 2.500 | 0.25 lb | 1 |
| 7353 | 095456073531 | Boxed | A4006 | 1/2" x 6JT | 3.656 in | 2.500 | 0.25 lb | 1 |
| 7354D | 095456073548 | Boxed | A4033 | 1/2" x 33JT | 3.656 in | 2.500 | 0.25 lb | 1 |
| 7355 | 095456073555 | Boxed | A4101 | 5/8" x 1JT | 3.312 in | 2.500 | 0.26 lb | 1 |
| 7356 | 095456073562 | Boxed | A4102 | 5/8" x 2JT | 3.531 in | 2.500 | 0.31 lb | 1 |
| 7357 | 095456073579 | Boxed | A4103 | 5/8" x 3JT | 3.875 in | 2.500 | 0.37 lb | 1 |
| 7359 | 095456073593 | Boxed | A4106 | 5/8" x 6JT | 3.656 in | 2.500 | 0.37 lb | 1 |
| 7360D | 095456073609 | Boxed | A4133 | 5/8" x 33JT | 3.656 in | 2.500 | 0.37 lb | 1 |
| 7361 | 095456073616 | Boxed | A4202 | 3/4" x 2JT | 4.031 in | 3.000 | 0.37 lb | 1 |
| 7362 | 095456073623 | Boxed | A4203 | 3/4" x 3JT | 4.375 in | 3.000 | 0.37 lb | 1 |
| 7364D | 095456073647 | Boxed | A4206 | 3/4" x 6JT | 4.156 in | 3.000 | 0.37 lb | 1 |
| 7365 | 095456073654 | Boxed | A4233 | 3/4" x 33JT | 4.156 in | 3.000 | 0.37 lb | 1 |
| 7367 | 095456073678 | Boxed | A4303 | 1" x 3JT | 4.375 in | 3.000 | 0.68 lb | 1 |
| 7368 | 095456073685 | Boxed | A4306 | 1" x 6JT | 4.156 in | 3.000 | 0.68 lb | 1 |

Jacobs® Threaded Shank To Morse Taper

- Precision Machined and Ground to Master Gages for Maximum Performance with Jacobs® Drill and Tap Chucks
- Ideal for Use with Custom Tool and Work Holder Designs and for Specialized Machining Applications



| Cat. No. | UPC No. | Packaging | AO No. | Mount | Overall Length | Threaded Extension (L-1) | Product Weight | Shelf Pack Qty. |
|----------|--------------|-----------|--------|-------------------|----------------|--------------------------|----------------|-----------------|
| 7345D | 095456073456 | Boxed | A0261 | 2 Morse 3/8" - 24 | 3.69 in | 0.56 | 0.28 lb | 1 |
| 7346D | 095456073463 | Boxed | A0264 | 2 Morse 1/2" - 20 | 4.06 in | 0.56 | 0.34 lb | 1 |
| 7347D | 095456073470 | Boxed | A0268 | 2 Morse 5/8" - 16 | 4.19 in | 0.69 | 0.42 lb | 1 |

Jacobs® Bridgeport® Taper to Jacobs® Taper

- Precision Machined and Ground to Master Gages for Maximum Performance with Jacobs® Drill and Tap Chucks



| Cat. No. | UPC No. | Packaging | AO No. | Mount | Overall Length Min | Overall Length Max | Mount Length (C) Min | Mount Length (C) Max | Diameter (D) Min | Diameter (D) Max | Product Weight | Shelf Pack Qty. |
|----------|--------------|-----------|--------|-------|--------------------|--------------------|----------------------|----------------------|------------------|------------------|----------------|-----------------|
| 7339 | 095456073395 | Boxed | A0802 | 2JT | 5.18 in | 5.20 in | 0.91 in | 0.92 in | 0.49 in | 0.56 in | 1.00 lb | 1 |
| 7340D | 095456073401 | Boxed | A0803 | 3JT | 5.53 in | 5.55 in | 1.25 in | 1.27 in | 0.75 in | 0.81 in | 1.10 lb | 1 |
| 7341 | 095456073418 | Boxed | A0804 | 4JT | 5.97 in | 5.98 in | 1.69 in | 1.70 in | 1.04 in | 1.12 in | 1.36 lb | 1 |
| 7342D | 095456073425 | Boxed | A0806 | 6JT | 5.31 in | 5.33 in | 1.03 in | 1.05 in | 0.62 in | 0.68 in | 1.02 lb | 1 |
| 7343 | 095456073432 | Boxed | A0833 | 33JT | 5.31 in | 5.33 in | 1.03 in | 1.05 in | 0.56 in | 0.62 in | 0.98 lb | 1 |

Jacobs® Drill Sleeves - Morse Taper - Archer® Series 600

- Adapt Smaller Morse Taper Shank Tools to Larger Machine Spindles
- Oil Toughened and Externally Precision Ground with Hardened Tang
- Outside Morse Taper Sizes are 1 Through 6; Inside Morse Taper Sizes are 0 Through 5



| Cat. No. | UPC No. | Packaging | Model No. | Morse Taper No. Outside | Morse Taper No. Inside | Overall Length | Product Weight | Shelf Pack Qty. |
|----------|--------------|-----------|-----------|-------------------------|------------------------|----------------|----------------|-----------------|
| 30421D | 095456304215 | Boxed | 610 | 1 | 0 | 3.125 in | 0.10 lb | 1 |
| 30422D | 095456304222 | Boxed | 621 | 2 | 1 | 3.62 in | 0.20 lb | 1 |
| 30424 | 095456304246 | Boxed | 631 | 3 | 1 | 3.88 in | 0.37 lb | 1 |
| 30423D | 095456304239 | Boxed | 632 | 3 | 2 | 4.38 in | 0.42 lb | 1 |
| 30427D | 095456304277 | Boxed | 641 | 4 | 1 | 4.88 in | 1.06 lb | 1 |
| 30426D | 095456304260 | Boxed | 642 | 4 | 2 | 4.88 in | 0.87 lb | 1 |
| 30425D | 095456304253 | Boxed | 643 | 4 | 3 | 5.50 in | 0.90 lb | 1 |
| 30638 | 095456306387 | Boxed | 651 | 5 | 1 | 6.12 in | 3.28 lb | 1 |
| 30430D | 095456304307 | Boxed | 652 | 5 | 2 | 6.12 in | 2.87 lb | 1 |
| 30429D | 095456304291 | Boxed | 653 | 5 | 3 | 6.12 in | 2.56 lb | 1 |
| 30428D | 095456304284 | Boxed | 654 | 5 | 4 | 6.69 in | 2.24 lb | 1 |
| 30639 | 095456306394 | Boxed | 664 | 6 | 4 | 8.56 in | 5.50 lb | 1 |
| 30431D | 095456304314 | Boxed | 665 | 6 | 5 | 8.56 in | 5.62 lb | 1 |

Jacobs® Extension Sockets - Morse Taper - Archer® Series 800

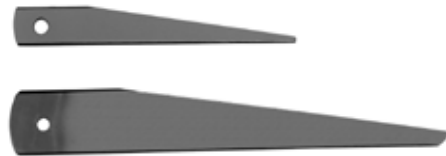
- Extend Tool Lengths and Application Distances While Adapting for Increases or Decreases in Applied Tool Morse Taper Sizes
- Externally Precision Ground with Hardened Tang
- Outside and Inside Morse Taper Sizes are 1 Through 5



| Cat. No. | UPC No. | Packaging | Model No. | Morse Taper No. Outside | Morse Taper No. Inside | Overall Length | Outside Diameter | Socket Length (A) | Product Weight | Shelf Pack Qty. |
|----------|--------------|-----------|-----------|-------------------------|------------------------|----------------|------------------|-------------------|----------------|-----------------|
| 30443D | 095456304437 | Boxed | 811 | 1 | 1 | 5.71 in | 0.79 in | 2.99 in | 0.40 lb | 1 |
| 30444 | 095456304444 | Boxed | 812 | 1 | 2 | 6.30 in | 1.18 in | 3.58 in | 0.92 lb | 1 |
| 30445 | 095456304451 | Boxed | 821 | 2 | 1 | 6.30 in | 0.80 in | 2.99 in | 0.56 lb | 1 |
| 30446 | 095456304468 | Boxed | 822 | 2 | 2 | 6.89 in | 1.18 in | 3.58 in | 1.22 lb | 1 |
| 30447D | 095456304475 | Boxed | 823 | 2 | 3 | 7.72 in | 1.42 in | 4.41 in | 1.58 lb | 1 |
| 30448D | 095456304482 | Boxed | 831 | 3 | 1 | 6.89 in | 0.79 in | 2.99 in | 0.87 lb | 1 |
| 30449D | 095456304499 | Boxed | 832 | 3 | 2 | 7.64 in | 1.18 in | 3.58 in | 0.60 lb | 1 |
| 30450D | 095456304505 | Boxed | 833 | 3 | 3 | 8.46 in | 1.42 in | 4.41 in | 2.04 lb | 1 |
| 30451D | 095456304512 | Boxed | 834 | 3 | 4 | 9.45 in | 1.89 in | 5.39 in | 3.43 lb | 1 |
| 30640D | 095456306400 | Boxed | 842 | 4 | 2 | 8.46 in | 1.18 in | 3.58 in | 1.07 lb | 1 |
| 30452 | 095456304529 | Boxed | 843 | 4 | 3 | 9.45 in | 1.42 in | 4.41 in | 1.09 lb | 1 |
| 30453D | 095456304536 | Boxed | 844 | 4 | 4 | 10.43 in | 1.89 in | 5.39 in | 4.20 lb | 1 |
| 30454 | 095456304543 | Boxed | 845 | 4 | 5 | 11.81 in | 2.48 in | 6.77 in | 7.14 lb | 1 |
| 30641 | 095456306417 | Boxed | 853 | 5 | 3 | 10.35 in | 1.42 in | 4.41 in | 2.60 lb | 1 |
| 30455D | 095456304550 | Boxed | 854 | 5 | 4 | 11.81 in | 1.89 in | 5.39 in | 2.65 lb | 1 |
| 30456 | 095456304567 | Boxed | 855 | 5 | 5 | 13.19 in | 2.48 in | 6.77 in | 9.44 lb | 1 |

Jacobs® Ejecting Drifts

- Hardened and Tempered
- Eject Morse Taper Sizes 0 Through 6 From Sleeves, Sockets and Machine Spindles



| Cat. No. | UPC No. | Packaging | Model No. | Application | Product Weight | Shelf Pack Qty. |
|----------|--------------|-----------|-----------|-----------------------------------------|----------------|-----------------|
| 30484 | 095456304840 | Boxed | 900 | For ejection of No. 0 Morse Taper | 0.08 lb | 1 |
| 30485 | 095456304857 | Boxed | 902 | For ejection of Nos. 1 & 2 Morse Tapers | 0.18 lb | 1 |
| 30486 | 095456304864 | Boxed | 903 | For ejection of Nos. 3 & 4 Morse Tapers | 0.37 lb | 1 |
| 30487D | 095456304871 | Boxed | 904 | For ejection of Nos. 4 & 5 Morse Tapers | 0.75 lb | 1 |
| 30488D | 095456304888 | Boxed | 906 | For ejection of No. 6 Morse Taper | 1.45 lb | 1 |
| 30489D | 095456304895 | Boxed | 914 | For ejection of Nos. 4 & 5 | 0.63 lb | 1 |

Jacobs® Hand-Tite® Keyless Drill Chucks

- Split Bite Jaw: Increases Grip Over Standard Bite Chucks By Providing More Contact with the Bit
- Superior Gripping Force: Provides High Mechanical Advantage to Convert Hand Tightening Torque Into Superior Bit Gripping Force
- Hammerlock® Mechanism: Positive Locking Mechanism Prevents Loosening in Hammer and Other High Vibration Applications
- Anti-Lock Nut: Prevents Chuck From Locking Open
- Versatility: Models Available to Fit All 10mm (3/8") and 13mm (1/2") Variable Speed Corded and Cordless Portable Drills
- Precision Operation: Meet or Exceed Stringent DIN Run-Out and Dimensional Specifications
- Ergonomic Design: Material and Surface Finish Combinations Result in Increased Comfort and Performance
- Rugged Construction: Constructed of High Performance Material to Maximize Durability and Performance



| Cat. No. | UPC No. | Packaging | Model No. | Min. Capacity | Max. Capacity | Mount | Closed Length | Sleeve Dia. | Product Weight | Shelf Pack Qty. |
|----------|--------------|-----------|-----------|---------------|---------------|--------|---------------|-------------|----------------|-----------------|
| 30354 | 095456303546 | Boxed | 510-2H | 0.040 in | 0.375 in | 3/8-24 | 2.00 in | 1.68 in | 0.50 lb | 1 |
| 31037D | 095456310377 | Boxed | 513-2M | 0.062 in | 0.500 in | 3/8-24 | 2.9 in | 1.68 in | 0.63 lb | 1 |
| 31038D | 095456310384 | Boxed | 513-2M | 0.062 in | 0.500 in | 1/2-20 | 2.9 in | 1.68 in | 0.70 lb | 1 |

Jacobs® Professional Duty Chucks

- Industrial Quality
- Through-Hardened Jaws Provide Hard, Durable Gripping Surfaces
- One-Piece Sleeve Eliminates Crack Between Driving Teeth Often Found in Other Designs
- Fluted Sleeve Finish
- Each Chuck 100% Inspected for Performance and Precision



| Cat. No. | UPC No. | Packaging | Model No. | Min. Capacity | Max. Capacity | Mount | Key No. | Closed Length | Open Length | Sleeve Dia. | Product Weight | Shelf Pack Qty. |
|----------|--------------|-----------|-----------|---------------|---------------|--------|---------|---------------|-------------|-------------|----------------|-----------------|
| 31052D | 095456310520 | Boxed | 26BA-1/2 | 0.063 in | 0.5 in | 1/2-20 | KK | 3 in | 2.3 in | 1.72 in | 1.38 lb | 1 |
| 30246D | 095456302464 | Boxed | 41BA-3/8 | 0.063 in | 0.375 in | 3/8-24 | K30 | 2.42 in | 1.89 in | 1.42 in | 0.31 lb | 1 |

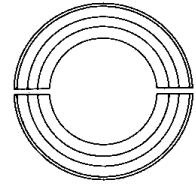
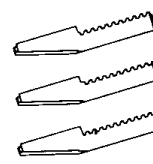
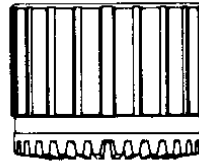
Jacobs® Multi-Craft® Drill Chuck

- Offered in 1/4", 3/8" and 1/2" Capacities
- Through-Hardened Jaws for Hard, Wear Resistant Gripping Surfaces



| Cat. No. | UPC No. | Packaging | Min. Capacity | Max. Capacity | Mount | Key No. | Closed Length | Open Length | Sleeve Dia. | Product Weight | Shelf Pack Qty. |
|----------|--------------|-----------|---------------|---------------|--------|---------|---------------|-------------|-------------|----------------|-----------------|
| 30243D | 095456302433 | Boxed | 0.028 in | 0.25 in | 3/8-24 | KG1 | 2.02 in | 1.575 in | 1.13 in | 0.30 lb | 1 |
| 30247D | 095456302471 | Boxed | 0.062 in | 0.375 in | 3/8-24 | KG1 | 2.312 in | 1.85 in | 1.22 in | 0.70 lb | 1 |
| 30598 | 095456305984 | Boxed | 0.078 in | 0.5 in | 3/8-24 | KK | 2.855 in | 2.25 in | 1.61 in | 0.65 lb | 1 |
| 30602 | 095456306028 | Boxed | 0.078 in | 0.5 in | 1/2-20 | KK | 2.855 in | 2.25 in | 1.61 in | 0.16 lb | 1 |

Jacobs® Replacement Parts



| Cat. No. | UPC No. | Packaging | Description | Chuck Series No. | Product Weight | Shelf Pack Qty. |
|----------|--------------|-----------|--------------------------------------------------|------------------|----------------|-----------------|
| 4944 | 095456049444 | Boxed | Replacement Sleeve for 3 Series Chuck | 3 | 0.54 lb | 1 |
| 5016D | 095456050167 | Boxed | Replacement Sleeve for 33 Series Chuck | 33 | 0.25 lb | 1 |
| 5046 | 095456050464 | Boxed | Replacement Sleeve for 34 Series Chuck | 34 | 0.42 lb | 1 |
| | 095456050662 | Boxed | Replacement Sleeve for 36 Series Chuck | 36 | 0.65 lb | 1 |
| 7417D | 095456074170 | Boxed | Replacement Jaw and Nut Unit for 3 Series Chuck | 3 | 0.53 lb | 1 |
| 7423 | 095456074231 | Boxed | Replacement Jaw and Nut Unit for 33 Series Chuck | 33 | 0.55 lb | 1 |
| 7424D | 095456074248 | Boxed | Replacement Jaw and Nut Unit for 34 Series Chuck | 34 | 0.53 lb | 1 |
| 7425 | 095456074255 | Boxed | Replacement Jaw and Nut Unit for 36 Series Chuck | 36 | 0.58 lb | 1 |

Jacobs® Adapt-A-Drive® Chuck

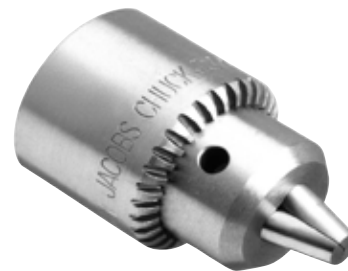
- Easy Conversion-Integral Hex Mount Locks the Adapt-A-Drive Chuck Into the Screwdriver Bit Socket
- Ideal for Use in Starting Screw Holes for Use in Hard-To-Reach Spaces



| Cat. No. | UPC No. | Packaging | Min. Capacity | Max. Capacity | Mount | Key No. | Sleeve Dia. | Product Weight | Shelf Pack Qty. |
|----------|--------------|-----------|---------------|---------------|------------|---------|-------------|----------------|-----------------|
| 30248D | 095456302488 | Boxed | 0.028 in | 0.25 in | 0.250" Hex | KG1 | 1.13 in | 0.45 lb | 1 |

Jacobs® Stainless Steel Chucks

- For Special Applications on Either Portable Air Operated or Stationary Machine Tools
- Resist Chemical Corrosion and Reduce Potential for Hazardous Sparking



| Cat. No. | UPC No. | Packaging | Model No. | Min. Capacity | Max. Capacity | Mount | Key No. | Closed Length | Open Length | Sleeve Dia. | Product Weight | Shelf Pack Qty. |
|----------|--------------|-----------|-----------|---------------|---------------|---------|---------|---------------|-------------|-------------|----------------|-----------------|
| 6625 | 095456066250 | Boxed | 0BM | 0.028 in | 0.156 in | 5/16-24 | K0M | 1.53 in | 1.17 in | 0.85 in | 0.20 lb | 1 |
| 6624 | 095456066243 | Boxed | 0M | 0.028 in | 0.156 in | 0JT | K0M | 1.45 in | 1.1 in | 0.85 in | 0.20 lb | 1 |
| 6627D | 095456066274 | Boxed | 1BM | 0.028 in | 0.25 in | 5/16-24 | K1M | 1.95 in | 1.57 in | 1.12 in | 0.32 lb | 1 |
| 6628 | 095456066281 | Boxed | 1BM | 0.028 in | 0.25 in | 3/8-24 | K1M | 1.95 in | 1.57 in | 1.12 in | 0.32 lb | 1 |
| 6626 | 095456066267 | Boxed | 1M | 0.028 in | 0.25 in | 1JT | K1M | 1.92 in | 1.54 in | 1.12 in | 0.32 lb | 1 |

Jacobs® Drain Chuck

- Specifically Designed for Use with Flexible Coil Spring Tools. Allows Coil Spring to Pass Through Chuck
- Idea for Soil Pipe and Sewer Cleaning Tools



| Cat. No. | UPC No. | Packaging | Model No. | Min. Capacity | Max. Capacity | Mount | Key No. | Open Length | Sleeve Dia. | Closed Length | Product Weight | Shelf Pack Qty. |
|----------|--------------|-----------|-----------|---------------|---------------|----------|---------|-------------|-------------|---------------|----------------|-----------------|
| 30726 | 095456307261 | Boxed | DC4595 | 0.25 in | 0.5 in | 13/16-20 | -- | 2.49 in | 1.7 in | 2.49 in | 0.28 lb | 1 |

Jacobs® Chuck Keys

- Nickel Thumb Grip Styles Increase Leverage and User Comfort
- Soft Steel Handles Limit the Potential for Dangerous Fracturing Under Excessive Load
- Self-Ejecting Models with Spring-Loaded Ejectors Ensure Key Disengagement After Tightening
- Never Apply Extensions, Pliers, Wrenches or 'Cheaters' of Any Kind to Chuck Key Handles
- Do Not Subject Chuck Key Handles to Hammer or Other Impact Blows



| Cat. No. | UPC No. | Packaging | Model No. | Pilot Size | Used On | Handle Style | No. Teeth | Product Weight | Shelf Pack Qty. |
|----------|--------------|-----------|-----------|------------|-----------------------------------------------|--------------|-----------|----------------|-----------------|
| 30827D | 095456308275 | Bagged | - | 13/64 in | 1/4 & 3/8" chucks | T-handle | 11 | 0.07 lb | 1 |
| 3637 | 095456036376 | Bagged | K0 | 1/8 in | 0 Series | T-handle | 11 | 0.04 lb | 1 |
| 3639 | 095456036390 | Bagged | K0M | 1/8 in | 0 Series Stainless | T-handle | 11 | 0.05 lb | 1 |
| 3641 | 095456036413 | Bagged | K1 | 5/32 in | 1 Series | T-handle | 11 | 0.04 lb | 1 |
| 3643 | 095456036437 | Bagged | K1M | 5/32 in | 1 Series Stainless | T-handle | 11 | 0.60 lb | 1 |
| 3649D | 095456036499 | Bagged | K2 | 1/4 in | 2 Series | Thumb Handle | 11 | 0.13 lb | 1 |
| 3651D | 095456036512 | Bagged | K3 | 5/16 in | 3, 34 Series & 14N | Thumb Handle | 11 | 0.55 lb | 1 |
| 3653 | 095456036536 | Bagged | K3C | 5/16 in | 34-33 C | Thumb Handle | 11 | 0.00 lb | 1 |
| 3655DD | 095456036550 | Bagged | K4 | 3/8 in | 36, 16, 18N | Thumb Handle | 12 | 0.34 lb | 1 |
| 3657 | 095456036574 | Bagged | K5 | 7/16 in | 20N | T-handle | 12 | 0.68 lb | 1 |
| 3659D | 095456036598 | Bagged | K7 | 7/32 in | 7 Series | Thumb Handle | 11 | 0.06 lb | 1 |
| 3664 | 095456036642 | Bagged | K30 | 15/64 in | 31 Series & 8-1/2N | Thumb Handle | 10 | 0.15 lb | 1 |
| 3666 | 095456036666 | Bagged | K32 | 1/4 in | 32,33 Series& 11N | Thumb Handle | 10 | 0.55 lb | 1 |
| 14273D | 095456142732 | Bagged | KG1 | 1/4 in | 1/4 & 3/8" Multi-Craft® (black handle) | T-handle | 11 | 0.04 lb | 1 |
| 3605 | 095456036055 | Bagged | KGA | 1/4 in | 1/4 & 3/8" Multi-Craft® | L-handle | 11 | 0.00 lb | 1 |
| 30052D | 095456300521 | Bagged | KK | 9/32 in | DC8, SM8, 74K, 22BA, 23BA, 24BA, 26BA, 29-33, | T-handle | 10 | 0.10 lb | 1 |

Jacobs® Self-Ejecting Keys

- Nickel Thumb Grip Styles Increase Leverage and User Comfort
- Soft Steel Handles Limit the Potential for Dangerous Fracturing Under Excessive Load
- Self-Ejecting Models with Spring-Loaded Ejectors Ensure Key Disengagement After Tightening
- Never Apply Extensions, Pliers, Wrenches or 'Cheaters' of Any Kind to Chuck Key Handles
- Do Not Subject Chuck Key Handles to Hammer or Other Impact Blows



| Cat. No. | UPC No. | Packaging | Model No. | Pilot Size | Used On | No. Teeth | Product Weight | Shelf Pack Qty. |
|----------|--------------|-----------|-----------|------------|---------------------------------------|-----------|----------------|-----------------|
| 2948D | 095456029484 | Bagged | S-K3C | 5/16 in | 3, 34 Series & 14N | 11 | 0.20 lb | 1 |
| 3157D | 095456031579 | Bagged | S-KK | 9/32 in | DC8, SM8, 74K, 22BA, 23BA, 24BA, 26BA | 10 | 0.00 lb | 1 |

Jacobs® Wedge Sets

- For Removing Taper Mount Chucks



| Cat. No. | UPC No. | Packaging | Model No. | Used On | Product Weight | Shelf Pack Qty. |
|----------|--------------|-----------|--------------|---------|----------------|-----------------|
| 13266 | 095456132665 | Bagged | #1 WEDGE SET | 1JT | 0.05 lb | 1 |
| 13267 | 095456132672 | Bagged | #2 WEDGE SET | 2JT | 0.10 lb | 1 |
| 13268 | 095456132689 | Bagged | #3 WEDGE SET | 3JT | 0.12 lb | 1 |
| 13269 | 095456132696 | Bagged | #6 WEDGE SET | 6JT | 0.10 lb | 1 |

Jacobs® Key Leashes

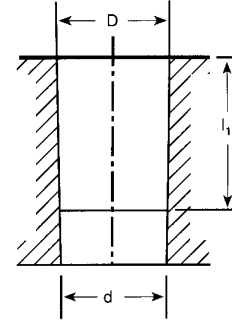


| Cat. No. | UPC No. | Packaging | Model No. | Used On | Product Weight | Shelf Pack Qty. |
|----------|--------------|-----------|-----------|------------------|----------------|-----------------|
| 3685D | 095456036857 | Bagged | Model A | K0, K1, K7, KG | 0.02 lb | 1 |
| 3686D | 095456036864 | Bagged | Model B | K30, K32, K2, KK | 0.02 lb | 1 |

TECHNICAL INFORMATION

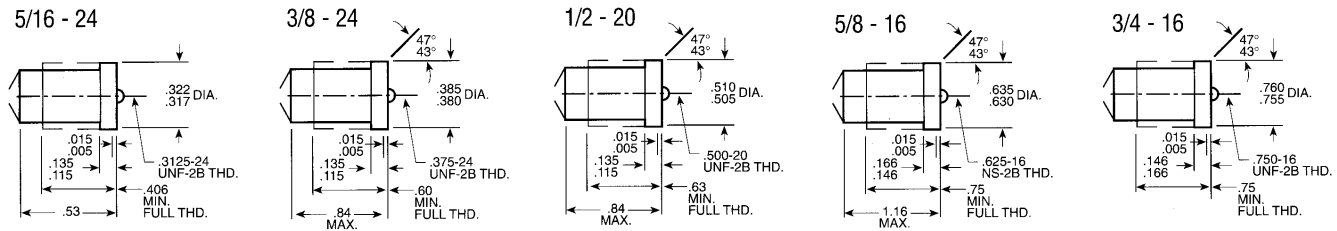
Jacobs® Tapers

The tables below reproduce and classify the normal dimensions of Jacobs® tapers and mounts. They also observe the generally accepted designation. In effect, the range of increasing values for diameter D contains two No. 2 tapers, the first of which is No. 2 short taper. Between the tapers 2 and 3, there are two interpolated tapers which bear the out-of-series numbers 33 and 6 respectively.

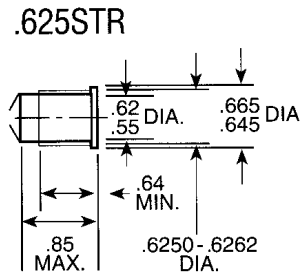


| Jacobs Taper No. | D | | d | | l ₁ | | Taper on Diameter | |
|------------------|--------|--------|--------|--------|----------------|--------|-------------------|--------|
| | IN | MM | IN | MM | IN | MM | IN | MM |
| 0 | 0.2500 | 6.350 | 0.2284 | 5.802 | 0.43750 | 11.112 | 0.59145 | 15.023 |
| 1 | 0.3840 | 9.754 | 0.3334 | 8.469 | 0.56525 | 16.669 | 0.92508 | 23.497 |
| 2 short | 0.5488 | 13.940 | 0.4876 | 12.386 | 0.75000 | 19.050 | 0.97861 | 24.857 |
| 2 | 0.5590 | 14.199 | 0.4876 | 12.386 | 0.87500 | 22.225 | 0.97861 | 24.857 |
| 33 | 0.6240 | 15.850 | 0.5605 | 14.237 | 1.00000 | 25.400 | 0.76194 | 19.353 |
| 6 | 0.6760 | 17.170 | 0.6241 | 15.852 | 1.00000 | 25.400 | 0.62292 | 15.822 |
| 3 | 0.8110 | 20.599 | 0.7461 | 18.951 | 1.21758 | 30.956 | 0.63898 | 16.230 |
| 4 | 1.1240 | 28.550 | 1.0372 | 26.346 | 1.65625 | 42.069 | 0.62886 | 15.973 |
| 5 | 1.4130 | 35.890 | 1.3161 | 33.422 | 1.87500 | 47.625 | 0.62010 | 15.773 |

Jacobs® Standard Threaded Mounts



Jacobs® Standard Straight Mount



NOTE: All dimensions are in inches unless otherwise specified.

CAUTION: When designing for new applications, contact the Engineering Department, The Jacobs® Chuck Manufacturing Company for current specifications.

Din Tapers

DIN TAPER INTERHANGABILITY

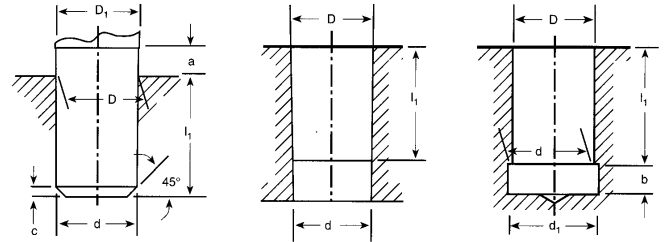
DIN tapered sections are identical with the following Morse tapers:

No. 1, for tapers B10 and B12

No. 2, for tapers B16 and B18

No. 3, for tapers B22 and B24

The length of each of these tapers is, of course, distinctly less than the overall length of the corresponding Morse taper. Each taper may be regarded as corresponding approximately either to that part of the Morse taper nearest the small end (for example: B10), or to the part nearest the large end (for example: B12).



| Ref. Diameter No. | D | | D1* | | d* | | d1 | | l1 | | a(max.) | |
|-------------------|--------|--------|--------|------|--------|------|-------|------|-------|------|---------|-----|
| | IN | MM | IN | MM | IN | MM | IN | MM | IN | MM | IN | MM |
| B10 | 0.3974 | 10.094 | 0.4036 | 10.3 | 0.3689 | 9.4 | 25/64 | 9.8 | 0.571 | 14.5 | 0.125 | 3.5 |
| B12 | 0.4750 | 12.065 | 0.4812 | 12.2 | 0.4877 | 11.1 | 29/64 | 11.5 | 0.728 | 18.5 | 0.125 | 3.5 |
| B16 | 0.6194 | 15.733 | 0.6288 | 16.0 | 0.5722 | 14.5 | 19/32 | 15.0 | 0.945 | 24.0 | 0.188 | 5.0 |
| B18 | 0.7000 | 17.780 | 0.7094 | 18.0 | 0.6371 | 16.2 | 21/32 | 16.8 | 1.260 | 32.0 | 0.188 | 5.0 |
| B22 | 0.8580 | 21.793 | 0.8674 | 22.0 | 0.7780 | 19.8 | 13/16 | 20.5 | 1.594 | 40.5 | 0.188 | 5.0 |
| B24 | 0.9380 | 23.825 | 0.9474 | 24.1 | 0.8328 | 21.3 | 7/8 | 22.0 | 1.988 | 50.5 | 0.188 | 5.0 |

| Ref. Diameter No. | b | | c | | Morse No. | Taper on | |
|-------------------|-------|-----|-------|-----|-----------|----------|-------|
| | IN | MM | IN | MM | | IN | MM |
| B10 | 0.125 | 3.5 | 0.047 | 1.0 | 1 | 0.04988 | 1.267 |
| B12 | 0.125 | 3.5 | 0.047 | 1.0 | 1 | 0.04988 | 1.267 |
| B16 | 0.156 | 4.0 | 0.063 | 1.5 | 2 | 0.04995 | 1.269 |
| B18 | 0.156 | 4.0 | 0.063 | 1.5 | 2 | 0.04995 | 1.269 |
| B22 | 0.188 | 4.5 | 0.078 | 2.0 | 3 | 0.05020 | 1.275 |
| B24 | 0.188 | 4.5 | 0.078 | 2.0 | 3 | 0.05020 | 1.275 |

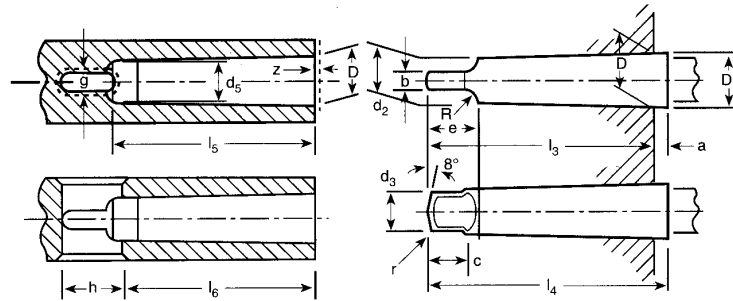
NOTES:

* D1 and d = calculated values given for information.

The effective values are obtained by applying the rate of taper and the basic dimension D to the actual values of a and l1, respectively.

Morse Tapers

EXTERNAL TAPER WITH TANG: NOS. 1 TO 6 METRIC



NOTE: All dimensions are in millimeters unless otherwise specified.

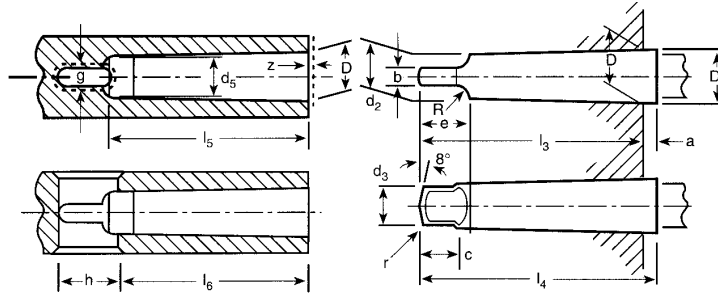
| Designation | | Metric Taper | | Morse Taper | | | | | | Metric Taper | | | | |
|----------------|---------------------|--------------|-----|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------|-------|-------|-------|-------|
| | | 4 | 6 | 1 | 2 | 3 | 4 | 5 | 6 | 80 | 100 | 120 | 160 | 200 |
| Basic Size | Taper | 1:20=0.05 | | 0.59858:12 =1:20.047 =0.04988 | 0.59941:12 =1:20.020 =0.04995 | 0.06235:12 =1:19.922 =0.05020 | 0.62326:12 =1:19.254 =0.05194 | 0.63151:12 =1:19.002 =0.05263 | 0.62565:12 =1:19.180 =0.05214 | | | | | |
| | | | | | | | | | | | | | | |
| EXTERNAL TAPER | D | 4 | 6 | 12.065 | 17.78 | 23.825 | 31.267 | 44.399 | 63.348 | 80 | 100 | 120 | 160 | 200 |
| | a | 2 | 3 | 3.5 | 5 | 5 | 6.5 | 6.5 | 8 | 8 | 10 | 12 | 16 | 20 |
| | D ₁ (1) | 4.1 | 6.2 | 12.2 | 18 | 24.1 | 31.6 | 44.7 | 63.8 | 80.4 | 100.5 | 120.6 | 160.8 | 201 |
| | d (1) | 2.9 | 4.4 | 9.4 | 14.6 | 19.8 | 25.9 | 37.6 | 53.9 | 70.2 | 88.4 | 106.6 | 143 | 179.4 |
| | d ₁ (2) | - | - | M6 | M10 | M12 | M16 | M20 | M24 | M30 | M36 | M36 | M48 | M48 |
| | d ₃ max. | - | - | 8.7 | 13.5 | 18.5 | 24.5 | 35.7 | 51 | 67 | 85 | 102 | 138 | 174 |
| | d ₂ (1) | - | - | 9 | 14 | 19.1 | 25.2 | 36.5 | 52.4 | 69 | 87 | 105 | 141 | 177 |
| | d ₄ max. | 2.5 | 4 | 9 | 14 | 19 | 25 | 35.7 | 51 | 67 | 85 | 102 | 138 | 174 |
| | l ₁ max. | 23 | 32 | 53.5 | 64 | 81 | 102.5 | 129.5 | 182 | 196 | 232 | 268 | 340 | 412 |
| | l ₂ max. | 25 | 35 | 57 | 69 | 86 | 109 | 136 | 190 | 204 | 242 | 280 | 356 | 432 |
| | l ₃ max. | - | - | 62 | 75 | 94 | 117.5 | 149.5 | 210 | 220 | 260 | 300 | 380 | 460 |
| | l ₄ max. | - | - | 65.5 | 80 | 99 | 124 | 156 | 218 | 228 | 270 | 312 | 396 | 480 |
| | b h13 | - | - | 5.2 | 6.3 | 7.9 | 11.9 | 15.9 | 19 | 26 | 32 | 38 | 50 | 62 |
| | c (3) | - | - | 8.5 | 10 | 13 | 16 | 19 | 27 | 24 | 28 | 32 | 40 | 48 |
| | e max. | - | - | 13.5 | 16 | 20 | 24 | 29 | 40 | 48 | 58 | 68 | 88 | 108 |
| | l min. | - | - | 16 | 24 | 28 | 32 | 40 | 50 | 65 | 80 | 80 | 100 | 100 |
| | R max. | - | - | 5 | 6 | 7 | 8 | 10 | 13 | 24 | 30 | 36 | 48 | 60 |
| R max. | - | - | 1.2 | 1.6 | 2 | 2.5 | 3 | 4 | 5 | 5 | 6 | 8 | 10 | |
| t max. | 2 | 3 | 5 | 5 | 7 | 9 | 10 | 16 | 24 | 30 | 36 | 48 | 60 | |
| INTERNAL TAPER | d ₅ H11 | 3 | 4.6 | 9.7 | 14.9 | 20.2 | 26.5 | 38.2 | 54.6 | 71.5 | 90 | 108.5 | 145.5 | 182.5 |
| | d ₆ | - | - | 7 | 11.5 | 14 | 18 | 23 | 27 | 33 | 36 | 39 | 52 | 52 |
| | l ₅ min. | 25 | 34 | 56 | 67 | 84 | 107 | 135 | 188 | 202 | 240 | 276 | 350 | 424 |
| | l ₆ | 21 | 29 | 52 | 62 | 78 | 98 | 125 | 177 | 186 | 220 | 254 | 321 | 388 |
| | g A13 | 22 | 32 | 52 | 63 | 79 | 11.9 | 15.9 | 19 | 26 | 32 | 38 | 50 | 62 |
| | h | 8 | 12 | 19 | 22 | 27 | 32 | 33 | 47 | 52 | 60 | 70 | 90 | 110 |
| | z (4) | 0.5 | 0.5 | 1 | 1 | 1 | 1.5 | 1.5 | 2 | 2 | 2 | 2 | 3 | 3 |

NOTES:

1. D₁ and d or d₂ = approximate values given for guidance. The actual values result from the actual values of a and l₁ or l₃ respectively, taking into account the taper and the basic size D.
2. It is allowed to increase the length c over which the tang is turned to diameter d₃, but without exceeding e.
3. z = maximum permissible deviation, outwards of the position of the gauge plane D from the nominal position of coincidence with the leading face.

Morse Tapers

EXTERNAL TAPER WITH TANG: NOS. 1 TO 6



NOTE: All dimensions are in inches unless otherwise specified.

| Designation | | Morse Taper | | | | | |
|----------------|------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| | | 1 | 2 | 3 | 4 | 5 | 6 |
| Basic Size | Taper | 0.59858:12 =1:20.047 =0.04988 | 0.59941:12 =1:20.020 =0.04995 | 0.06235:12 =1:19.922 =0.05020 | 0.62326:12 =1:19.254 =0.05194 | 0.63151:12 =1:19.002 =0.05263 | 0.62565:12 =1:19.180 =0.05214 |
| | D | 0.475 | 0.700 | 0.938 | 1.231 | 1.748 | 2.494 |
| EXTERNAL TAPER | a | 1/8 | 3/16 | 3/16 | 1/4 | 1/4 | 5/16 |
| | D_1 (1) | 0.4812 | 0.7094 | 0.9474 | 1.2440 | 1.7612 | 2.5103 |
| | d (1) | 0.3690 | 0.5720 | 0.7780 | 1.0200 | 1.4750 | 2.1160 |
| | d_1 (2) | UNC 1/4 | UNC 3/8 | UNC 1/2 | UNC 5/8 | UNC 5/8 | UNC 1 |
| | d_2 (1) | 0.3534 | 0.5533 | 0.7529 | 0.9908 | 1.4388 | 2.0639 |
| | d_3 max. | 11/32 | 17/32 | 23/32 | 31/32 | 1-13/32 | 2 |
| | d_4 max. | 11/32 | 17/32 | 23/32 | 31/32 | 1-13/32 | 2 |
| | l_1 max. | 2-1/8 | 2-9/16 | 3-3/16 | 4-1/16 | 5-3/16 | 7-1/4 |
| | l_2 max. | 2-1/4 | 2-3/4 | 3-3/8 | 4-5/16 | 5-7/16 | 7-9/16 |
| | l_3 max. | 2-7/16 | 2-15/16 | 3-11/16 | 4-5/8 | 5-7/8 | 8-1/4 |
| | l_4 max. | 2-9/16 | 3-1/8 | 3-7/8 | 4-7/8 | 6-1/8 | 8-9/16 |
| | b h12 | 0.2031 | 0.2500 | 0.3125 | 0.4687 | 0.6250 | 0.7500 |
| | c (3) | 11/32 | 13/32 | 17/32 | 5/8 | 3/4 | 1-1/16 |
| | e max. | 0.52 | 0.66 | 0.83 | 0.96 | 1.15 | 1.58 |
| | l min. | 1/2 | 3/4 | 1 | 1-1/4 | 1-1/4 | 2 |
| | R max. | 3/16 | 1/4 | 9/32 | 5/16 | 3/8 | 1/2 |
| | r max. | 3/64 | 1/16 | 5/64 | 3/32 | 1/8 | 5/32 |
| t max. | 3/16 | 3/16 | 1/4 | 1/4 | 5/16 | 3/8 | |
| INTERNAL TAPER | d_5 H11 | 0.378 | 0.588 | 0.797 | 1.044 | 1.502 | 2.150 |
| | d_6 | 9/32 | 7/16 | 9/16 | 11/16 | 11/16 | 1-1/8 |
| | l_5 min. | 2-3/16 | 2-21/32 | 3-9/32 | 4-5/32 | 5-5/16 | 7-3/8 |
| | l_6 | 2-1/16 | 2-1/2 | 3-1/16 | 3-7/8 | 4-15/16 | 7 |
| | g H12 | 0.223 | 0.270 | 0.333 | 0.493 | 0.650 | 0.780 |
| | h | 3/4 | 7/8 | 1-1/8 | 1-1/4 | 1-1/2 | 1-7/8 |
| | z (4) | 0.040 | 0.040 | 0.040 | 0.060 | 0.060 | 0.080 |

NOTES:

- D_1 and d or d_2 = approximate values given for guidance. The actual values result from the actual values of a and l_1 or l_3 respectively, taking into account the taper and the basic size D .
- It is allowed to increase the length c over which the tang is turned to diameter d_3 , but without exceeding e .
- z = maximum permissible deviation, outwards of the position of the gauge plane D from the nominal position of coincidence with the leading face.

SERVICE AND REPAIR

Mounting and Removing Chucks

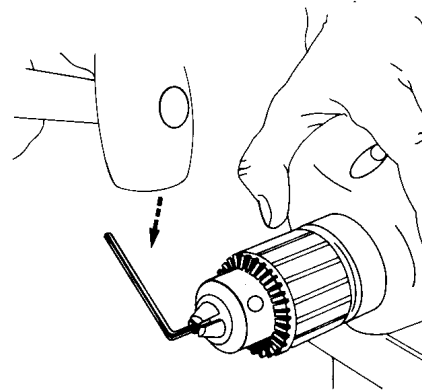
ON THREADED SPINDLE PORTABLE TOOLS

TO MOUNT CHUCKS:

Thread chuck on the spindle by hand so that the back of the chuck seats firmly against the mounting surface provided on the portable tool spindle.

TO REMOVE CHUCKS:

Chucks with threaded mounts can be identified by the letters “B” or “BA” in the model number (1B, 41BA). “BA” model chucks may have a left hand thread retaining screw through the chuck body into the tool spindle. Remove retaining screw through the chuck jaw hole opening, turn screw clockwise and proceed as described for “B” model chucks. “B” model chucks may be removed from a threaded spindle by tightening the chuck jaws around a hex key and striking the key with a sharp blow in a counter-clockwise direction, using a wooden or rubber hammer (Illus. A).



Illus. A

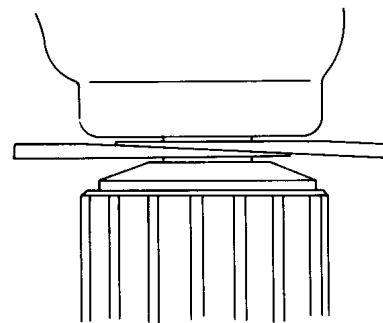
ON TAPERED SPINDLES

TO MOUNT CHUCKS:

Clean both tapers of all grease and grit. With the chuck jaws completely retracted into the chuck and using a thin piece of wood to protect the chuck nose, tap the chuck into place on the spindle.

TO REMOVE CHUCKS:

If a power tool has a tapered spindle, the chuck may be removed from the spindle by inserting chuck removal wedges between the chuck back and the spindle housing (Illus. B).



Illus. B

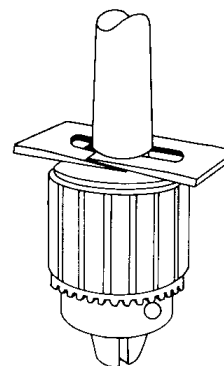
ON TAPERED SHANK ARBORS

TO MOUNT CHUCKS:

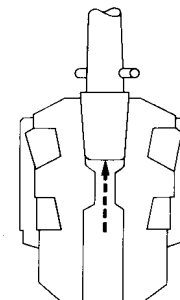
Clean both tapers as above. With the jaws retracted into the chuck and with the chuck nose resting on a wooden bench, strike the tang of the arbor lightly to seat it into the chuck. Do NOT assemble on an arbor press as excessive pressure will expand the chuck body and distort the chuck jaw holes.

TO REMOVE CHUCKS:

Insert wedges between the back of the chuck and the shoulder of the arbor (Illus. C). In case the mounting taper of the arbor does not provide a shoulder, a cross hole should be drilled through the neck of the arbor (Illus. D) and a cross pin inserted. Then the wedges can be used between the chuck back and the cross pin. If desired, a hole may be drilled through the soft center portion of the chuck body (Illus. D), and a pin may then be used with an arbor press to force the arbor out of the chuck.



Illus. C



Illus. D

Repair Instructions

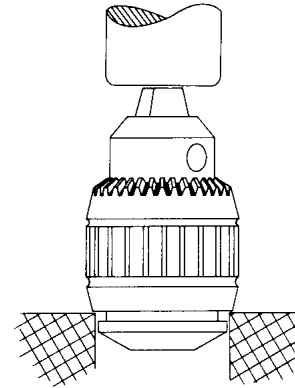
DISASSEMBLY

PLAIN BEARING CHUCKS:

Extend the jaws to half capacity, press the sleeve off over front (jaw end) of body, remove the nut halves (Illus. E).

Ball Bearing Chucks:

Extend the jaws to half capacity, press the sleeve off over front (jaw end) of body, remove the nut halves, jaws, bearing race, and thrust washer (Illus. E).



Illus. E

ASSEMBLY

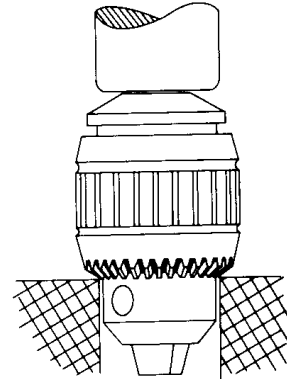
CAUTION: Each of the three jaws differ slightly from the other by the location of the threaded portion (Illus. G). In order to ensure proper operation, they must be re-installed in the proper sequence.

PLAIN BEARING CHUCKS:

Refer to Illus. G and insert the jaws in the correct sequence when viewing the chuck from the body nose diameter. insert No. 1 jaw (with small step) first, then No. 2 jaw (with largest step) in the clockwise position, then No. 3 jaw (without a step) should be inserted.

Turn chuck jaws to closed position and check to ensure that all three jaws are properly aligned. The height of all three jaws should be uniform.

A good grade of grease should be applied to the jaw and nut threads, then the nut halves should be closed around the jaws. Extend jaws to half capacity. Press on the sleeve with an arbor press (Illus. F).



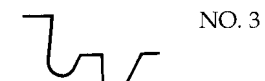
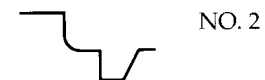
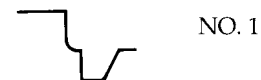
Illus. F

BALL BEARING CHUCKS:

Slip the thrust race over jaw end of the body until it contacts the rear flange. Slip the caged bearing over jaw end of the body until it contacts the thrust race.

Follow Plain Bearing jaw assembly and nut procedure.

**JAW NUMBER INDICATED
BY PROFILES SHOWN BELOW.**



Illus. G - Jaw Identification

DECIMAL EQUIVALENT CHART

| Drill Size | Decimal Inches | Drill Size | Decimal Inches | Drill Size | Decimal Inches | Drill Size | Decimal Inches | Drill Size | Decimal Inches | Drill Size | Decimal Inches |
|------------|----------------|------------|----------------|------------|----------------|------------|----------------|------------|----------------|------------|----------------|
| 0.30mm | 0.0118 | 1.45mm | 0.0571 | 3.30mm | 0.1299 | 5.80mm | 0.2283 | 9.00mm | 0.3543 | 5/8 | 0.6250 |
| 0.32mm | 0.0126 | 1.50mm | 0.0591 | 3.40mm | 0.1339 | 5.90mm | 0.2323 | T | 0.3580 | 16.00mm | 0.6299 |
| 80 | 0.0135 | 53 | 0.0595 | 29 | 0.1360 | A | 0.2340 | 9.10mm | 0.3583 | 16.25mm | 0.6398 |
| 0.35mm | 0.0138 | 1.55mm | 0.0610 | 3.50mm | 0.1378 | 15/64 | 0.2344 | 23/64 | 0.3594 | 41/64 | 0.6406 |
| 79 | 0.0145 | 1/16 | 0.0625 | 28 | 0.1405 | 6.00mm | 0.2362 | 9.20mm | 0.3622 | 16.50mm | 0.6496 |
| 0.38mm | 0.0150 | 1.60mm | 0.0630 | 9/64 | 0.1406 | B | 0.2380 | 9.30mm | 0.3661 | 21/32 | 0.6562 |
| 1/64 | 0.0156 | 52 | 0.0635 | 3.60mm | 0.1411 | 6.10mm | 0.2402 | U | 0.3680 | 16.75mm | 0.6594 |
| 0.40mm | 0.0157 | 1.65mm | 0.0650 | 27 | 0.1440 | C | 0.2420 | 9.40mm | 0.3701 | 17.00mm | 0.6693 |
| 78 | 0.0160 | 1.70mm | 0.0669 | 3.70mm | 0.1457 | 6.20mm | 0.2441 | 9.50mm | 0.3740 | 43/64 | 0.6719 |
| 0.42mm | 0.0165 | 51 | 0.0670 | 26 | 0.1417 | D | 0.2460 | 3/8 | 0.3750 | 17.25mm | 0.6791 |
| 0.45mm | 0.0177 | 1.75mm | 0.0689 | 25 | 0.1495 | 6.30mm | 0.2480 | V | 0.3770 | 11/16 | 0.6875 |
| 77 | 0.0180 | 50 | 0.0700 | 3.80mm | 0.1496 | 1/4, E | 0.2500 | 9.60mm | 0.3780 | 17.50mm | 0.6890 |
| 0.48mm | 0.0189 | 1.80mm | 0.0709 | 24 | 0.1520 | 6.40mm | 0.2520 | 9.70mm | 0.3819 | 45/64 | 0.7031 |
| 0.50mm | 0.0197 | 1.85mm | 0.0728 | 3.90mm | 0.1535 | 6.50mm | 0.2559 | 9.80mm | 0.3858 | 18.00mm | 0.7087 |
| 76 | 0.0200 | 49 | 0.0730 | 23 | 0.1540 | F | 0.2570 | W | 0.3860 | 23/32 | 0.7188 |
| 75 | 0.0210 | 1.90mm | 0.0748 | 5/32 | 0.1562 | 6.60mm | 0.2598 | 9.90mm | 0.3898 | 18.50mm | 0.7283 |
| 0.55mm | 0.0211 | 48 | 0.0760 | 22 | 0.1570 | G | 0.2610 | 25/64 | 0.3906 | 47/84 | 0.7344 |
| 74 | 0.0225 | 1.95mm | 0.0768 | 4.00mm | 0.1575 | 6.70mm | 0.2638 | 10.00mm | 0.3937 | 19.00mm | 0.7480 |
| 0.60mm | 0.0236 | 5/64 | 0.0781 | 21 | 0.1590 | 17/64 | 0.2656 | X | 0.3970 | 3/4 | 0.7500 |
| 73 | 0.0240 | 47 | 0.0785 | 20 | 0.1610 | H | 0.2660 | 10.20mm | 0.4016 | 49/64 | 0.7656 |
| 0.62mm | 0.0244 | 2.00mm | 0.0787 | 4.10mm | 0.1614 | 6.80mm | 0.2677 | Y | 0.4040 | 19.50mm | 0.7677 |
| 72 | 0.0250 | 2.05mm | 0.0807 | 4.20mm | 0.1654 | 6.90mm | 0.2717 | 13/32 | 0.4062 | 25/32 | 0.7812 |
| 0.65mm | 0.0256 | 46 | 0.0810 | 19 | 0.1660 | I | 0.2720 | Z | 0.4130 | 20.00mm | 0.7874 |
| 71 | 0.0260 | 45 | 0.0820 | 4.30mm | 0.1693 | 7.00mm | 0.2756 | 10.50mm | 0.4134 | 51/64 | 0.7969 |
| 0.70mm | 0.0276 | 2.10mm | 0.0827 | 18 | 0.1695 | J | 0.2770 | 27/64 | 0.4219 | 20.50mm | 0.8071 |
| 70 | 0.0280 | 2.15mm | 0.0846 | 11/64 | 0.1719 | 7.10mm | 0.2795 | 10.80mm | 0.4252 | 13/16 | 0.8125 |
| 69 | 0.0292 | 44 | 0.0860 | 17 | 0.1730 | K | 0.2810 | 11.00mm | 0.4331 | 21.00mm | 0.8268 |
| 0.75mm | 0.0295 | 2.20mm | 0.0866 | 4.40mm | 0.1732 | 9/32 | 0.2812 | 7/16 | 0.4375 | 53/64 | 0.8281 |
| 68 | 0.0310 | 2.25mm | 0.0886 | 16 | 0.1770 | 7.20mm | 0.2835 | 11.20mm | 0.4409 | 27/32 | 0.8438 |
| 1/32 | 0.0312 | 43 | 0.0890 | 4.50mm | 0.1772 | 7.30mm | 0.2874 | 11.50mm | 0.4528 | 21.50mm | 0.8465 |
| 0.80mm | 0.0315 | 2.30mm | 0.0906 | 15 | 0.1800 | L | 0.2900 | 29/64 | 0.4531 | 55/64 | 0.8594 |
| 67 | 0.0320 | 2.35mm | 0.0925 | 4.60mm | 0.1811 | 7.40mm | 0.2913 | 11.80mm | 0.4646 | 22.00mm | 0.8661 |
| 66 | 0.0330 | 42 | 0.0935 | 14 | 0.1820 | M | 0.2950 | 15/32 | 0.4688 | 7/8 | 0.8750 |
| 0.85mm | 0.0335 | 3/32 | 0.0938 | 4.70 13 | 0.1850 | 7.50mm | 0.2953 | 12.00mm | 0.4724 | 22.50mm | 0.8858 |
| 65 | 0.0350 | 2.40mm | 0.0945 | 3/16 | 0.1875 | 19/64 | 0.2969 | 12.20mm | 0.4803 | 57/64 | 0.8906 |
| 0.90mm | 0.0354 | 41 | 0.0960 | 4.80 12 | 0.1890 | 7.60mm | 0.2992 | 31/64 | 0.4844 | 23.00mm | 0.9055 |
| 64 | 0.0360 | 2.45mm | 0.0965 | 11 | 0.1910 | N | 0.3020 | 12.50mm | 0.4921 | 29/32 | 0.9062 |
| 63 | 0.0370 | 40 | 0.0980 | 4.90mm | 0.1929 | 7.70mm | 0.3031 | 1/2 | 0.5000 | 59/64 | 0.9219 |
| 0.95mm | 0.0374 | 2.50mm | 0.0984 | 10 | 0.1935 | 7.80mm | 0.3071 | 12.80mm | 0.5039 | 23.50mm | 0.9252 |
| 62 | 0.0380 | 39 | 0.0995 | 9 | 0.1960 | 7.90mm | 0.3110 | 13.00mm | 0.5118 | 15/16 | 0.9375 |
| 61 | 0.0390 | 38 | 0.1015 | 5.00mm | 0.1969 | 5/16 | 0.3125 | 33/64 | 0.5156 | 24.00mm | 0.9449 |
| 1.00mm | 0.0394 | 2.60mm | 0.1024 | 8 | 0.1990 | 8.00mm | 0.3150 | 13.20mm | 0.5197 | 61/64 | 0.9531 |
| 60 | 0.0400 | 37 | 0.1040 | 5.10mm | 0.2008 | O | 0.3160 | 17/32 | 0.5312 | 24.50mm | 0.9646 |
| 59 | 0.0410 | 2.70mm | 0.1063 | 7 | 0.2010 | 8.10mm | 0.3189 | 13.50mm | 0.5315 | 31/32 | 0.9688 |
| 1.05mm | 0.0413 | 3.6 | 0.1065 | 13/64 | 0.2031 | 8.20mm | 0.3228 | 13.80mm | 0.5433 | 25.00mm | 0.9843 |
| 58 | 0.0420 | 7/64 | 0.1094 | 6 | 0.204 | P | 0.3230 | 36/64 | 0.5469 | 63/64 | 0.9844 |
| 57 | 0.0430 | 35 | 0.1100 | 5.20mm | 0.2047 | 8.30mm | 0.3268 | 14.00mm | 0.5512 | 1" | 1.0000 |
| 1.10mm | 0.0433 | 2.80mm | 0.1102 | 5 | 0.2055 | 21/64 | 0.3281 | 14.25mm | 0.5610 | | |
| 1.15mm | 0.0453 | 34 | 0.1110 | 5.30mm | 0.2087 | 8.40mm | 0.3307 | 9/16 | 0.5625 | | |
| 56 | 0.0465 | 33 | 0.1130 | 4 | 0.2090 | Q | 0.3320 | 14.50mm | 0.5709 | | |
| 3/64 | 0.0469 | 2.90mm | 0.1142 | 5.40mm | 0.2126 | 8.50mm | 0.3346 | 37/64 | 0.5781 | | |
| 1.20mm | 0.0472 | 32 | 0.1160 | 3 | 0.2130 | 8.60mm | 0.3386 | 14.75mm | 0.5807 | | |
| 1.25mm | 0.0492 | 3.00mm | 0.1181 | 5.50mm | 0.2165 | R | 0.3390 | 15.00mm | 0.5906 | | |
| 1.30mm | 0.0512 | 31 | 0.1200 | 7/32 | 0.2188 | 8.70mm | 0.3425 | 19/32 | 0.5938 | | |
| 55 | 0.0520 | 3.10mm | 0.1220 | 5.60mm | 0.2205 | 11/32 | 0.3438 | 15.25mm | 0.6004 | | |
| 1.35mm | 0.0531 | 1/8 | 0.1250 | 2 | 0.2210 | 8.80mm | 0.3465 | 39/64 | 0.6094 | | |
| 54 | 0.0550 | 3.20mm | 0.1260 | 5.70mm | 0.2244 | S | 0.3480 | 15.50mm | 0.6102 | | |
| 1.40mm | 0.0551 | 30 | 0.1285 | 1 | 0.2280 | 8.90mm | 0.3504 | 15.75mm | 0.6201 | | |

JACOBS CHUCKS