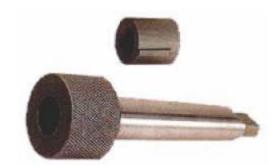


### **Mandrel Drives**

# We are offering **Mandrel Drives Taper Shank - Interchangeable Female Square**



Use:
Mandrel drives serve the purpose of adapting tube expander mandrels to existing air or electric drills. Loosening the knurled nut, releases the square insert type of socket for the introduction of another size of mandrel square.

| Morse<br>Taper No. | Square Size | Model No. | Insert<br>Square<br>Size | Insert Model<br>No. |
|--------------------|-------------|-----------|--------------------------|---------------------|
| _                  | 3/8"        | MM/2/95   | 3/8"                     | MDT/95              |
| 2                  | 1/2"        | MM/2/127  | 1/2"                     | MDT/127             |
| Ĵ                  | 3/8"        | MM/3/95   | 3/8"                     | MDT/95              |
|                    | 1/2"        | MM/3/127  | 1/2"                     | MDT/127             |
| 3                  | 3/4"        | MM/3/190  | 3/4"                     | MDT/190             |
| 8                  | 1"          | MM/3/254  | 1"                       | MDT/254             |
|                    | 3/8"        | MM/4/95   | 3/8"                     | MDT/95              |
|                    | 1/2"        | MM/4/127  | 1/2"                     | MDT/127             |
| 3                  | 3/4"        | MM/4/190  | 3/4"                     | MDT/190             |
|                    | 1"          | MM/4/254  | 1"                       | MDT/254             |
| 5                  | 3/8"        | MM/5/95   | 3/8"                     | MDT/95              |
|                    | 1/2"        | MM/5/127  | 1/2"                     | MDT/127             |
| 4                  | 3/4"        | MM/5/190  | 3/4"                     | MDT/190             |
| 3                  | 1"          | MM/5/254  | 1"                       | MDT/240             |

### Taper Shank - Male Square



| Morse Taper No. | Square Size | Model No. |
|-----------------|-------------|-----------|
| 112             | 3/8"        | MTM/1/95  |
| 1               | 1/2"        | MTM/1/127 |
| 2               | 3/8"        | MTM/2/95  |
| 2               | 1/2"        | MTM/2/127 |
| 2               | 3/4"        | MTM/3/190 |
| 3               | 1"          | MTM/3/254 |
|                 | 3/4"        | MTM/4/190 |
| 4               | 1"          | MTM/4/254 |

Taper Shank - Female Square



| Morse Taper No. | Square Size | Model No. |
|-----------------|-------------|-----------|
| 4               | 3/8"        | MTF/1/95  |
| 1               | 1/2"        | MTF/1/127 |
|                 | 3/8"        | MTF/2/95  |
| 2               | 1/2"        | MTF/2/127 |
| 2               | 3/4"        | MTF/3/190 |
| 3               | 1"          | MTF/3/254 |
|                 | 3/4"        | MTF/4/190 |
| 4               | 1"          | MTF/4/254 |

Tringle Shank - Female Square



| Square Size | Chuck Size | Model No.   |  |
|-------------|------------|-------------|--|
| 3/8"        | 1/4"       | MTC/95/63   |  |
| 3/8"        | 3/8"       | MTC/95/95   |  |
| 3/8"        | 1/2"       | MTC/95/127  |  |
| 1/2"        | 1/2"       | MTC/127/127 |  |

Reversible Ratchet Wrench

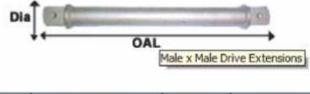


| Square Size | Length | Model No. |  |
|-------------|--------|-----------|--|
| 3/8"        | 8"     | HR/95     |  |
| 1/2"        | 10"    | HR/127    |  |
| 3/4"        | 20"    | HR/195    |  |
| 1"          | 24"    | HR/254    |  |

**Note :** Ratchets are also available with hexagonal female openings for driving one revolution tube cutters and other items.

# We are offering **Mandrel Drives**





| Square size | Model No. | OAL | Dia.   |  |
|-------------|-----------|-----|--------|--|
|             | EB/95/6   | 6"  |        |  |
| 2/0"        | EB/95/9   | 9"  | 1 (2)  |  |
| 3/8"        | EB/95/12  | 12" | 1/2"   |  |
|             | EB/95/18  | 18" |        |  |
|             | EB/127/6  | 6"  |        |  |
|             | EB/127/9  | 9"  |        |  |
| 1/2"        | EB/127/12 | 12" | 5/8"   |  |
|             | EB/127/18 | 18" |        |  |
|             | EB/127/24 | 24" |        |  |
|             | EB/195/6  | 6"  |        |  |
|             | EB/195/9  | 9"  | 1"     |  |
| 3/4"        | EB/195/12 | 12" |        |  |
|             | EB/195/18 | 18" |        |  |
|             | EB/195/24 | 24" |        |  |
|             | EB/254/6  | 6"  |        |  |
|             | EB/254/12 | 12" | 1.1/4" |  |
| 1"          | EB/254/14 | 14" |        |  |
|             | EB/254/18 | 18" |        |  |
|             | EB/254/24 | 24" |        |  |

## Female x Female Extensions Couplings

Model No.

Square size



OAL

Dia.

| 3/8" x 3/8" | EC/95/95   | 1.7/16"  | 13/16" |
|-------------|------------|----------|--------|
| 3/8" x 1/2" | EC/95/127  | 1.9/16"  | 1.1/16 |
| 3/8" x 5/8" | EC/95/158  | 1.1/2"   | 1.1/4" |
| 1/2" x 1/2" | EC/127/127 | 1.11/16" | 1.1/16 |
| 1/2" x 5/8" | EC/127/158 | 1.5/8"   | 1.1/4" |
| 1/2" x 3/4" | EC/127/195 | 1.5/8"   | 1.3/8" |
| 1/2" x 7/8" | EC/127/222 | 1.5/8"   | 1.5/8" |
| 1/2" x 1"   | EC/127/254 | 1.5/8"   | 1.7/8" |
| 5/8" x 3/4" | EC/158/195 | 1.9/16"  | 1.3/8" |
| 5/8" x 7/8" | EC/158/222 | 2"       | 1.5/8" |
| 5/8" x 1"   | EC/158/254 | 1.13/16" | 1.7/8" |
| 3/4" x 3/4" | EC/195/195 | 1.5/8"   | 1.7/16 |
| 3/4" x 7/8" | EC/195/222 | 1.5/8"   | 1.3/4" |
| 3/4" x 1"   | EC/195/254 | 1.13/16" | 1.7/8" |
| 7/8" x 7/8" | EC/222/222 | 1.11/16" | 1.3/4" |
| 7/8" x 1"   | EC/222/254 | 2.1/8"   | 2.1/8" |
| 1" × 1"     | EC/254/254 | 2.1/16"  | 1.7/8" |

Square

**Universal Joints** 

4 • • •

OAL

Model

Square

Universal Joint Female-Female

THE PERSON NAMED IN

Universal Joint Male-Female



Female-Female

**Double Universal Joint** 



| Size | No.    | 15311713411 |        | Size | No.    |          |        | Size |         |          |         |
|------|--------|-------------|--------|------|--------|----------|--------|------|---------|----------|---------|
| 3/8" | U3/95  | 2.1/4"      | 7/8"   | 3/8" | UC/95  | 2.1/4"   | 7/8"   | 3/8" | DU3/95  | 3.15/16" | 1.1/8"  |
| 1/2" | UJ/127 | 2.5/8"      | 1"     | 1/2" | UC/127 | 2.19/32" | 1"     | 1/2" | DU3/127 | 4"       | 1.5/16" |
| 3/4" | U3/195 | 3"          | 1.1/2" | 3/4" | UC/195 | 3.9/32"  | 1.1/2" | 3/4" | DUJ/195 | 4.11/16" | 1.5/8"  |
| 1"   | U3/254 | 3.3/4"      | 1.3/4" | 1"   | UC/254 | 4"       | 1.3/4" | 1"   | DU3/254 | 6.1/32"  | 2.1/4"  |

| Square Size Female | Square Size Male | Model No. | OAL | Major Dia. |
|--------------------|------------------|-----------|-----|------------|
|                    |                  | UE/95/6   | 6"  |            |
| 3/8"               | 3/8"             | UE/95/9   | 9"  | 1.1/8"     |
|                    |                  | UE/95/12  | 12" |            |
|                    |                  | UE/95S/9  | 9"  |            |
| 3/8"               | 1/2"             | UE/95S/12 | 12" | 1.1/8"     |
|                    |                  | UE/95S/16 | 16" |            |
|                    |                  | UE/127/6  | 6"  |            |
|                    | 1/2"             | UE/127/9  | 9"  |            |
| 1/2"               |                  | UE/127/12 | 12" | 1.5/16"    |
|                    |                  | UE/127/16 | 16" |            |
|                    |                  | UE/127/20 | 20" |            |
|                    |                  | UE/195/9  | 9"  |            |
| 2/4"               | 2/48             | UE/195/12 | 12" | 4.2/4"     |
| 3/4"               | 3/4"             | UE/195/16 | 16" | 1.3/4"     |
|                    |                  | UE/195/20 | 20" |            |
|                    |                  | UE/254/9  | 9"  |            |
| 1"                 | 1"               | UE/254/12 | 12" | 2.1/4"     |
|                    |                  | UE/254/16 | 16" |            |