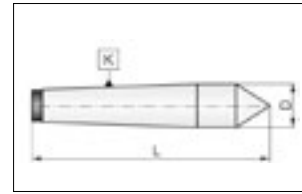




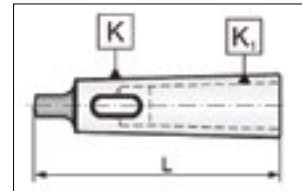
PRODUCTION

- DEAD CENTRES
- DRILL SLEEVES
- EXTENSION SOCKETS
- COLLETS
- KNURLING TOOLS



DEAD CENTRES

| K | L | D | CODE |
|---|-----|------|--------|
| 1 | 80 | 12.2 | 8712-1 |
| 2 | 100 | 18 | 8712-2 |
| 3 | 125 | 24.1 | 8712-3 |
| 4 | 160 | 31.6 | 8712-4 |
| 5 | 200 | 44.7 | 8712-5 |
| 6 | 270 | 63.8 | 8712-6 |

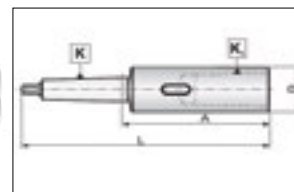


DRILL SLEEVES

Reducing sleeves for tools with morse taper shank.

■ Completely hardened, ground internally and externally.

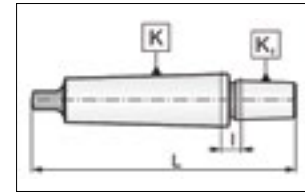
| K | K1 | L | CODE |
|---|----|-----|----------|
| 2 | 1 | 92 | 1751-2-1 |
| 3 | 1 | 99 | 1751-3-1 |
| 3 | 2 | 112 | 1751-3-1 |
| 4 | 1 | 124 | 1751-4-1 |
| 4 | 2 | 124 | 1751-4-2 |
| 4 | 3 | 140 | 1751-4-3 |
| 5 | 1 | 156 | 1751-5-1 |
| 5 | 2 | 156 | 1751-5-2 |
| 5 | 3 | 156 | 1751-5-3 |
| 5 | 4 | 174 | 1751-5-4 |
| 6 | 2 | 218 | 1751-6-2 |
| 6 | 3 | 218 | 1751-6-3 |
| 6 | 4 | 218 | 1751-6-4 |
| 6 | 5 | 218 | 1751-6-5 |



MORSE TAPER EXTENSION SOCKET

Completely hardened, ground, internally and externally.

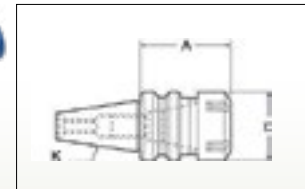
| K | K1 | L | A | D | CODE |
|---|----|-----|-------|----|----------|
| 1 | 1 | 145 | 83 | 20 | 1761-1-1 |
| 1 | 2 | 160 | 98 | 30 | 1761-1-2 |
| 2 | 1 | 160 | 85 | 20 | 1761-2-1 |
| 2 | 2 | 175 | 100 | 30 | 1761-2-2 |
| 2 | 3 | 196 | 121 | 36 | 1761-2-3 |
| 3 | 1 | 175 | 81 | 20 | 1761-3-1 |
| 3 | 2 | 194 | 100 | 30 | 1761-3-2 |
| 3 | 3 | 215 | 121 | 36 | 1761-3-3 |
| 3 | 4 | 240 | 146 | 48 | 1761-3-4 |
| 4 | 1 | 200 | 82.5 | 20 | 1761-4-1 |
| 4 | 2 | 215 | 97.5 | 30 | 1761-4-2 |
| 4 | 3 | 240 | 122.5 | 36 | 1761-4-3 |
| 4 | 4 | 265 | 147.5 | 48 | 1761-4-4 |
| 4 | 5 | 300 | 182.5 | 63 | 1761-4-5 |
| 5 | 3 | 268 | 118.5 | 36 | 1761-5-3 |
| 5 | 4 | 300 | 150.5 | 48 | 1761-5-4 |
| 5 | 5 | 335 | 185.5 | 63 | 1761-5-5 |



DRILL ARBORS

Drill arbor for Jacobs drill chuck

| K | K1 | L | I | CODE |
|---|-----|-------|------|------------|
| 1 | J2 | 90.5 | 6.3 | 5362-1-J2 |
| 1 | J6 | 95.0 | 7.6 | 5362-1-J6 |
| 2 | J2 | 106.0 | 8.8 | 5362-2-J2 |
| 2 | J3 | 112.5 | 6.5 | 5362-1-J3 |
| 2 | J33 | 107.0 | 6.6 | 5362-2-J33 |
| 2 | J6 | 107.0 | 6.6 | 5362-2-J6 |
| 3 | J1 | 120.5 | 9.8 | 5362-3-J1 |
| 3 | J3 | 131.5 | 6.5 | 5362-3-J3 |
| 3 | J33 | 126.0 | 6.6 | 5362-3-J33 |
| 3 | J6 | 129.0 | 9.6 | 5362-3-J6 |
| 4 | J3 | 160.5 | 12.0 | 5362-4-J3 |
| 4 | J6 | 155.0 | 12.0 | 5362-4-J6 |
| 5 | J4 | 203.5 | 11.4 | 5362-5-J4 |



ER COLLET CHUCKS

For tooling with cylindrical shank

| K | COLLET | A | CAPACITY D | CODE |
|------|--------|----|------------|---------------|
| NT30 | ER32 | 50 | 2-20 | 7616-30-32-50 |
| NT40 | ER32 | 60 | 2-20 | 7616-40-32-60 |
| NT40 | ER40 | 60 | 3-26 | 7616-40-40-60 |
| NT50 | ER32 | 70 | 2-20 | 7616-50-32-70 |
| NT50 | ER40 | 70 | 2-26 | 7616-50-40-70 |

*BT series also available.



ER COLLET CHUCK STRAIGHT TYPE

For tooling with cylindrical shank

| D | COLLET | L | CAPACITY | D1 | CODE |
|----|--------|-----|----------|----|----------------|
| 16 | ER16 | 160 | 2-10 | 22 | 7812-20-16-160 |
| 20 | ER16 | 100 | 2-10 | 22 | 7812-20-16-100 |



ER COLLETS

| Size | ER16 CODE | ER32 CODE | ER40 CODE |
|-------|------------|------------|------------|
| 3-2 | 7618-3-16 | 7618-3-32 | 7618-3-40 |
| 4-3 | 7618-4-16 | 7618-4-32 | 7618-4-40 |
| 5-4 | 7618-5-16 | 7618-5-32 | 7618-5-40 |
| 6-5 | 7618-6-16 | 7618-6-32 | 7618-6-40 |
| 7-6 | 7618-7-16 | 7618-7-32 | 7618-7-40 |
| 8-7 | 7618-8-16 | 7618-8-32 | 7618-8-40 |
| 9-8 | 7618-9-16 | 7618-9-32 | 7618-9-40 |
| 10-9 | 7618-10-16 | 7618-10-32 | 7618-10-40 |
| 11-10 | | 7618-11-32 | 7618-11-40 |
| 12-11 | | 7618-12-32 | 7618-12-40 |
| 13-12 | | 7618-13-32 | 7618-13-40 |
| 14-13 | | 7618-14-32 | 7618-14-40 |
| 15-14 | | 7618-15-32 | 7618-15-40 |
| 16-15 | | 7618-16-32 | 7618-16-40 |
| 17-16 | | 7618-17-32 | 7618-17-40 |
| 18-17 | | 7618-18-32 | 7618-18-40 |
| 19-18 | | 7618-19-32 | 7618-19-40 |
| 20-19 | | 7618-20-32 | 7618-20-40 |
| 21-20 | | | 7618-21-40 |
| 22-21 | | | 7618-22-40 |
| 23-22 | | | 7618-23-40 |
| 24-23 | | | 7618-24-40 |
| 25-24 | | | 7618-25-40 |
| 26-25 | | | 7618-26-40 |



COLLETS R8

Standard Accessories: Crank Handle, T-Nuts, Clamping Bolts

| SIZE (MM) | CODE |
|-----------|------------|
| 3 | 7641-R8-3 |
| 4 | 7641-R8-4 |
| 6 | 7641-R8-6 |
| 8 | 7641-R8-8 |
| 10 | 7641-R8-10 |
| 12 | 7641-R8-12 |
| 14 | 7641-R8-14 |
| 16 | 7641-R8-16 |
| 20 | 7641-R8-20 |



TOOLHOLDERS

Turning Toolholders

- Accurately machined from special steel.
- Available in straight, left and right hand shanks.
- Provided with one wrench.
- Supplied with tool bits of standard length.

| TOOLBIT | HOLDER SIZE(MM) | STRAIGHT CODE | \$ | LEFT HAND CODE | RIGHT HAND CODE |
|---------|-----------------|---------------|-------|----------------|-----------------|
| 3/16 | 8x19x114 | 5215-201 | P.O.A | 5220-201 | 5225-201 |
| 1/4 | 9.5x22x127 | 5215-202 | P.O.A | 5220-202 | 5225-202 |
| 5/16 | 13x28x152 | 5215-204 | P.O.A | 5220-204 | 5225-204 |
| 3/8 | 16x35x178 | 5215-205 | P.O.A | 5220-205 | 5225-205 |
| 1/2 | 22x44x228 | 5215-207 | P.O.A | 5220-207 | 5225-207 |



BORING TOOLHOLDER

- Made from tool steel.
- Double ended boring bars and holder comes complete with screws and allen keys.
- Black shining finish.
- Supplied with one tool bit out dirt.
- Boring bars have one end 45° and the other 90°.

| TOOLBIT | BAR SIZE (MM) | HOLDER SIZE (MM) | CODE |
|---------|---------------|------------------|----------|
| 3/16 | 11.1x133 | 16x64 | 5250-202 |
| 1/4 | 14.3x171 | 16x76 | 5250-203 |
| 5/16 | 19.1x235 | 22x95 | 5250-204 |
| 3/8 | 22.2x292 | 41x114 | 5250-205 |

PARTING TOOLHOLDERS



- Heat treated hardened body.
- Machined to precise tolerances.
- Support the blade over a wide area, reducing chance of blade breakage.
- Provided with one wrench.
- Available in straight.
- Supplied with one spanner.

| BLADE SIZE | HOLDER SIZE (MM) | CODE |
|------------|------------------|----------|
| 3/32x1/2 | 8x19x114 | 5300-202 |
| 3/32x5/8 | 9.5x22x127 | 5300-203 |
| 1/8x3/4 | 13x28x152 | 5300-204 |
| 1/8x7/8 | 16x35x178 | 5300-205 |
| 3/16x1 | 19x41x203 | 5300-206 |



KNURLING TOOLS

- Machined ground steel in shiny black finish.
- Knurls are hob cut from high speed steel and heat treated.
- Six knurl tool is supplied with one pair of each, Fine, Medium and Course, Spiral knurls.
- Two Knurl tool is supplied with one pair of Medium, Spiral knurls.
- Single knurl tool is supplied with Medium straight.
- Replacement knurls are also available separate.

Standard Accessories: Crank Handle, T-Nuts, Clamping Bolts

| NO. KNURLS | HOLDER SIZE(MM) | KNURL SIZE(MM) | CODE |
|------------|-----------------|----------------|----------|
| 1 | 12.7x12.7x100 | 19x6.35x6.35 | 5358-201 |
| 2 | 9.5x22x140 | 16x7.9x5.55 | 5354-201 |
| 2 | 12.7x12.7x115 | 19x9.5x6.35 | 5356-201 |
| 6 | 12.7x28x165 | 19x9.5x6.35 | 5350-201 |
| 6 | 12.7x22x165 | 19x9.5x6.35 | 5352-201 |



KNURLING WHEELS

- Knurls are hob cut from high speed steel and heat treated.
- Available in three pitches, Fine(33 TPI), Medium(21 TPI) and Course (14 TPI).

| PITCH | PATTERN | CODE |
|--------------------------------|-----------|----------|
| 19mm x 9.5mm x 6.35mm | | |
| Course | Spiral RH | 5365-201 |
| Course | Spiral LH | 5365-202 |
| Medium | Spiral RH | 5365-203 |
| Medium | Spiral LH | 5365-204 |
| Fine | Spiral RH | 5365-205 |
| Fine | Spiral LH | 5365-206 |
| Course | Straight | 5365-207 |
| Medium | Straight | 5365-208 |
| Fine | Straight | 5365-209 |
| 19mm x 6.35mm x 6.35mm | | |
| Medium | Straight | 5368-208 |
| 15.9mm x 7.9mm x 5.55mm | | |
| Course | Spiral RH | 5367-201 |
| Course | Spiral LH | 5367-202 |
| Medium | Spiral RH | 5367-203 |
| Medium | Spiral LH | 5367-204 |
| Fine | Spiral RH | 5367-205 |
| Fine | Spiral LH | 5367-206 |
| Course | Straight | 5367-207 |
| Medium | Straight | 5367-208 |
| Fine | Straight | 5367-209 |



CLAMP KITS

- Assorted sets of clamping elements including step blocks and step clamps.
- Heat Treated.
- Blackened surface.
- Contained in a metal rack for convenient storage.

| THREAD | T-SLOT | CODE | |
|-----------------|--------|---------|--|
| METRIC | | | |
| M10 | 12mm | CK-10 | |
| M12 | 14mm | CK-12A | |
| M12 | 16mm | CK-12B | |
| M14 | 16mm | CK-14 | |
| M16 | 18mm | CK-16 | |
| IMPERIAL | | | |
| 3/8 UNC | 7/16 | CK-103A | |
| 3/8 UNC | 1/2 | CK-103B | |
| 1/2 BSW | 9/16 | CK-104A | |
| 1/2 BSW | 5/8 | CK-104B | |
| 1/2 BSW | 11/16 | CK-104C | |
| 5/8 UNC | 11/16 | CK-105A | |
| 5/8 UNC | 3/4 | CK-105B | |

