



CNC Router Tooling



2017



- Collet & Nut Toolholders
- ShrinkFIT Toolholders
- Hydraulic Toolholders
- Moulder Arbors
- Drill Chucks
- Set-up Equipment
- Aggregate Heads



Because your success depends on the reliability of every component.

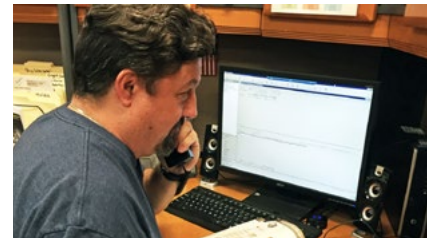
800.597.3921 or 317.803.8000

Techniks is a partner you can truly depend on.

You know we make toolholders, but did you know we will work closely with you to understand your manufacturing needs, so we can provide the best possible solutions? Becoming a Techniks customer means you have an expert solutions partner who provides top quality products and excellent customer service backed by our satisfaction guarantee.

With Techniks you get:

- *inspected, tested and lab-certified products that provide outstanding value and extend perishable cutting tool life to save you money*
- *full factory support before, during, and after the sale*
- *guaranteed turn-key CNC tooling and workholding solutions*
- *live phone support (toll-free) 8:00 am – 6:00 pm E.S.T.*
- *orders ship the same day they are received! (ground orders received by 2:00 pm, or expedited orders received by 5:00 pm)*
- *each order is checked 4 times before shipping. 99.9% average shipping accuracy (we track this each month)*
- *all products are backed by our 100% satisfaction guarantee*
- *training on how to use our products if needed*
- *24/7 access to request a quote, look up product information, request catalogs, on the web (www.techniksusa.com)*
- *receive promotions and product information by opt-in email*



Live phone support M-F, 8:00 am – 6:00 pm EST



Orders ship the same day they are received.



RoadShow live product demos at your facility.

The whole team at Techniks is committed to excellent customer service for fast and accurate fulfillment of orders.

Thank You for considering Techniks for your CNC tooling needs.

Contact Information

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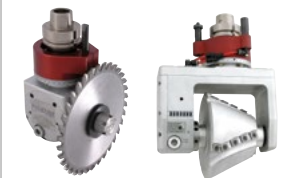
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Request our Full-Line Metalworking Holders Catalog

The key to our success is our people, who go the extra mile every day to ensure you are delighted with our service and products. Becoming a Techniks customer means you have a hard working partner, helping you grow your business by providing great products at competitive prices.

Key Points:

- *Techniks Certified quality*
- *live phone support M-F, 8-6*
- *expert technical support*



Request our full-line CNC Tooling Solutions catalog or view it online: www.techniksusa.com

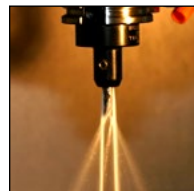
The table below presents a snap-shot view of our toolholder product lines.



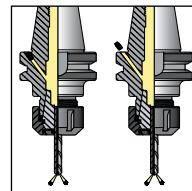
PowerCOAT Nut*



Extended Lengths



CoolBLAST HPC



CoolFLEX DIN B



Slim Nose Options



DualDrive Dual-Contact

| Holder Type | Spindle Sizes | Certified | Extended | CoolBLAST | CoolFLEX | Slim Nose | DualDRIVE | C4,5,6 |
|--|--|-----------|----------|-----------|----------|-----------|-----------|--------|
| Collet & Nut* | BT30/40/50, CAT40/50, HSK, TG, ISO, SK30, SS | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| End Mill Holder | BT30/40/50, CAT40/50, HSK63A, HSK100A | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| ShrinkFIT | BT30/40, CAT40/50, HSKE, HSKA, SFS12 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| SlimFIT System (drawbar collet) | BT30/40, CAT40/50, HSK, extensions | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Face Mill Arbor | BT30/40/50, CAT40/50, HSKA, R8 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Hydraulic Toolholders | BT30/40/, CAT40/50, HSKA, HSKF | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Milling Chuck | BT40, CAT40/50, HSK | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Morse Taper | BT30/40/50, CAT40/50 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Drill Chuck | BT30/40, CAT40/50, HSK, ISO30 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

*All our collet and nut style holders include our PowerCOAT Nut that improves holding power by 75%.

Request our Cutting Tools Catalog for Metalworking



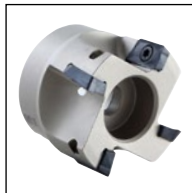
Cutting Tools

Key Points:

- Free cutter body program
- tooling packages and other special deals
- high-performance PVD inserts



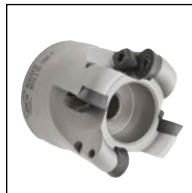
For more information request our Cutting Tools catalog or view it online: www.technikusa.com



90° Face Mills



45° Face Mills



Button Cutter



Indexable End Mill



Helical Cutter



Turning / Boring

| Face Mills | Diameters | Inserts | Insert Pockets | H6 Bore I.D. | ShrinkMILL | CoolBLAST |
|--------------------|---------------------|------------------|-------------------|--------------|------------|-----------|
| 90° Facemills | 2" 2.5" 3" 4" 5" 6" | APKT, APGT, APEX | 4, 5, 6, 7, 8, 10 | ✓ | ✓ | ✓ |
| 45° Facemills | 2" 3" 4" 5" | SEKT, SEET | 4, 6, 7, 8 | ✓ | ✓ | ✓ |
| 45° Heavy-Duty | 3" 4" 5" 6" | SNKX (8 edges) | 5, 7, 8, 10 | ✓ | | ✓ |
| Positive High-Feed | 2" 2.5" 3" 4" | SDKX | 4, 5, 6, 7 | ✓ | | ✓ |
| Negative Cast Iron | 3" 4" 5" 6" | PNEG (10 edges) | 8, 10, 12, 14 | ✓ | | |
| Round Button | 2" 3" | RDMT, RDMW, RDMX | 4, 5 | ✓ | ✓ | ✓ |
| Negative High-Feed | 2" 2.5" 3" 4" | SNKX | 4, 6, 7 | ✓ | ✓ | ✓ |

| End Mills | Diameters | Inserts | Insert Pockets | PowerLOC | ShrinkLOC | CoolBLAST |
|--------------------|------------------|------------------|----------------|----------|-----------|-----------|
| Indexable End Mill | .5" up to 1.5" | APKT, APGT | 1, 2, 3 | ✓ | ✓ | ✓ |
| Positive High-Feed | .75" up to 1.25" | WPGT, SDMT, SDKX | 2, 3 | | | ✓ |
| Negative High-Feed | 1" up to 1.25" | SNKX (8 edges) | 3, 4 | ✓ | ✓ | ✓ |
| 90° Helical Cutter | .75" up to 1.25" | APKT | 4, 8, 12 | | | ✓ |
| Indexable Drill | 2.5" up to 9" | WCMX | 3, 4, 6, 8 | | | ✓ |

| Turning Tools | Application | Lead Angle | Shank | L & R Hand | 2-Side Insert | All Material |
|-----------------------|------------------|---------------|---------------|------------|---------------|--------------|
| Negative Tool Holder | turning & facing | 93°, 95° | 1" square | ✓ | ✓ | ✓ |
| Negative Boring Bars* | boring & facing | 93°, 95° | 1" 1.25" 1.5" | ✓ | ✓ | ✓ |
| Positive Tool Holder | turning & facing | 91°, 93°, 95° | .5" & .75" | ✓ | | ✓ |
| Positive Boring Bars* | boring & facing | 91°, 93°, 95° | .375" to .75" | ✓ | | ✓ |

*Coolant-thru is standard for better chip evacuation.

Satisfaction guaranteed on all our CNC tooling solutions from spindle to workpiece.

www.technikusa.com

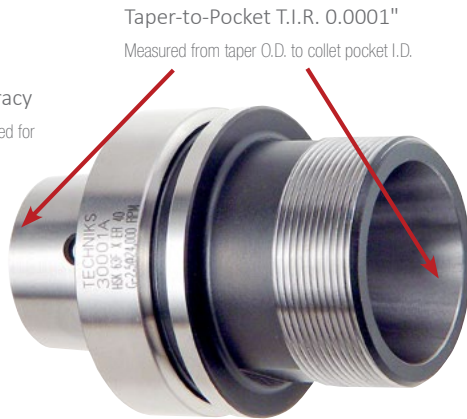
What Does Techniks Certified Mean?

Techniks Certified = Manufactured to The Highest Standards



Techniks Certified Tooling means the critical features of each holder has been individually lab tested, measured and inspected for quality. Depending on the holder this can include: balance, dimensional accuracy, collet pocket runout (T.I.R.), bore I.D. and taper accuracy. Techniks Certified guarantees your holder will meet or beat our published specifications.

Lab Certified Accuracy
Each toolholder is lab certified for accuracy and balance.



Taper Accuracy AT3
Taper ground to AT3 accuracy for maximum contact with spindle.

Ultra Precision Collet
Each collet hand inspected.
T.I.R. only 0.0002"



Balanced to 25,000 RPM
Factory balanced to 25,000 RPM at G2.5
Custom balancing to 60,000 RPM available.

PowerCOAT Nuts
Our PowerCOAT nut holds 70% tighter than standard nuts for best T.I.R. and rigidity.



Balanced Nut
Balanced nut reduces vibration to extend cutting tool life.

A full report comes with each holder



INSPECTION REPORT Balanced to G2.5 25,000 RPM

MODEL NO : SYIC-
COMMODITY : HSK/ER COLLET CHUCK TYPE F
TYPE :

| ITEM EXAMINED | UNIT | VAL | TOL | STANDARD | I/D | O/E | F |
|---------------|--------|-----|--------|----------|-------|-------|-------|
| APPROVED | HSK/ER | #30 | #29.05 | #11.42 | 0.002 | 0.005 | 0.015 |
| TOLERANCE | HSK/ER | #36 | #36.90 | #14.13 | 0.002 | 0.005 | 0.02 |
| TEST VALUE | HSK/ER | #48 | #46.53 | #18.13 | 0.002 | 0.002 | |

Operator: DATE: JUL 15 2004

TEST REPORT OF BALANCE

MODEL NO : SYIC-TE-30000-N
COMMODITY : HSK/ER COLLET CHUCK
TYPE : HSK/ER

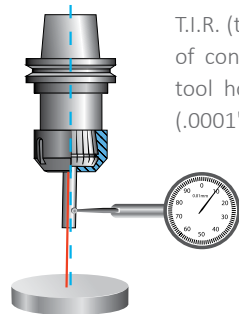
ALLOWABLE UNBALANCE PER ISO 1940 SPECIFICATION : 0.8 g.mm
RESIDUAL UNBALANCE ASSEMBLED : 0.7 g.mm
Ø ONLY SHANK : 0.7 g.mm
□ SHANK WITH NUT : g.mm
□ SHANK WITH COLLET AND PIN : g.mm

MEASURED TOP : 0.7 g.mm
UNBALANCE BOTTOM : 0.7 g.mm

NOTE : (L : SEE THE DRAWING AS FOLLOWING)
RISK < 300 mm MEASURED BY I PLANE (BOTTOM)
L > 300 mm MEASURED BY O PLANE (TOP & BOTTOM)

| SYIC-TE-30000-N | HSK/ER32-70 | M=0.74 kg |
|---------------------|-------------|-----------|
| Ø=2.5 | n=24000 rpm | bottom |
| Perm. unbal. (gmm) | | 0.8 |
| Actual unbal. (gmm) | | 0.7 |
| | | 14.07.04 |

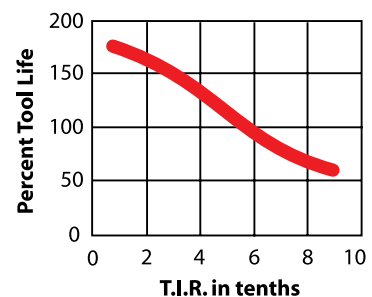
How T.I.R. Affects Cutting Tool Life



T.I.R. (total indicator runout) is the measure of concentricity of the cutting tool in the tool holder. T.I.R. is measured in "tenths" (.0001") or one ten-thousandths of an inch.

Cutting tool life decreases by 10% for every .0001" T.I.R. The rigidity and accuracy of Techniks Toolholders minimizes T.I.R.

Toolholders make the important connection between the machine spindle and the cutting tool.
Quality toolholders extend tool life by 150% or more.



You lose 10% tool life for every .0001" T.I.R.

Special Savings on HSK 63F Tooling Packages

10 Piece HSK 63F Tooling Package

HSK 63F Holders and ER 40 Collets



Order No. TP-HSK63F10PACK

Special Package Price: \$1,000.00

Original List Price: \$1,395.00 – **You Save: \$395.00**

| Qty. | Part No. | Description | List Price | Extended |
|------|----------|---------------|------------|------------|
| 5 | 30001 | HSK63F x ER40 | \$249.00 | \$1,245.00 |
| 5 | 04240-XX | ER40 collet | \$30.00 | \$150.00 |

17 Piece HSK 63F Tooling Package

HSK 63F Holders and SYOZ 25 Collets



Order No. TP-H63SYOZMini

Special Package Price: \$1,750.00

Original List Price: \$2,228.00 – **You Save: \$478.00**

| Qty | Part No. | Description | List Price | Extended |
|-----|----------|-------------------|------------|------------|
| 8 | 31205F | HSK 63F x SYOZ2 5 | \$249.00 | \$1,992.00 |
| 8 | 83868-XX | SYOZ 25 collet | \$27.00 | \$216.00 |
| 1 | 83691 | SYOZ 25 wrench | \$20.00 | \$20.00 |

21 Piece HSK 63F Tooling Package

HSK 63F Holders and ER 40 Collets



Order No. TP-H63ER40

Special Package Price: \$2,300.00

Original List Price: \$2,814.00 – **You Save: \$514.00**

| Qty | Part No. | Description | List Price | Extended |
|-----|----------|-----------------|------------|------------|
| 10 | 30001 | HSK63F x ER40 | \$249.00 | \$2,490.00 |
| 10 | 04240-XX | ER40 collet | \$30.00 | \$300.00 |
| 1 | 04617 | ER40 - E Wrench | \$24.00 | \$24.00 |



Techniks Certified holders are inspected, tested, and measured for quality, accuracy, and balance. A full lab report is included with each holder.

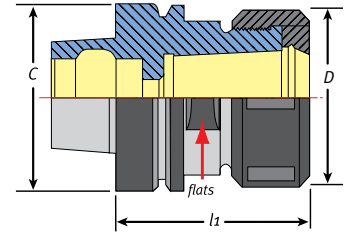
HSK F & HSK E Precision CNC Router Toolholders



Features

- *Balanced to 25,000 RPM at G2.5*
- *T.I.R. 0.0001" measured from taper to collet pocket*
- *PowerCOAT nut included for 75% more clamping power*

HSK63A Toolholders available upon request



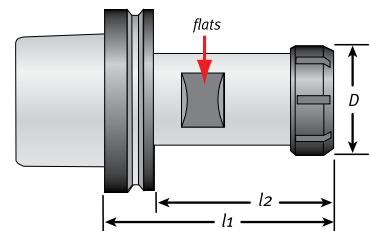
HSK50F, 63F Toolholders for CNC Routers

| Part No. | Description | l1 | D | Nut | Wrench | Flats |
|----------------|--|-------|------|---------|--------|-------|
| 31419-F | HSK50F x ER32 - 80mm, slotted nut | 80mm | 50mm | 46132 | 04616 | 36mm |
| 103.123.11.100 | HSK63F x ER11 - 100mm | 100mm | 16mm | 23111 | 04621 | - |
| 31431-F | HSK63F x ER16 - 60mm, slotted nut | 60mm | 32mm | 46116 | 04613 | 26mm |
| 31434-F | HSK63F x ER16 - 100mm, slotted nut | 100mm | 32mm | 46116 | 04613 | 26mm |
| 30000 | HSK63F x ER32 - 70mm, slotted nut | 70mm | 50mm | 46132 | 04616 | 36mm |
| 30001 | HSK63F x ER40 - 75mm, slotted nut | 75mm | 63mm | 46140 | 04617 | 46mm |
| 30001-L | HSK63F x ER40 - 75mm, left-hand thread | 75mm | 63mm | 46140-L | 04617 | 46mm |
| 30001-Solid | HSK63F x ER40 - 75mm, No thru hole | 75mm | 63mm | 46140 | 04617 | 46mm |
| 30002 | HSK63F x ER40 - 90mm, slotted nut | 90mm | 63mm | 46140 | 04617 | 46mm |
| 30003 | HSK63F x ER40 - 115mm, slotted nut | 115mm | 63mm | 46140 | 04617 | 46mm |
| 30005 | HSK63F x ER40 - 125mm, slotted nut | 125mm | 63mm | 46140 | 04617 | 46mm |
| 31025F | HSK63 F x SYOZ 25 - 80mm, slotted nut | 80mm | 60mm | 83632 | 03691 | 38mm |



Features

- *Balanced to 25,000 RPM at G2.5*
- *T.I.R. 0.0001" measured from taper to collet pocket*
- *PowerCOAT nut included for 75% more clamping power*



HSK32E, 40E, 50E, 63E Toolholders for HSK E Type Spindle

| Part No. | Description | l1 | l2 | D | Nut | Set Screw | Wrench | Flats |
|------------|------------------------------------|-------|------|------|-------|-----------|--------|-------|
| 31374-60-E | HSK32E x ER25 - 60mm, slotted nut | 60mm | 27mm | 42mm | 46125 | 16089 | 04615 | 22mm |
| 31376-E | HSK40E x ER16 - 65mm, slotted nut | 65mm | 45mm | 32mm | 46116 | 16083 | 04613 | 24mm |
| 31383-E | HSK40E x ER25 - 75mm, slotted nut | 75mm | 55mm | 42mm | 46125 | 16089 | 04615 | 27mm |
| 31386-E | HSK40E x ER32 - 100mm, slotted nut | 100mm | 80mm | 50mm | 46132 | 16089 | 04616 | 35mm |
| 31402-E | HSK50E x ER16 - 80mm, slotted nut | 80mm | 60mm | 28mm | 46116 | 16083 | 04613 | 27mm |
| 31419-E | HSK50E x ER32 - 85mm, slotted nut | 85mm | 59mm | 50mm | 46132 | 16089 | 04616 | 36mm |
| 31456-E | HSK63E x ER32 - 90mm, slotted nut | 90mm | 64mm | 50mm | 46132 | 16089 | 04616 | 36mm |
| 31472-E | HSK63E x ER40 - 120mm, slotted nut | 120mm | 94mm | 63mm | 46140 | 16091 | 04617 | 46mm |
| 50001 | HSK63E x ER40 -75mm, slotted nut | 75mm | 49mm | 63mm | 46140 | 16091 | 04617 | 46mm |

BT 30, BT 35, & SYOZ 25 Toolholders



Features

- *Balanced to 25,000 RPM at G2.5*
- *T.I.R. 0.0001" measured from taper to collet pocket*
- *PowerCOAT nut included for 75% more clamping power*

NOTE: ER16 and 20 toolholders come with hex nut as standard.
For slotted nuts simply add SLOTNUT to the end of the part number.

PowerCOAT nut is included with each holder.
Techniks Certified for accuracy and balance.

BT30 Precision ER Toolholders - without Slots

| Part No. | Description | I1 | D | Collet Nut | Set Screw | Wrench |
|----------|---|------|------|------------|-----------|--------|
| 16106-W | BT30 x ER20 - 70, No Slots | 70mm | 34mm | 41120 | 16087 | 04614 |
| 16121 | BT30 x ER32 - 60, 41mm flats, No Slots - Komo | 60mm | 50mm | 46132 | 16089 | 04616 |
| 16131 | BT30 x ER32 - 90, 38mm flats, No Slots - Komo | 90mm | 50mm | 46132 | 16089 | 04616 |

BT30 Precision ER Toolholders - with slots

| Part No. | Description | I1 | D | Max. Shank | Set Screw | Wrench |
|-----------|----------------------------------|--------|-------|------------|-----------|--------|
| 16102 | BT30 x ER16 - 60mm, hex nut | 60mm | 1.08" | .406" | 16083 | 04609 |
| 16101 | BT30 x ER16 - 70mm, hex nut | 70mm | 1.08" | .406" | 16083 | 04609 |
| 16103 | BT30 x ER16 - 90mm, hex nut | 90mm | 1.08" | .406" | 16083 | 04609 |
| 16104 | BT30 x ER16 - 100mm, hex nut | 100mm | 1.08" | .406" | 16083 | 04609 |
| 16105 | BT30 x ER16 - 120mm, hex nut | 120mm | 1.08" | .406" | 16083 | 04609 |
| 16106 | BT30 x ER20 - 70mm, hex nut | 70mm | 1.34" | .512" | 16087 | 04610 |
| 16107 | BT30 x ER20 - 135mm, hex nut | 135mm | 1.34" | .512" | 16087 | 04610 |
| 16108-2.5 | BT30 x ER20 - 63.5mm, hex nut | 63.5mm | 1.34" | .512" | 16087 | 04610 |
| 16109 | BT30 x ER25 - 70mm, slotted nut | 70mm | 1.65" | .63" | 16089 | 04615 |
| 16110 | BT30 x ER25 - 60mm, slotted nut | 60mm | 1.65" | .63" | 16089 | 04615 |
| 16111-90 | BT30 x ER25 - 90mm, slotted nut | 90mm | 1.65" | .63" | 16089 | 04615 |
| 16111 | BT30 x ER25 - 135mm, slotted nut | 135mm | 1.65" | .63" | 16089 | 04615 |
| 16112 | BT30 x ER32 - 60mm, slotted nut | 60mm | 1.97" | .788" | 16089 | 04616 |
| 16113 | BT30 x ER32 - 70mm, slotted nut | 70mm | 1.97" | .788" | 16089 | 04616 |
| 16114 | BT30 x ER32 - 100mm, slotted nut | 100mm | 1.97" | .788" | 16089 | 04616 |
| 16115 | BT30 x ER40 - 80mm, slotted nut | 80mm | 2.48" | 1.023" | 16089 | 04617 |

BT30, SYOZ 25 Toolholders

| Part No. | Description | I1 | D | Collet Nut | Wrench |
|----------|---------------------------------|------|------|------------|--------|
| 16001-W | BT30 x SYOZ 25 - 70, 38mm flats | 70mm | 60mm | 83632 | 03691 |
| 16001 | BT30 x SYOZ 25 - 70 with nut | 70mm | 60mm | 83632 | 03691 |

BT 35, ER32, SYOZ 25 Toolholders for Heian Routers

| Part No. | Description | I1 | D | Collet Nut | Wrench |
|------------------|-------------------------------|------|------|------------|--------|
| 16010 | BT 35 x SYOZ 25 - 76 with nut | 76mm | 60mm | 83632 | 03691 |
| 161-BT35-ER32 76 | BT 35 x ER32 - 76 | 76mm | 50mm | 46132 | 04616 |

BT40 Precision CNC Router Toolholders

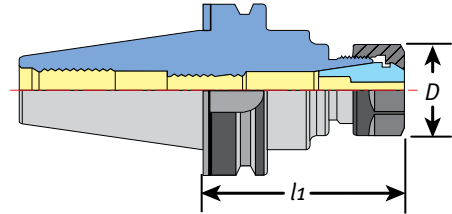


Techniks Certified for accuracy and balance
Each holder comes with a complete lab report

Features

- *Balanced to 25,000 RPM at G2.5*
- *T.I.R. 0.0001" measured from taper to collet pocket*
- *PowerCOAT nut included for 75% more clamping power*

NOTE: ER16 and 20 toolholders come with hex nut as standard.
For slotted nuts simply add SLOTNUT to the end of the part number.



BT40 ER Toolholders

| Part No. | Description | l1 | D | Max. Shank | Set Screw | Wrench |
|----------|----------------------------------|-------|-------|------------|-----------|--------|
| 16151 | BT40 x ER16 - 70mm, hex nut | 70mm | 1.08" | .406" | 16083 | 04609 |
| 16153 | BT40 x ER16 - 100mm, hex nut | 100mm | 1.08" | .406" | 16083 | 04609 |
| 16155 | BT40 x ER16 - 125mm, hex nut | 125mm | 1.08" | .406" | 16083 | 04609 |
| 16157 | BT40 x ER16 - 150mm, hex nut | 150mm | 1.08" | .406" | 16083 | 04609 |
| 16158 | BT40 x ER16 - 180mm, hex nut | 180mm | 1.08" | .406" | 16083 | 04609 |
| 16159 | BT40 x ER20 - 70mm, hex nut | 70mm | 1.34" | .512" | 16085 | 04610 |
| 16162 | BT40 x ER20 - 100mm, hex nut | 100mm | 1.34" | .512" | 16085 | 04610 |
| 16165 | BT40 x ER20 - 135mm, hex nut | 135mm | 1.34" | .512" | 16085 | 04610 |
| 16167 | BT40 x ER20 - 150mm, hex nut | 150mm | 1.34" | .512" | 16085 | 04610 |
| 16169 | BT40 x ER25 - 70mm, slotted nut | 70mm | 1.65" | .630" | 16089 | 04615 |
| 16171 | BT40 x ER25 - 100mm, slotted nut | 100mm | 1.65" | .630" | 16089 | 04615 |
| 16175 | BT40 x ER25 - 150mm, slotted nut | 150mm | 1.65" | .630" | 16089 | 04615 |
| 16177 | BT40 x ER32 - 70mm, slotted nut | 70mm | 1.97" | .788" | 16089 | 04616 |
| 16179 | BT40 x ER32 - 100mm, slotted nut | 100mm | 1.97" | .788" | 16089 | 04616 |
| 16181 | BT40 x ER32 - 150mm, slotted nut | 150mm | 1.97" | .788" | 16089 | 04616 |
| 16183 | BT40 x ER40 - 80mm, slotted nut | 80mm | 2.48" | 1.023" | 16089 | 04617 |
| 16185 | BT40 x ER40 - 100mm, slotted nut | 100mm | 2.48" | 1.023" | 16089 | 04617 |
| 16189 | BT40 x ER40 - 150mm, slotted nut | 150mm | 2.48" | 1.023" | 16089 | 04617 |

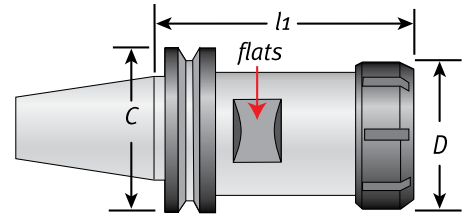
ISO & SK Precision CNC Router Toolholders



Techniks Certified for accuracy and balance
Each holder comes with a complete lab report

Features

- *Balanced up to 40,000 RPM at G2.5*
- *T.I.R. 0.0001" or better from taper to collet pocket*
- *PowerCOAT nut and retention knob included*



ISO 20 and ISO 25 Toolholders for CNC Routers

| Part No. | Description | l1 | C | D | Nut | Wrench | Flats |
|--------------|--|------|------|------|-------|--------|-------|
| 16000-2016MC | *ISO 20 x ER16 - 52mm, HS mini nut & pull stud | 52mm | 30mm | 22mm | 53116 | 04622 | 17 |
| 16000-2516 | ISO 20 x ER16 - 52mm, slotted nut & pull stud | 52mm | 30mm | 32mm | 46116 | 04613 | 17 |
| 16000-2520 | ISO 20 x ER20 - 52mm, slotted nut & pull stud | 52mm | 30mm | 35mm | 46120 | 04614 | 17 |
| 12194-ISO25 | ISO 25 x ER25 - 50mm, slotted nut & pull stud | 50mm | 38mm | 42mm | 46125 | 04615 | 27 |
| 25077 | ISO 25 x ER25 - 65mm, slotted nut & pull stud | 65mm | 38mm | 42mm | 23111 | 04615 | 27 |

*Balanced to 40,000 RPM. Use for Haas OM-1A, OM-2A Office Mills. Haas is trademark of Haas Automation and used here for identification only.



Taper ground to AT3 accuracy or better
Techniks Certified for accuracy and balance

Features

- *Balanced to 25,000 RPM at G2.5*
- *T.I.R. 0.0001" or better from taper to collet pocket*
- *PowerCOAT nut included for 75% more clamping power*

ISO 30, ISO 40 and SK 30 Toolholders for CNC Routers

| Part No. | Description | l1 | C | D | Nut | Wrench | Flats |
|-------------|-----------------------------------|-------|---------|------|-------|--------|-------|
| 42407-W | ISO 30 x ER11 - 100mm, mini nut | 100mm | 50mm | 16mm | 23111 | 04621 | 14 |
| 42213-W-50 | ISO 30 x ER32 - 50mm, slotted nut | 50mm | 50mm | 50mm | 46132 | 04616 | 47 |
| 42213-W-63 | ISO 30 x ER32 - 63mm, slotted nut | 63mm | 50mm | 50mm | 46132 | 04616 | 36 |
| 42213-W-90 | ISO 30 x ER32 - 90mm, slotted nut | 90mm | 50mm | 50mm | 46132 | 04616 | 36 |
| 12000-CMS | ISO 30 x ER32 - CMS toolholder | 58mm | 46mm | 50mm | 46132 | 04616 | 36 |
| 12040-CMS | ISO 30 x ER40 - CMS toolholder | 66mm | 46mm | 63mm | 46140 | 04617 | 42 |
| 42215-W-57 | ISO 30 x ER40 - 57mm, slotted nut | 57mm | 50mm | 63mm | 46140 | 04617 | 47 |
| 42261-W | ISO 40 x ER40 - 70mm, slotted nut | 70mm | 63.55mm | 63mm | 46140 | 04617 | 46 |
| NT-54300130 | SK-30 x SYOZ 25 toolholder | 63mm | 50mm | 60mm | 83632 | 03691 | 38 |

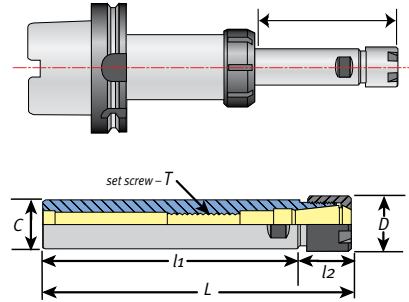
Precision ER Mini-Nut & Straight Shank Extensions



Features

- Collet pocket T.I.R. 0.0001"
- All surfaces precision ground
- PowerCOAT Nut included

Extension length should not exceed a 4 : 1 ratio of length to diameter. For example, a 1/2" shank should not extend more than 2" in front of the holder.



Mini-Nut ER Straight Shank Extensions

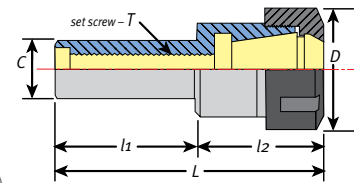
| Part No. | Description | C | L | l1 | l2 | D | Set Screw | Wrench |
|----------|----------------------|------|---------|-------|--------|------|-----------|--------|
| 04889 | 3/8" x ER8, - 100mm | 3/8" | 124mm | 100mm | 24mm | 12mm | - | 04620 |
| 04891 | 1/2" x ER11, - 140mm | 1/2" | 166.5mm | 140mm | 26.5mm | 16mm | - | 04621 |
| 04893 | 5/8" x ER11, - 140mm | 5/8" | 158.5mm | 140mm | 18.5mm | 16mm | - | 04621 |
| 04895 | 1/2" x ER16, - 140mm | 1/2" | 177mm | 140mm | 37mm | 22mm | - | 04622 |
| 04896 | 3/4" x ER16, - 140mm | 3/4" | 165mm | 140mm | 25mm | 22mm | 16083 | 04622 |
| 04892 | 1/2" x ER20, - 140mm | 1/2" | 180mm | 140mm | 40mm | 28mm | 16083 | 04623 |
| 04894 | 3/4" x ER20, - 140mm | 3/4" | 180mm | 140mm | 40mm | 28mm | 16083 | 04623 |
| 04881 | 20mm x ER20, - 180mm | 20mm | 220mm | 180mm | 40mm | 28mm | 16083 | 04623 |
| 04897 | 1.0" x ER20, - 140mm | 1.0" | 168mm | 140mm | 28mm | 28mm | 16083 | 04623 |
| 04898 | 3/4" x ER25, - 100mm | 3/4" | 149mm | 100mm | 49mm | 35mm | 16087 | 04624 |
| 04888 | 1.0" x ER25, - 140mm | 1.0" | 190mm | 140mm | 50mm | 35mm | 16083 | 04624 |



Features

- Collet pocket T.I.R. 0.0001"
- All surfaces precision ground
- PowerCOAT Nut included

For shank sizes 1/8" (3mm) or smaller use our DNA (dead nuts accurate) collets for best results. (pg.18)



ER Straight Shank Extensions

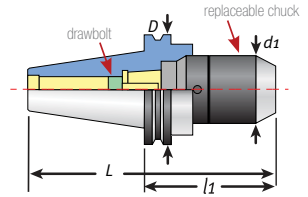
| Part No. | Description | C | L | l1 | l2 | D | Set Screw | Wrench |
|-----------|------------------------------------|--------|---------|--------|--------|------|-----------|--------|
| 04851 | 16mm x ER11, - 140mm, hex nut | 16mm | 174.5mm | 140mm | 21.6mm | 19mm | - | 04608 |
| 04855 | 1/2" x ER11, - 140mm, hex nut | 1/2" | 174.5mm | 140mm | 21.6mm | 19mm | - | 04608 |
| 04854 | 5/8" x ER11, - 140mm, hex nut | 5/8" | 174.5mm | 140mm | 21.6mm | 19mm | - | 04608 |
| 04832 | 5/8" x ER16, - 60mm, hex nut | 5/8" | 95.1mm | 60mm | 35.1mm | 28mm | - | 04609 |
| 04834 | 3/4" x ER16, - 50mm, hex nut | 3/4" | 85.1mm | 50mm | 35.1mm | 28mm | 16083 | 04609 |
| 04835 | 3/4" x ER16, - 100mm, hex nut | 3/4" | 135.1mm | 100mm | 35.1mm | 28mm | 16083 | 04609 |
| 04856 | 3/4" x ER16, - 140mm, hex nut | 3/4" | 175.1mm | 140mm | 35.1mm | 28mm | 16083 | 04609 |
| 04836-2.5 | 3/4" x ER20, - 2-1/2", hex nut | 3/4" | 100mm | 2-1/2" | 38mm | 34mm | 16083 | 04610 |
| 04858 | 1.0" x ER20, - 140mm, hex nut | 1.0" | 180.5mm | 140mm | 40.5mm | 34mm | 16083 | 04610 |
| 04837 | 1.0" x ER25, - 50mm, slotted nut | 1.0" | 101mm | 50mm | 51mm | 42mm | 16089 | 04615 |
| 04817 | 20mm x ER32, - 50mm, slotted nut | 20mm | 97.1mm | 50mm | 47mm | 50mm | 16089 | 04616 |
| 04818 | 20mm x ER32, - 100mm, slotted nut | 20mm | 146.5mm | 100mm | 47mm | 50mm | 16083 | 04616 |
| 04839 | 1.0" x ER32, - 50mm, slotted nut | 1.0" | 101.5mm | 50mm | 51.5mm | 50mm | 16089 | 04616 |
| 04839-140 | 1.0" x ER32, - 140mm, slotted nut | 1.0" | 191.5mm | 140mm | 51.5mm | 50mm | 16083 | 04616 |
| 04843 | 1-1/4" x ER32, - 60mm, slotted nut | 1-1/4" | 111.5mm | 60mm | 51.5mm | 50mm | 16089 | 04616 |
| 04841 | 1.0" x ER40, - 50mm, slotted nut | 1.0" | 115mm | 50mm | 65mm | 63mm | 16083 | 04617 |

Drill Chucks, Drill Adapters and CMS Toolholders



Features

- 3x more holding power than other chucks
- Holds non-standard shank sizes up to 1/2"
- Replaceable chuck is held by a drawbolt



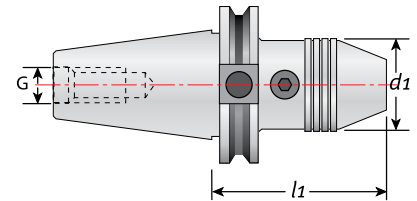
HSK63F & BT Replaceable Drill Chucks

| Part No. | Description | l1 | L | D | d1 |
|----------|--------------------------------------|-------|---------|------|------|
| 34905-F | HSK 63F x SPU 13mm - 150mm | 150mm | 182.5mm | 63mm | 50mm |
| 16456-W | BT30 x SPU 13mm - 110mm (no slots) | 110mm | 170.4mm | 46mm | 50mm |
| 16456 | BT30 x SPU 13mm - 110mm | 110mm | 170.4mm | 46mm | 50mm |
| 82164 | SPU drill chuck (replacement) | | | | |
| 82172 | SPU drill chuck wrench (replacement) | | | | |



Features

- Capacity from 1/16" to 1/2"
- 4 times greater holding power
- Balanced to 10,000 RPM

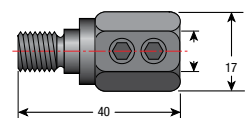
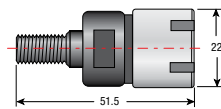


HP3 Precision Drill Toolholders (ISO, BT, HSK)

| Part No. | Description | d1 | l1 | G |
|----------------|-----------------------------|----|-------|-----|
| 64.05.046.051 | ISO30 HP3 drill chuck 1/2" | 50 | 103 | M12 |
| 171.05.046.003 | HSK63F HP3 drill chuck 1/2" | 50 | 123.5 | - |



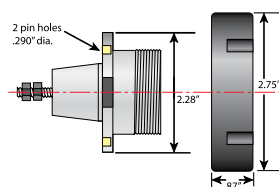
- ER collet or side-lock style
- Eliminate threaded drill bits
- Better rigidity & holding power



Threaded Drill Adapters

Designed for CNC Routers with inline Multi-Spindles.

| Part No. | Collet | Shank | Thread | Part No. | Shank | Thread | I.D. |
|----------|--------|--------------|--------|-------------|----------|--------|------|
| 00316-R | ER16 | 3/8" or 10mm | Right | 00316-SLN-R | M10x1.05 | Right | 10mm |
| 00316-L | ER16 | 3/8" or 10mm | Left | 00316-SLN-L | M10x1.05 | Left | 10mm |



- Use with standard ER32 or DNA ER32 collets
- 0.0002" T.I.R. (collet pocket runout)
- Taper ground to AT3 specification

CMS Toolholder

| Part No. | Description |
|----------|--------------------------------|
| CMS-RR32 | CMS Toolholder with turret nut |

Includes turret nut. Order collets and nuts separately.

Featured Technology – ER Collets for CNC Routers

ER Collets from ER8 thru ER40 – Inch and Metric Sizes

Techniks Collet Advantages

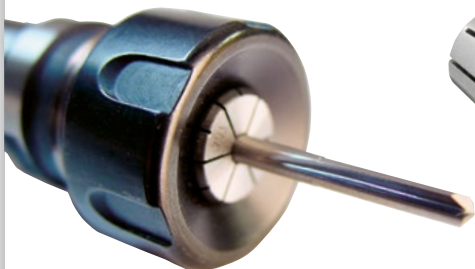
1. manufactured to highest industry standards
2. each collet is hand inspected for quality
3. runout (T.I.R.) averages 0.0002"
4. ultra-precision collets available (T.I.R. 0.0001")

Techniks collets are manufactured from high carbon-bearing steel using a special Swiss grinding technique. Each collet is heat treated for improved clamping range and longer life.

Depend on Techniks collets to provide unsurpassed accuracy and holding power to extend cutting tool life.



Use DNA ER Collets (Dead Nuts Accurate) for Small Router Bits & Cutters



- 0.0002" T.I.R.
- Best collet for tools 6mm and smaller
- Works with standard ER holders

See page 18 for more information.

Featured Technology – PowerCOAT Nut



PowerCOAT Nuts Outperform Bearing Nuts

- 40% more holding power = Greater rigidity & accuracy
- Less runout (T.I.R.), better balance (up to 70,000 RPMs)
- Safer: cutting tool is less likely break free

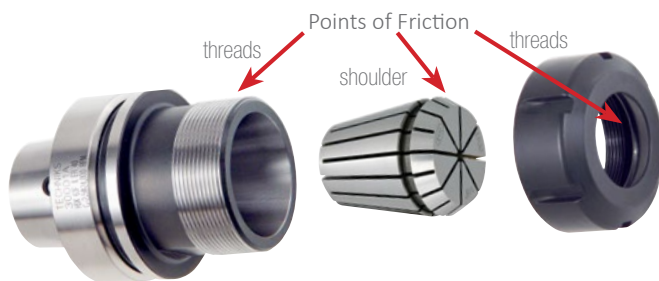


Watch the Holding Power testing video at:
<http://ow.ly/sV3UY>

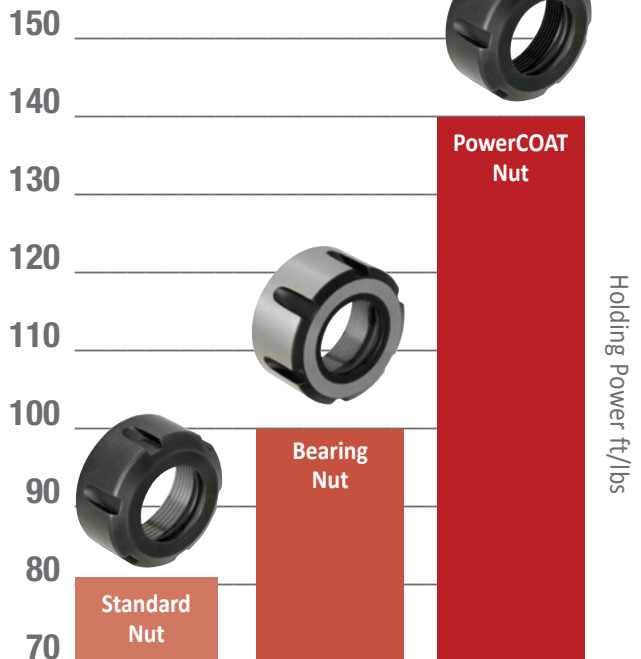
See pages 20-21 to find your PowerCOAT nut.

CNC Routers Run Better with PowerCOAT

PowerCOAT nuts greatly reduce friction between the nut, collet shoulder, and tool holder threads to increase down force on the collet, making it collapse tighter around the tool shank. This improves holding power and runout (T.I.R.). Better T.I.R. means cutting is faster and smoother and tool life is improved too.



Holding Power Testing – ft/lbs

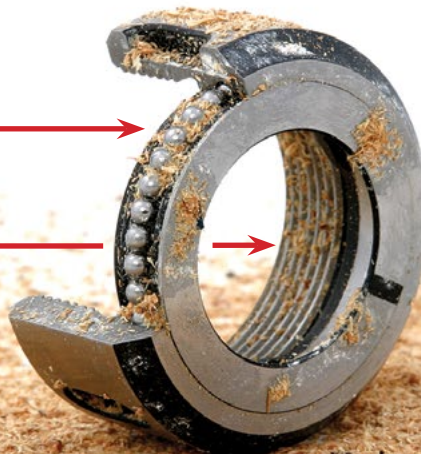


Case Study: Each nut was tightened to 70 ft/lbs recommended torque before break-free testing of holding power. The PowerCOAT nut reached 140 ft/lbs before break.

Why Bearing Nuts Are Obsolete Technology

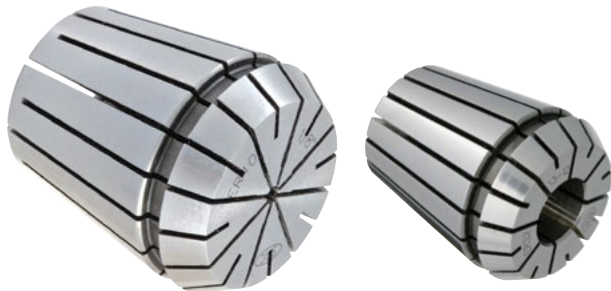
Rubber bearing seals eventually fail, then dust contaminates bearings, making them seize up.

Uncoated threads limit holding power.



Bearing nuts cannot be balanced because they have moving parts, so cutting tools wear prematurely.

Inch Size Precision ER Collets & Collet Sets



Features

- Average .0002" T.I.R.
- Collapse range: .039"
- Use with PowerCOAT nut for best holding power and cutting tool life.

Compatible with DR, RD, ESX, AR, & BR series collets.



To Order Ultra Precision Collets

Hand-selected Ultra Precision collets are guaranteed .0002" T.I.R. or better. Just place "UP" in front of the regular part number when ordering.

ER8 Inch Size Collets

| Part No. | Collapse Range | Shank |
|------------|----------------|-------|
| 04208-1/16 | .043 – .062" | 1/16" |
| 04208-1/8 | .086 – .125" | 1/8" |
| 04208-3/16 | .148 – .187" | 3/16" |

ER Inch Size Collet Sets

| Part No. | Size | Pieces | Collets Included | Fits Shank Sizes |
|----------|------|--------|----------------------|------------------|
| 04208IS | ER11 | 7 | 1/16 – 1/4" by 32nds | 1/32 - 1/4" |
| 04209IS | ER16 | 10 | 3/32 – 3/8" by 32nds | 1/16 - 3/8" |
| 04210IS | ER20 | 12 | 5/32 – 1/2" by 32nds | 1/8 - 1/2" |
| 04211IS | ER25 | 16 | 5/32 – 5/8" by 32nds | 1/8 - 5/8" |
| 04212IS | ER32 | 18 | 7/32 – 3/4" by 32nds | 3/16 - 3/4" |
| 04213IS* | ER40 | 13 | 1/8 – 1.0" by 16ths | 1/8 - 1.0" |

*ER 40 collet set does not include 13/16 & 15/16 collet sizes

ER11 Inch Size Collets

| Part No. | Collapse Range | Shank |
|------------|----------------|-------|
| 04211-1/16 | .043 – .062" | 1/16" |
| 04211-3/32 | .054 – .093" | 3/32" |
| 04211-1/8 | .086 – .125" | 1/8" |
| 04211-5/32 | .117 – .156" | 5/32" |
| 04211-3/16 | .148 – .187" | 3/16" |
| 04211-7/32 | .179 – .218" | 7/32" |
| 04211-1/4 | .211 – .250" | 1/4" |
| 04211-9/32 | .242 – .281" | 9/32" |

ER16 Inch Size Collets

| Part No. | Collapse Range | Shank |
|-------------|----------------|--------|
| 04216-1/16 | .043 – .062" | 1/16" |
| 04216-3/32 | .054 – .093" | 3/32" |
| 04216-1/8 | .086 – .125" | 1/8" |
| 04216-5/32 | .117 – .156" | 5/32" |
| 04216-3/16 | .148 – .187" | 3/16" |
| 04216-7/32 | .179 – .218" | 7/32" |
| 04216-1/4 | .211 – .250" | 1/4" |
| 04216-9/32 | .242 – .281" | 9/32" |
| 04216-5/16 | .273 – .312" | 5/16" |
| 04216-11/32 | .304 – .343" | 11/32" |
| 04216-3/8 | .336 – .375" | 3/8" |
| 04216-13/32 | .367 – .406" | 13/32" |

ER20 Inch Size Collets

| Part No. | Collapse Range | Shank |
|-------------|----------------|--------|
| 04220-1/16 | .043 – .062" | 1/16" |
| 04220-3/32 | .054 – .093" | 3/32" |
| 04220-1/8 | .086 – .125" | 1/8" |
| 04220-5/32 | .117 – .156" | 5/32" |
| 04220-3/16 | .148 – .187" | 3/16" |
| 04220-7/32 | .179 – .218" | 7/32" |
| 04220-1/4 | .211 – .250" | 1/4" |
| 04220-9/32 | .242 – .281" | 9/32" |
| 04220-5/16 | .273 – .312" | 5/16" |
| 04220-11/32 | .304 – .343" | 11/32" |
| 04220-3/8 | .336 – .375" | 3/8" |
| 04220-13/32 | .367 – .406" | 13/32" |
| 04220-7/16 | .398 – .437" | 7/16" |
| 04220-15/32 | .429 – .468" | 15/32" |
| 04220-1/2 | .461 – .500" | 1/2" |

Inch Size Precision ER Collets

ER25 Inch Size Collets

| Part No. | Inch Range | Shank |
|-------------|--------------|--------|
| 04225-3/32 | .054 – .093" | 3/32" |
| 04225-1/8 | .086 – .125" | 1/8" |
| 04225-5/32 | .117 – .156" | 5/32" |
| 04225-3/16 | .148 – .187" | 3/16" |
| 04225-7/32 | .179 – .218" | 7/32" |
| 04225-1/4 | .211 – .250" | 1/4" |
| 04225-9/32 | .242 – .281" | 9/32" |
| 04225-5/16 | .273 – .312" | 5/16" |
| 04225-11/32 | .304 – .343" | 11/32" |
| 04225-3/8 | .336 – .375" | 3/8" |
| 04225-13/32 | .367 – .406" | 13/32" |
| 04225-7/16 | .398 – .437" | 7/16" |
| 04225-15/32 | .429 – .468" | 15/32" |
| 04225-1/2 | .461 – .500" | 1/2" |
| 04225-17/32 | .492 – .531" | 17/32" |
| 04225-9/16 | .523 – .562" | 9/16" |
| 04225-19/32 | .554 – .593" | 19/32" |
| 04225-5/8 | .586 – .625" | 5/8" |
| 04225-3/4 | .711 – .750" | 3/4" |

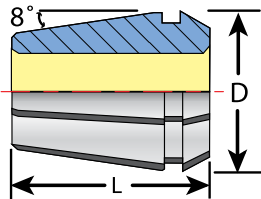
ER32 Inch Size Collets

| Part No. | Inch Range | Shank |
|-------------|--------------|--------|
| 04232-1/16 | .043 – .062" | 1/16" |
| 04232-3/32 | .054 – .093" | 3/32" |
| 04232-1/8 | .086 – .125" | 1/8" |
| 04232-5/32 | .117 – .156" | 5/32" |
| 04232-3/16 | .148 – .187" | 3/16" |
| 04232-7/32 | .179 – .218" | 7/32" |
| 04232-1/4 | .211 – .250" | 1/4" |
| 04232-9/32 | .242 – .281" | 9/32" |
| 04232-5/16 | .273 – .312" | 5/16" |
| 04232-11/32 | .304 – .343" | 11/32" |
| 04232-3/8 | .336 – .375" | 3/8" |
| 04232-13/32 | .367 – .406" | 13/32" |
| 04232-7/16 | .398 – .437" | 7/16" |
| 04232-15/32 | .429 – .468" | 15/32" |
| 04232-1/2 | .461 – .500" | 1/2" |
| 04232-17/32 | .492 – .531" | 17/32" |
| 04232-9/16 | .523 – .562" | 9/16" |
| 04232-19/32 | .554 – .593" | 19/32" |
| 04232-5/8 | .586 – .625" | 5/8" |
| 04232-21/32 | .617 – .656" | 21/32" |
| 04232-11/16 | .648 – .687" | 11/16" |
| 04232-23/32 | .679 – .718" | 23/32" |
| 04232-3/4 | .711 – .750" | 3/4" |

ER40 Inch Size Collets

| Part No. | Inch Range | Shank |
|-------------|--------------|--------|
| 04240-1/8 | .086 – .125" | 1/8" |
| 04240-5/32 | .117 – .156" | 5/32" |
| 04240-3/16 | .148 – .187" | 3/16" |
| 04240-7/32 | .179 – .218" | 7/32" |
| 04240-1/4 | .211 – .250" | 1/4" |
| 04240-9/32 | .242 – .281" | 9/32" |
| 04240-5/16 | .273 – .312" | 5/16" |
| 04240-11/32 | .304 – .343" | 11/32" |
| 04240-3/8 | .336 – .375" | 3/8" |
| 04240-13/32 | .367 – .406" | 13/32" |
| 04240-7/16 | .398 – .437" | 7/16" |
| 04240-15/32 | .429 – .468" | 15/32" |
| 04240-1/2 | .461 – .500" | 1/2" |
| 04240-17/32 | .492 – .531" | 17/32" |
| 04240-9/16 | .523 – .562" | 9/16" |
| 04240-19/32 | .554 – .593" | 19/32" |
| 04240-5/8 | .586 – .625" | 5/8" |
| 04240-21/32 | .617 – .656" | 21/32" |
| 04240-11/16 | .648 – .687" | 11/16" |
| 04240-23/32 | .679 – .718" | 23/32" |
| 04240-3/4 | .711 – .750" | 3/4" |
| 04240-25/32 | .742 – .781" | 25/32" |
| 04240-13/16 | .773 – .812" | 13/16" |
| 04240-27/32 | .807 – .843" | 27/32" |
| 04240-7/8 | .836 – .875" | 7/8" |
| 04240-29/32 | .867 – .906" | 29/32" |
| 04240-15/16 | .898 – .937" | 15/16" |
| 04240-31/32 | .929 – .968" | 31/32" |
| 04240-1 | .961 – 1.00" | 1.0" |

Use the table (below) for selecting your replacement collets. ER collets all have unique length and diameter measurements.



| ER Size | L | D |
|---------|----------------|---------------|
| ER8 | 13mm (.51") | 8.5mm (.33") |
| ER11 | 18mm (.708") | 11.5mm (.45") |
| ER16 | 27.5mm (1.08") | 17mm (.67") |
| ER20 | 31.5mm (1.24") | 21mm (.83") |
| ER25 | 34mm (1.34") | 26mm (1.02") |
| ER32 | 40mm (1.57") | 33mm (1.3") |
| ER40 | 46mm (1.81") | 41mm (1.61") |
| ER50 | 60 mm (2.36") | 52mm (2.05") |

ER50 Inch Size Collets

| Part No. | Inch Range | Shank |
|-------------|----------------|--------|
| 04250-1/2 | .461 – .500" | 1/2" |
| 04250-5/8 | .586 – .625" | 5/8" |
| 04250-3/4 | .711 – .750" | 3/4" |
| 04250-7/8 | .836 – .875" | 7/8" |
| 04250-1 | .961 – 1.00" | 1.0" |
| 04250-1-1/4 | 1.211 – 1.250" | 1-1/4" |

Metric Size Precision ER Collets and Collet Sets



Compatible with DR, RD, ESX, AR, & BR series collets.

To Order Ultra Precision Collets

Hand-selected Ultra Precision collets are guaranteed .0002" T.I.R. or better. Just place "UP" in front of the regular part number when ordering.



Features

- Average .0002" T.I.R.
- Clamping range: .039"
- Use with PowerCOAT nut for best holding power and cutting tool life.

ER Metric Collet Sets

| Part No. | Size | Pieces | Collets Included | Fits Shank Sizes |
|----------|------|--------|------------------|------------------|
| 04200MS | ER8 | 9 | 1 - 5mm by 0.5mm | .5 – 5mm |
| 04201MS | ER11 | 13 | 1 - 7mm by 0.5mm | .5 – 7mm |
| 04202MS | ER16 | 10 | 1 - 10mm by 1mm | .5 – 10mm |
| 04203MS | ER20 | 12 | 2 - 13mm by 1mm | 1.0 – 13mm |
| 04204MS | ER25 | 15 | 2 - 16mm by 1mm | 1.0 – 16mm |
| 04205MS | ER32 | 18 | 3 - 20mm by 1mm | 2 – 20mm |
| 04206MS | ER40 | 23 | 4 - 26mm by 1mm | 3 – 26mm |
| 04207MS | ER50 | 17 | 6 - 34mm by 2 mm | 5 – 34mm |

ER8 Precision Metric Collets

| Part No. | Inch Range | Shank |
|------------|--------------|-----------|
| 04208-01.0 | .019 – .039" | 0.5 – 1.0 |
| 04208-01.5 | .039 – .059" | 1.0 – 1.5 |
| 04208-02.0 | .059 – .079" | 1.5 – 2.0 |
| 04208-02.5 | .079 – .098" | 2.0 – 2.5 |
| 04208-03.0 | .098 – .118" | 2.5 – 3.0 |
| 04208-03.5 | .118 – .138" | 3.0 – 3.5 |
| 04208-04.0 | .138 – .157" | 3.5 – 4.0 |
| 04208-04.5 | .157 – .177" | 4.0 – 4.5 |
| 04208-05.0 | .177 – .197" | 4.5 – 5.0 |

ER11 Precision Metric Collets

| Part No. | Inch Range | Shank |
|------------|--------------|-----------|
| 04211-01.0 | .019 – .039" | 0.5 – 1.0 |
| 04211-01.5 | .039 – .059" | 1.0 – 1.5 |
| 04211-02.0 | .059 – .079" | 1.5 – 2.0 |
| 04211-02.5 | .079 – .098" | 2.0 – 2.5 |
| 04211-03.0 | .098 – .118" | 2.5 – 3.0 |
| 04211-03.5 | .118 – .138" | 3.0 – 3.5 |
| 04211-04.0 | .138 – .157" | 3.5 – 4.0 |
| 04211-04.5 | .157 – .177" | 4.0 – 4.5 |
| 04211-05.0 | .177 – .197" | 4.5 – 5.0 |
| 04211-05.5 | .197 – .217" | 5.0 – 5.5 |
| 04211-06.0 | .217 – .236" | 5.5 – 6.0 |
| 04211-06.5 | .236 – .256" | 6.0 – 6.5 |
| 04211-07.0 | .256 – .276" | 6.5 – 7.0 |

ER16 Precision Metric Collets

| Part No. | Inch Range | Shank |
|------------|--------------|----------|
| 04216-01 | .019 – .039" | 0.5–1 |
| 04216-01.5 | .039 – .059" | 1.0–1.5 |
| 04216-02 | .039 – .079" | 1.5–2 |
| 04216-02.5 | .059 – .098" | 1.5–2.5 |
| 04216-03 | .079 – .118" | 2–3 |
| 04216-03.5 | .098 – .137" | 2.5–3.5 |
| 04216-04 | .118 – .157" | 3–4 |
| 04216-04.5 | .137 – .177" | 3.5–4.5 |
| 04216-05 | .157 – .197" | 4–5 |
| 04216-05.5 | .177 – .216" | 4.5–5.5 |
| 04216-06 | .197 – .236" | 5–6 |
| 04216-06.5 | .216 – .255" | 5.5–6.5 |
| 04216-07 | .236 – .276" | 6–7 |
| 04216-07.5 | .255 – .295" | 6.5–7.5 |
| 04216-08 | .276 – .315" | 7–8 |
| 04216-08.5 | .295 – .334" | 7.5–8.5 |
| 04216-09 | .315 – .354" | 8–9 |
| 04216-09.5 | .334 – .374" | 8.5–9.5 |
| 04216-10 | .354 – .394" | 9–10 |
| 04216-10.5 | .374 – .413" | 9.5–10.5 |

ER20 Precision Metric Collets

| Part No. | Inch Range | Shank |
|------------|--------------|-----------|
| 04220-01 | .019 – .039" | 0.5–1 |
| 04220-01.5 | .039 – .059" | 1.0–1.5 |
| 04220-02 | .039 – .079" | 1.5–2 |
| 04220-02.5 | .059 – .098" | 1.5–2.5 |
| 04220-03 | .079 – .118" | 2–3 |
| 04220-03.5 | .098 – .137" | 2.5–3.5 |
| 04220-04 | .118 – .157" | 3–4 |
| 04220-04.5 | .137 – .177" | 3.5–4.5 |
| 04220-05 | .157 – .197" | 4–5 |
| 04220-05.5 | .177 – .216" | 4.5–5.5 |
| 04220-06 | .197 – .236" | 5–6 |
| 04220-06.5 | .216 – .255" | 5.5–6.5 |
| 04220-07 | .236 – .276" | 6–7 |
| 04220-07.5 | .255 – .295" | 6.5–7.5 |
| 04220-08 | .276 – .315" | 7–8 |
| 04220-08.5 | .295 – .334" | 7.5–8.5 |
| 04220-09 | .315 – .354" | 8–9 |
| 04220-09.5 | .334 – .374" | 8.5–9.5 |
| 04220-10 | .354 – .394" | 9–10 |
| 04220-10.5 | .374 – .413" | 9.5–10.5 |
| 04220-11 | .394 – .433" | 10–11 |
| 04220-11.5 | .413 – .452" | 10.5–11.5 |
| 04220-12 | .433 – .472" | 11–12 |
| 04220-12.5 | .452 – .492" | 11.5–12.5 |
| 04220-13 | .472 – .512" | 12–13 |
| 04220-13.5 | .492 – .531" | 12.5–13.5 |
| 04220-14 | .512 – .551" | 13–14 |

Metric Size Precision ER Collets

ER25 Precision Metric Collets

| Part No. | Inch Range | Shank mm |
|------------|--------------|----------|
| 04225-02 | .039 – .079" | 1.5–2 |
| 04225-02.5 | .059 – .098" | 2–2.5 |
| 04225-03 | .079 – .118" | 2–3 |
| 04225-03.5 | .098 – .137" | 2.5–3.5 |
| 04225-04 | .118 – .157" | 3–4 |
| 04225-05 | .157 – .197" | 4–5 |
| 04225-06 | .197 – .236" | 5–6 |
| 04225-07 | .236 – .276" | 6–7 |
| 04225-08 | .276 – .315" | 7–8 |
| 04225-09 | .315 – .354" | 8–9 |
| 04225-10 | .354 – .394" | 9–10 |
| 04225-11 | .394 – .433" | 10–11 |
| 04225-12 | .433 – .472" | 11–12 |
| 04225-13 | .472 – .512" | 12–13 |
| 04225-14 | .512 – .551" | 13–14 |
| 04225-15 | .551 – .591" | 14–15 |
| 04225-16 | .591 – .630" | 15–16 |
| 04225-17 | .630 – .669" | 16–17 |

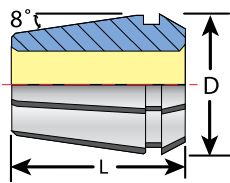
ER32 Precision Metric Collets

| Part No. | Inch Range | Shank mm |
|------------|--------------|-----------|
| 04232-03 | .079 – .118" | 2–3 |
| 04232-03.5 | .098 – .137" | 2.5–3.5 |
| 04232-04 | .118 – .157" | 3–4 |
| 04232-04.5 | .137 – .177" | 3.5–4.5 |
| 04232-05 | .157 – .197" | 4–5 |
| 04232-05.5 | .177 – .216" | 4.5–5.5 |
| 04232-06 | .197 – .236" | 5–6 |
| 04232-06.5 | .216 – .255" | 5.5–6.5 |
| 04232-07 | .236 – .276" | 6–7 |
| 04232-07.5 | .255 – .295" | 6.5–7.5 |
| 04232-08 | .276 – .315" | 7–8 |
| 04232-08.5 | .295 – .334" | 7.5–8.5 |
| 04232-09 | .315 – .354" | 8–9 |
| 04232-09.5 | .334 – .374" | 8.5–9.5 |
| 04232-10 | .354 – .394" | 9–10 |
| 04232-10.5 | .374 – .413" | 9.5–10.5 |
| 04232-11 | .394 – .433" | 10–11 |
| 04232-11.5 | .413 – .452" | 10.5–11.5 |
| 04232-12 | .433 – .472" | 11–12 |
| 04232-12.5 | .452 – .492" | 11.5–12.5 |
| 04232-13 | .472 – .512" | 12–13 |
| 04232-13.5 | .492 – .531" | 12.5–13.5 |
| 04232-14 | .512 – .551" | 13–14 |
| 04232-14.5 | .531 – .570" | 13.5–14.5 |
| 04232-15 | .551 – .591" | 14–15 |
| 04232-15.5 | .570 – .610" | 14.5–15.5 |
| 04232-16 | .591 – .630" | 15–16 |
| 04232-16.5 | .610 – .649" | 15.5–16.5 |
| 04232-17 | .630 – .669" | 16–17 |
| 04232-17.5 | .649 – .688" | 16.5–17.5 |
| 04232-18 | .669 – .709" | 17–18 |
| 04232-18.5 | .688 – .728" | 17.5–18.5 |
| 04232-19 | .709 – .748" | 18–19 |
| 04232-19.5 | .728 – .767" | 18.5–19.5 |
| 04232-20 | .748 – .787" | 19–20 |
| 04232-21 | .787 – .827" | 20–21 |

ER40 Precision Metric Collets

| Part No. | Inch Range | Shank mm |
|----------|---------------|----------|
| 04240-04 | .118 – .157" | 3–4 |
| 04240-05 | .157 – .197" | 4–5 |
| 04240-06 | .197 – .236" | 5–6 |
| 04240-07 | .236 – .276" | 6–7 |
| 04240-08 | .276 – .315" | 7–8 |
| 04240-09 | .315 – .354" | 8–9 |
| 04240-10 | .354 – .394" | 9–10 |
| 04240-11 | .394 – .433" | 10–11 |
| 04240-12 | .433 – .472" | 11–12 |
| 04240-13 | .472 – .512" | 12–13 |
| 04240-14 | .512 – .551" | 13–14 |
| 04240-15 | .551 – .591" | 14–15 |
| 04240-16 | .591 – .630" | 15–16 |
| 04240-17 | .630 – .669" | 16–17 |
| 04240-18 | .669 – .709" | 17–18 |
| 04240-19 | .709 – .748" | 18–19 |
| 04240-20 | .748 – .787" | 19–20 |
| 04240-21 | .787 – .827" | 20–21 |
| 04240-22 | .827 – .866" | 21–22 |
| 04240-23 | .866 – .906" | 22–23 |
| 04240-24 | .906 – .945" | 23–24 |
| 04240-25 | .945 – .984" | 24–25 |
| 04240-26 | .984 – 1.024" | 25–26 |

Use the table (below) for selecting your replacement collets. ER collets all have unique length and diameter measurements.



| Size | L | D |
|------|----------------|---------------|
| ER8 | 13mm (.51") | 8.5mm (.33") |
| ER11 | 18mm (.708") | 11.5mm (.45") |
| ER16 | 27.5mm (1.08") | 17mm (0.67") |
| ER20 | 31.5mm (1.24") | 21mm (0.83") |
| ER25 | 34mm (1.34") | 26mm (1.02") |
| ER32 | 40mm (1.57") | 33mm (1.3") |
| ER40 | 46mm (1.81") | 41mm (1.61") |
| ER50 | 60mm (2.36") | 52mm (2.05") |

ER50 Precision Metric Collets

| Part No. | Inch Range | Shank mm |
|----------|----------------|----------|
| 04250-06 | .197 – .236" | 5–6 |
| 04250-07 | .236 – .276" | 6–7 |
| 04250-08 | .276 – .315" | 7–8 |
| 04250-09 | .315 – .354" | 8–9 |
| 04250-10 | .354 – .394" | 9–10 |
| 04250-12 | .394 – .472" | 10–12 |
| 04250-14 | .472 – .551" | 12–14 |
| 04250-16 | .551 – .630" | 14–16 |
| 04250-18 | .630 – .709" | 16–18 |
| 04250-20 | .709 – .787" | 18–20 |
| 04250-22 | .787 – .866" | 20–22 |
| 04250-24 | .866 – .945" | 22–24 |
| 04250-26 | .945 – 1.024" | 24–26 |
| 04250-28 | 1.024 – 1.102" | 26–28 |
| 04250-30 | 1.102 – 1.181" | 28–30 |
| 04250-32 | 1.181 – 1.259" | 30–32 |
| 04250-34 | 1.259 – 1.338" | 32–34 |

DNA – Dead Nuts Accurate Collets (For Small Size Tools)

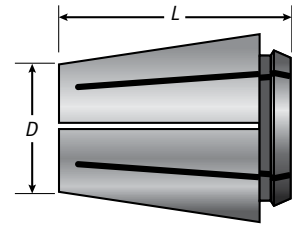


Features

- .0002" T.I.R. extends cutting tool life!
- Best collet for tools 1/8" (6mm) and smaller
- More rigid and more accurate than ER, but works with your ER holders

DNA Dimensions

| Collet | L | D |
|--------|-------|-------|
| DNA 11 | .673 | .460 |
| DNA 16 | .945 | .654 |
| DNA 20 | 1.201 | .815 |
| DNA 25 | 1.339 | 1.010 |
| DNA 32 | 1.571 | 1.301 |
| DNA 40 | 1.776 | 1.617 |



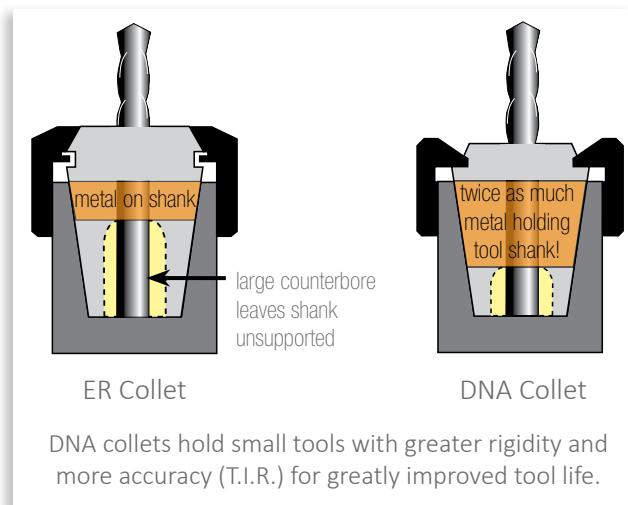
DNA collets are compatible with ETS holders

DNA 11 Dead Nuts Accurate Collets

| Part No. | Shank Size inch/mm | Collapse Range inch / mm |
|------------|------------------------------|--------------------------|
| 05952-02 | 5/64" / 1.5 - 2mm | .059" - .079" / .5mm |
| 05952-03 | 7/64" / 2.5 - 3mm | .098" - .118" / .5mm |
| 05952-03.5 | 1/8" / 3 - 3.5mm | .118" - .138" / .5mm |
| 05952-04 | 5/32" / 3.5 - 4mm | .138" - .157" / .5mm |
| 05952-05 | 3/16" / 4.5 - 5mm | .177" - .197" / .5mm |
| 05952-06 | 15/64" / 5.5 - 6mm | .216" - .236" / .5mm |
| 05952-1/8 | exact size collet: 1/8" | .105" - .125" / .5mm |
| 05952-3/16 | exact size collet: 3/16" | .167" - .187" / .5mm |
| 05952-1/4 | exact size collet: 1/4" | .230" - .250" / .5mm |
| 2011.0000 | DNA 11 nut M14 x .75" | |
| 04608 | DNA 11 collet wrench | |
| DNA11TWA | DNA 11 torque wrench adapter | |

DNA 16 Dead Nuts Accurate Collets

| Part No. | Shank Size inch/mm | Range inch/mm |
|------------|--------------------------|-----------------------|
| 05954-0.3 | .2 - .3mm | .007" - .011" / .10mm |
| 05954-0.4 | 1/64" / .3 - .4mm | .011" - .015" / .10mm |
| 05954-0.5 | .4 - .5mm | .015" - .019" / .10mm |
| 05954-0.6 | .5 - .6mm | .019" - .023" / .10mm |
| 05954-0.8 | 1/32" / .7 - .8mm | .027" - .031" / .10mm |
| 05954-1.0 | .9 - 1.0mm | .035" - .039" / .10mm |
| 05954-1.2 | 3/64" / 1.1 - 1.2mm | .043" - .047" / .10mm |
| 05954-1.25 | 1.0 - 1.25mm | .039" - .049" / .25mm |
| 05954-1.5 | 1.25 - 1.5mm | .049" - .059" / .25mm |
| 05954-1.75 | 1/16" / 1.5 - 1.75mm | .059" - .068" / .25mm |
| 05954-02 | 5/64" / 1.75 - 2mm | .068" - .078" / .25mm |
| 05954-2.25 | 2 - 2.25mm | .078" - .088" / .25mm |
| 05954-2.5 | 3/32" / 2.25 - 2.5mm | .088" - .098" / .25mm |
| 05954-03 | 2.5 - 3mm | .098" - .118" / .5mm |
| 05954-3.5 | 1/8" / 3 - 3.5mm | .118" - .138" / .5mm |
| 05954-04 | 5/32" / 3.5 - 4mm | .137" - .157" / .5mm |
| 05954-4.5 | 4 - 4.5mm | .157" - .177" / .5mm |
| 05954-05 | 3/16" / 4 - 5mm | .157" - .197" / 1.0mm |
| 05954-06 | 7/32" / 5 - 6mm | .196" - .236" / 1.0mm |
| 05954-07 | 1/4" / 6 - 7mm | .236" - .275" / 1.0mm |
| 05954-08 | 5/16" / 7 - 8mm | .275" - .314" / 1.0mm |
| 05954-09 | 11/32" / 8 - 9mm | .314" - .354" / 1.0mm |
| 05954-10 | 3/8" / 9 - 10mm | .354" - .392" / 1.0mm |
| 05954-1/8 | exact size collet: 1/8" | .105" - .125" / .5mm |
| 05954-3/16 | exact size collet: 3/16" | .147" - .187" / 1.0mm |
| 05954-1/4 | exact size collet: 1/4" | .210" - .25" / 1.0mm |
| 05954-3/8 | exact size collet: 3/8" | .335 - .375" / 1.0mm |



For Best Results Use DNA Nuts

DNA 20 Dead Nuts Accurate Collets

| Part No. | Shank Size inch/mm | Range inch/mm |
|------------|--|-----------------------|
| 05956-03 | 2.5 - 3mm | .098" - .118" / .5mm |
| 05956-3.5 | 1/8" / 3 - 3.5mm | .118" - .138" / .5mm |
| 05956-04 | 5/32" / 3.5 - 4mm | .137" - .157" / .5mm |
| 05956-05 | 3/16" / 4 - 5mm | .157" - .197" / 1.0mm |
| 05956-06 | 7/32" 5 - 6mm | .197" - .236" / 1.0mm |
| 05956-1/8 | exact size collet: 1/8" | .105" - .125" / .5mm |
| 05956-3/16 | exact size collet: 3/16" | .147" - .187" / 1.0mm |
| 05956-1/4 | exact size collet: 1/4" | .210" - .250" / 1.0mm |
| 05956-3/8 | exact size collet: 3/8" | .335" - .375" / 1.0mm |
| 2020.0000 | DNA 20 nut, M25 x 1.5" x O.D. 32mm | |
| 2020.0000C | DNA 20 coolant nut, uses ER20 rings on page 24 | |
| DNA20W | DNA 20 collet wrench | |
| DNA20TWA | DNA 20 torque wrench adapter | |

DNA 32 Dead Nuts Accurate Collets

| Part No. | Shank Size inch/mm | Range inch/mm |
|------------|--|-----------------------|
| 05958-03 | 2.5 - 3mm | .098" - .118" / .5mm |
| 05958-3.5 | 1/8" / 3 - 3.5mm | .118" - .138" / .5mm |
| 05958-04 | 5/32" / 3.5 - 4mm | .137" - .157" / .5mm |
| 05958-05 | 3/16" / 4 - 5mm | .157" - .197" / 1.0mm |
| 05958-06 | 7/32" 5 - 6mm | .197" - .236" / 1.0mm |
| 05958-1/8 | exact size collet: 1/8" | .105" - .125" / .5mm |
| 05958-3/16 | exact size collet: 3/16" | .147" - .187" / 1.0mm |
| 05958-1/4 | exact size collet: 1/4" | .210" - .250" / 1.0mm |
| 05958-3/8 | exact size collet: 3/8" | .335" - .375" / 1.0mm |
| 05958-1/2 | exact size collet: 1/2" | .460" - .5" / 1.0mm |
| 05958-3/4 | exact size collet: 3/4" | .710" - .75" / 1.0mm |
| 05958-13 | exact size collet: 13mm | .472" - .512" / 1.0mm |
| 05958-20 | exact size collet: 20m | .748" - .787" / 1.0mm |
| 1132.0000 | DNA 32 nut, M40 x 1.5" x O.D. 47.5mm | |
| 1132.0000C | DNA 32 coolant nut, uses ER25 rings on page 24 | |
| DNA32W | DNA 32 collet wrench | |
| DNA32TWA | DNA 32 torque wrench adapter | |



DNA nuts feature PowerCOAT for 75% more holding power and best tool life.

DNA 16 Nuts, Sealed Nuts, Wrenches & TWAs

| Part No. | Description |
|-----------|---|
| 2016-2000 | DNA16 Mini Nut - M19 x 1.0" x O.D. 25mm |
| 27116 | M22 x 1.5 nut, , O.D. 27mm |
| 27216 | M22 x 1.5 nut 1/8" o-ring |
| 27116-30 | 3.0 - 2.5mm sealed nut, O.D. 27mm |
| 27116-40 | 4.0 - 3.5mm sealed nut, O.D. 27mm |
| 27116-45 | 4.5 - 4.0mm sealed nut, O.D. 27mm |
| 27116-50 | 5.0 - 4.5mm sealed nut, O.D. 27mm |
| 27116-55 | 5.5 - 5mm sealed nut, O.D. 27mm |
| 27116-60 | 6.0 - 5.5mm sealed nut, O.D. 27mm |
| 27116-65 | 6.5 - 6mm sealed nut, O.D. 27mm |
| DNA16W | DNA 16 collet wrench |
| DNA16TWA | DNA 16 torque wrench adapter |
| 894-22 | DNA 16 mini nut wrench |

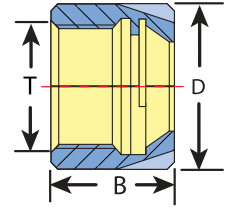


PowerCOAT ER Collet Nuts



Features

- 40% more holding than bearing nuts
- Balanced to 25,000 RPM
- Better rigidity and T.I.R. (runout)



PowerCOAT nuts greatly reduce friction between the nut, collet shoulder, and toolholder threads to increase down force on the collet, making it collapse tighter around the tool shank. This improves holding power and runout (T.I.R.). Better T.I.R. means cutting is faster and smoother and tool life is improved.

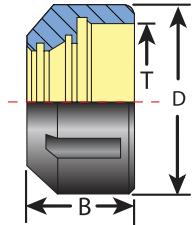
PowerCOAT Ultra High-Speed ER Nuts

| Part No. | Description | D | B | T | Wrench | Max Speed | Recommended Torque |
|----------|--------------------------|--------|--------|------------|--------|-----------|--------------------|
| 46111 | ER11 high speed hex nut | 19mm | 11.8mm | M14 x 0.75 | 04608 | 70,000 | 20 ft/lbs |
| 46116 | ER16 high speed slot nut | 27.5mm | 18.0mm | M22 x 1.5 | 04613 | 65,000 | 42 ft/lbs |
| 46120 | ER20 high speed slot nut | 35mm | 19.5mm | M25 x 1.5 | 04614 | 60,000 | 59 ft/lbs |
| 46125 | ER25 high speed slot nut | 42mm | 20.5mm | M32 x 1.5 | 04615 | 55,000 | 77 ft/lbs |
| 46132 | ER32 high speed slot nut | 50mm | 23.0mm | M40 x 1.5 | 04616 | 50,000 | 100 ft/lbs |
| 46140 | ER40 high speed slot nut | 63mm | 26.0mm | M50 x 1.5 | 04617 | 40,000 | 130 ft/lbs |



Features

- 40% more holding than bearing nuts
- Balanced to 25,000 RPM
- Better rigidity and T.I.R. (runout)



Use with our dust seal that snaps into the nut to seal and protect your collets and cutting tools. Match the ER collet size and shank size to the dust seal specifications (see pg. 28).

PowerCOAT ER Dust Seal Nuts

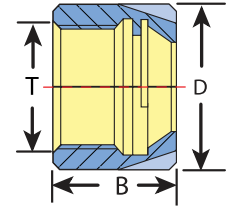
| Part No. | Description | D | B | T | Wrench | Recommended Torque |
|----------|-----------------------|----|------|---------|--------|--------------------|
| 41616 | ER16 HS Dust Seal Nut | 32 | 22.5 | M22x1.5 | 04613 | 42 ft/lbs |
| 41620 | ER20 HS Dust Seal Nut | 35 | 24 | M25x1.5 | 04614 | 59 ft/lbs |
| 41625 | ER25 HS Dust Seal Nut | 42 | 25 | M32x1.5 | 04615 | 77 ft/lbs |
| 41632 | ER32 HS Dust Seal Nut | 50 | 27.5 | M40x1.5 | 04616 | 100 ft/lbs |
| 41640 | ER40 HS Dust Seal Nut | 63 | 30.7 | M50x1.5 | 04617 | 130 ft/lbs |

PowerCOAT ER Collet Nuts



Features

- For minimum nose O.D. applications
- Increases holding power by 75%
- High speed nuts balanced to 20,000 RPM



Use ER High Speed mini nuts for applications where speed exceeds 10,000 RPMs. They are balanced to G2.5 for 20,000 RPMs. For collet holders and multi-spindle heads where center or shoulder distances are important.

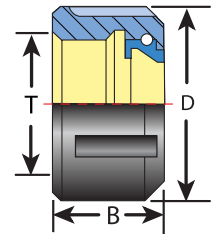
PowerCOAT ER High Speed Mini Nuts

| Part No. | Description | D | B | T | Wrench | Recommended Torque |
|----------|------------------------------------|------|--------|------------|--------|--------------------|
| 33108 | ER8 high speed mini nut | 12mm | 11mm | M10 x 0.75 | 04620 | 7 ft/lbs |
| 33111 | ER11 high speed mini nut | 16mm | 12mm | M13 x 0.75 | 04621 | 12 ft/lbs |
| 33116 | ER16 high speed mini nut | 22mm | 18mm | M19 x 1.0 | 04622 | 20 ft/lbs |
| 33120 | ER20 high speed mini nut | 28mm | 19.5mm | M24 x 1.0 | 04623 | 22 ft/lbs |
| 33125 | ER25 high speed mini nut | 35mm | 21mm | M30 x 1.0 | 04624 | 26 ft/lbs |
| 33125-L | ER25 high speed left-hand mini nut | 35mm | 21mm | M30 x 1.0 | 04624 | 26 ft/lbs |



Features

- Bearings reduce friction between collet and nut
- Holds 40% tighter than standard bearing nuts
- Helps prolong cutter life



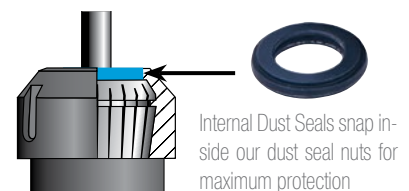
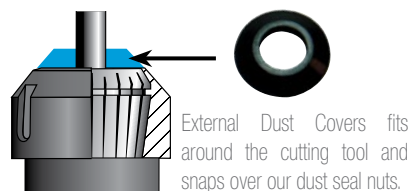
PowerCOAT ER Bearing Nuts

| Part No. | Description | D | B | T | Wrench | Recommended Torque |
|----------|---------------------------------|--------|------|---------|--------|--------------------|
| 29116 | Power Coat ER 16 Bearing Nut | 27.5mm | 18mm | M22x1.5 | 04609 | 42 ft/lbs |
| 29132 | Power Coat ER 32 HS Bearing Nut | 50mm | 25mm | M40x1.5 | 04616 | 100 ft/lbs |



External and Internal Dust Protection

Techniks Internal Dust Seals and External Dust Covers provide the ultimate protection against unwanted particles from entering your collet. Eliminating dust build-up effectively prevents costly failures, reducing downtime caused by clogged collets. (see pgs. 24-25)



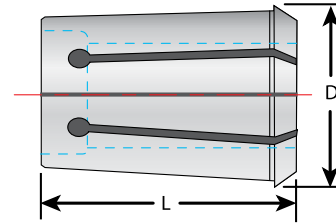
SYOZ / EOC (DIN 6388) Perske Style



Features

- T.I.R. (runout) .0004"
- Collapse range: 1/64"
- Made from high-carbon steel

These collets and collet nuts conform to DIN 6388 standards. Snap collet into the nut before screwing the nut onto the spindle or holder.



SYOC / EOC Collet Dimensions

| Part No. | L | D |
|----------|------|--------|
| SYOZ20 | 34mm | 20mm |
| SYOZ25 | 52mm | 35mm |
| EOC 08 | 26mm | 14.4mm |
| EOC16 | 40mm | 25.5mm |

SYOZ20

Various metric and inch sizes available from stock.

SYOZ25 Collets

| Part No. | Shank Size |
|------------|------------|
| 83868-1/8 | 1/8" |
| 83868-3/16 | 3/16" |
| 83868-1/4 | 1/4" |
| 83868-5/16 | 5/16" |
| 83868-3/8 | 3/8" |
| 83868-7/16 | 7/16" |
| 83868-1/2 | 1/2" |
| 83868-9/16 | 9/16" |
| 83868-5/8 | 5/8" |
| 83868-3/4 | 3/4" |
| 83868-7/8 | 7/8" |
| 83868-1 | 1.0" |
| 83868-10 | 10mm |
| 83868-16 | 16mm |
| 83868-20 | 20mm |
| 83868-25 | 25mm |

EOC8 Collets

| Part No. | Shank Size |
|-------------|------------|
| 83508-0.109 | 0.109" |
| 83508-1/8 | 1/8" |
| 83508-3/16 | 3/16" |
| 83508-1/4 | 1/4" |
| 03508-17/64 | 17/64" |
| 83508-3/8 | 3/8" |
| 83508-5/16 | 5/16" |
| 03508-03 | 3mm |
| 03508-04 | 4mm |
| 03508-08 | 8mm |
| 03508-L | LH nut |
| 83508-NUT | Nut |

EOC 12 Collets

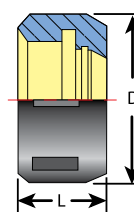
| Part No. | Shank Size |
|------------|------------|
| 83512-1/8 | 1/8" |
| 83512-3/16 | 3/16" |
| 83512-1/4 | 1/4" |
| 83512-5/16 | 5/16" |
| 83512-3/8 | 3/8" |
| 83512-7/16 | 7/16" |
| 83512-1/2 | 1/2" |
| 83512-10 | 10mm |

EOC16 Collets

| Part No. | Shank Size |
|--------------|---------------------|
| 83531-1/8 | 1/8" |
| 83531-3/16 | 3/16" |
| 83531-1/4 | 1/4" |
| 83531-3/8 | 3/8" |
| 83531-5/16 | 5/16" |
| 83531-7/16 | 7/16" |
| 83531-1/2 | 1/2" |
| 83531-9/16 | 9/16" |
| 83531-5/8 | 5/8" |
| 83531-02 | 2mm |
| 83531-03 | 3mm |
| 83531-04 | 4mm |
| 83531-05 | 5mm |
| 83531-06 | 6mm |
| 83531-07 | 7mm |
| 83531-08 | 8mm |
| 83531-09 | 9mm |
| 83531-10 | 10mm |
| 83531-11 | 11mm |
| 83531-12 | 12mm |
| 83531-13 | 13mm |
| 83531-14 | 14mm |
| 83531-15 | 15mm |
| 83531-16 | 16mm |
| 03636-NUT | Nut |
| 03636-WRENCH | Wrench (Hook 40-42) |

DIN 6388 Nuts and Wrenches

| Part No. | Description | L | D | Wrench |
|-----------|-----------------------------|----|----|--------|
| 83508-NUT | EOC08 nut | 19 | 30 | - |
| 03636-NUT | EOC16 nut | 24 | 43 | 03636 |
| 83634 | SYOZ20/EOC 12 nut | 20 | 35 | 22220 |
| 83634-L | SYOZ20/EOC 12 left-hand nut | 20 | 35 | 22220 |
| 83632 | SYOZ25 PowerCOAT nut | 30 | 60 | 03691 |



Shoda Collets and Nuts / Heian® Collets



Old Style



Piggyback Style



New Style



Super Shoda

Features

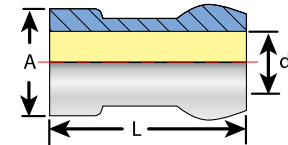
- Precision ground accuracy
- Heat-treated carbon steel
- Individually inspected

Our Shoda collets are the most accurate in the industry. We use heat-treated high carbon bearing steel and a Swiss grinding technique that ensures accuracy.

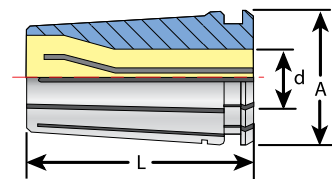
Shoda Collets

Dimensions are in millimeters unless otherwise indicated.

| Part Number | Description | A | d | L |
|--------------|-------------------------------------|----|-------|----|
| SD-20mm-.250 | Shoda 20mm (old style) 1/4" collet | 20 | .250" | 52 |
| SD-20mm-.312 | Shoda 20mm (old style) 5/16" collet | 20 | .312" | 52 |
| SD-20mm-.375 | Shoda 20mm (old style) 3/8" collet | 20 | .375" | 52 |
| SD-20mm-.500 | Shoda 20mm (old style) 1/2" collet | 20 | .500" | 52 |
| SD-20mm-.625 | Shoda 20mm (old style) 5/8" collet | 20 | .625" | 52 |
| SD-C001-.125 | Shoda Piggyback 1/8" collet | 16 | .125" | 52 |
| SD-C001-.187 | Shoda Piggyback 3/16" collet | 16 | .187" | 52 |
| SD-C001-.250 | Shoda Piggyback 1/4" collet | 16 | .250" | 52 |
| SD-C001-.312 | Shoda Piggyback 5/16" collet | 16 | .312" | 52 |
| SD-C001-.375 | Shoda Piggyback 3/8" collet | 16 | .375" | 52 |
| SD-C001-.500 | Shoda Piggyback 1/2" collet | 16 | .500" | 52 |
| SD-C015-.125 | Shoda 24mm (new style) 1/8" collet | 24 | .125" | 52 |
| SD-C015-.250 | Shoda 24mm (new style) 1/4" collet | 24 | .250" | 52 |
| SD-C015-.312 | Shoda 24mm (new style) 5/16" collet | 24 | .312" | 52 |
| SD-C015-.375 | Shoda 24mm (new style) 3/8" collet | 24 | .375" | 52 |
| SD-C015-.500 | Shoda 24mm (new style) 1/2" collet | 24 | .500" | 52 |
| SD-C015-.625 | Shoda 24mm (new style) 5/8" collet | 24 | .625" | 52 |
| SD-C015-.750 | Shoda 24mm (new style) 3/4" collet | 24 | .750" | 52 |
| SS-22-1/4 | Super Shoda 1/4" collet | 23 | 1/4" | 40 |
| SS-22-3/8 | Super Shoda 3/8" collet | 23 | 3/8" | 40 |
| SS-22-10 | Super Shoda 10mm collet | 23 | 10 | 40 |
| SS-22-1/2 | Super Shoda 1/2" collet | 23 | 1/2" | 40 |



Shoda SD collet



Super Shoda SS collet

Super Shoda nut

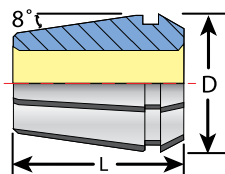
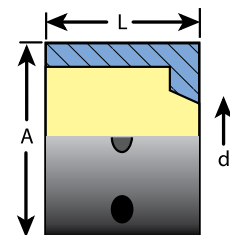


New style nut

Shoda Collet Nuts

Dimensions are in millimeters.

| Part Number | Description | A | d | L |
|---------------|-----------------------------|----|------|----|
| SD-C001-Nut | Shoda piggy back collet nut | 36 | 14 | 30 |
| SD-20mm-Nut | Shoda old style collet nut | 41 | 19 | 30 |
| SD-C015-Nut | Shoda new style collet nut | 46 | 22 | 30 |
| SS22-Nut | Super Shoda collet nut | 36 | 12.5 | 15 |
| SS22-Ext -Nut | Super Shoda extended nut | 36 | 12.5 | 30 |



Heian® Collets

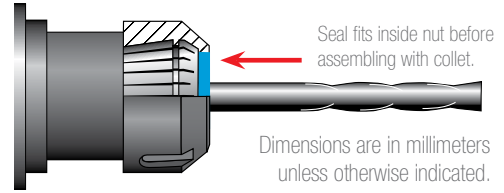
| Part Number | d | L |
|--------------|------------------|----------------|
| HN-24mm | 24mm (Back side) | 55mm (2.16") |
| HN-29mm | 29mm (Back side) | 55mm (2.16") |
| HN-Piggyback | 22mm (Back side) | 36.5mm (1.43") |

Internal Dust Seals



Features

- Eliminates cleaning collets!
- Extends the life of your collets
- Use with Dust Seal Nuts (pg.20)



Internal Dust Seals

| ER16 | ER20 | ER25 | ER32 | ER40 | Metric Shank | Inch Shank |
|--------------|--------------|--------------|--------------|--------------|--------------|------------|
| 08516 - 03.5 | 08520 - 03.5 | 08525 - 03.5 | 08532 - 03.5 | 08540 - 03.5 | 3.5 - 3.0 | 1/8" |
| 08516 - 04.0 | 08520 - 04.0 | 08525 - 04.0 | 08532 - 04.0 | 08540 - 04.0 | 4.0 - 3.5 | 5/32" |
| 08516 - 04.5 | 08520 - 04.5 | 08525 - 04.5 | 08532 - 04.5 | 08540 - 04.5 | 4.5 - 4.0 | 11/64" |
| 08516 - 05.0 | 08520 - 05.0 | 08525 - 05.0 | 08532 - 05.0 | 08540 - 05.0 | 5.0 - 4.5 | 3/16" |
| 08516 - 05.5 | 08520 - 05.5 | 08525 - 05.5 | 08532 - 05.5 | 08540 - 05.5 | 5.5 - 5.0 | 13/64" |
| 08516 - 06.0 | 08520 - 06.0 | 08525 - 06.0 | 08532 - 06.0 | 08540 - 06.0 | 6.0 - 5.5 | 7/32" |
| 08516 - 06.5 | 08520 - 06.5 | 08525 - 06.5 | 08532 - 06.5 | 08540 - 06.5 | 6.5 - 6.0 | 1/4" |
| 08516 - 07.0 | 08520 - 07.0 | 08525 - 07.0 | 08532 - 07.0 | 08540 - 07.0 | 7.0 - 6.5 | 17/64" |
| 08516 - 07.5 | 08520 - 07.5 | 08525 - 07.5 | 08532 - 07.5 | 08540 - 07.5 | 7.5 - 7.0 | 9/32" |
| 08516 - 08.0 | 08520 - 08.0 | 08525 - 08.0 | 08532 - 08.0 | 08540 - 08.0 | 8.0 - 7.5 | 5/16" |
| 08516 - 08.5 | 08520 - 08.5 | 08525 - 08.5 | 08532 - 08.5 | 08540 - 08.5 | 8.5 - 8.0 | 21/64" |
| 08516 - 09.0 | 08520 - 09.0 | 08525 - 09.0 | 08532 - 09.0 | 08540 - 09.0 | 9.0 - 8.5 | 11/32" |
| 08516 - 09.5 | 08520 - 09.5 | 08525 - 09.5 | 08532 - 09.5 | 08540 - 09.5 | 9.5 - 9.0 | 3/8" |
| 08516 - 10.0 | 08520 - 10.0 | 08525 - 10.0 | 08532 - 10.0 | 08540 - 10.0 | 10.0 - 9.5 | 25/64" |
| | 08520 - 10.5 | 08525 - 10.5 | 08532 - 10.5 | 08540 - 10.5 | 10.5 - 10.0 | 13/32" |
| | 08520 - 11.0 | 08525 - 11.0 | 08532 - 11.0 | 08540 - 11.0 | 11.0 - 10.5 | 27/64" |
| | 08520 - 11.5 | 08525 - 11.5 | 08532 - 11.5 | 08540 - 11.5 | 11.5 - 11.0 | 7/16" |
| | 08520 - 12.0 | 08525 - 12.0 | 08532 - 12.0 | 08540 - 12.0 | 12.0 - 11.5 | 15/32" |
| | 08520 - 12.5 | 08525 - 12.5 | 08532 - 12.5 | 08540 - 12.5 | 12.5 - 12.0 | 31/64" |
| | 08520 - 13.0 | 08525 - 13.0 | 08532 - 13.0 | 08540 - 13.0 | 13.0 - 12.5 | 1/2" |
| | | 08525 - 13.5 | 08532 - 13.5 | 08540 - 13.5 | 13.5 - 13.0 | 17/32" |
| | | 08525 - 14.0 | 08532 - 14.0 | 08540 - 14.0 | 14.0 - 13.5 | 35/64" |
| | | 08525 - 14.5 | 08532 - 14.5 | 08540 - 14.5 | 14.5 - 14.0 | 9/16" |
| | | 08525 - 15.0 | 08532 - 15.0 | 08540 - 15.0 | 15.0 - 14.5 | 37/64" |
| | | 08525 - 15.5 | 08532 - 15.5 | 08540 - 15.5 | 15.5 - 15.0 | 19/32" |
| | | 08525 - 16.0 | 08532 - 16.0 | 08540 - 16.0 | 16.0 - 15.5 | 5/8" |
| | | | 08532 - 16.5 | 08540 - 16.5 | 16.5 - 16.0 | 41/64" |
| | | | 08532 - 17.0 | 08540 - 17.0 | 17.0 - 16.5 | 21/32" |
| | | | 08532 - 17.5 | 08540 - 17.5 | 17.5 - 17.0 | 11/16" |
| | | | 08532 - 18.0 | 08540 - 18.0 | 18.0 - 17.5 | 45/64" |
| | | | 08532 - 18.5 | 08540 - 18.5 | 18.5 - 18.0 | 23/32" |
| | | | 08532 - 19.0 | 08540 - 19.0 | 19.0 - 18.5 | 3/4" |
| | | | 08532 - 19.5 | 08540 - 19.5 | 19.5 - 19.0 | 49/64" |
| | | | 08532 - 20.0 | 08540 - 20.0 | 20.0 - 19.5 | 25/32" |
| | | | | 08540 - 20.5 | 20.5 - 20.0 | 51/64" |
| | | | | 08540 - 21.0 | 21.0 - 20.5 | 13/16" |
| | | | | 08540 - 21.5 | 21.5 - 21.0 | 27/32" |
| | | | | 08540 - 22.0 | 22.0 - 21.5 | 55/64" |
| | | | | 08540 - 22.5 | 22.5 - 22.0 | 7/8" |
| | | | | 08540 - 23.0 | 23.0 - 22.5 | 29/32" |
| | | | | 08540 - 23.5 | 23.5 - 23.0 | 59/64" |
| | | | | 08540 - 24.0 | 24.0 - 23.5 | 15/16" |
| | | | | 08540 - 24.5 | 24.5 - 24.0 | 61/64" |
| | | | | 08540 - 25.0 | 25.0 - 24.5 | 31/32" |
| | | | | 08540 - 25.5 | 25.5 - 25.0 | 1" |

External Dust Covers For Tool Shanks



Simple and effective dust covers prevent costly failures and reduce downtime by keeping unwanted particles from entering the collet pocket where they can clog collets, hampering performance.

Keeping your tool holder clean insures proper balance, maximizes grip on tool shank, and reduces downtime spent cleaning out collets during tool changes.



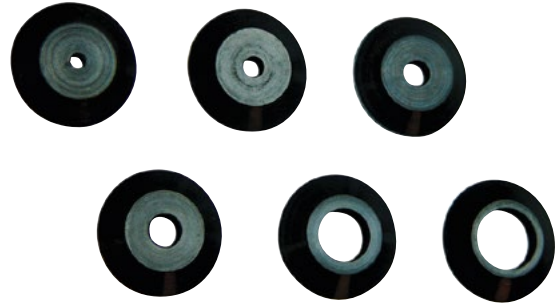
For 3/16" thru 3/4" tool shanks.
Works with: TG75, TG100, ER25, ER32, ER40, SYOZ25, SD-CO15, SD-20MM
Do not slide dust cover over cutting edge of tool or you may damage the dust cover.

External Dust Covers

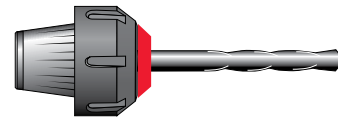
| Part No. | Description |
|-----------|---------------------------------|
| DC32-3/16 | Dust cover for 3/16" tool shank |
| DC32-1/4 | Dust cover for 1/4" tool shank |
| DC32-5/16 | Dust cover for 5/16" tool shank |
| DC32-3/8 | Dust cover for 3/8" tool shank |
| DC32-1/2 | Dust cover for 1/2" tool shank |
| DC32-5/8 | Dust cover for 5/8" tool shank |
| DC32-3/4 | Dust cover for 3/4" tool shank |

Features

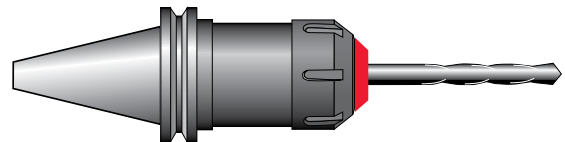
- Eliminates cleaning collets!
- Extends the life of your collets
- Extends tool life by maintaining T.I.R.



1. Slide dust cover on cutting tool shank from the bottom. Do not slide dust cover over cutting edges.



2. Install cutting tool into collet and nut.



3. Install assembly into toolholder and tighten collet nut to proper torque using a torque wrench.

Dust Cover Sets

| Part No. | Description |
|-------------|--------------------------------------|
| DC32-3/16-5 | 3/16" Dust Covers, 5 pieces |
| DC32-1/4-5 | 1/4" Dust Covers, 5 pieces |
| DC32-5/16-5 | 5/16" Dust Covers, 5 pieces |
| DC32-3/8-5 | 3/8" Dust Covers, 5 pieces |
| DC32-1/2-5 | 1/2" Dust Covers, 5 pieces |
| DC32-5/8-5 | 5/8" Dust Covers, 5 pieces |
| DC32-3/4-5 | 3/4" Dust Covers, 5 pieces |
| DC32-5D | 1 each, 1/4", 3/8", 1/2", 5/8", 3/4" |

AirPRO – Dust Evacuation Nut



balanced to
24,000 RPM at G2.5

Features

- Stop losing time & money on clean-up
- AirPRO removes 85% - 100% of dust
- Easy-to-use, just replace your collet nut

AirPRO removes dust “in the cut” so it works great removing dust from nested cuts and slatwall too!

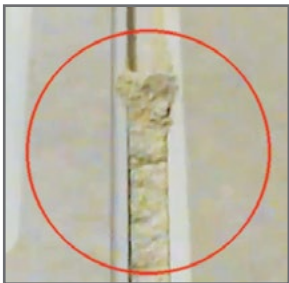
AirPRO works with your existing cutting tools and toolholders.

AirPRO’s turbine action creates a powerful up-draft that evacuates dust into your machine’s collection hood before it has a chance to settle on your working surface.

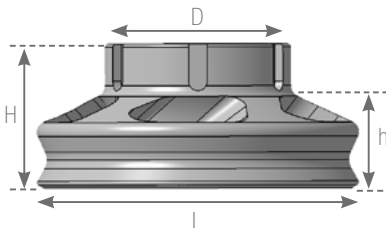
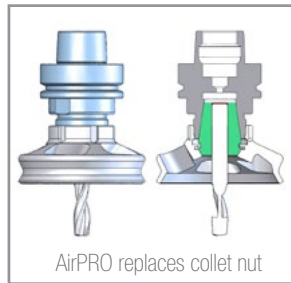
With AirPRO, you’ll spend much less time cleaning up and much more time cutting. The AirPRO typically pays for itself in less than 30 days thanks to the increased production and reduced clean-up time.

Additional benefits include less machine maintenance needed because less dust is landing on electrical and pneumatic systems. Your employees will appreciate the cleaner environment, and the risk of dust combustion is greatly reduced.

Problem: dust settles in cut



Solution: AirPRO



Always tighten the AirPRO to proper torque specification using a torque wrench and tightening stand.



Watch the demo video at:
<http://ow.ly/NOft3023mg5>

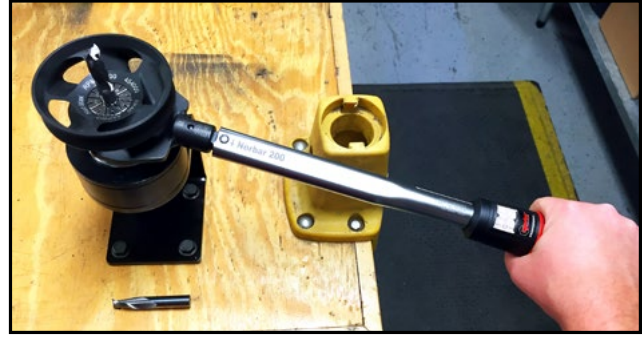
AirPRO for ER32, ER40 or SYOZ25 Chucks

| Part No. | Description | Min RPM | Max RPM | D | L | H | h | Weight |
|----------|---------------|---------|---------|-------|-------|-------|-------|--------|
| 453200 | ER32 AirPRO | 18,000 | 24,000 | 1.97" | 3.77" | 1.77" | 1.24" | 1.1 lb |
| 454000 | ER40 AirPRO | 18,000 | 24,000 | 2.48" | 4.06" | 1.81" | 1.13" | 1.4 lb |
| 452500 | SYOZ25 AirPRO | 18,000 | 24,000 | 2.36" | 3.92" | 1.97" | 1.13" | 1.3 lb |

AirPRO Operating Parameters

| Part No. | Description | Optimal Gap | Max Chip Load | Wrench | Adapter | Torque |
|----------|---------------|-------------|---------------|--------|----------|-----------|
| 453200 | ER32 AirPRO | .070" | .020" | 200TH | 04604-32 | 100 lb.ft |
| 454000 | ER40 AirPRO | .070" | .020" | 200TH | 04605-40 | 130 lb.ft |
| 452500 | SYOZ25 AirPRO | .070" | .020" | 200TH | 03690-25 | 90 lb.ft |

AirPRO – Setup Instructions

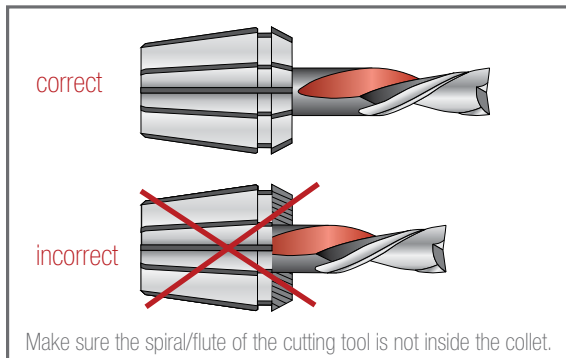


1. Every time you setup an AirPRO inspect the AirPRO, toolholder, collet, and cutting tool for signs of wear or other damage. Do not use worn or damaged tools with the AirPRO.
2. Remove all dust or other contaminants from the AirPRO, ER collet and toolholder, making sure the threads are clean.
3. Snap the collet into the AirPRO.
4. For proper holder power, insert the cutter as far as it will go into the collet, keeping its spiral/flute from entering the collet. (See diagram below)
6. Hand tighten the AirPRO, collet, and cutter assembly into your toolholder.
7. Insert the assembly into a tightening stand and tighten to correct specification using a torque wrench. See other side for torque specifications.

Recommended Cutting Tool Depth

For optimal performance setup the AirPRO and cutting tool depth to maintain .070" gap between the face of the AirPRO and the material surface.

| Material Depth | L Min | L Max | H Min | H Max |
|----------------|--------|--------|--------|--------|
| 1/4" | 2 1/2" | 2 1/2" | 1/2" | 1" |
| 3/8" | 2 1/2" | 2 1/2" | 1/2" | 1 1/8" |
| 12mm | 2 1/2" | 3" | 5/8" | 1 1/4" |
| 1/2" | 2 1/2" | 3" | 5/8" | 1 1/4" |
| 5/8" - 16mm | 3" | 3" | 3/4" | 1 3/8" |
| 18mm | 3" | 3" | 7/8" | 1 1/2" |
| 3/4" - 19mm | 3" | 3" | 1" | 1 5/8" |
| 20mm | 3" | 3" | 1" | 1 5/8" |
| 1" - 25mm | 3" | 3 1/2" | 1 1/8" | 1 3/4" |
| 1 1/8" | 3 1/2" | 3 1/2" | 1 1/4" | 1 7/8" |
| 1 1/4" - 32 mm | 3-1/2" | 3 1/2" | 1 3/8" | 2" |



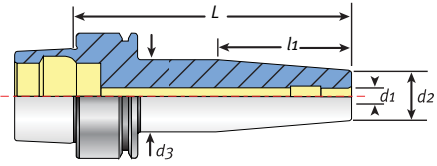
5. Use the cutter pre-set jig (sold separately) to accurately set the cutter to the correct depth to maintain .070" clearance between AirPRO and material. Clearance from .060" up to .200" is acceptable, but .070" is optimal.

HSK40E, 50E Precision ShrinkFIT Holders



Features

- Maximum T.I.R. only 0.0001"
- Balanced 25,000 RPM at G2.5
- Comes with coolant-thru set screw installed



Techniks Certified for accuracy and balance

HSK40E Inch Size ShrinkFIT Holders

| Part No. | Description | d1 | d2 | d3 | L | l1 | thread | coolant screw |
|----------|-----------------------------|-------|------|-------|-------|-------|------------|---------------|
| 39001-E | HSK40E x 1/8" I.D. - 3.54" | 1/8" | .36" | .47" | 3.54" | .79" | - | 16081C-20 |
| 39002-E | HSK40E x 3/16" I.D. - 3.54" | 3/16" | .63" | .71" | 3.54" | .79" | - | 16081C-20 |
| 39004-E | HSK40E x 1/4" I.D. - 3.54" | 1/4" | .71" | 1.06" | 3.54" | 1.42" | M5 x 0.8P | 16080C-20 |
| 39006-E | HSK40E x 5/16" I.D. - 3.54" | 5/16" | .83" | 1.06" | 3.54" | 1.42" | M6 x 1.0P | 16081C-20 |
| 39008-E | HSK40E x 3/8" I.D. - 3.54" | 3/8" | .94" | 1.26" | 3.54" | 1.65" | M8 x 1.25P | 16082C-20 |

HSK40E Metric Size ShrinkFIT Holders

| Part No. | Description | d1 | d2 | d3 | L | l1 | thread | coolant screw |
|----------|---------------------------|------|------|------|------|------|------------|---------------|
| 39082-E | HSK40E x 3mm I.D. - 80mm | 3mm | 9mm | 18mm | 80mm | 18mm | - | 16081C-20 |
| 39084-E | HSK40E x 4mm I.D. - 80mm | 4mm | 10mm | 22mm | 80mm | 20mm | - | 16081C-20 |
| 39088-E | HSK40E x 6mm I.D. - 80mm | 6mm | 21mm | 27mm | 80mm | 36mm | M5 x 0.8P | 16080C-20 |
| 39090-E | HSK40E x 8mm I.D. - 80mm | 8mm | 21mm | 27mm | 80mm | 36mm | M6 x 1.0P | 16081C-20 |
| 39092-E | HSK40E x 10mm I.D. - 80mm | 10mm | 24mm | 32mm | 85mm | 42mm | M8 x 1.25P | 16082C-20 |

HSK50E ShrinkFIT Holders

| Part No. | Description | d1 | d2 | d3 | L | l1 | thread | coolant screw |
|----------|-----------------------------|-------|-------|-------|-------|-------|-------------|---------------|
| 39014-E | HSK50E x 1/8" I.D. - 3.15" | 1/8" | .36" | .87" | 3.15" | .79" | M6 x 1.0P | 16081C-20 |
| 39016-E | HSK50E x 3/16" I.D. - 3.54" | 3/16" | .43" | .87" | 3.54" | .79" | M6 x 1.0P | 16081C-20 |
| 39018-E | HSK50E x 1/4" I.D. - 3.54" | 1/4" | .71" | 1.06" | 3.54" | 1.42" | M5 x 0.8P | 16080C-20 |
| 39020-E | HSK50E x 5/16" I.D. - 3.54" | 5/16" | .83" | 1.06" | 3.54" | 1.42" | M6 x 1.0P | 16081C-20 |
| 39022-E | HSK50E x 3/8" I.D. - 3.54" | 3/8" | .94" | 1.26" | 3.54" | 1.65" | M8 x 1.25P | 16082C-20 |
| 39024-E | HSK50E x 1/2" I.D. - 3.54" | 1/2" | 1.10" | 1.34" | 3.54" | 1.85" | M10 x 1.5P | 16083C-20 |
| 39025-E | HSK50E x 5/8" I.D. - 3.54" | 5/8" | 1.06" | 1.34" | 3.54" | .97" | M12 x 1.75P | 16085C-20 |



Features

- Smaller nose diameter (d2)
- Maximum T.I.R. only 0.0001"
- Balanced 25,000 RPM at G2.5

HSK40E SlimLINE ShrinkFIT Holders

| Part No. | Description | d1 | d2 | d3 | L | l1 | thread | coolant screw |
|----------|--------------------------------------|-------|------|-------|-------|-------|------------|---------------|
| 99528 | HSK40E x 1/8" I.D. - 2.36" SlimLINE | 1/8" | .36" | .63" | 2.36" | .78" | M6 x 1.0P | 16081C-20 |
| 99538 | HSK40E x 3/16" I.D. - 2.36" SlimLINE | 3/16" | .43" | .69" | 2.36" | .78" | M6 x 1.0P | 16081C-20 |
| 99548 | HSK40E x 1/4" I.D. - 2.36" SlimLINE | 1/4" | .47" | .81" | 2.36" | 1.42" | M5 x 0.8P | 16080C-20 |
| 99568 | HSK40E x 3/8" I.D. - 2.36" SlimLINE | 3/8" | .63" | .94" | 2.36" | 1.65" | M8 x 1.25P | 16082C-20 |
| 99588 | HSK40E x 1/2" I.D. - 2.36" SlimLINE | 1/2" | .71" | 1.06" | 2.36" | 1.85" | M10 x 1.5P | 16083C-20 |

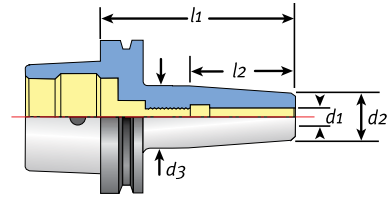
Use SlimLINE holders for finish passes where small nose diameter (d2) tooling is required.

HSK63F & ISO30 ShrinkFIT Toolholders



Features

- Maximum T.I.R. only 0.0001"
- Balanced 25,000 RPM at G2.5
- Comes with coolant-thru set screw installed



Techniks Certified for accuracy and balance

HSK63F Inch ShrinkFIT Toolholders

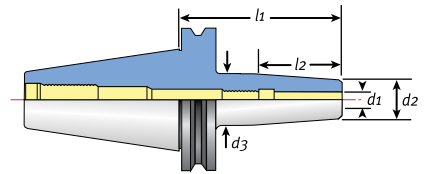
| Part No. | Description | d1 | d2 | d3 | l1 | l2 | thread | coolant screw |
|----------|-----------------------------|-------|-------|-------|-------|-------|-------------|---------------|
| 71250 | HSK63F x 1/4" I.D. - 3.15" | 1/4" | .83" | 1.06" | 3.15" | 1.42" | M5 x 0.8P | 16080C-20 |
| 71312 | HSK63F x 5/16" I.D. - 3.74" | 5/16" | .79" | 1.06" | 3.74" | 1.42" | M6 x 1.0P | 16081C-20 |
| 71375 | HSK63F x 3/8" I.D. - 3.74" | 3/8" | .94" | 1.26" | 3.74" | 1.65" | M8 x 1.25P | 16082C-20 |
| 71500 | HSK63F x 1/2" I.D. - 3.74" | 1/2" | .94" | 1.26" | 3.74" | 1.85" | M10 x 1.5P | 16083C-20 |
| 71625 | HSK63F x 5/8" x 3.74" | 5/8" | 1.06" | 1.34" | 3.74" | 1.97" | M12 x 1.75P | 16085C-20 |
| 71750 | HSK63F x 3/4" I.D. - 3.94" | 3/4" | 1.42" | 1.65" | 3.94" | 2.05" | M16 x 2.0P | 16089C-20 |
| 71100 | HSK63F x 1.0" I.D. - 4.53" | 1" | 1.42" | 1.65" | 4.53" | 2.28" | M20 x 2.0P | 16091C-20 |

HSK63F Metric ShrinkFIT Toolholders

| Part No. | Description | d1 | d2 | d3 | l1 | l2 | thread | coolant screw |
|----------|----------------------------|------|------|------|-------|------|------------|---------------|
| 71010 | HSK63F x 20mm I.D. - 100mm | 20mm | 33mm | 42mm | 100mm | 47mm | M16 x 2.0P | 16089C-20 |
| 71011 | HSK63F x 25mm I.D. - 115mm | 25mm | 44mm | 53mm | 115mm | 58mm | M20 x 2.0P | 16091C-20 |



ShrinkFIT toolholders provide concentric clamping force of 10,000 lbs. or more directly on the cutting tool shank to reduce T.I.R. (runout). This is why operators are able to run faster and cutters last longer too.



ISO30 ShrinkFIT Toolholders

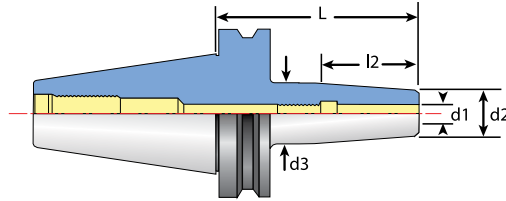
| Part No. | Description | d1 | d2 | d3 | l1 | l2 | thread | coolant screw |
|----------|-------------------|------|----|----|----|----|-------------|---------------|
| 64250 | ISO30 x 1/4" - 80 | 1/4" | 21 | 27 | 80 | 39 | M5 x 0.8P | 16082C-20 |
| 64375 | ISO30 x 3/8" - 80 | 3/8" | 24 | 32 | 80 | 42 | M8 x 1.25P | 16082C-20 |
| 64500 | ISO30 x 1/2" - 80 | 1/2" | 28 | 32 | 80 | 47 | M10 x 1.5P | 16083C-20 |
| 64625 | ISO30 x 5/8" - 80 | 5/8" | 28 | 32 | 80 | 50 | M12 x 1.75P | 16085C-20 |
| 64750 | ISO30 x 3/4" - 80 | 3/4" | 33 | 42 | 80 | 52 | M16 x 2.0P | 16089C-20 |
| 64110 | ISO30 x 1.0" - 4" | 1.0" | 46 | 53 | 4" | 58 | M20 x 2.0P | 16091C-20 |

BT30 & 40 Precision ShrinkFIT Holders



Features

- Maximum T.I.R. only 0.0001"
- Balanced 25,000 RPM at G2.5
- Comes with coolant-thru set screw installed



BT30 ShrinkFIT Holders

| Part No. | Description | d1 | d2 | d3 | L | l2 | thread | coolant screw |
|----------|-----------------------|------|-------|-------|----|-------|-------------|---------------|
| 67250 | BT30 x 1/4" I.D. - 3" | 1/4" | 0.82" | 1.06" | 3" | 1.42" | M5 x 0.8P | 16082C-20 |
| 67375 | BT30 x 3/8" I.D. - 3" | 3/8" | 0.94" | 1.25" | 3" | 1.42" | M8 x 1.25P | 16082C-20 |
| 67500 | BT30 x 1/2" I.D. - 3" | 1/2" | 0.94" | 1.25" | 3" | 1.85" | M10 x 1.5P | 16083C-20 |
| 67625 | BT30 x 5/8" I.D. - 3" | 5/8" | 1.06" | 1.33" | 3" | 1.97" | M12 x 1.75P | 16085C-20 |
| 67750 | BT30 x 3/4" I.D. - 3" | 3/4" | 1.29" | 1.62" | 3" | 2.04" | M16 x 2.0P | 16089C-20 |

BT40 ShrinkFIT Holders Inch Size

| Part No. | Description | d1 | d2 | d3 | L | l2 | thread | coolant screw |
|------------|---------------------------|--------|-------|-------|----|-------|-------------|---------------|
| 39110 | BT40 x 3/16" I.D. - 3.54 | 3/16" | .43" | .75" | 6" | .79" | M6 x 1.0P | 16081C-20 |
| 39111 | BT40 x 1/4" I.D. - 3.54 | 1/4" | .82" | 1.06" | 6" | 1.42" | M5 x 0.8P | 16080C-20 |
| 39113 | BT40 x 3/8" I.D. - 3.54 | 3/8" | .94" | 1.25" | 6" | 1.65" | - | 16082C-20 |
| 39114 | BT40 x 1/2" I.D. - 3.54 | 1/2" | 1.10" | 1.34" | 6" | 1.85" | M10 x 1.5P | 16083C-20 |
| 19029 | BT40 x 5/8" I.D. - 3.54 | 5/8" | 1.06" | 1.34" | 6" | 1.96" | M12 x 1.75P | 16089C-20 |
| 39115 | BT40 x 3/4" I.D. - 3.54 | 3/4" | 1.29" | 1.65" | 6" | 2.04" | M16 x 2.0P | 16085C-20 |
| 39117 | BT40 x 1.0" I.D. - 3.54 | 1.0" | 1.73" | 2.08" | 6" | 2.28" | M20 x 2.0P | 16089C-20 |
| 39119-4.13 | BT40 x 1-1/4" I.D. - 4.13 | 1-1/4" | 1.81" | 2.08" | 6" | 2.28" | M20 x 2.0P | 16091C-20 |

BT40 ShrinkFIT Holders Metric Size

| Part No. | Description | d1 | d2 | d3 | L | l2 | thread | coolant screw |
|-----------|--------------------------|------|------|------|-------|------|------------|---------------|
| 19136-135 | BT40 x 6mm I.D. - 135mm | 6mm | 12mm | 26mm | 135mm | 36mm | M5 x 0.8P | 16080C-20 |
| 19138 | BT40 x 8mm I.D. - 90mm | 8mm | 21mm | 26mm | 90mm | 36mm | M6 x 1.0P | 16081C-20 |
| 19138-135 | BT40 x 8mm I.D. - 135mm | 8mm | 14mm | 36mm | 135mm | 36mm | M6 x 1.0P | 16081C-20 |
| 19140 | BT40 x 10mm I.D. - 90mm | 10mm | 24mm | 29mm | 90mm | 36mm | M8 x 1.25P | 16082C-20 |
| 19140-135 | BT40 x 10mm - I.D. 135mm | 10mm | 16mm | 36mm | 135mm | 42mm | M8 x 1.25P | 16082C-20 |
| 19142 | BT40 x 12mm - I.D. 90mm | 12mm | 24mm | 29mm | 90mm | 47mm | M10 x 1.5P | 16083C-20 |
| 19142-135 | BT40 x 12mm - I.D. 135mm | 12mm | 15mm | 29mm | 135mm | 47mm | M10 x 1.5P | 16083C-20 |

ShrinkFIT Universal Toolholder Extensions

Extensions turn any toolholder into a ShrinkFIT Holder!



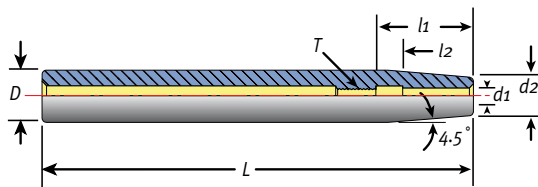
For extended lengths
or tight clearances

Features

- Extend the reach of your existing holders
- Better rigidity and T.I.R. extends tool life
- Works with any 5/8", 3/4", or 1" holder



ShrinkFIT extensions work great with our 00400 ShrinkSTATION.



| Part No. | Description | D | d1 | d2 | L | l1 | l2 | T |
|----------|---------------------------------------|------|-------|-------|------|------|-------|----------|
| 86062 | 5/8" O.D., x 1/8" I.D. - 6.3" length | 5/8" | 1/8" | .394" | 6.3" | - | .39" | - |
| 86064 | 5/8" O.D., x 3/16" I.D. - 6.3" length | 5/8" | 3/16" | .394" | 6.3" | - | .39" | - |
| 86066 | 5/8" O.D., x 1/4" I.D. - 6.3" length | 5/8" | 1/4" | .394" | 6.3" | 1.42 | 1.02" | M6x1.0 |
| 86076 | 3/4" O.D., x 1/4" I.D. - 6.3" length | 3/4" | 1/4" | .551" | 6.3" | 1.42 | 1.02" | M6x1.0 |
| 86080 | 3/4" O.D., x 3/8" I.D. - 6.3" length | 3/4" | 3/8" | .551" | 6.3" | 1.65 | 1.26" | M8x1.25 |
| 86090 | 1.0" O.D., x 3/8" I.D. - 6.3" length | 1.0" | 3/8" | .79" | 6.3" | 1.65 | 1.26" | M8x1.25 |
| 86092 | 1.0" O.D., x 1/2" I.D. - 6.3" length | 1.0" | 1/2" | .79" | 6.3" | 1.85 | 1.46" | M10x1.5 |
| 86094 | 1.0" O.D., x 5/8" I.D. - 6.3" length | 1.0" | 5/8" | .87" | 6.3" | 1.97 | 1.57" | M12x1.75 |

ShrinkSTATION – ShrinkFIT Machine

NEW

Features

- Changes tools in 6–8 seconds (1/2" shank)
- Easy-to-Use touch screen controls
- Automatic cooling using 90 PSI shop air

The ShrinkSTATION is an ideal solution for job shops or manufacturing facilities that need a reliable shrink fit machine that can handle practically all sizes and types of toolholders, and is affordable.

This machine features many of the same processor and control technologies used in our ShrinkPRO machines. Every component of this machine from the industrial touch-screen interface, to the motor driven transport rail and the heavy-duty stainless steel base, is designed for reliable performance and ease-of-use in demanding environments.

Ease-of-Use

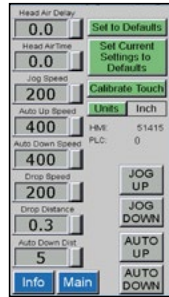
- Use the touch screen to select your shank size, and the machine displays the default cycle time
- Change preset defaults for your tool changes
- Jog feature for easy height adjustments
- Tool moves to the optimum position for heating automatically



Designed and built in Indianapolis, IN.



select tool shank



change default

The ShrinkSTATION includes everything you need to perform shrink fit tool changes on CAT40, CAT50, BT30, BT40, ISO30, HSK40, 50, 63 and 100, C4, C5, C6 toolholders with gauge lengths up to 22" (560mm).

It is designed to be used with carbide cutting tools from 1/8" up to 1-1/4" (3mm to 32mm).

NOTE: For shrinking tools made from high-speed steel (HSS) we recommend Model 00600 ShrinkPRO or 00500 Quencher machines.

ShrinkSTATION Includes:

| Part No. | Description | QTY. |
|------------|--|------|
| 00400 | induction heat shrink fit machine | 1 |
| 00165 | induction stop ring (3-5mm) | 1 |
| 00166 | induction stop ring (6-12mm) | 1 |
| 00167 | induction stop ring (14-20mm) | 1 |
| 00301-01.4 | induction stop ring (25-32mm) | 1 |
| 00151 | toolholder adapter - 30 taper | 1 |
| 00152 | toolholder adapter - 40 taper & C6 | 1 |
| 00153 | toolholder adapter - 50 taper | 1 |
| 00157 | toolholder adapter - HSK40 & C4 | 1 |
| 00158 | toolholder adapter - HSK50 & C5 | 1 |
| 00159 | toolholder adapter - HSK63 | 1 |
| | transport adapter for extended lengths | 1 |
| 26139-L | thermal insulated glove | 1 |

| Part No. | Description | Tool Change | Cooling | Rating | L x D x H | Weight |
|----------|---|-------------|-----------|--------------------|---------------|--------|
| 00400 | induction heat, air cool shrink fit machine | 6–8 seconds | 2 minutes | 1 phase, 220V, 15A | 16"x 16"x 22" | 60 lbs |

ShrinkPRO – High-Performance ShrinkFIT



20" wide x 20" deep x 37" tall

Features

- Change 1/8" shanks in 2 seconds. 1" in 6 seconds
- Flexible power requirements – Operates on 208V up to 480V
- Automatic cooling cycle by compressed air

Features and Flexibility

This machine truly has it all; touchscreen simplicity, state-of-the-art induction heating for fast tool changes, and automatic cooling cycle using your shop air.

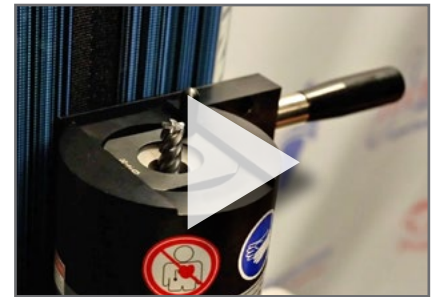
Easy-to-Use Touchscreen



Select your shank size and ShrinkPRO sets heating duration



View the video.
<http://ow.ly/sVv3S>



Scan the QR code to view the demo video.

Included With ShrinkPRO Machine

| Part No. | Description | QTY. |
|---------------|-------------------|------|
| TAR-BT30 | 30 taper adapter | 1 |
| TAR-CAT40 | 40 taper adapter | 1 |
| TAR-C6 | 50 taper adapter | 1 |
| TAR-HSK40 | HSK40 adapter | 1 |
| TAR-HSK50 | HSK50 adapter | 1 |
| TAR-HSK63-100 | HSK63/100 adapter | 1 |
| 26139-L | insulated glove | 1 |

The ShrinkPRO is a great choice for dedicated tool changing stations or cellular workflows, because it can operate on voltages ranging from 208VAC thru 480VAC.

| Part No. | Description | Tool Change | Rating | L x D x H | Ship Wt. |
|----------|-------------------|-------------|--------------------|---------------|----------|
| 00600 | ShrinkPRO machine | 2–6 seconds | 3 phase, 480V, 20A | 20"x 20"x 37" | 84 lbs |

For HSK32 Adapter order Part No. 00156. For HSK80 Adapter order Part No. 00160.

The Quencher Cools Tools in Only 30 Seconds



Designed and built in Indianapolis, IN.

fast, safe, induction heat



36.75" wide x 24" deep x 71" tall

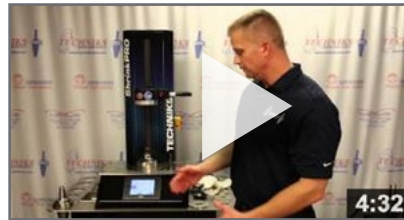
Features

- Change tool and back to spindle in under 1 minute!
- Auto-Quench means you never touch hot toolholder
- Flexible – Operates on 208V up to 480V

The Quencher ShrinkFIT machine features a liquid cooling cycle that is 250% faster than air-cooled units. Cooling time is to less than 30 seconds!

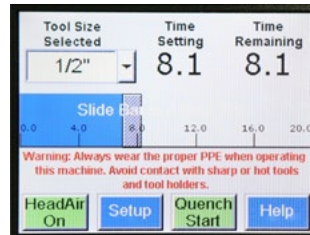
The hot tool is immersed in the Quench Tank and the cool tool is returned to the shrink position in only 30 seconds and automatically dried using shop air.

The Quencher is a great choice for dedicated tool changing stations or cellular workflows, because it can operate on voltages from 208 - 480VAC.



View the demo video.
<http://ow.ly/u3JPK>

Touchscreen Simplicity



Select your shank size and the Quencher sets heating duration. Touch the Quench button to start cooling cycle.

The Quencher includes induction rings for 1/8" up to 1-1/4" shank sizes, tool seats for BT30/CAT30, BT40/CAT40, BT50/CAT50, and HSK40, 50, 63 and 100. No plumbing is required and the Quencher comes loaded with coolant.

| Description | Tool Change | Electrical Supply | Ship Wt. |
|----------------|-------------|--------------------|----------|
| 00500 Quencher | 2-5 seconds | 3 phase, 480V, 20A | 660 lbs. |



"Never Down" Guarantee

We stand behind our products 100% and expect them to out-perform the competition. Purchase any Techniks ShrinkFIT machine with confidence knowing that we can provide a back-up if yours should ever need servicing!

Replacement machine is on loan until original is repaired and back in service. Replacement machines are limited to standard configuration. Power requirements may vary from original machine. Replacements are subject to availability. Extended Warranties are also available.

Tool Life Comparison: ER Chucks vs. ShrinkFIT

Our side-by-side testing shows you the differences.



TEST CONDITIONS

This trial was performed on a CNC Vertical Machining Center with a CT 40 taper. Identical spindle speeds, feed rates, material conditions and endmills were utilized to isolate the performance of these tool holding technologies. The test cuts were in 4140 Prehard (30-32 Rc) using 3 flute uncoated carbide center cutting endmills. The identical tool paths involved a variety of cutting directions.



ER chuck



ShrinkFIT tool

TEST RESULTS

Tool Life

The most significant comparison between these tool holding technologies is in the area of tool life. The endmill in the ShrinkFIT toolholder showed dramatically less wear (photos) compared to the endmill used in the collet chuck (note the fractured surface).

Our results back up other reports that ShrinkFIT allows 4 to 7 times the tool life of other tool holding technologies. In our tests there was significant fretting on the taper of the ER collet chuck while there was virtually no fretting on the ShrinkFIT holder (visible in photo above). This was attributed to the superior wear characteristics of H-13 tool steel over ER8620.

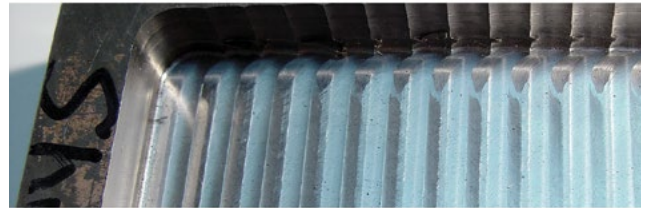


ER chuck wear detail



ShrinkFIT wear detail

Shrink-Fit surface finish



ER collet chuck surface finish



Cutting Ability

During our four machining test passes of .125" depth of cut, the ShrinkFIT toolholder required less spindle load than the ER collet chuck toolholder. The increased rigidity of ShrinkFIT created a more balanced chip load during cutting. This was observed in a better machining sound and visual improvement in surface finish (above) and absence of fretting on the ShrinkFIT toolholder (below)



ER chuck fretting

CONCLUSION

While both technologies have their place, machining using ShrinkFIT is a significant improvement over ER collet chuck technology. ShrinkFIT has advantages in tool life, cutting ability, surface finish, and produces less wear-and tear on the toolholder taper and spindle bearings.

High Precision Hydraulic Toolholders



Use hydraulic chucks for all types of drilling, routing, and profiling operations.

Features

- *Balanced to 25,000 RPM at G2.5*
- *T.I.R. 0.0001"*
- *Precision ground to AT3 standard*

Runout Accuracy 0.0001"

T.I.R. measured at 3xD

Our hydraulic holders extend tool life and improve surface finish because T.I.R. is only 0.0001".



Quick & Easy Tool Changes

Fast tool changes are performed with just a twist of a wrench (included). You can change tools in-spindle without the need for setup equipment.



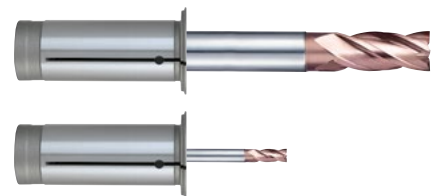
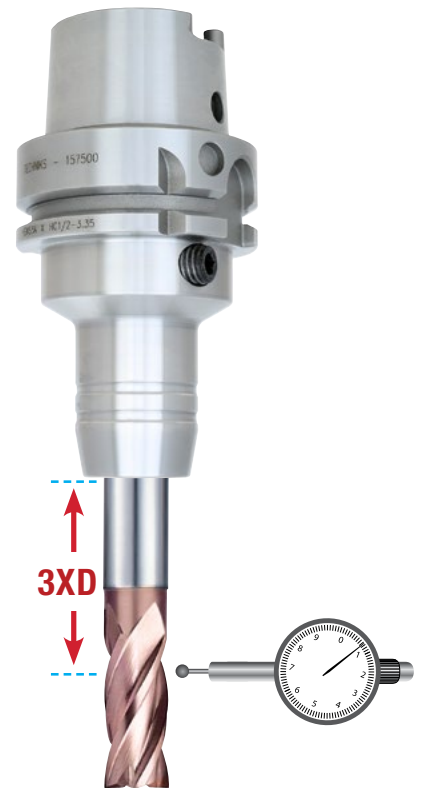
Extended Length Holders

Extended length hydraulic holders are a great choice any time you need smooth, accurate cutting at extended lengths.



Precision Reduction Sleeves

Use sleeves for fast tool changes. Reduction sleeves fit shank sizes 1/8" up to 5/8" (3 - 16mm)



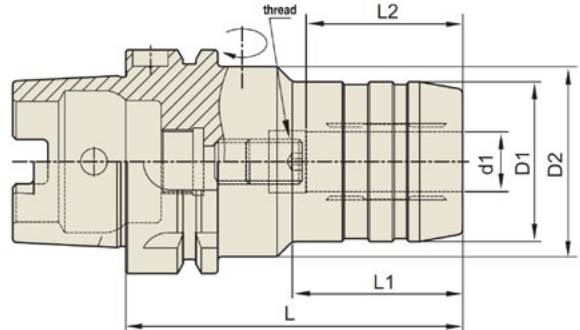
HSK63F Hydraulic Holders and Reduction Sleeves



Hydraulic Chucks provide powerful, vibration-free cutting in all materials. Hydros are a good choice when you need T.I.R. of 0.0001" and high holding power. Use cutting tools with a H6 shank tolerance.

Features

- *Balanced to 25,000 RPM at G2.5*
- *T.I.R. 0.0001" measured from taper to bore*
- *Taper precision ground to AT3 standard*



HSK63F Hydraulic Toolholders

| Part No. | Description | d1 | D1 | D2 | L | L1 | L2 | Thread |
|----------|-------------------|-------------|------|------|-------|------|------|---------|
| 160750 | HSK63F-HC19.05-85 | 19mm (.75") | 42mm | 50mm | 85mm | 43mm | 42mm | M16x1.0 |
| 160100 | HSK63F-HC25.4-120 | 25mm (1.0") | 57mm | 63mm | 120mm | 59mm | 40mm | M16x1.0 |

High-Precision Reduction Sleeves



Features

- *Made from high-grade tool steel*
- *Precision ground accuracy*
- *Fits tools 1/8" up to 5/8" (3-20mm)*

The slots in these high-precision sleeves are cut using ultra-precision EDM (electronic wire discharge) technology, ensuring the most accurate I.D. possible, and providing strong clamping force.

Assemble the cutting tool into the sleeve first, then insert the assembly into the hydraulic toolholder. Do not load sleeve and collet separately. Turn the clamping screw clockwise to apply clamping pressure.

NOTE: Do not turn clamping screw unless there is a sleeve or cutting tool in the toolholder, or damage may occur.

Metric Size Sleeves

| Part No. | Description |
|----------|--------------------------|
| 820030 | HK20-03 Reduction Sleeve |
| 820040 | HK20-04 Reduction Sleeve |
| 820050 | HK20-05 Reduction Sleeve |
| 820060 | HK20-06 Reduction Sleeve |
| 820080 | HK20-08 Reduction Sleeve |
| 820100 | HK20-10 Reduction Sleeve |
| 820120 | HK20-12 Reduction Sleeve |
| 820140 | HK20-14 Reduction Sleeve |
| 820160 | HK20-16 Reduction Sleeve |

Inch Size Sleeves

| Part No. | Description |
|----------|-----------------------------|
| 625108 | HK3/4-1/8 Reduction Sleeve |
| 625316 | HK3/4-3/16 Reduction Sleeve |
| 625104 | HK3/4-1/4 Reduction Sleeve |
| 625516 | HK3/4-5/16 Reduction Sleeve |
| 625308 | HK3/4-3/8 Reduction Sleeve |
| 625102 | HK3/4-1/2 Reduction Sleeve |
| 625508 | HK3/4-5/8 Reduction Sleeve |

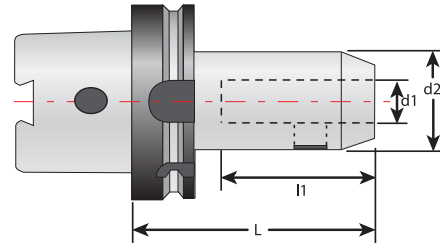
HSK63F End Mill Holders & Face Mill Arbors



Techniks Certified for bore and taper tolerances

Features

- I.D. bore tolerance is H5 (Best in Industry)
- Balanced to 15,000 RPM at G6.3
- Taper ground to AT3 for maximum spindle contact



HSK63F Side Lock End Mill Holders

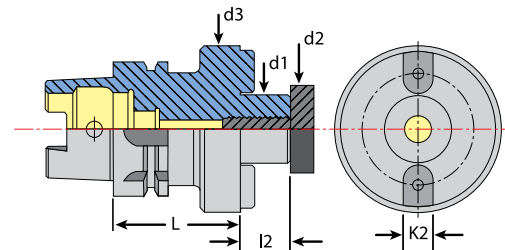
| Part No. | Description - I.D. | d1 | d2 | L | l1 |
|-----------|--------------------------|------|-------|------|------|
| 32958-4-F | HSK63F x SLN 3/4" - 4.0" | 3/4" | 1.75" | 4.0" | 4.0" |
| 32962-4-F | HSK63F x SLN 1" - 4.0" | 1" | 2" | 4.0" | 4.0" |
| 32838-4-F | HSK63F x SLN 25mm - 4.0" | 25mm | 65mm | 4.0" | 4.0" |
| 32840-4-F | HSK63F x SLN 32mm - 4.0" | 32mm | 72mm | 4.0" | 4.0" |



Techniks Certified for accuracy

Features

- Compatible with all face mills
- H6 arbor tolerance for less chatter & better tool life
- For HSK63A, HSK100A and R8 spindles



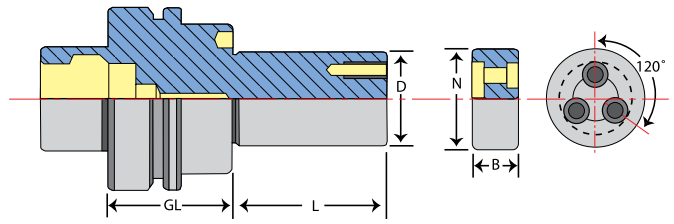
HSK63F Face Mill Arbors with Drive Keys

| Part No. | Description - I.D. | L | l2 | d1 | d2 | d3 | K2 |
|----------|----------------------------|------|------|--------|-------|-------|------|
| 93510-F | HSK63F x FMA 3/4" - 4.0" | 4.0" | .69" | 3/4" | .88" | 1.69" | .31" |
| 93520-F | HSK63F x FMA 1" - 4.0" | 4.0" | .69" | 1.0" | 1.19" | 2.20" | .38" |
| 93530-F | HSK63F x FMA 1-1/4" - 4.0" | 4.0" | .69" | 1-1/4" | 1.50" | 2.75" | .50" |
| 935040-F | HSK63F x FMA 1-1/2" - 4.0" | 4.0" | .94" | 1-1/2" | 1.88" | 3.80" | .63" |

HSK63F and ISO30 Moulder Head Arbors



- Arbor nut with 3 tightening screws improves safety
- Precision ground taper provides high accuracy



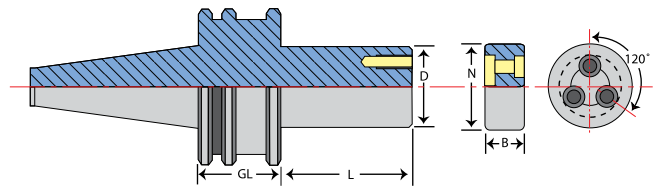
Dimensions are in millimeters unless otherwise indicated.

HSK63F Moulder Head Arbors

| Part No. | Description | D | L | N | B | GL |
|---------------|---------------------------|--------|-----|----|----|----|
| 41050 | HSK63F 1" arbor x 80 | 1.0" | 80 | 35 | 20 | 45 |
| 41086-95-8SC | HSK63F 1" arbor x 95 | 1.0" | 95 | 35 | 8 | 45 |
| 41086-120-8SC | HSK63F 1" arbor x 120 | 1.0" | 120 | 35 | 8 | 45 |
| 41055-8SC | HSK63F 1-1/4" arbor x 50 | 1 1/4" | 50 | 45 | 8 | 45 |
| 41060 | HSK63F 1-1/4" arbor x 55 | 1 1/4" | 55 | 42 | 20 | 45 |
| 41080-3H | HSK63F 1-1/4" arbor x 80 | 1 1/4" | 80 | 42 | 20 | 45 |
| 41085 | HSK63F 1-1/4" arbor x 100 | 1 1/4" | 100 | 42 | 20 | 45 |
| 41087 | HSK63F 1-1/4" arbor x 112 | 1 1/4" | 112 | 42 | 20 | 45 |
| 41091 | HSK63F 50mm arbor x 153 | 50mm | 153 | 60 | 10 | 33 |



- Arbor nut with 3 tightening screws improves safety
- Taper ground to AT3 specification for accuracy



Dimensions are in millimeters unless otherwise indicated.

ISO30 Moulder Head Arbors

| Part No. | Description | D | L | N | B | GL |
|------------------|----------------------------|--------|-----|----|----|----|
| 42700-40-W | ISO30 x 1-1/4" x 40 arbor | 1-1/4" | 40 | 42 | 20 | 42 |
| 42700-55-W | ISO30 x 1-1/4" x 55 arbor | 1-1/4" | 55 | 42 | 20 | 42 |
| 42700-80-W | ISO30 x 1-1/4" x 80 arbor | 1-1/4" | 80 | 42 | 20 | 42 |
| 42700-1.25-100-W | ISO30 x 1-1/4" x 100 arbor | 1-1/4" | 100 | 42 | 20 | 42 |

Special sizes made to your specifications. Call for details.

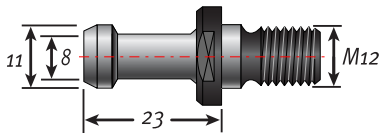
Retention Knobs for CNC Routers



- All mating surfaces precision ground
- Manufactured to the highest standards for maximum safety and long life
- Hardened for maximum longevity

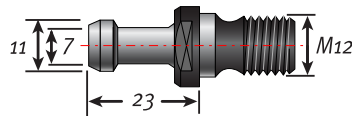
Match the dimensions and appearance of your retention knob to the drawings below. Use the manufacturer's print that came with your machine to verify your selection.

For safe operation, make sure that the pull stud you order is the exact pull stud your machine uses. Using the wrong pull stud can cause damage to the spindle and/or toolholder, and is a safety hazard.



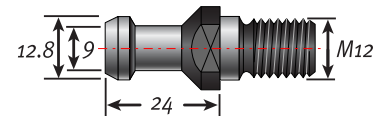
BT30 – 45°

Part No. 07801
Includes: Heian, Shinx



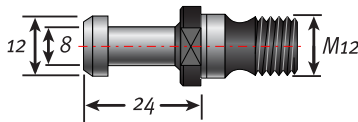
BT30 – 60°

Part No. 07806
Includes: Shoda, Anderson (1997 and earlier, verify on manufacturer's print)



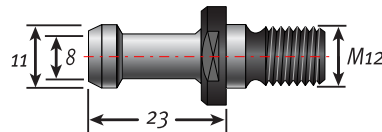
BT30 KOMO

Part No. 750-19
Only for BT30 KOMO routers



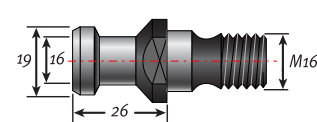
BT30 – 90°

Part No. 07812
(verify on manufacturer's print)



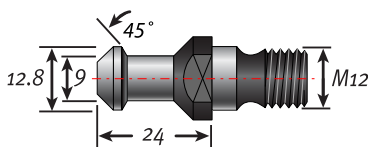
BT35 – 60°

Part No. 4403502
(Heian, verify on manufacturer's print)



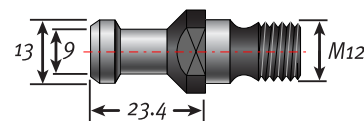
DAT 40

Part No. 49003
(verify on manufacturer's print)



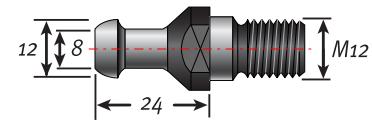
Colombo ISO30 Ball Style for RS Spindles

Part No. 49001-45
Includes: Motion Master
(verify on manufacturer's print)



For Colombo ISO30 for Billet Spindle

Part No. 49001
Includes: Motion Master, Anderson
(for newer machines, verify on manufacturer's print)



ISO30 For HSD Spindles

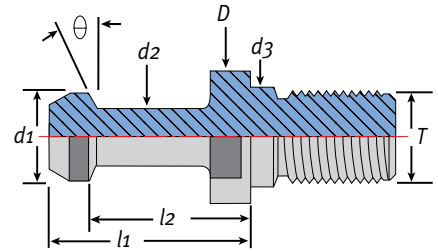
Part No. 49019
Includes: Biesse, Bermag, Bussellato, CNT, DMS, CR Onsrud, Masterwood, Thermwood, and Holz-her

Special Order Retention Knobs & Collets

Special Order Retention Knobs

We can get the pull studs you need. Just fill in your pull stud(s) dimensions on the chart below before you call. Keep your information in this catalog for easy re-orders.

Please carefully select the pull stud you need by referring to the diagram. For safe operation please make sure that the pull stud you order is the exact pull stud your machine uses. Improper choice of pull stud can cause damage to the spindle and/or toolholder, and is a potential safety hazard.



| Retention Knob | Machine | d1 | d2 | l1 | l2 | θ | T |
|----------------|---------|----|----|----|----|---|---|
| | | | | | | | |
| | | | | | | | |

Special Order Collet Dimensions

Length_____ Diameter_____ Other Markings_____

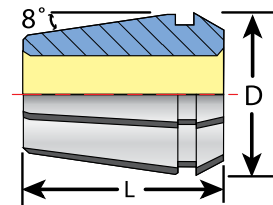
Length_____ Diameter_____ Other Markings_____

Length_____ Diameter_____ Other Markings_____

Use the guide below for selecting your replacement collets. The best way to tell what type of collet you need is to measure the length of the collet using a digital caliper. ER, TG, and SYOZ collets all have unique length and diameter measurements.

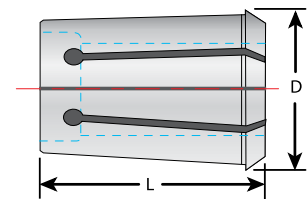
Standard Collet Dimensions

| ER Collet Style | Length | O.D. (diameter) |
|-----------------|----------------|-----------------|
| ER11 | 18mm (0.708") | 11.5mm (0.45") |
| ER16 | 27.5mm (1.08") | 17mm (0.67") |
| ER20 | 31.5mm (1.24") | 21mm (0.83") |
| ER25 | 34mm (1.34") | 26mm (1.02") |
| ER32 | 40mm (1.57") | 33mm (1.3") |
| ER40 | 46mm (1.81") | 41mm (1.61") |
| ER50 | 60 mm (2.36") | 52mm (2.05") |



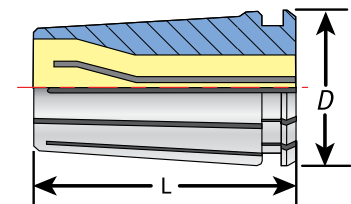
ER Collet Style

| DIN 6388 Collet Style | Length | O.D. (diameter) |
|-----------------------|---------------|-----------------|
| EOC 8 | 26mm (1.026") | 14.4mm (0.567") |
| SYOZ20 | 34mm (1.34") | 20mm (0.78") |
| RD020 | 34mm (1.34") | 20mm (0.78") |
| 407E | 34mm (1.34") | 20mm (0.78") |
| EOC12 | 34mm (1.34") | 20mm (0.78") |
| SYOZ25 | 52mm (2.06") | 35mm (1.38") |
| RD035 | 52mm (2.06") | 35mm (1.38") |
| 462E | 52mm (2.06") | 35mm (1.38") |
| EOC32 | 60mm (2.36") | 43.7mm (1.72") |



SYOZ Collet Style

| TG Collet Style | Length | O.D. (diameter) |
|-----------------|--------------|-----------------|
| TG75 | 47mm (1.85") | 27mm (1.06") |
| TG100 | 60mm (2.36") | 35mm (1.38") |



TG Collet Style

Hand Wrenches for Collet Nuts



DNA slotted wrench



ER hex wrench



ER or TG slotted wrench



ER mini wrench



TG hook wrench

Always use a tightening fixture

Note: Correct torque on the collet nut reduces collet wear and improves safety by properly securing cutting tool in the holder. Do not over-tighten nuts or you may damage the collet and/or toolholder.



DNA Hand Wrenches

| Part No. | Description | Nut Type |
|----------|------------------------|-------------|
| DNA11W | DNA 11 wrench | DNA-11 |
| DNA16W | DNA 16 wrench | DNA-16 |
| DNA20W | DNA 20 wrench | DNA-20 |
| DNA32W | DNA 32 wrench | DNA-32 |
| 894-22 | DNA 16 mini nut wrench | DNA-16 Mini |

ER Hex Hand Wrenches

| Part No. | Description | Nut Type |
|----------|-----------------|----------|
| 894-36 | TE-Short wrench | TE Short |
| 04608 | ER11-A wrench | A (Hex) |
| 04609 | ER16-A wrench | A (Hex) |
| 04610 | ER20-A wrench | A (Hex) |

ER Slotted Hand Wrenches

| Part No. | Description | Nut Type |
|----------|---------------|----------|
| 04613 | ER16-E wrench | Slotted |
| 04614 | ER20-E wrench | Slotted |
| 04615 | ER25-E wrench | Slotted |
| 04616 | ER32-E wrench | Slotted |
| 04617 | ER40-E wrench | Slotted |
| 04618 | ER50-E wrench | Slotted |

ER Mini Hand Wrenches

| Part No. | Description | Nut Type |
|----------|---------------|----------|
| 04620 | ER8-M wrench | ER Mini |
| 04621 | ER11-M wrench | ER Mini |
| 04622 | ER16-M wrench | ER Mini |
| 04623 | ER20-M wrench | ER Mini |
| 04624 | ER25-M wrench | ER Mini |

TG, SYOZ and Drill Chuck Hand Wrenches

| Part No. | Description | Nut Type |
|----------|------------------------------------|----------|
| 04616 | TG 75 slotted wrench 45–50mm | TG 75 |
| 03691 | TG 100/SYOZ 25 hook wrench 55–60mm | TG 100 |
| 22220 | SYOZ 20 wrench | SYOZ 20 |
| 82172 | Drill Chuck wrench | Chuck |

Adjustable Torque Wrenches & Collet Key Adapters



Set adjustable dial to specified torque, and tighten nut until wrench "clicks".

Improved "pull-release" locking system makes locking wrench at correct torque more secure.

Torque Wrench Features

- Improved locking system for a more secure lock
- Provides proper tightening for cutting tool life
- Easy read dial for fast adjustments to torque value

Adjustable Torque Wrench

| Part No. | Range | Length | Weight | Spigot |
|----------|---------------|--------|----------|------------|
| 60TH | 5-45 ft/lbs | 12" | 1 lb. | 16mm round |
| 200TH | 30-150 ft/lbs | 16.5" | 1.75 lbs | 16mm round |
| 300TH | 45-228 ft/lbs | 21.5" | 2.5 lbs | 16mm round |



ER Mini Collet Key Adapters

| Part No. | Size | Type | Torque |
|----------|-----------|------|-----------|
| 04576 | ER11 mini | mini | 12 ft/lbs |
| 04577 | ER16 mini | mini | 20 ft/lbs |
| 04578 | ER20 mini | mini | 22 ft/lbs |
| 04587 | ER25 mini | mini | 28 ft/lbs |

ER Hex Collet Key Adapters

| Part No. | Size | Type | Torque |
|----------|----------|------|-----------|
| 04581 | ER11 hex | hex | 12 ft/lbs |
| 04601-16 | ER16 hex | hex | 42 ft/lbs |
| 04602-20 | ER20 hex | hex | 59 ft/lbs |

TG and SYOZ Collet Key Adapters

| Part No. | Size | Type | Torque |
|-----------|------------------------|------|-----------|
| 04018-TWA | TG 75, 45-50mm | hook | 90 ft/lbs |
| 03690-25 | TG 100/SYOZ25, 55-60mm | hook | 90 ft/lbs |
| 04593 | SYOZ-20 | hook | 40 ft/lbs |

ER Slotted Collet Key Adapters

| Part No. | Size | Type | Torque |
|----------|----------------|---------|------------|
| 04581 | DNA 11 | hex | 12 ft/lbs |
| DNA16TWA | DNA 16 | slotted | 42 ft/lbs |
| DNA20TWA | DNA 20 | slotted | 59 ft/lbs |
| DNA32TWA | DNA 32 | slotted | 100 ft/lbs |
| 04588-R | ER 32 Enclosed | slotted | 100 ft/lbs |
| 04580-16 | ER16 slotted | slotted | 42 ft/lbs |
| 04580-20 | ER20 slotted | slotted | 59 ft/lbs |
| 04603-25 | ER25 slotted | slotted | 77 ft/lbs |
| 04604-32 | ER32 slotted | slotted | 100 ft/lbs |
| 04605-40 | ER40 slotted | slotted | 130 ft/lbs |



Retention Knob Sockets – Square Drive

| Part No. | Size | Flats | Drive | Torque |
|-----------|--------------|--------|-------|------------|
| PSS-30BT | BT30 | 0.535" | 3/8" | 36 ft/lbs |
| PSS-30ISO | ISO 30 | 0.535" | 3/8" | 36 ft/lbs |
| PSS-40 | All 40 taper | 0.750" | 3/8" | 76 ft/lbs |
| PSC-50 | CAT50, BT50 | 1.187" | 1/2" | 100 ft/lbs |

Fixed Head Square Drives

| Part No. | Description | Drive |
|----------|-------------------|-------|
| 29828 | 3/8" square drive | 3/8" |
| 29827 | 1/2" square drive | 1/2" |



Tightening Fixtures



Auto-locking roller bearing design makes tool changes faster and eliminates slippage.

Roller Bearing Tightening Fixture

- For CAT, BT, HSK, ISO spindles
- Roller bearing design for the fastest tool changes possible!

Roller Bearing Tightening Fixture

| Part No. | Description |
|-----------|---|
| 17385B | roller bearing fixture for ISO30, SK30, HSK50 |
| 17386B | roller bearing fixture for BT30 |
| 17386B-35 | roller bearing fixture for BT35 |
| 17584B | roller bearing fixture for HSK32 |
| 17586B | roller bearing fixture for HSK40 |
| 17786B | roller bearing fixture for HSK100 |
| 17846B | CAT40 BT40, ISO40, HSK63A, HSK63E, HSK63F |
| 17387B | Clamping Device - HSK85 Weining |

Note: Correct torque on the collet nut reduces collet wear and improves safety by properly securing cutting tool in the holder. Do not over-tighten nuts or you may damage the collet and/or toolholder.



A sliding collar engages the wrench flats on HSK toolholders without drive slots.

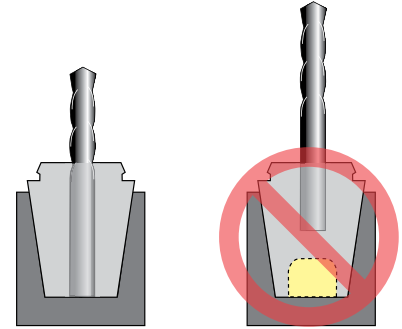
NTS Side Mount Fixtures

- For CAT, BT, HSK, ISO spindles
- Change knobs from bottom
- Bolts right to workbench

Side Mount Tightening Fixture

| Part No. | Description |
|---------------|---------------------------------|
| NTS-BT30-38 | BT30 taper - 38mm flats |
| NTS-BT30-41 | BT30 taper - 41mm flats |
| NTS-BT30-Slot | BT30 for tools with drive slots |
| NTS-ISO20-17 | ISO20 - 17mm flats |
| NTS-ISO20-22 | ISO20 - 22mm flats |
| NTS-ISO25-27 | ISO25 - 27mm flats |
| NTS-ISO30-36 | ISO30 - 36mm flats |
| NTS-ISO30-38 | ISO30 - 38mm flats |
| NTS-ISO30-47 | ISO30 - 47mm flats |
| NTS-HSK63A | HSK63A - no flats |
| NTS-HSK63F-36 | HSK63F - 36mm flats |
| NTS-HSK63F-38 | HSK63F - 38mm flats |
| NTS-HSK63F-41 | HSK63F - 41mm flats |
| NTS-HSK63F-46 | HSK63F - 46mm flats |
| NTS-40-Taper | Any CAT40 or BT40 taper |

Recommended Torque Values



Always use a torque wrench and tightening stand when tightening collet nuts and retention knobs. Over-tightening collet nuts will cause premature damage to collets and increase run-out.

For maximum holding power fill the collet all the way with the tool shank (left) and use a PowerCOAT nut.

Recommended Collet Nut & Retention Knob Tightening Torque

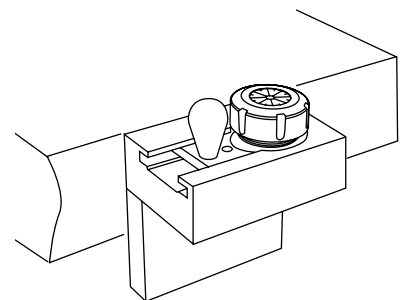
| Collet | Nut Type | Collets I.D. OVER 1/16" (2mm) | Collets I.D. UNDER 1/16" (2mm) | Order Torque Wrench Adapter |
|---------|----------|----------------------------------|-----------------------------------|--------------------------------|
| ER16 | slotted | 42 ft/lbs | 30 ft/lbs | 04580-16 |
| ER16 | hex | 42 ft/lbs | 30 ft/lbs | 04601-16 |
| ER20 | slotted | 59 ft/lbs | 24 ft/lbs | 04580-20 |
| ER20 | hex | 59 ft/lbs | 24 ft/lbs | 04602-20 |
| ER25 | slotted | 77 ft/lbs | 77 ft/lbs | 04503-25 |
| ER25 | mini nut | 25 ft/lbs | 25 ft/lbs | 04587 |
| ER32 | slotted | 100 ft/lbs | 100 ft/lbs | 04604-32 |
| ER40 | slotted | 130 ft/lbs | 130 ft/lbs | 04605-40 |
| SY0Z 25 | hook | 90 ft/lbs | 90 ft/lbs | 03690-25 |
| TG75 | slotted | 90 ft/lbs | 90 ft/lbs | 04604-32 |
| TG100 | hook | 90 ft/lbs | 90 ft/lbs | 03690-25 |

DIRECTIONS

1. Snap collet into nut.
2. Insert cutting tool into collet. Make sure shank extends to the bottom of the collet.
3. Hand tighten collet nut assembly into toolholder.
4. Insert toolholder assembly into tightening fixture and secure it.
5. Tighten collet nut to recommended torque using a torque wrench and adapter.

Always tighten retention knobs to exact specification or damage to tooling or bodily harm may occur.

| Retention Knobs | Wrench Flats | Drive | Torque | Order Socket |
|-----------------|--------------|-------|-----------|--------------|
| BT30 Taper | 0.535" | 1/4" | 36 ft/lbs | PSS-30BT |
| ISO 30 Taper | 0.535" | 3/8" | 36 ft/lbs | PSS-30ISO |
| Any 40 Taper | 0.750" | 3/8" | 76 ft/lbs | PSS-40 |
| BT50 Taper | 1.187" | 1/2" | 99 ft/lbs | PSC-50 |
| CAT50 Taper | 1.250" | 1/2" | 99 ft/lbs | PSC-50 |



Spindle Wipers and Preset Gauges



Real lambskin provides the best cleaning. Use with any type of machine with a taper of 7/24 CAT, BT or DIN 69871.

Spindle Wipers

- For CAT, BT, ISO, HSK spindles
- Remove contaminants to improve T.I.R.
- Keep spindle and tapers clean

| Part No. | Taper Spindle | Total Length | Taper Length |
|----------|---------------|--------------|--------------|
| 17706 | 30 | 170 | 60 |
| 17707 | 40 | 188 | 78 |
| 17708 | 50 | 240 | 120 |
| 38036 | HSK63A | 165 | 31 |
| 38032 | HSK63F | 165 | 31 |

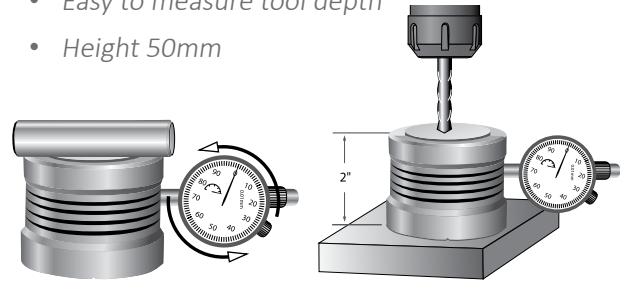


Analog Axial Preset Gauge

| Part No. | Description |
|----------|---------------------|
| 17906-2 | ZSI-50 preset gauge |
| 17906-04 | replacement dial |

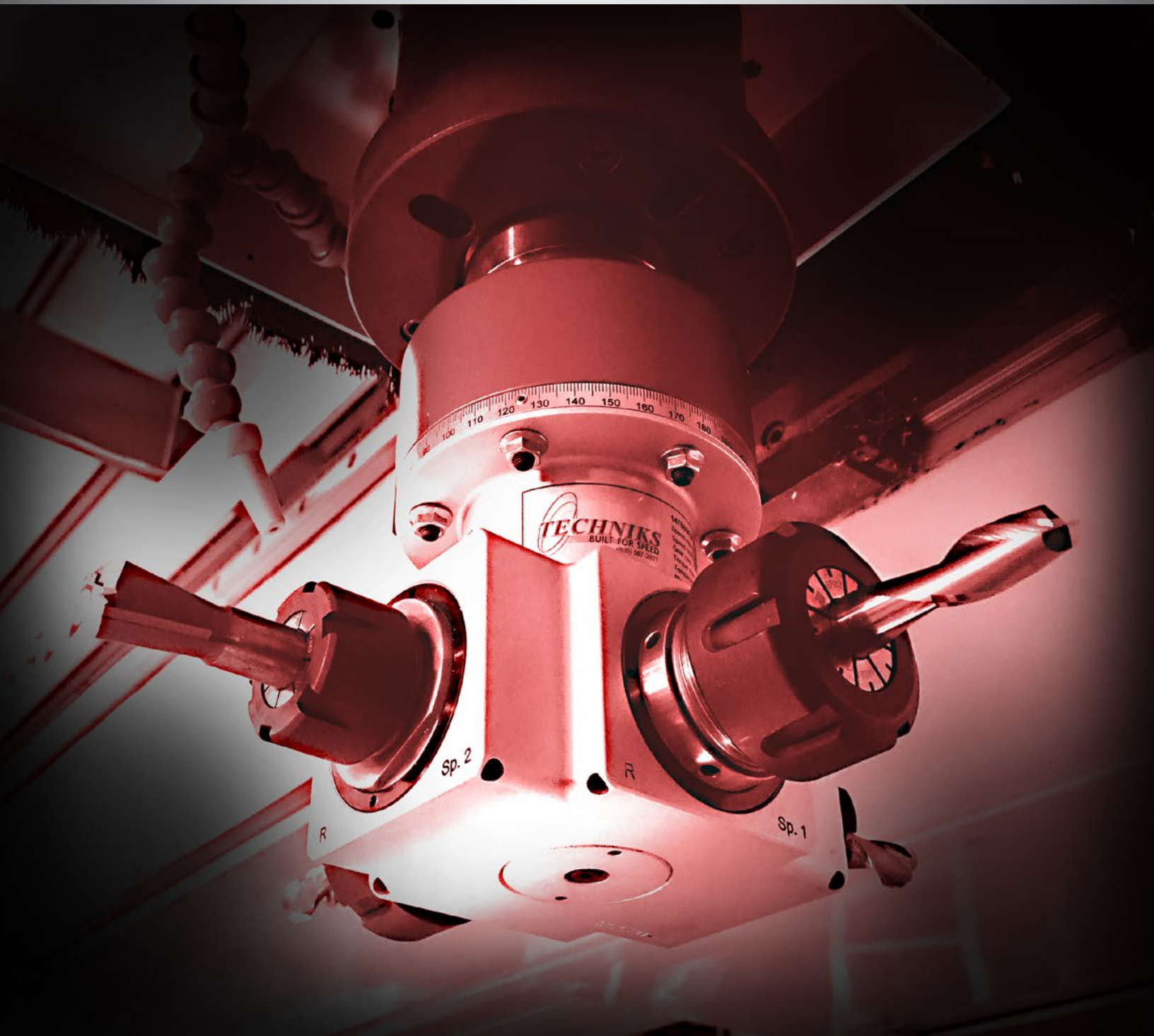
Analog Axial Preset Gauge Features

- Accuracy 0.0002"
- Easy to measure tool depth
- Height 50mm

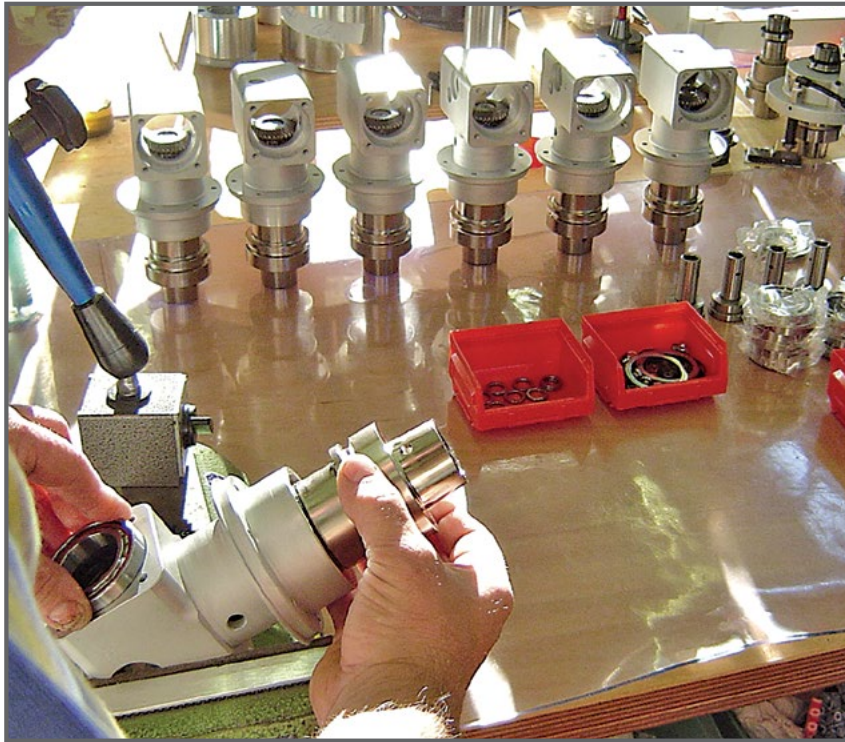


1. Use the gauge pin included to press down on the spring-loaded center piece as illustrated. Please be sure the gauge pin is placed on the shiny surface.
2. Turn the indicator to read "0", then remove the gauge pin.
3. Put the unit on the workpiece and carefully jog the tool down to make contact with the gauge face. When the gauge reads "0" the tool is 2" above the workpiece.

Aggregate Heads for CNC Routers



Aggregate Heads – “Never Down Guarantee”



Built to Meet Your Needs

We promise

- *unmatched reliability*
- *unmatched performance*
- *unmatched support*

How you benefit

- *increase productivity*
- *increased reliability*
- *reduced machine down-time*

How To Order Aggregates

Call us to talk live with one of our operation engineers. Simply provide the router manufacturer, the spindle type (HSK, ISO, BT, etc.), operation, and the material being processed. We will make sure you get the right aggregate for your needs.

Call your Techniks service center to speak to a representative.



Scan the QR code or go to <http://ow.ly/GOBnL> to watch the video

We go to painstaking lengths to ensure that our aggregates out-perform the competition. Our obsession to quality craftsmanship is the foundation on which all our of aggregates heads are built.

Only the very best components are used to create our aggregate heads. This is why our aggregate heads run cool, quiet, and trouble-free. Every aggregate head we make is individually hand assembled by one, highly skilled technician who is personally responsible for the quality of that aggregate and performs a rigorous quality assurance procedure; including a 90-point inspection of the bevel gears and a 30-minute test run, before finally sealing the aggregate and signing off on the inspection report.

Never Down Guarantee

We stand behind our aggregate heads with our “Never Down” Guarantee. Should yours ever need servicing, a replacement will be shipped to you to get you back to work until the original aggregate is repaired and back in service. Learn more about our top-quality aggregate heads on the next page. Replacement aggregates are limited to standard configuration and subject to availability.



Obsession With Quality

Spindle Compatibility
Our aggregate heads are available for all types of machine spindles.

HSK, CAT, ISO, etc.

Output Versatility
Our innovative line of aggregates feature fixed or modular output systems for all types of wood-based operations.

Boring Milling Sawing Moulding Sanding/Finishing

Torque Arm Ring
We have the torque arm rings for your specific machine requirements.

ER25 or ER32

Modular Quick Change

Saw Spindles

High Quality Bevel Gears
Our bevel gears are put through a 90 point inspection for quality. Because of this, there is less gear play, less vibration, and wear is reduced. It's a difference you can hear! (Ours are quieter)

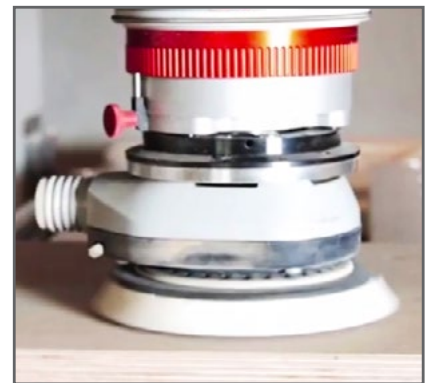
Grease or Oil Lubrication
All SmartLINE & FunctionLINE aggregates are grease lubricated for standard duty operation. For extended run-time operations our UltraLINE aggregates features oil bath lubrication for optimum cooling.



Dual sawing operations



Grooving operations



Sanding operations

Recommended Operations by Aggregate Type

SmartLINE Aggregates



SmartLINE Aggregates feature a compact & light-weight design for operations where clearance or maneuverability is required. Grease lubricated for long life. SmartLINE aggregates deliver great value, with an excellent price to performance ratio.

FunctionLINE Aggregates



FunctionLINE Aggregates offer the widest selection and are among our most versatile grease lubricated aggregates. Designed for high performance in almost all wood-based materials, they can be purpose-built for almost any operation specific operation

UltraLINE Aggregates



UltraLINE Aggregates are oil bath lubricated for continuous operation in extreme conditions. Recommended for sawing using blades larger than 7", V-grooving, heavy routing operations, cutting MDF, composite materials, or cutting aluminum.

Questions About Aggregates?

Call us to talk with one of our operation engineers. Simply provide router manufacturer, spindle type, operation, and the material being processed. We will make sure you get the right aggregate for your needs.

| Operation | Speeds/feeds (RPM) | SmartLINE | | | | FunctionLINE | | | | | | UltraLINE | | | | |
|-------------------|--|-----------|------------|------|----------|--------------|---------|------------|-------|----------------|----------|-----------|----------|-------|------------|-------------|
| | | Duo | Vario/Viso | Mono | Mono Fix | Duo | Quattro | Vario/Viso | Extra | Soft Touch Pro | Extra II | Mono R | Mono Fix | Duo R | Vario Viso | Mega Cutter |
| Boring | 3000 - 9000min | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ○ |
| Milling | 8.100 min | ◐ | ● | ◐ | ● | ◐ | ◐ | ● | ◐ | ● | ◐ | ● | ● | ● | ● | ○ |
| | 12.000 min | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ○ |
| | 15.000 min | ● | ● | ● | ● | ● | ● | ● | ● | ● | ○ | ○ | ○ | ○ | ○ | ○ |
| | 18.000 min | ○ | ○ | ◐ | ○ | ◐ | ◐ | ○ | ◐ | ● | ○ | ○ | ○ | ○ | ○ | ○ |
| Sawing | Ø 150mm / max. 45mm / 7000 - 10000 min | ● | ● | ● | ● | ● | ● | ● | ○ | ○ | ◐ | ● | ● | ● | ● | ● |
| | Ø 200mm / max. 70mm / 5200 - 7000 min | ○ | ○ | ● | ● | ● | ● | ● | ○ | ○ | ○ | ● | ● | ● | ● | ○ |
| | Ø 250mm / max. 95mm / 4300 - 6000 min | ○ | ○ | ○ | ● | ○ | ○ | ○ | ○ | ○ | ○ | ● | ● | ● | ● | ○ |
| | Ø 300mm / max. 120mm / 3500 - 4500 min | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ● | ● | ● | ● | ○ |
| Moulding | | ○ | ○ | ○ | ○ | ○ | ● | ○ | ○ | ○ | ○ | ◐ | ◐ | ◐ | ◐ | ● |
| Sanding/Finishing | | ◐ | ◐ | ◐ | ◐ | ◐ | ◐ | ◐ | ◐ | ● | ◐ | ● | ● | ● | ● | ● |

Suitable ● Partly Suitable ◐ Not Suitable ○

Operation Examples



Duo
Cutout for Clamex P
joining elements



Duo
Drilling dowel holes



Doors / Windows



Extra
Lockset recess



Extra II
Corner notching



Operation Examples

Cabinetry



Custom (Underneath)
Cutout for kitchen-board connectors



Boring



Custom (Vertical)
Drilling hinges in
one-step operation



Boring



Custom (Vertical)
Hole patterns for
acoustic panels



Boring



Mega Cutter

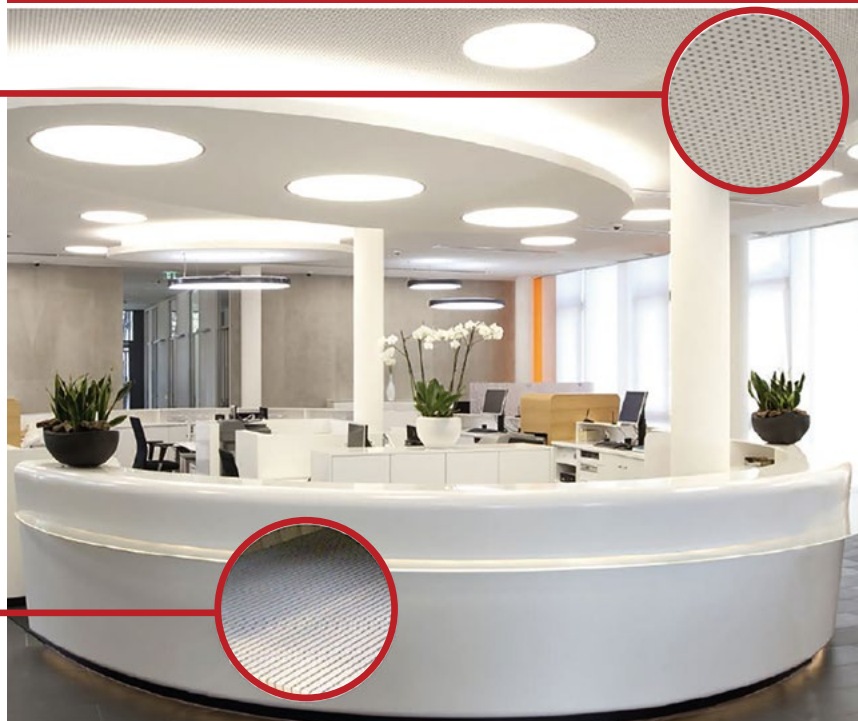
Sawing grooves for
curved or straight
wood elements



Sawing



Interiors



Operation Examples

Surface and Edge Processing



Soft Touch Edge Pro
Milling and scraping of glued edges



Sanding/
Finishing



Extra

Milling holes for bars with long cutting tools.



Milling



Quattro

Milling pockets for stair clamping.



Milling



Hohlstemmer

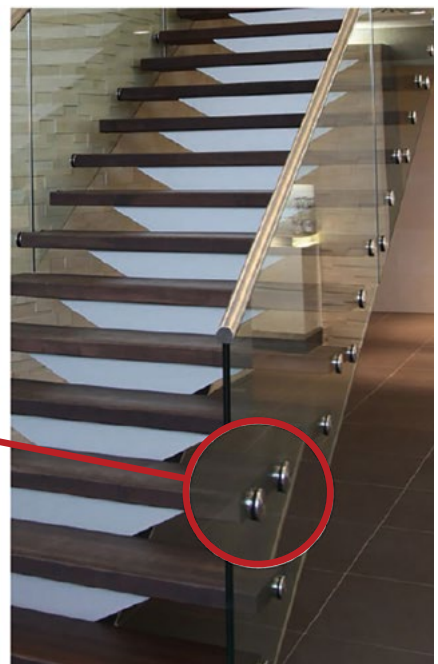
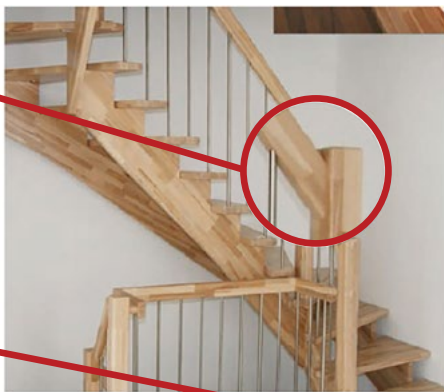
Chisel mortising for stairs.



Milling



Stair Manufacturing



SmartLINE – Duo Aggregates



SmartLINE Duo Compact Aggregate

Light weight aggregate for standard-duty operations on smaller routers or where space is limited. They can be configured with multiple ER25 outputs, a combination of ER and saw outputs, or even with two S1 saw outputs. SmartLINE aggregates are grease lubricated and offer an excellent price-to-performance ratio.

Use For:

- Combine boring and sawing operations
- Creating custom profiles and mortises
- Faster sizing and grooving (saw blade)

Features:

- Output: two-sided, right angle
- Output options: ER25, saw blade

Includes:

- Collet nut & wrenches
- ER collets sold separately



Scan the QR code or go to <http://ow.ly/GOp64> to watch the video



Boring

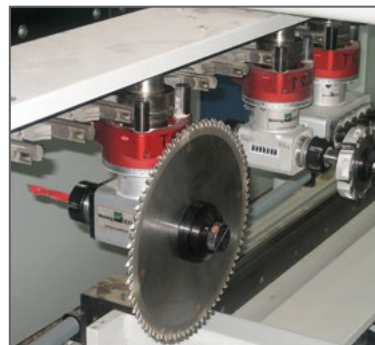


Milling



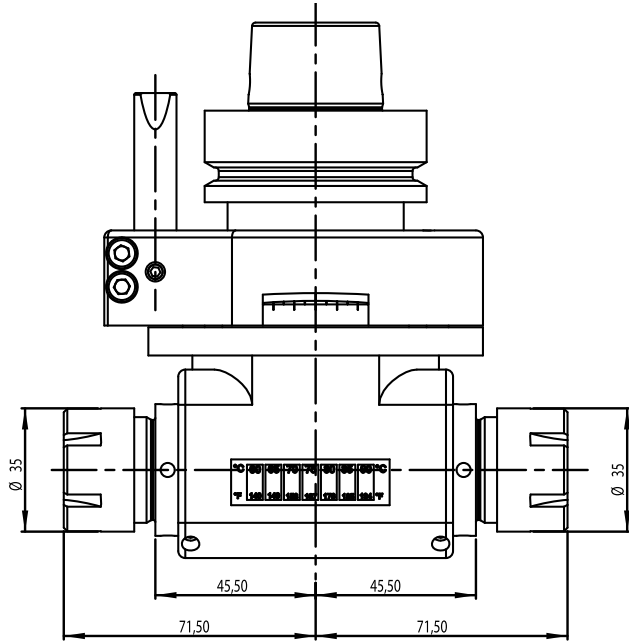
Sawing

| | |
|----------------------------------|-------------------------|
| Max Speed Input (Spindle) | 8,000 R.P.M. |
| Max Speed Output (Tool) | 12,000 R.P.M. |
| Max Torque | 12 ft/lbs |
| Gear Ratio | 1:1.5 |
| Lubrication | Grease |
| Max Temp. | 85° C / 185° F |
| Rotation | 360° |
| Output Direction | Same as machine spindle |
| Tool Interfaces | M5, S2 |

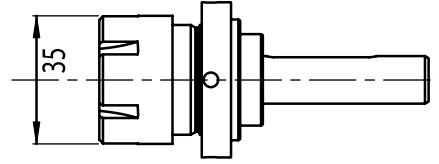


SmartLINE – Duo Aggregates

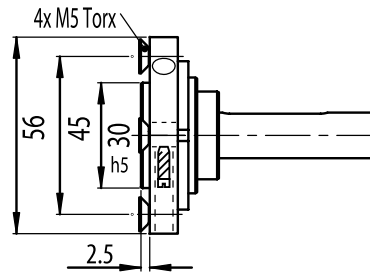
SmartLINE Duo Dimensions (mm)



SmartLINE Duo Output Options



M5 - ER25 Collet and nut
Range: 1mm – 16mm



S1 - Saw Spindle, 45mm bolt circle
w/ 10 mm bore for router bit

Fixed Angle Aggregates

Techniks fixed angle Mono aggregate heads can be built to any angle for any operation. Available with all the features of our FunctionLINE aggregates, a fixed angle mono aggregate head delivers high performance in continuous operation, perfect for boring, routing, and sawing applications.

Call us to order a fixed angle aggregate built to your specific machine and operation requirements.



SmartLINE – Vario/Viso Aggregates



SmartLINE Vario & Viso Adjustable Angle

Use Vario or Viso Aggregates to cut at any angle from 0° to 100°. The Viso digital display aggregate takes the guesswork out of repeating angles, and makes transfer of angles from prints to aggregate easy.

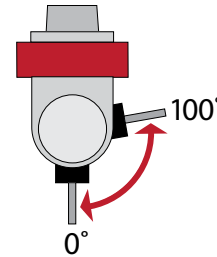
Vario aggregates can be fitted with an ER25 output, or the Combi saw output that is compatible with 45mm or 52mm bolt circles. The Viso can also accept the modular system.

Features:

- Compact design for smaller routers or where space is limited.
- Variable angle single output (0° - 100°)
- Viso features digital display for easy angle setting

Includes:

- Collet nut & wrenches
- ER collets sold separately



Scan the QR code or go to <http://ow.ly/GOzUH> to watch the video



Boring

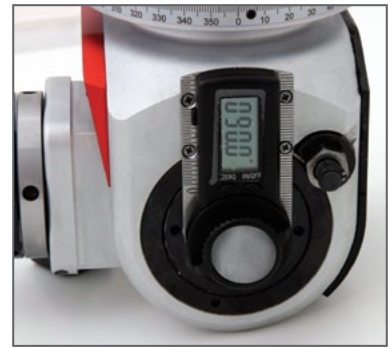


Milling



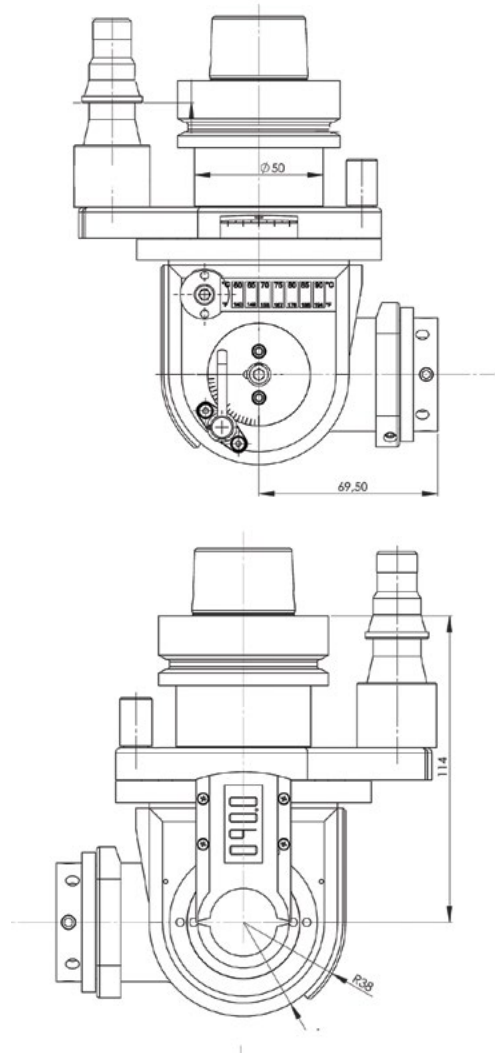
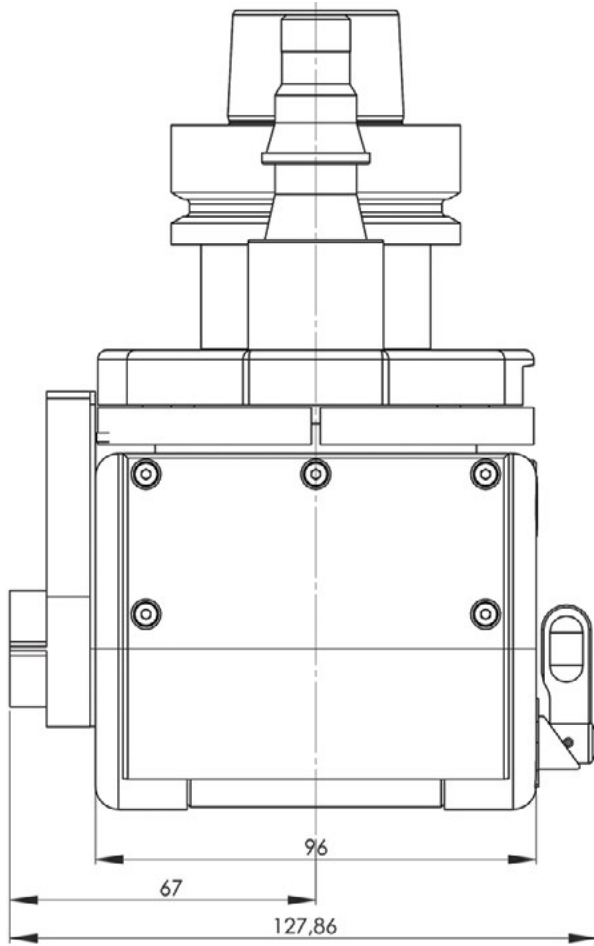
Sawing

| | |
|----------------------------------|-------------------------|
| Max Speed Input (Spindle) | 15,000 R.P.M. |
| Max Speed Output (Tool) | 15,000 R.P.M. |
| Max Torque | 14.75 ft/lbs |
| Gear Ratio | 1:1 |
| Lubrication | Grease |
| Max Temp. | 85° C / 185° F |
| Rotation | 360° |
| Output Direction | Same as machine spindle |
| Tool Interfaces | K1, K2 |

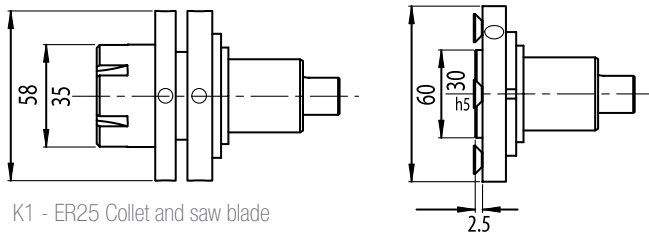


SmartLINE – Vario/Viso Aggregates

SmartLINE Vario & Viso Dimensions (mm)



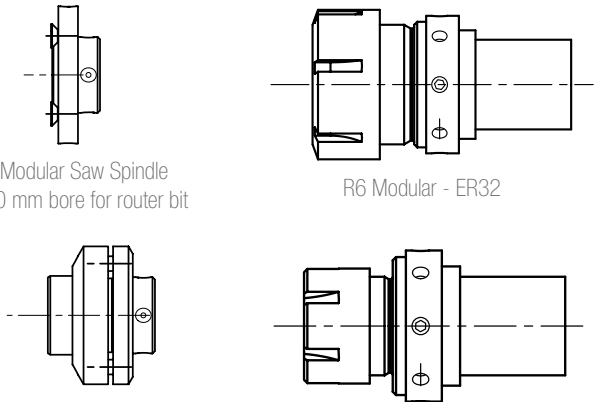
SmartLINE Vario or Viso Output Options



K1 - ER25 Collet and saw blade

K2 - Saw blade with either 45mm or 52mm bolt circle

Modular Output Options (Viso Only)



S1 - Modular Saw Spindle w/ 10 mm bore for router bit

R6 Modular - ER32

P1 - Modular Saw Arbor Range: 1.5mm-4mm tool shank

M5 - Modular ER25

SmartLINE – Extra Aggregates



SmartLINE Extra Lockset Recess

Innovative lockset recess aggregate features compact design and lighter weight to make this the ideal aggregate for working in tight spaces. Offset design is optimized for cutting lockset recesses, but can be used for other boring operations.

Use For:

- *routing out lockset recesses*
- *other boring operations*

Features:

- *Offset design optimized for longer tooling operations such as mortising*
- *Output options: ER25*

Includes:

- *Collet nut & wrenches*
- *ER collets sold separately*



Scan the QR code or go to <http://ow.ly/GOArR> to watch the video

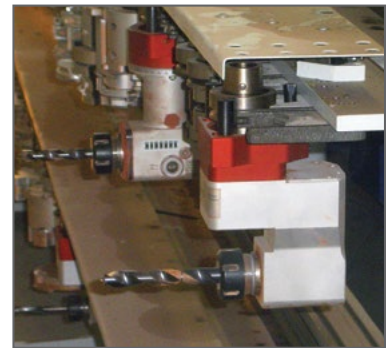
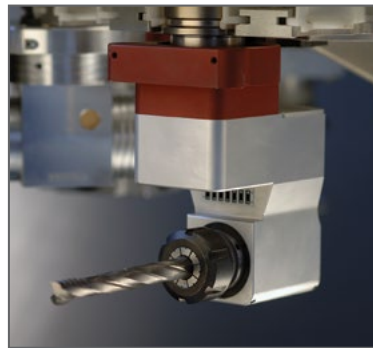


Boring



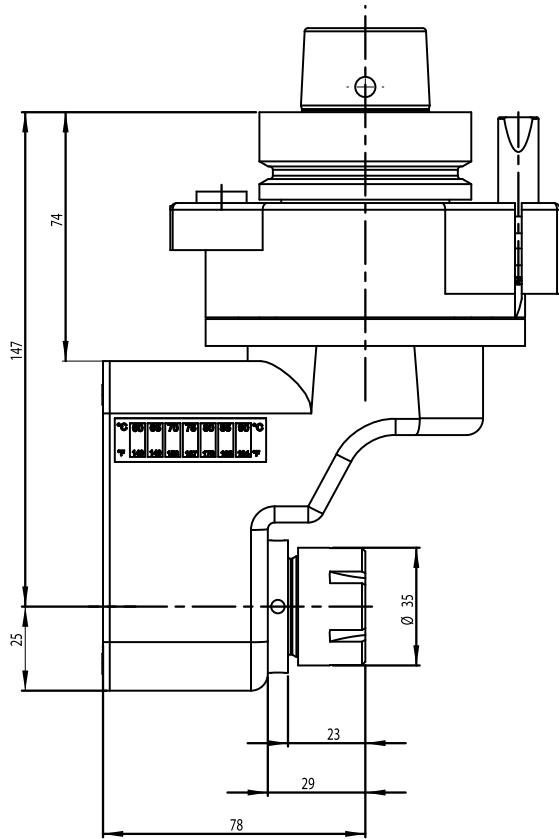
Milling

| | |
|----------------------------------|-------------------------|
| Max Speed Input (Spindle) | 8,000 R.P.M. |
| Max Speed Output (Tool) | 12,000 R.P.M. |
| Max Torque | 3 ft/lbs |
| Gear Ratio | 1:1.5 |
| Lubrication | Grease |
| Max Temp. | 85° C / 185° F |
| Rotation | 360° |
| Output Direction | Same as machine spindle |
| Tool Interfaces | M5 |

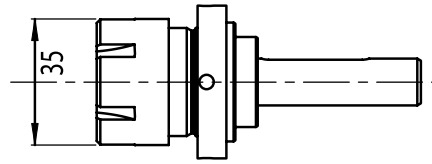


SmartLINE – Extra Aggregates

SmartLINE Extra Lockset Recess



SmartLINE Extra Lockset Recess Output

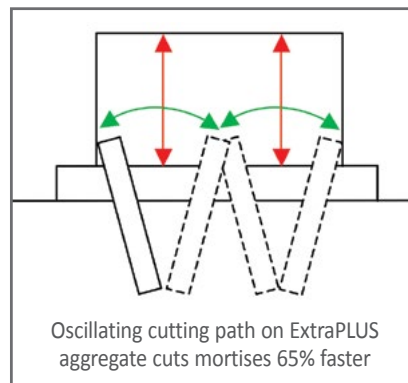


M5 - ER25 Collet and nut
Range: 1mm – 16mm

EXTRA PLUS Oscillating Lock-Recess Aggregate



Winner of the IWF 2012 Challengers Award, the Extra Plus aggregate head is one of our innovative additions to our Function-LINE. Featuring an oscillating cutting motion, the Extra Plus reduces lock recess cutting time by 65%.



Scan the QR code or go to <http://ow.ly/Aimc0> to watch the video

FunctionLINE – Mono Aggregates



FunctionLINE Mono Aggregate

An affordable way to add 4th axis capability to your CNC router. Able to perform routing, boring, mortising, and sawing operations.

FunctionLINE Mono aggregates can be configured with either ER25 or ER32 outputs, or a saw arbor, or for maximum flexibility a modular output that allows switching between saw spindles or ER outputs.

Features:

- Single, right angle output (other angles available)
- Output options: ER25, ER32, saw blade, modular

Includes:

- Collet nut & wrenches
- ER collets sold separately



Scan the QR code or go to <http://ow.ly/GOp64> to watch the video



Boring

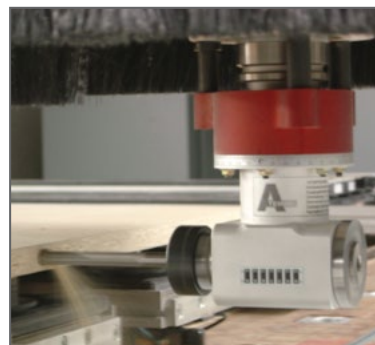


Milling



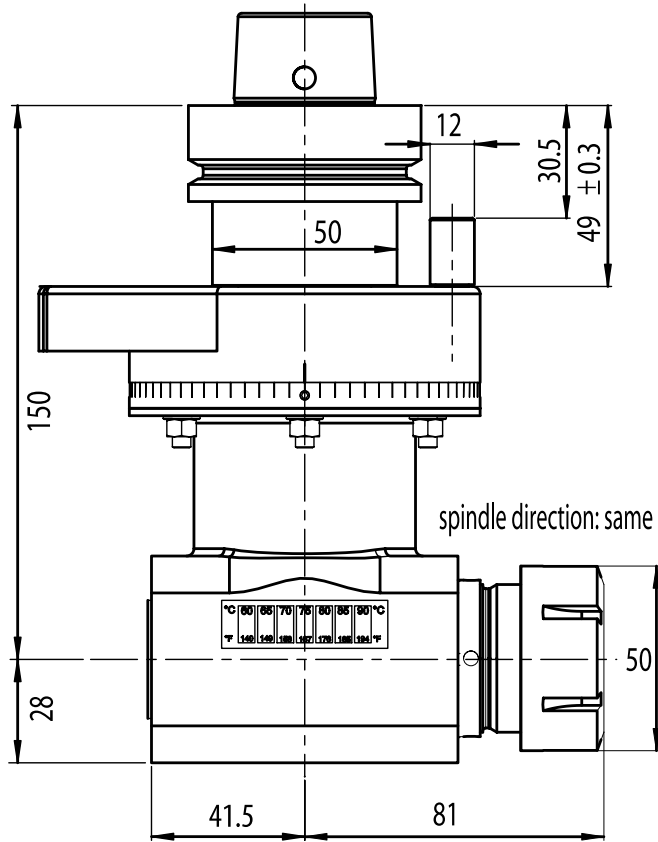
Sawing

| | |
|----------------------------------|-------------------------|
| Max Speed Input (Spindle) | 10,000 R.P.M. |
| Max Speed Output (Tool) | 15,000 R.P.M. |
| Max Torque | 14.75 ft/lbs |
| Gear Ratio | 1:1.5 |
| Lubrication | Grease |
| Max Temp. | 85° C / 185° F |
| Rotation | 360° |
| Output Direction | Same as machine spindle |
| Tool Interfaces | M5, R6, S1, S2, Modular |

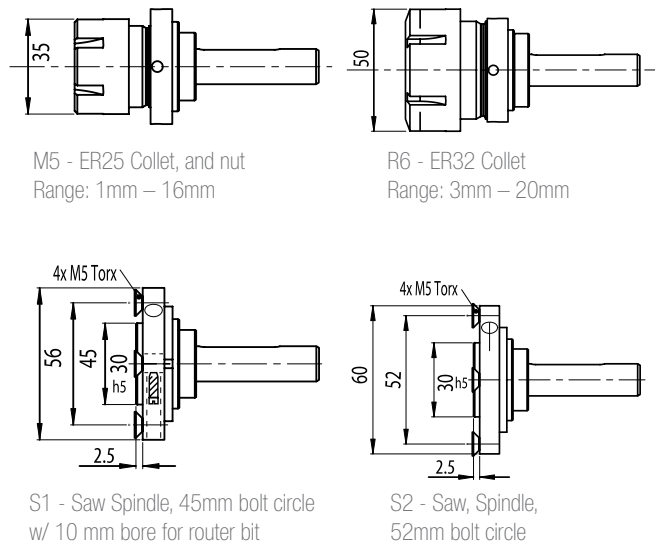


FunctionLINE – Mono Aggregates

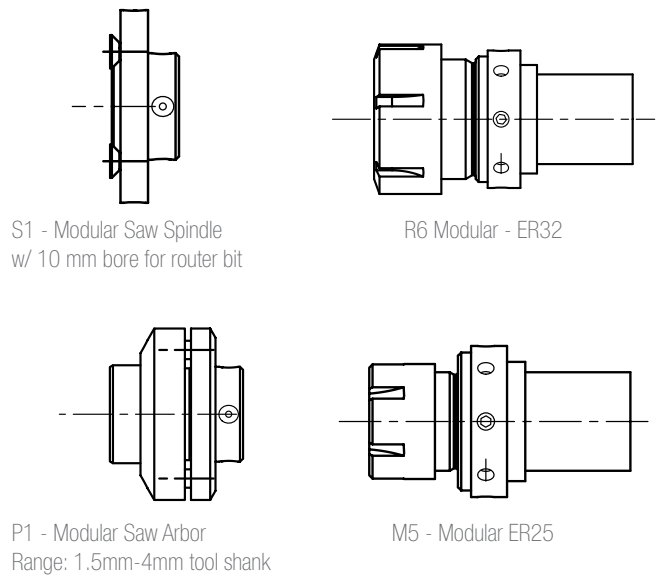
FunctionLINE Mono Dimensions (mm)



FunctionLINE Mono Output Options



FunctionLINE Mono Modular Options



FunctionLINE – Duo Aggregates



FunctionLINE Duo Aggregate

An affordable way to add 4th axis capability to your CNC router. Able to perform routing, boring, mortising, and sawing operations.

FunctionLINE Duo aggregates can be configured with either ER25 or ER32 outputs, or a saw arbor, or for maximum flexibility a modular output that allows switching between saw spindles or ER outputs.

Features:

- Dual, right angle output (other angles available)
- Output options: ER25, ER32, saw blade, modular

Includes:

- Collet nut & wrenches
- ER collets sold separately



Scan the QR code or go to <http://ow.ly/GOp64> to watch the video



Boring



Milling



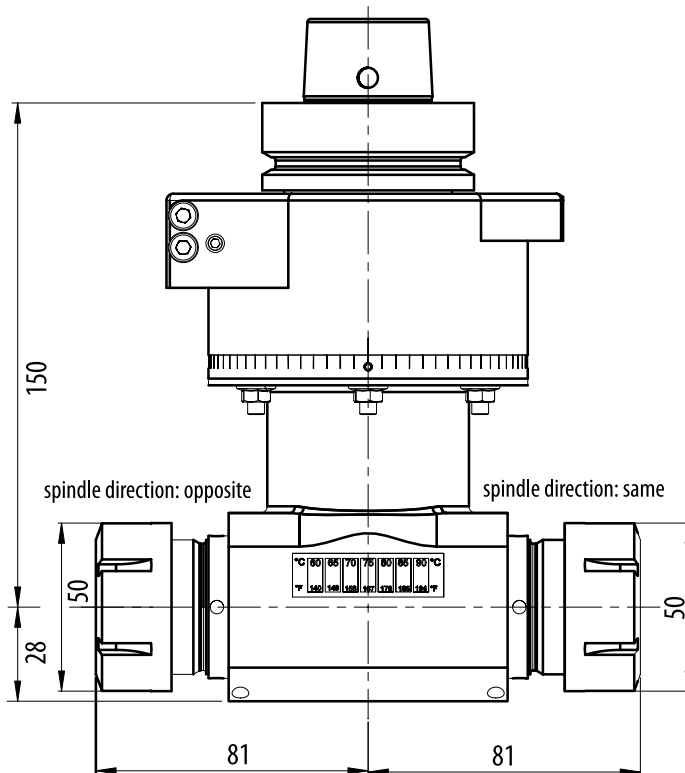
Sawing

| | |
|----------------------------------|---------------------------|
| Max Speed Input (Spindle) | 10,000 R.P.M. |
| Max Speed Output (Tool) | 15,000 R.P.M. |
| Max Torque | 14.75 ft/lbs |
| Gear Ratio | 1:1.5 |
| Lubrication | Grease |
| Max Temp. | 85° C / 185° F |
| Rotation | 360° |
| Output Direction | #1 clockwise, #2 opposite |
| Tool Interfaces | M5, R6, S1, S2, Modular |

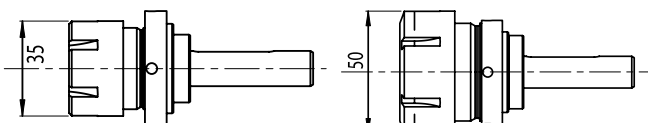


FunctionLINE – Duo Aggregates

FunctionLINE Duo Dimensions (mm)

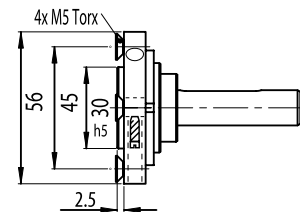


FunctionLINE Duo Output Options

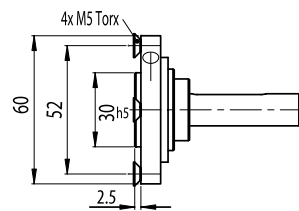


M5 - ER25 Collet, and nut
Range: 1mm - 16mm

R6 - ER32 Collet,
Range: 3mm - 20mm

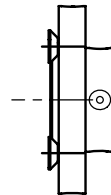


S1 - Saw Spindle, 45mm bolt circle
w/ 10 mm bore for router bit

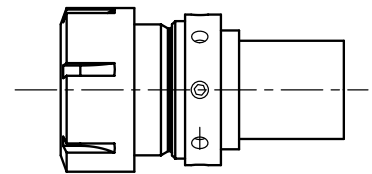


S2 - Saw, Spindle,
52mm bolt circle

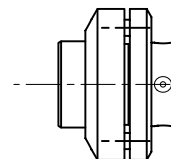
FunctionLINE Duo Modular Options



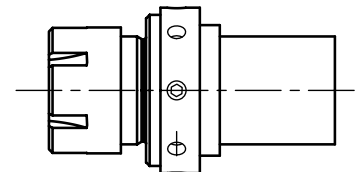
S1 - Modular Saw Spindle
w/ 10 mm bore for router bit



R6 Modular - ER32



P1 - Modular Saw Arbor
Range: 1.5mm-4mm tool shank



M5 - Modular ER25

FunctionLINE – Quattro Aggregates



FunctionLINE Quattro Aggregate

FunctionLINE Quattro aggregates can be configured with 4 ER25 outputs, or two ER25 and two ER32 outputs, or two modular outputs and two ER25 outputs. Modular outputs are required for saw spindles.

They provide the greatest number of configurations and operation specific tool output options for routing, boring, mortising, and sawing operations.

Features

- Quad, right angle outputs
- Practically eliminates time consuming tool changes
- Output options: ER25, ER32, saw blade, modular

Includes:

- Collet nuts & wrenches
- ER collets sold separately



Scan the QR code or go to <http://ow.ly/GOAbB> to watch the video



Boring

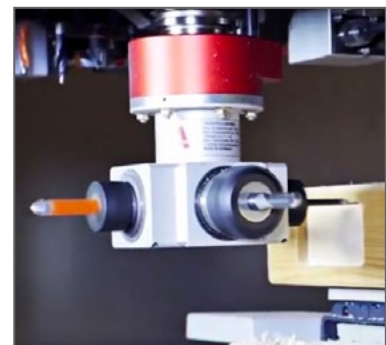
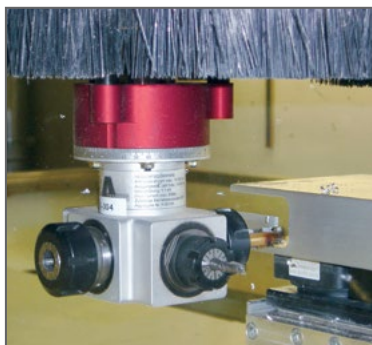
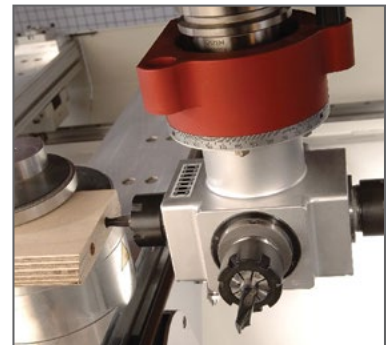
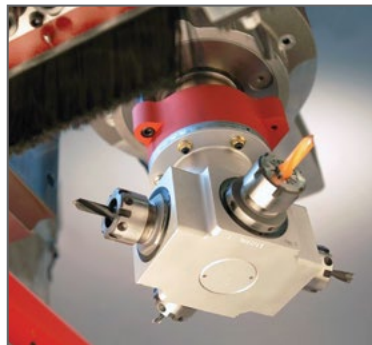


Milling



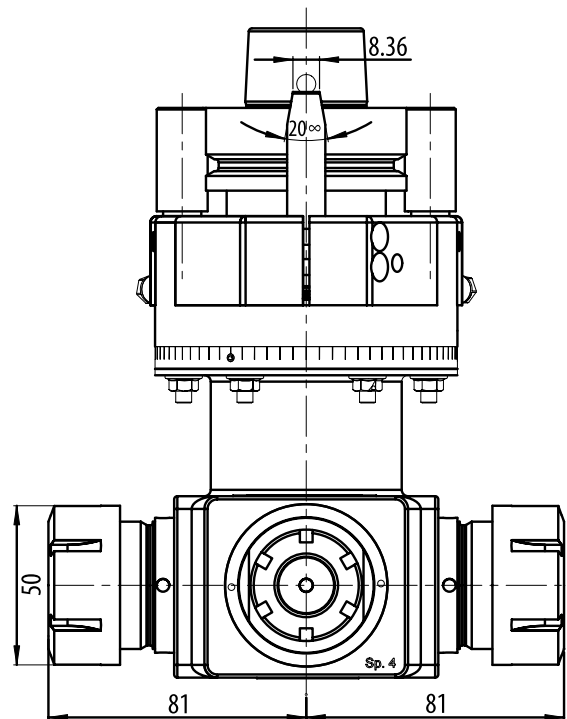
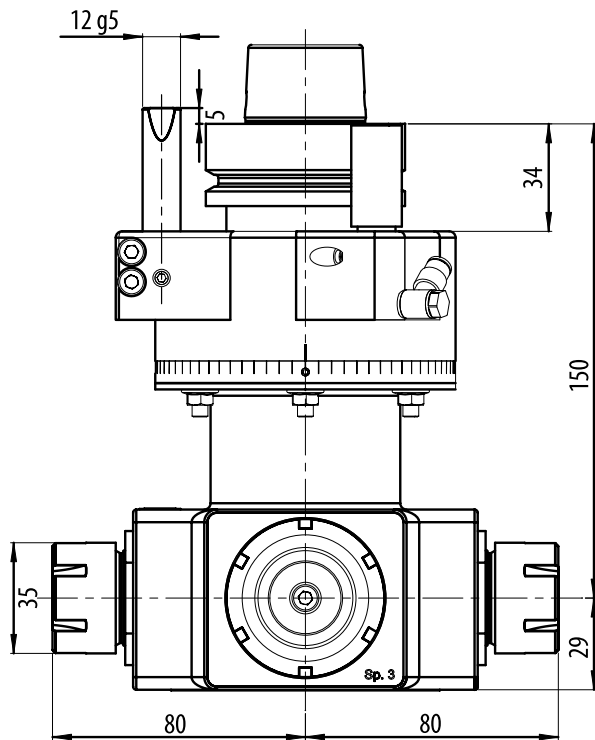
Sawing

| | |
|----------------------------------|--|
| Max Speed Input (Spindle) | 10,000 R.P.M. |
| Max Speed Output (Tool) | 15,000 R.P.M. |
| Max Torque | 14.75 ft/lbs |
| Gear Ratio | 1:1.5 |
| Lubrication | Grease |
| Max Temp. | 85° C / 185° F |
| Rotation | 360° |
| Output Direction | #1 & #2 clockwise, #3 & #4 opposite |
| Tool Interfaces | M5, R6, S1, Modular |

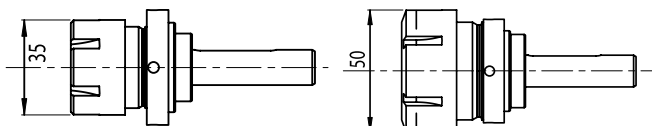


FunctionLINE – Quattro Aggregates

FunctionLINE Quattro Dimensions (mm)

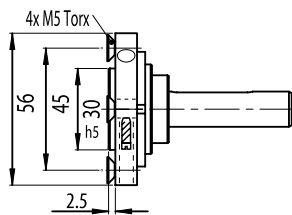


FunctionLINE Quattro Output Options



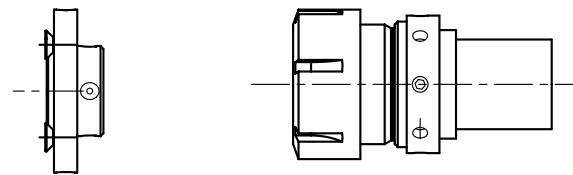
M5 - ER25 Collet, and nut
Range: 1mm – 16mm

R6 - ER32 Collet
Range: 3mm – 20mm



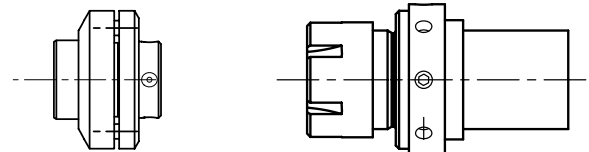
S1 - Saw Spindle, 45mm bolt circle
w/ 10 mm bore for router bit

FunctionLINE Quattro Modular Options



S1 - Modular Saw Spindle
w/ 10 mm bore for router bit

R6 Modular - ER32



P1 - Modular Saw Arbor
Range: 1.5mm-4mm tool shank

M5 - Modular ER25

FunctionLINE – Vario/Viso Aggregates



FunctionLINE Vario/Viso Aggregate

Use Vario/Viso Aggregates to cut at any angle from 0° to 100°. They can be fitted with an ER25 output, or the Combi saw output that is compatible with 45mm or 52mm bolt circles. The Viso can also accept the modular system.

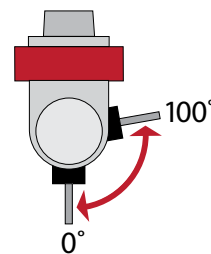
The Viso digital display aggregate takes the guesswork out of repeating angles, and makes transfer of angles from prints to aggregate easy.

Features:

- Route, drill, saw, or mortise any angle from 0° to 100°
- Viso features digital display for easy angle setting
- Output options: combination ER25 and saw blade or modular system (Viso only)

Includes:

- Collet nut & wrenches
- ER collets sold separately



Scan the QR code or go to <http://ow.ly/GOzUH> to watch the video



Boring



Milling



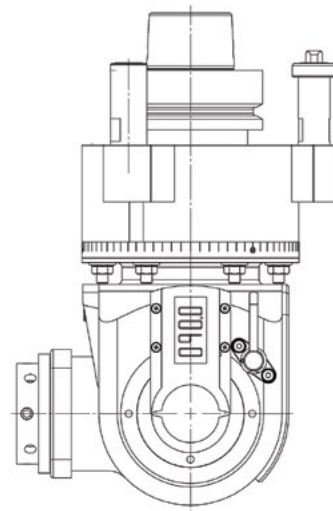
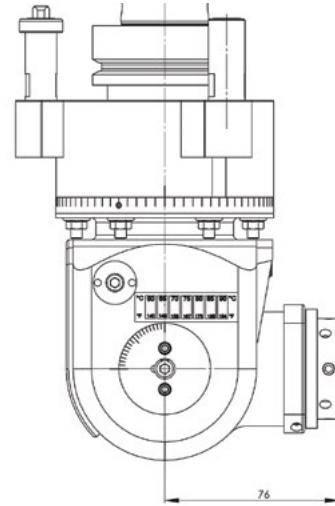
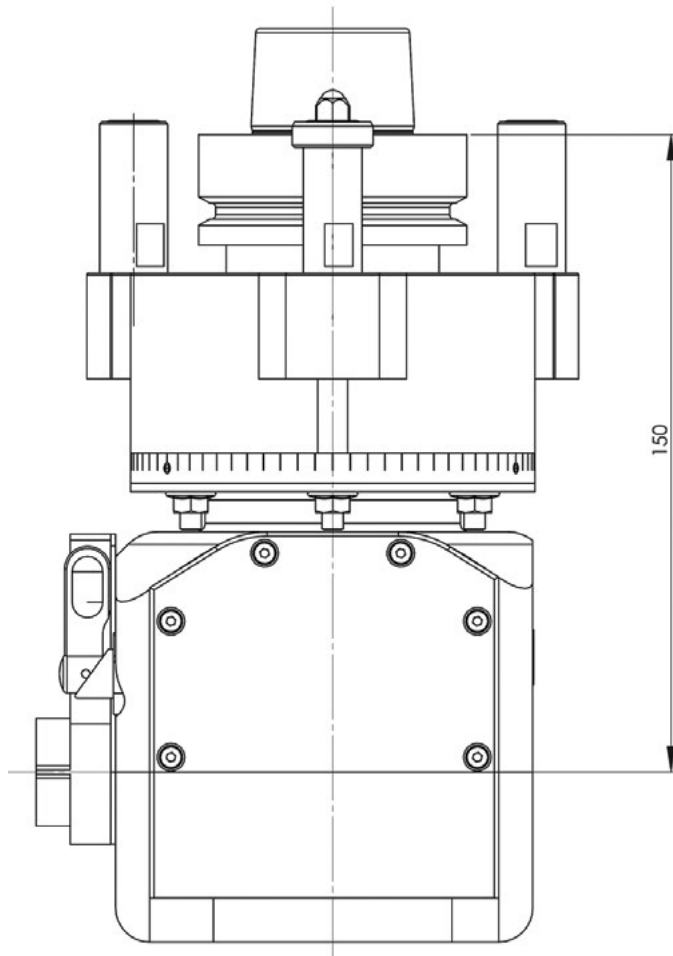
Sawing

| | |
|----------------------------------|--|
| Max Speed Input (Spindle) | 15,000 R.P.M. |
| Max Speed Output (Tool) | 15,000 R.P.M. |
| Max Torque | 14.75 ft/lbs |
| Gear Ratio | 1:1 |
| Lubrication | Grease |
| Max Temp. | 85° C / 185° F |
| Rotation | 360° |
| Output Direction | Opposite of machine spindle |
| Tool Interfaces | K1, K2 (Vario) K1, K2, Modular (Viso) |

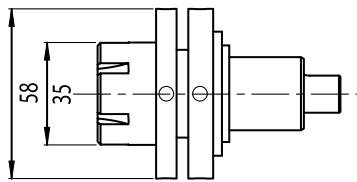


FunctionLINE – Vario/Viso Aggregates

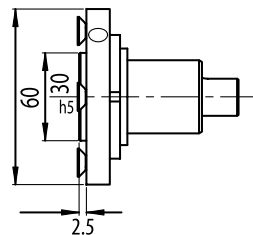
FunctionLINE Vario/Viso Dimensions (mm)



FunctionLINE Vario/Viso Output Options

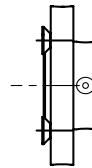


K1 - ER25 Collet and saw blade

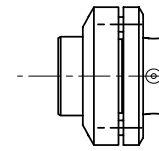


K2 - Combi spindle 45mm and 52mm bolt circle

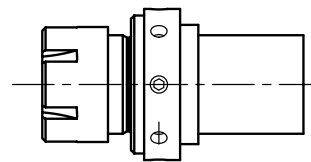
FunctionLINE Vario/Viso Modular Options



S1 - Modular Saw Spindle w/ 10 mm bore for router bit



P1 - Modular Saw Arbor Range: 1.5mm-4mm tool shank



M5 - Modular ER25

FunctionLINE – Extra Aggregates



FunctionLINE Extra Aggregate

Innovative lockset recess aggregate features an offset design optimized for cutting lockset recesses. Can also be used for other boring operations.

Use For:

- routing out lockset recesses
- use ER16 output on back for cutting lock plates
- other boring or routing operations

Features:

- Offset design optimized for longer tooling operations such as mortising
- ER32 output on front, ER16 on back
- 15,000 RPM tool speed for faster cutting

Includes:

- Collet nut & wrenches
- ER collets sold separately



Scan the QR code or go to <http://ow.ly/GOArR> to watch the video

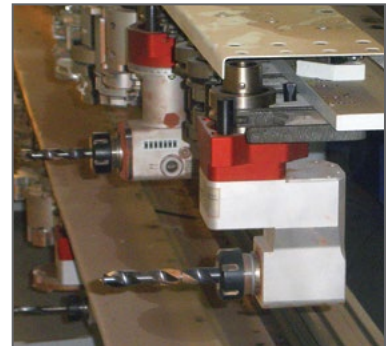
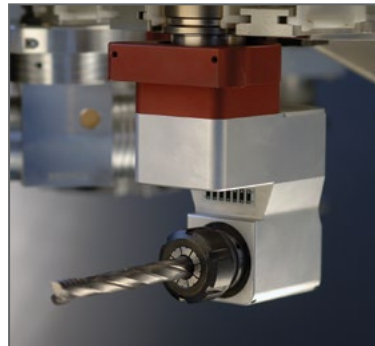


Boring



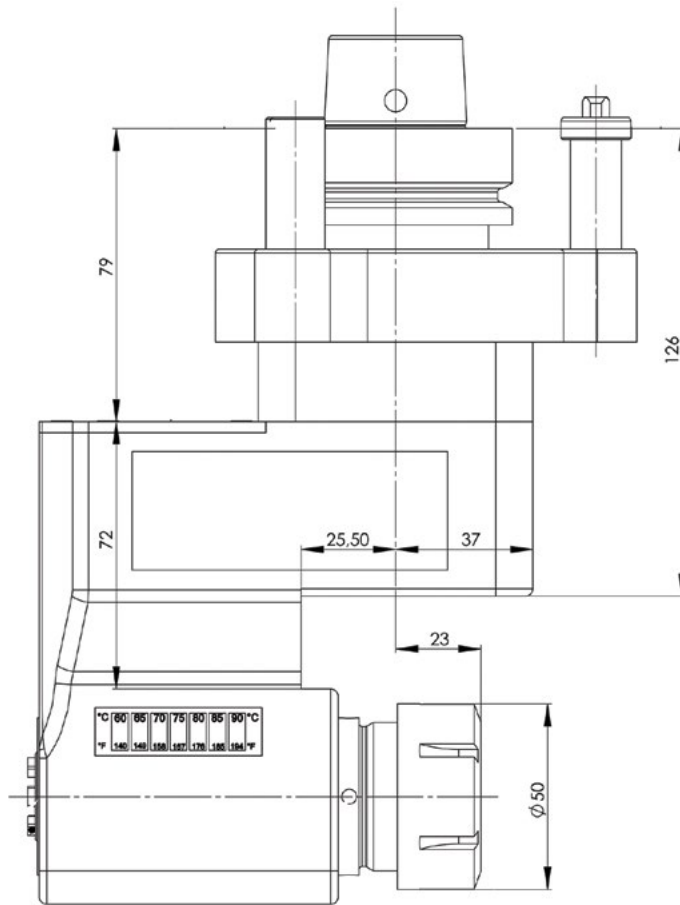
Milling

| | |
|----------------------------------|------------------------------------|
| Max Speed Input (Spindle) | 10,000 R.P.M. |
| Max Speed Output (Tool) | 15,000 R.P.M. |
| Max Torque | 14.75 ft/lbs |
| Gear Ratio | 1:1.5 |
| Lubrication | Grease |
| Max Temp. | 85° C / 185° F |
| Rotation | 360° |
| Output Direction | Same as machine spindle |
| Tool Interfaces | Front: ER32 Back: ER16 integral |

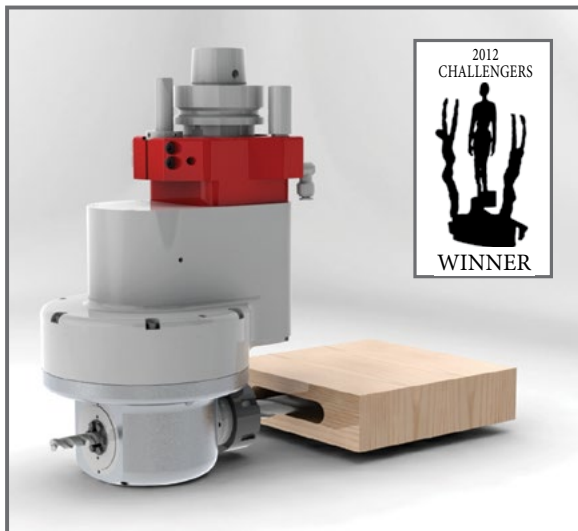


FunctionLINE – Extra Aggregates

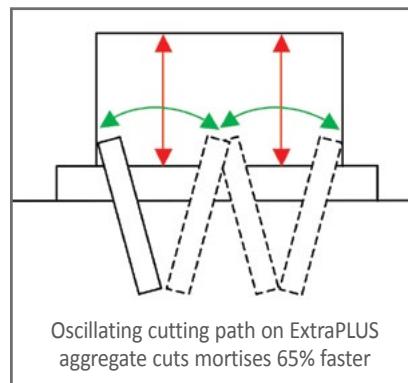
FunctionLINE Extra Aggregate



EXTRA PLUS Oscillating Lock-Recess Aggregate



Winner of the IWF 2012 Challengers Award, the Extra Plus aggregate head is one of our innovative additions to our FunctionLINE. Featuring an oscillating cutting motion, the Extra Plus reduces lock recess cutting time by 65%.



Scan the QR code or go to <http://ow.ly/Aimc0> to watch the video

FunctionLINE – Soft Touch Aggregates



FunctionLINE Soft Touch Aggregate

The Soft-Touch aggregate head accurately follows the contours of your material, automatically compensating for up to 10mm of variance for consistent depth-of-cut. Floating pressure is adjustable from 1/4 lb. to 20 lbs. Compressed air provides saw dust evacuation.

Features:

- Up to 10mm of compensation for surface variation
- Eliminate re-work processing
- Optional chip guide directs dust into the machine's dust hood for a cleaner work environment

Includes:

- Collet nut and wrench, standard floating bell, ER25 or ER32 output (your choice)



Scan the QR code or go to <http://ow.ly/GOAXj> to watch the video



Boring

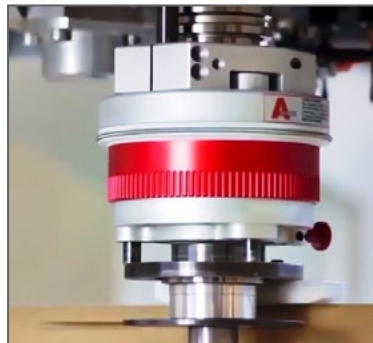
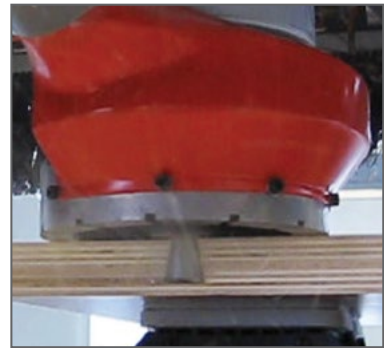
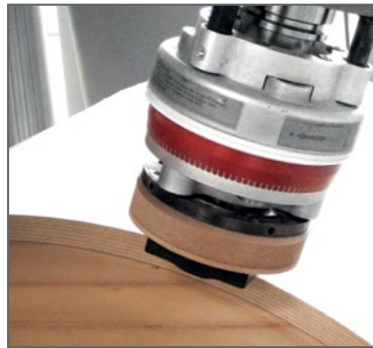


Milling



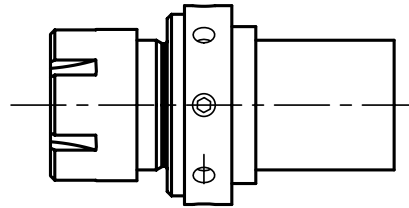
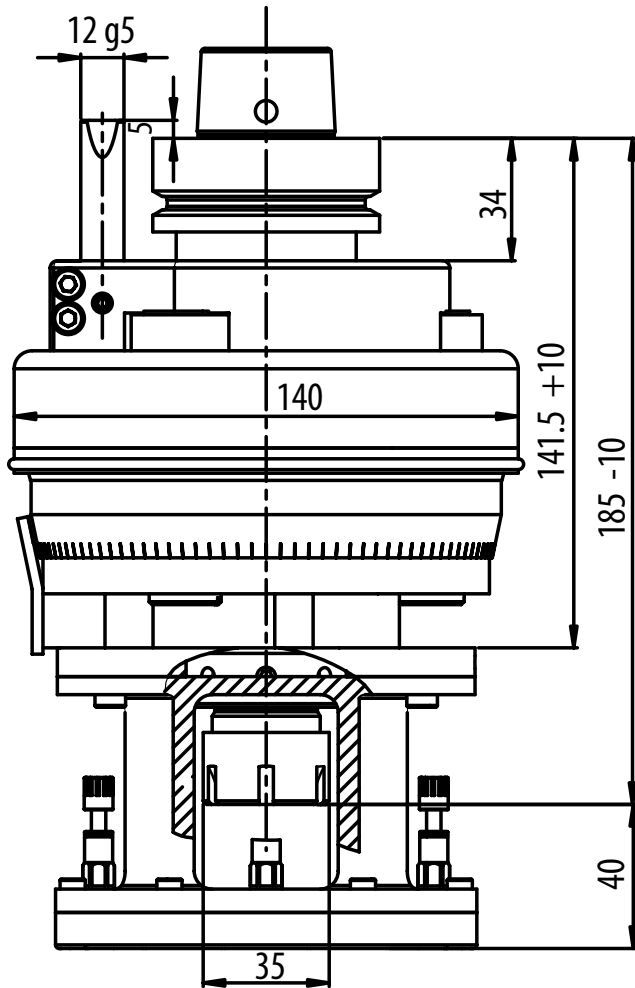
Sanding/
Finishing

| | |
|----------------------------------|--|
| Max Speed Input (Spindle) | 18,000 R.P.M. (24,000 R.P.M option) |
| Floating Pressure | Adjustable from 1/4 lb. to 20 lbs. |
| Floating Range | 10 mm (with 10mm adjustment) |
| Floating Bell | 70mm deep x 105 mm I.D. |
| Max Torque | 10 ft/lbs |
| Gear Ratio | 1:1 |
| Lubrication | Grease |
| Max Temp. | 85° C / 185° F |
| Output Direction | Same as machine spindle |
| Tool Interfaces | Modular |

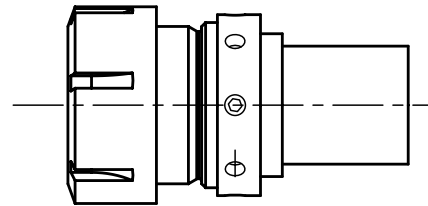


FunctionLINE – Soft Touch Aggregates

FunctionLINE Soft Touch Dimensions (mm) FunctionLINE Soft Touch Modular Options



M5 - Modular ER25

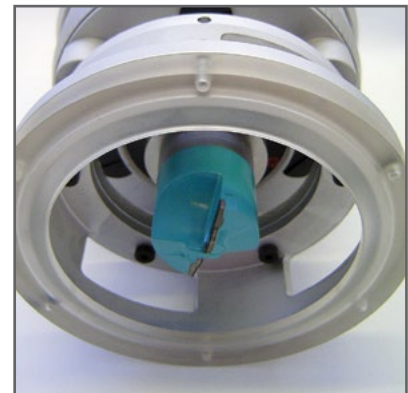


R6 - Modular ER32

Soft-Touch Aggregate Heads

Soft-Touch aggregates modular capabilities provide a wide variety of spindle outputs to perform a variety of processing tasks quickly and efficiently.

Includes: Chip Guide, Various floating bells, shoes, sanding discs, and sleighs.



UltraLINE – Mono Aggregates



UltraLINE Mono Aggregate

UltraLINE aggregates are an affordable way to add 4th axis capability to your CNC router. Perform routing, boring, mortising, and sawing operations faster and easier. We recommend UltraLINE aggregates for sawing using blades larger than 7", V-grooving, heavy routing operations, cutting MDF, composite materials, or cutting aluminum.

Features

- Oil bath gear lubrication for superior wear resistance during heavy-duty operations
- Single, right angle output (other angles available)
- Output options: ER25, ER32, saw blade, arbor

Includes:

- Collet nut & wrenches
- ER collets sold separately



Scan the QR code or go to <http://ow.ly/GOAHk> to watch the video



Boring

Milling

Sawing

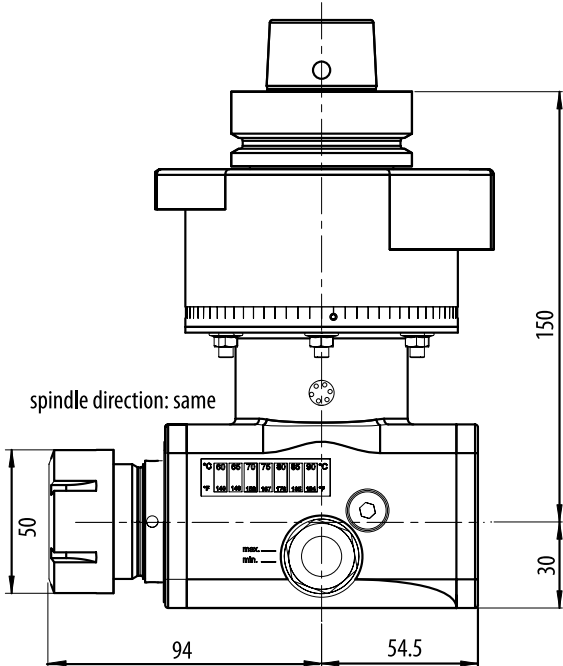
Sanding/
Finishing

| | |
|----------------------------------|--|
| Max Speed Input (Spindle) | 10,000 R.P.M. |
| Max Speed Output (Tool) | 15,000 R.P.M. |
| Max Torque | 16.25 ft/lbs |
| Gear Ratio | 1:1.5 |
| Lubrication | Oil Bath |
| Max Temp. | 85° C / 185° F |
| Rotation | 360° |
| Output Direction | Same as machine spindle |
| Tool Interfaces | M5, R6, S1, S2, A1, A2, A3, A4, O5, R7 |

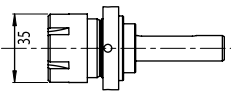


UltraLINE – Mono Aggregates

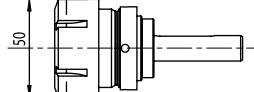
UltraLINE Mono Dimensions (mm)



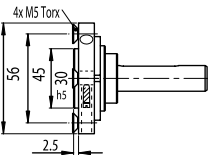
UltraLINE Mono Modular Options



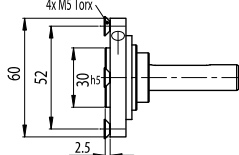
M5 - ER25 Collet and nut
Range: 1mm – 16mm



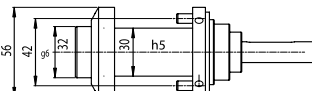
R6 - ER32 Collet and nut
Range: 3mm – 20mm



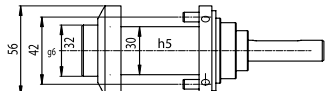
S1 - Saw Spindle, 45mm bolt circle
w/ 10 mm bore for router bit



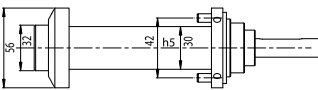
S2 - Saw Spindle
52mm bolt circle



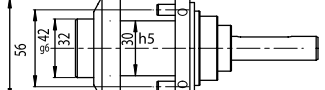
A1 - Prolock Spindle
Range: 1.5mm-6mm tool shank



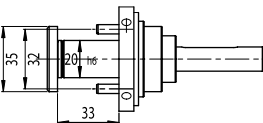
A2 - Prolock Spindle
Range: 48mm – 52mm



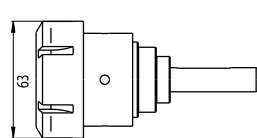
A3 - Prolock Spindle
Range: 98mm – 102mm



A4 - Prolock Spindle
Range: 28mm – 32mm



O5 - Special, $\varnothing 20h6$ 2x $\varnothing 5H7$, 2x
M5 - bolt circle 32mm, M10 central



R7 - ER40 - for use with Ultra
Line only. Range: 4mm – 26mm

UltraLINE – Duo Aggregates



UltraLINE Duo Aggregate

UltraLINE aggregates add 4th axis capability to your CNC router. Perform routing, boring, mortising, and sawing operations faster and easier. We recommend UltraLINE aggregates for sawing using blades larger than 7", V-grooving, heavy routing operations, cutting MDF, composite materials, or cutting aluminum.

Features

- Oil bath gear lubrication for superior wear resistance during heavy-duty operations
- Dual, right angle output (other angles available)
- Output options: ER25, ER32, saw blade, Prolock

Includes:

- Collet nuts & wrenches
- ER collets sold separately



Scan the QR code or go to <http://ow.ly/GOAHk> to watch the video



Boring



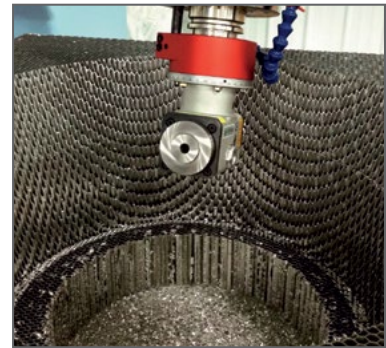
Milling



Sawing



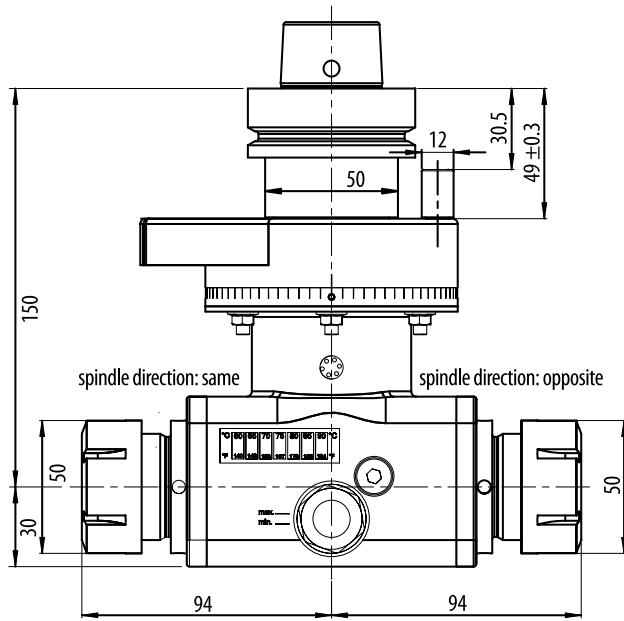
Sanding/
Finishing



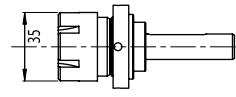
| | |
|----------------------------------|--------------------------------------|
| Max Speed Input (Spindle) | 10,000 R.P.M. |
| Max Speed Output (Tool) | 15,000 R.P.M. |
| Max Torque | 16.25 ft/lbs |
| Gear Ratio | 1:1.5 |
| Lubrication | Oil Bath |
| Max Temp. | 85° C / 185° F |
| Rotation | 360° |
| Output Direction | Same as machine spindle |
| Tool Interfaces | M5, R6, S1, S2, A1 A2, A3, A4, 05 |

UltraLINE – Duo Aggregates

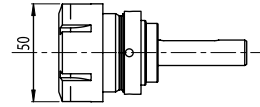
UltraLINE Duo Dimensions (mm)



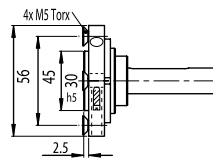
UltraLINE Duo Modular Options



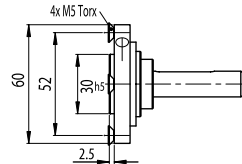
M5 - ER25 Collet and nut
Range: 1mm – 16mm



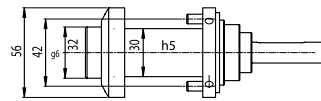
R6 - ER32 Collet and nut
Range: 3mm – 20mm



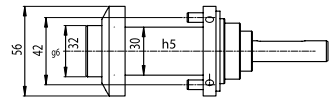
S1 - Saw Spindle, 45mm bolt circle
w/ 10 mm bore for router bit



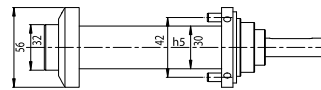
S2 - Saw Spindle
52mm bolt circle



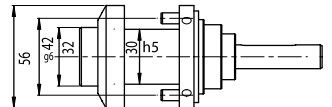
A1 - Prolock Spindle
Range: 1.5mm-6mm tool shank



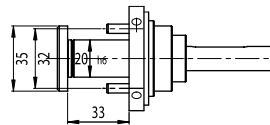
A2 - Prolock Spindle
Range: 48mm – 52mm



A3 - Prolock Spindle
Range: 98mm – 102mm



A4 - Prolock Spindle
Range: 28mm – 32mm



05 - Special, $\varnothing 20h6$ 2x $\varnothing 5H7$, 2x
M5 - bolt circle 32mm, M10 central

UltraLINE – Vario/Viso Aggregates



UltraLINE Vario/Viso Aggregate

UltraLINE aggregates feature oil bath lubricated gearing for superior wear resistance, and are sealed from all contaminants for extended life under heavy-duty conditions.

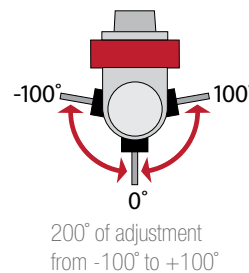
UltraLINE aggregates are perfect for sawing using blades larger than 7", V-grooving, heavy routing operations, cutting MDF, composite materials, or cutting aluminum.

Features:

- Full 200° of angle adjustment from -100° to 100°
- Most flexible of any aggregate head
- Create "impossible" custom profile and mortises
- Faster sizing and grooving than with router bits

Includes:

- Collet nut & wrenches
- Torx screws and saw blade connection
- ER collets sold separately



Scan the QR code or go to <http://ow.ly/GOzUH> to watch the video



Boring



Milling

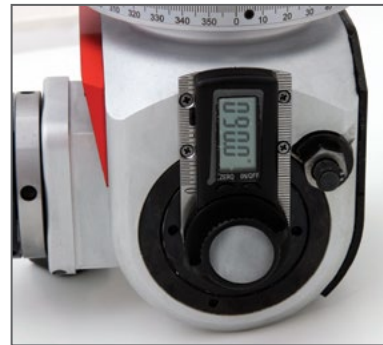


Sawing



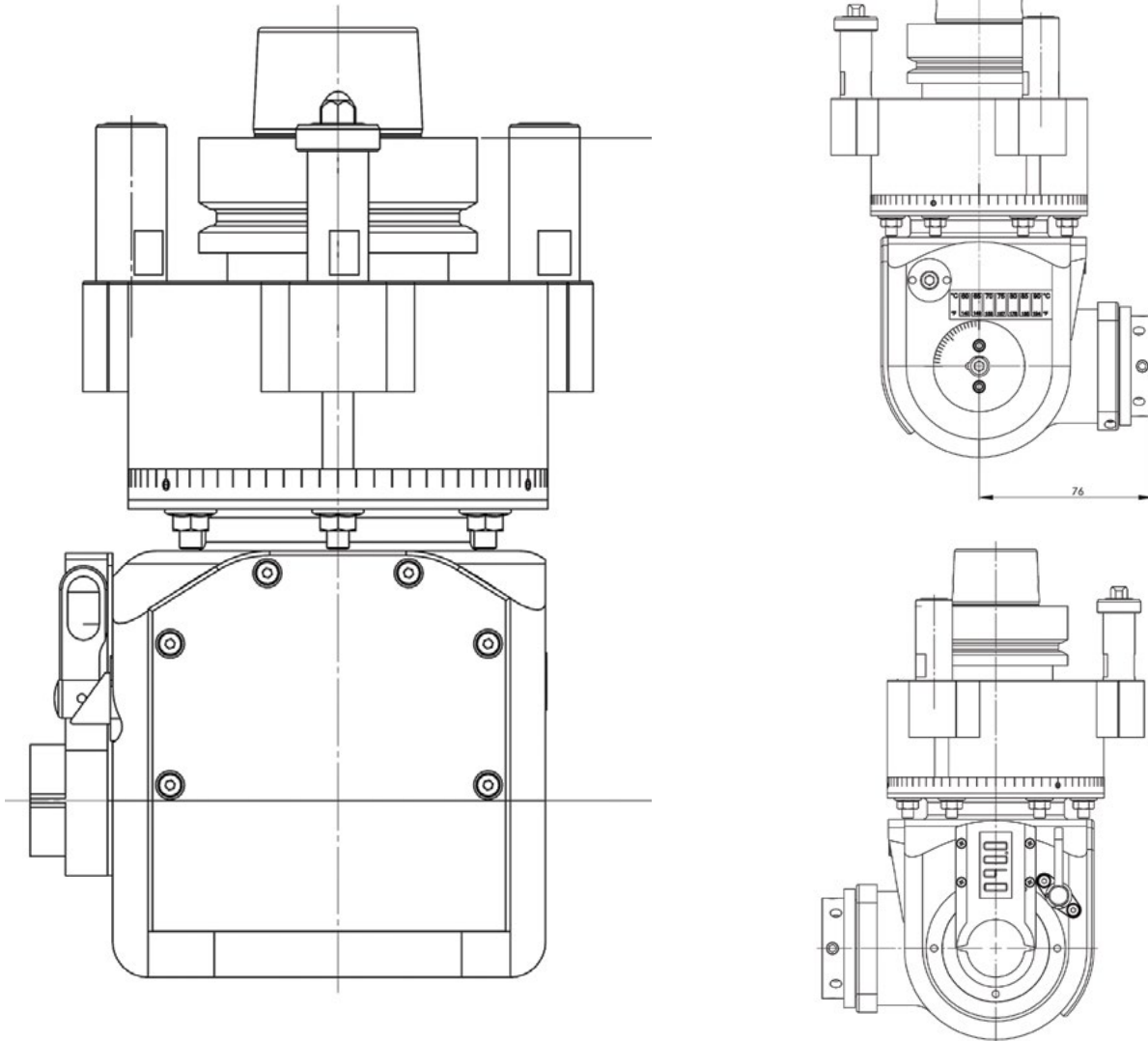
Sanding/
Finishing

| | |
|----------------------------------|--------------------------|
| Max Speed Input (Spindle) | 13,760 R.P.M. |
| Max Speed Output (Tool) | 15,000 R.P.M. |
| Max Torque | 16.25 Ft/lbs |
| Gear Ratio | 1:1.09 |
| Lubrication | Oil Bath |
| Max Temp. | 85° C / 185° F |
| Rotation | 360° |
| Output Direction | Opposite machine spindle |
| Tool Interfaces | K1, K2 |

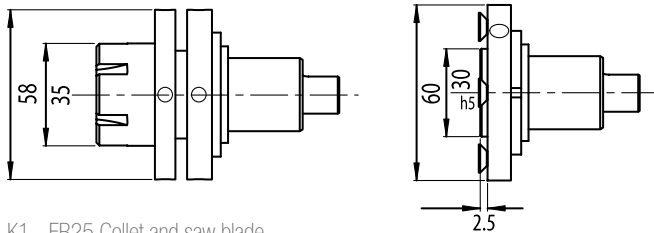


UltraLINE – Vario/Viso Aggregates

UltraLINE Vario/Viso Dimensions (mm)



UltraLINE Vario/Viso Output Options



K1 - ER25 Collet and saw blade

K2 - Combi spindle 45mm
and 52mm bolt circle

UltraLINE – Moulder Aggregate



UltraLINE Moulder Aggregate

UltraLINE Moulder aggregates are used with a variety of cutting tools to shape and form as required. They are also used for gang saw operations. They feature oil bath lubricated gearing for superior wear resistance under heavy-duty use.

Features:

- Gear reduction for high torque
- 30mm x 120mm arbor size
- Optional Chip Guide for dust control

Includes:

- Slide hammer and saw pins



Scan the QR code or go to <http://ow.ly/GOBaC> to watch the video



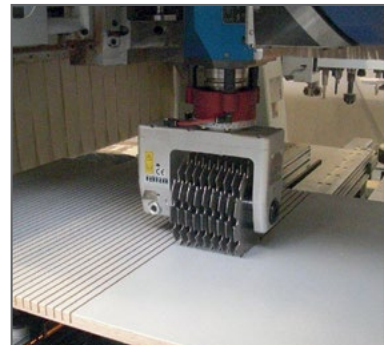
Moulding



Sawing



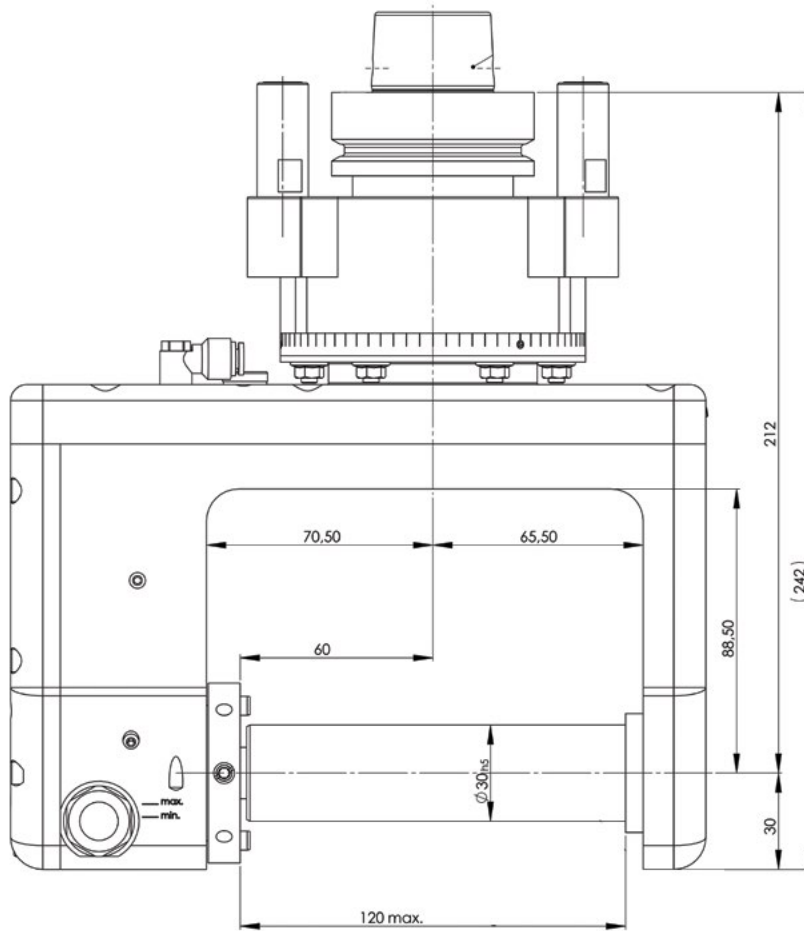
Sanding/
Finishing



| | |
|----------------------------------|--------------------------|
| Max Speed Input (Spindle) | 11,380 R.P.M. |
| Max Speed Output (Tool) | 7,690 R.P.M. |
| Max Torque | 17 ft/lbs |
| Gear Ratio | 1:0.641 |
| Lubrication | Oil Bath |
| Max Temp. | 85° C / 185° F |
| Output Direction | Same as machine spindle |
| Tool Interfaces | Arbor Size: 30mm x 120mm |

UltraLINE – Moulder Aggregate

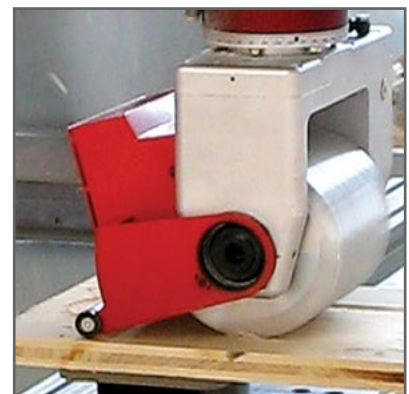
UltraLINE Moulder Dimensions (mm)



Moulder Head Chip Guide

During operation dust is directed horizontally by the natural exhaust of the moulder.

The Chip Guide System directs dust and chips into the machine's dust exhaust system, so chips don't contaminate your material or your workplace.



Specialty/Custom Aggregate Heads

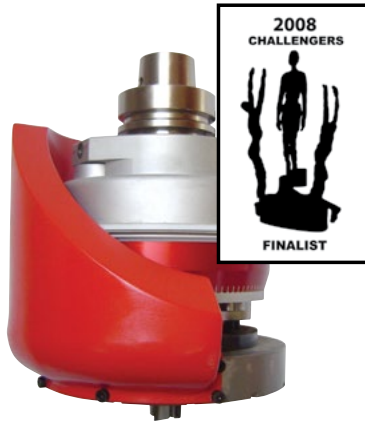


profiling aggregate



3 inline outputs for boring

grooving applications



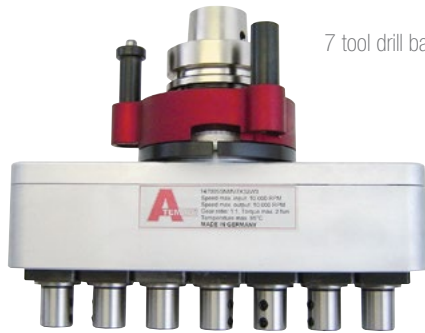
Floating Aggregate with Chip Guide System



mortising chainsaw style



chisel corner squaring



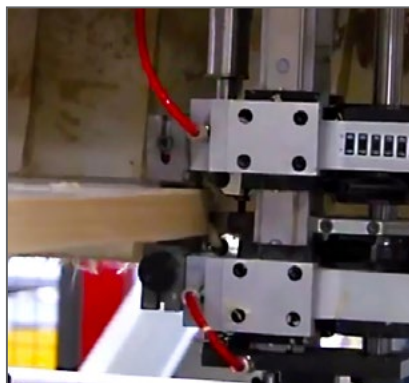
7 tool drill bank



oscillating aggregate speeds mortising



Milling & finishing of edges



Multi-spindle speed processing



Cutting pocket with chainsaw

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