

# HPI - PIONEER Premium Tool Holding & Work Holding SG - Second Generation Tool Holding System



**PIONEER**

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# Value Pack 2010

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Our traditional Value Pack has been improved to meet today's machining requirements. This is the finest tooling in the industry packaged and ready to ship.

Features:

- **Dynamically Balanced 20,000 RPM (Cat50 @ 15,000)**
- **AT3 or better Taper Tolerance Guaranteed**
- **Collet Chucks 3µm (0.0001") TIR Taper to Taper**
- **End Mill Adapters 3µm (0.0001") TIR Taper to Bore with H5 Bore Tolerance**
- **DIN AD/B Flange Entry Coolant Standard!**
- **Shiny Finish**
- **Now Inch Lengths!**



<b>CAT40 VP Standard</b> \$599.00 USD Balanced to G6.3 @ 20,000 RPM	<b>CAT50 VP Standard</b> \$899.00 USD Balanced to G6.3 @ 15,000 RPM	<b>BT30 VP Standard</b> \$599.00 USD Balanced to G6.3 @ 20,000 RPM	<b>BT40 VP Standard</b> \$599.00 USD Balanced to G6.3 @ 20,000 RPM
(2) CAT40-ER16H-0250	(2) CAT50-ER32-0400	(3) BT30-ER16H-70	(2) BT40-ER16H-60
(2) CAT40-ER32 -0250	(2) CAT50-ER40-0400	(3) BT30-ER20H-70	(2) BT40-ER32 - 75
(1) CAT40-EM025-0250	(1) CAT50-EM050-0300	(1) BT30-EM025-0236	(1) BT40-EM025-0250
(1) CAT40-EM037-0250	(1) CAT50-EM062-0300	(1) BT30-EM037-0236	(1) BT40-EM037-0250
(1) CAT40-EM050-0250	(1) CAT50-EM075-0300	(1) BT30-EM050-0236	(1) BT40-EM050-0250
(1) CAT40-EM075-0250	(1) CAT50-EM100-0300	(1) BT30-EM075-0236	(1) BT40-EM075-0250
(1) CAT40-EM100-0300	(1) CAT50-EM125-0300		(1) BT40-EM100-0300
(1) CAT40-SM075-0175	(1) CAT50-SM125-0150		(1) BT40-SM075-0175

<b>CAT40 VP Plus</b> \$749.00 USD All of the tools above plus the following:	<b>CAT50 VP Plus</b> \$1,049.00 USD All of the tools above plus the following:	<b>BT30 VP Plus</b> \$749.00 USD All of the tools above plus the following:	<b>BT40 VP Plus</b> \$749.00 USD All of the tools above plus the following:
(5) ER16 COLLETS + Tray ER16-0125 (1/8) ER16-0187 (3/16) ER16-0250 (1/4) ER16-0312 (5/16) ER16-0375 (3/8)	(6) ER32 COLLETS + Tray ER32-0250 (1/4) ER32-0312 (5/16) ER32-0375 (3/8) ER32-0500 (1/2) ER32-0625 (5/8) ER32-0750 (3/4)	(5) ER16 COLLETS + Tray ER16-0125 (1/8) ER16-0187 (3/16) ER16-0250 (1/4) ER16-0312 (5/16) ER16-0375 (3/8)	(5) ER16 COLLETS + Tray ER16-0125 (1/8) ER16-0187 (3/16) ER16-0250 (1/4) ER16-0312 (5/16) ER16-0375 (3/8)
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(1) ER16 WRENCH (1) ER32 WRENCH	(1) ER32 WRENCH (1) ER40 WRENCH	(1) ER16 WRENCH (1) ER20 WRENCH	(1) ER16 WRENCH (1) ER32 WRENCH



ER Collet Chuck  
3µm (0.0001) or better  
T.I.R. on ID taper



Endmill Adapter  
H5 tolerance on I.D. &  
3µm (0.0001) TIR  
or better



Shell Mill Adapter



DIN AD/B Flange  
Coolant - Pre-Sealed  
for Center Coolant



Collet Set  
5µm 0.0002" Runout  
Standard



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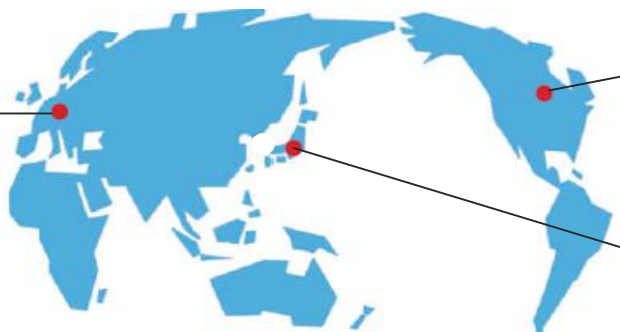
# The Pioneer Group

We have been in the metal cutting industry for over three decades and contributed to the progress of the industry through the development and supply of the best quality products both in premier and standard product groups. Some of the products that we either manufacture or source from outside have supported the most sophisticated products out from Japan known for their unsurpassed edge in technology.

## Our Mission

It is our renewed pledge that we will continue our conscientious efforts to supply our customers with the finest quality and most sophisticated tool holders and other products at competitive prices so that our customers can stay abreast in an ever-changing and competitive world. As you turn the pages of our new 2010 catalog, you will find windows for products with the best in quality, performance and in technology that are available in the world today.

All of our products have our uncompromising support and back-up, world-wide through our own world-wide organizations and in partnership with our overseas partners.



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### HPI - PIONEER

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# Best Price, Period.



This is not a gimmick. Compare our standard List Price against Parlec, Command, Haimer, Lyndex Nikken, Rego-Fix, Techniks and you will find the **lowest price** on ER, EM, SM, RA, TC, Collets: ER, TG, DA, SSER, RA and TA adapters **at any quantity!**

Add a standard Retention Knob for **\$7 Net** with every holder.

We stand behind everything we build and sell. Our Distributors are some of the best in the business. Together, we have been delivering world-class support and product satisfaction to organizations like yours.

We listen too. Our success enables us to continuously improve our engineering AND lower our standard list prices.

Your success hinges on having people, products and pricing you can trust. Give us a try and see what others already know...

you won't be disappointed.

## Unsurpassed Quality

- ⇒ Static & **Dynamic Balance** to 20,000 RPM's on all BT30, BT40 & Cat40  
15,000 RPM's on Cat50 & BT50
- ⇒ **3 Micron** or better on all ER, TG Chucks  
Taper to Taper
- ⇒ **3 Micron** or better on all End Mill Adapters
- ⇒ **Reach Support** on all Extended Length holders for additional Rigidity - Standard
- ⇒ **10", 12" and 15" projections** in Cat50 EM, SM and ER
- ⇒ **Improved Mill Chuck** design for High Speed applications
- ⇒ Shiny Finish
- ⇒ Inch Lengths, Nose Diameters, Screw Positions to be 100% interchangeable with competitive models
- ⇒ **DIN AD+B Standard** on all Cat40, Cat50, BT40 EM, SM, ER, TG and many more up to 12" Projections
- ⇒ New Packaging

**Best Performance, Best Price, Excellent Inventory, Period!**

Parlec is a Trade Name of Parlec, Inc., 101 Perinton Parkway, Fairport, NY 14450, USA  
Command is a Trade Name of Command Tooling Systems, LLC, 1393 I Sunfish Lake Blvd., Ramsey, MN 55303 U.S.A.  
Haimer is a Trademark of Franz Haimer GmbH LTD LIAB CO FED REP GERMANY Weitenstrasse 21 86508 Heilbrunn  
Lyndex Nikken is a Trademark of LYINDEX-NIKKEN, INC. CORPORATION ILLINOIS 1468 ARMOUR BOULEVARD MUNDELEIN ILLINOIS 60060  
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Techniks is the Trade Name of Techniks Inc. 9930 East 56th Street, Indianapolis, IN 46236

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# MC - Milling Chuck

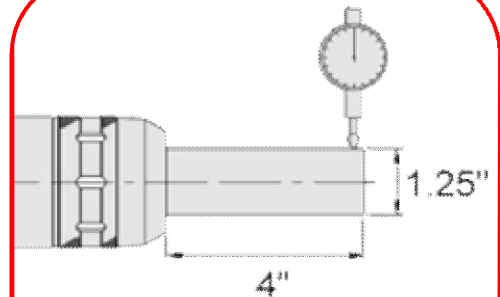
## Powerful and Rigid

Roughing and Finishing



### Semi-Roughing To Finishing

With its unsurpassed gripping torque and fine run-out capability, the MC provides the maximum performance not only for tough roughing applications but also for fine-finishing applications. It also provides longer cutter life.

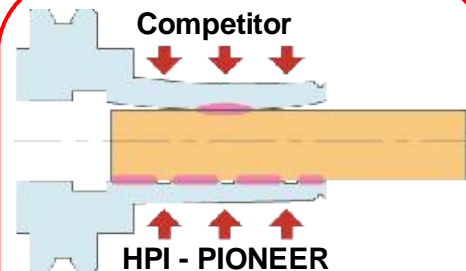
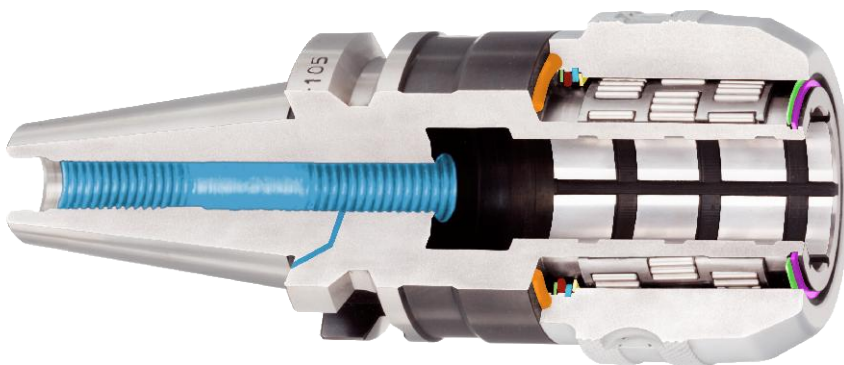


### Ultra-Precision Performance

The MC is ground for 0.0002" (5 $\mu$ ) run-out at 4" from nose (MC1/1/4).

### When performance matters HPI - PIONEER delivers:

- 5 Micron (0.0002") TIR at 4"
- Over 600 ft/lbs of Radial Slip Torque (MC 1-1/4) due to the unique Radial Groove system
- 20% Higher Radial Torque than competitive models
- Extreme Dampening Effect - MC Closer nut dampens heavy cutting applications for better tool life and finish
- Collet System down to 1/8" (6mm)
- Sealed roller bearing system
- 100% Inspection



### Radial Grooves

The radial grooves provide more uniform collapse capability and allows the chuck to collapse evenly all the way to the nose. It provides reliable gripping and run-out capability, and also minimizes cutter vibration and chatter.



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# MX - Mini Chuck

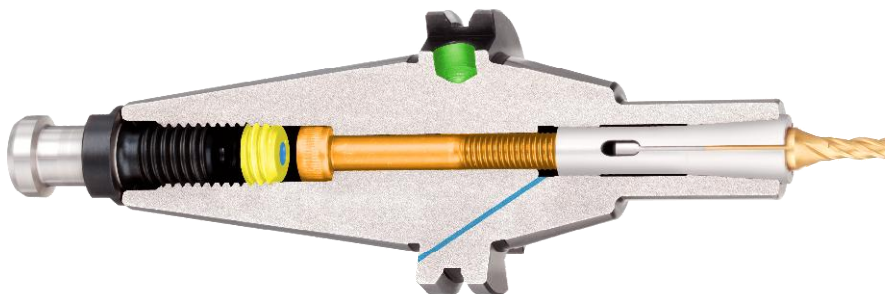
## Small & Accurate

Ultra-Performance Finishing



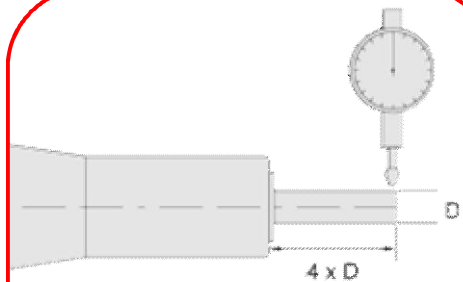
### Cost effective small tool performance:

- 3 Micron (0.0001") TIR at 4X Tool Diameter
- Dynamically Balanced for High Speed applications
- High Pressure Coolant Thru Standard with optional Jet Slotting
- Collet System down to 1/8" (3mm)
- Gear Drive or Rear Pull Collet System Available
- 100% Inspection
- Small nose diameter for close center work



### Finishing

With 0.0001" TIR the MX provides the best finish and tool life with small tooling. Coolant thru design delivers air or coolant to extend tool life.



### Ultra-Precision Performance

MX is ground for 0.0001" (3µm) run-out at 4D from the collet face.



### High Pressure Coolant Ready

Unique slotting design allows for coolant pressures as high as 1,500psi. Optional Jet Slots available to provide coolant around solid cutting tools.

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# D3 - Dynamic Dual Drive

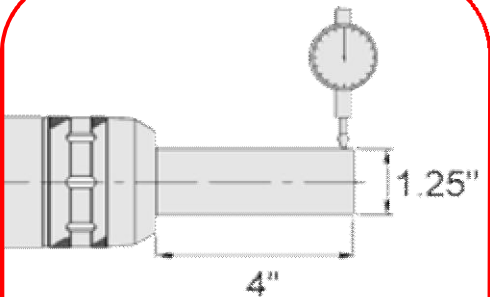
## Dual Contact

For + Spindles



### Spindle and Tool Wear / Heat Compensation

Movable flange absorbs vibration and ensures optimum dual contact, compensating for wear and expansion from heat.

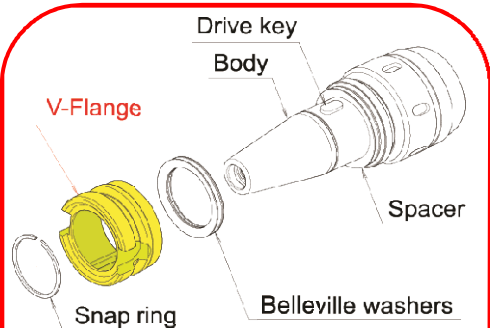
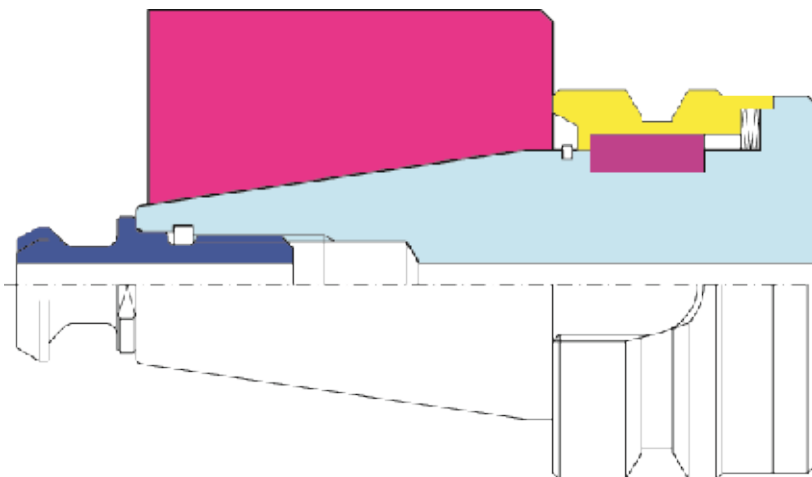


### Ultra Precision

The MC is ground for 0.0002" (5 $\mu$ ) run-out at 4" from nose (MC1/1/4).

### When performance matters HPI - PIONEER delivers:

- 5 Micron (0.0002") TIR at 4"
- Spindle Taper & Face Contact for Dual Drive in side load cutting
- Over 600 ft/lbs of Radial Slip Torque (MC 1-1/4) due to the unique Radial Groove system
- Extreme Dampening Effect - MC Closer nut dampens heavy cutting applications for better tool life and finish
- Collet System down to 1/8" (6mm)
- Sealed roller bearing system
- 100% Inspection



### Rigid & Solid

- Solid body with movable flange allow the solid taper to mate directly to the spindle.
- Perfect simultaneous taper and flange contact.



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# ER Collet System

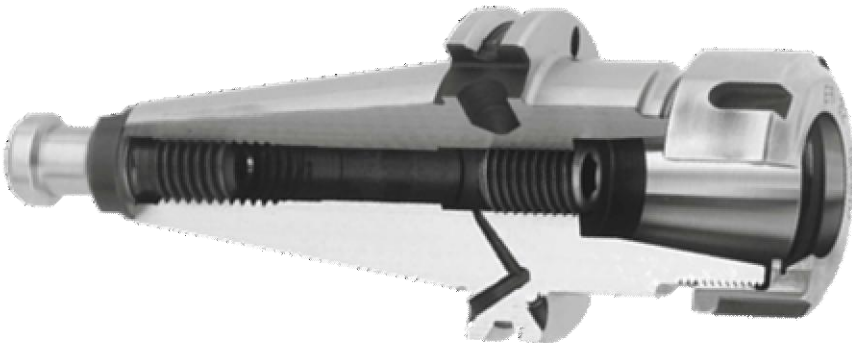
## Flexible and Accurate

Performance Drilling and Milling



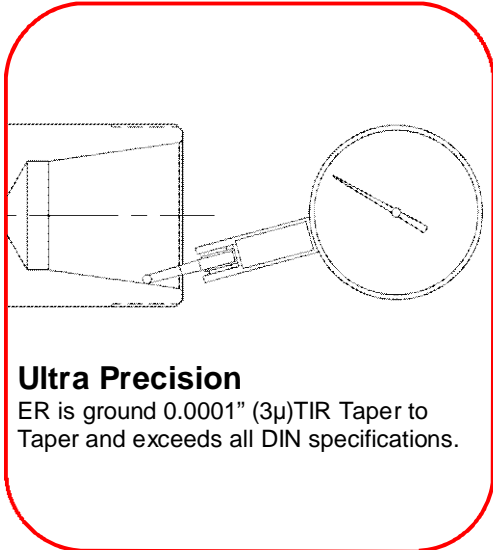
### Cost effective Industry Standard:

- 3 Micron (0.0001") Taper to Taper
- Dynamically Balanced for High Speed applications
- High Pressure Coolant Thru
- DIN AD/B Standard on Cat40, Cat50 and BT40
- Standard, Steel Seal and Rubber Sealed Collets in Stock
- 100% Inspection
- Exceeds all Industry Standards



### True Dynamic Balance

HPI ER collet chucks are Dynamically balanced not production balanced.



### Ultra Precision

ER is ground 0.0001" (3μ)TIR Taper to Taper and exceeds all DIN specifications.



### Dynamic Balanced Nut

The collet nut is available in a true dynamic balance, this nut is available for all ER Collet Chucks.

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# SX - Slim Chuck

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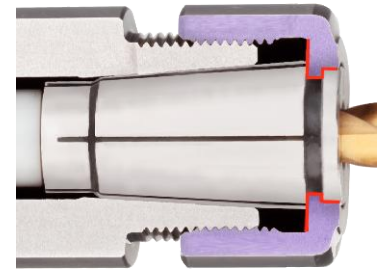
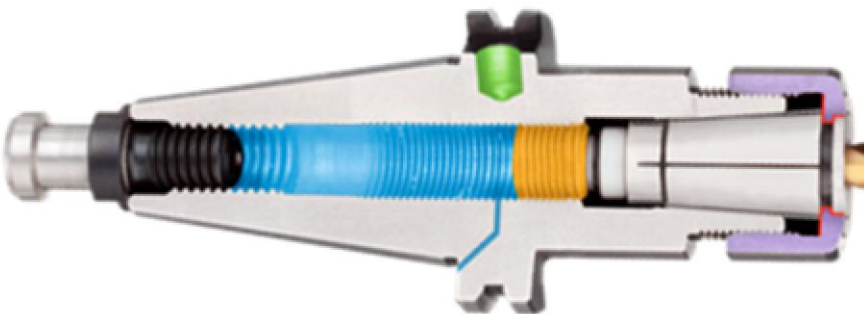
## Powerful and Rigid

Roughing and Finishing



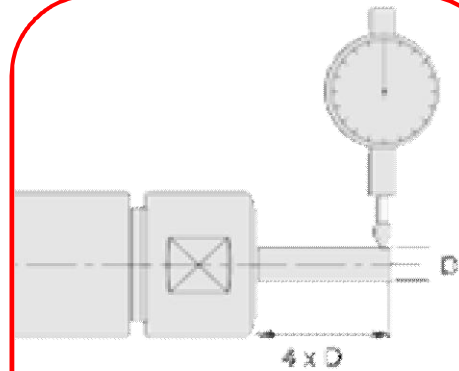
### Consistent Tool Change performance:

- 3 Micron (0.0001") Taper to Taper
- 50% more holding power than comparable ER systems
- Dynamically Balanced for High Speed applications
- High Pressure Coolant Thru
- DIN AD/B Optional
- Standard and Steel Seal Collets Available
- 100% Inspection
- Exceeds all Industry Standards



### Flat Ground Shoulder

By having a flat ground shoulder in the collet nut, the collet can be clipped into the nut ensuring to hold the cutter on the tool holder centerline.

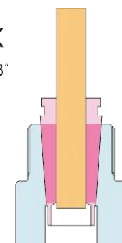


### Fine Run-Out

0.0004" (10 Micron) run-out at 4D away from the nose. Ultra-Precision Class 0.0002" (5 Micron) collet available.

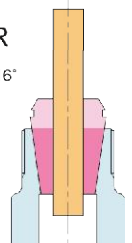
HSX

8°



ER

16°



### Smaller Taper Angle

The SX uses a smaller taper angle, which is half of the industry standard 16° collet systems. This collet system provides 100% more gripping torque and better concentricity.





# Precision Collets

## Designed to Exceed

Precision and Ultra-Precision

**HPI - PIONEER** Collets are the “Best in Class” for performance and price. We have expanded our view of the market and offer some of the first Steel Sealed collets in TG and SX as well as the only ranging Steel Sealed ER collet in the market today.

## Accuracy

HPI - PIONEER standard Precision collets are manufactured to exceed industry standards for that collet.

We offer 2 grades of collets, Precision and Ultra Precision.

Ultra Precision collets are 1/2 the runout of standard Precision collets. Each Ultra Precision collet is hand inspected off master gages to guarantee accuracy.

## Coolant Thru

HPI - PIONEER has re-designed how many collets function with improved run out and coolant sealing without the need of plugs, disk or any secondary item.

We call this sealing technique “Steel Seal” which we also refer to as “Sealed by Design”. This design seals by keeping the slots locked into the collet chuck taper, the result is slots are blind inside the collet chuck which seals the collets.

There are many manufacturer’s making this design collet today but all have designed their collet for single use or “On Size” tooling.

We took this design and changed the slotting to allow the collet to collapse.

Our SSER product will range from 0.25mm - 1.0mm depending on the bore size. Our SSTG design will collapse a full 0.5mm without reducing holding power.



### Standard Collets Available from HPI - PIONEER

MC - Milling Chuck



MX - Mini Chuck



SX - Slim Chuck



ER Collet



TG Collet



DA Collet



## HPI - PIONEER Quality Assurance

Quality is the cornerstone of our organization and it is the only way to retain customers. HPI - PIONEER stands behind every product we manufacture and sell. HPI - PIONEER warrants against defective material and workmanship for one year from the shipping date. Customer designed tools may be subject to special warrantee conditions. All other warranties, expressed or implied, are excluded from all sales by HPI - PIONEER.

HPI cannot control how our customers use our product. All information provided is given in good faith. It is the responsibility of the user to do testing to insure the products suitability with the application.

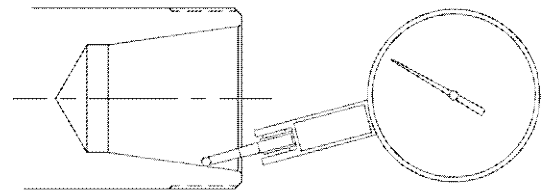
### Understanding T.I.R.

One of the issues with all cutting tools performance is TIR. TIR stands for Total Indicator Reading also known as Run Out. How you measure TIR is by mounting the tool holder in a known quality fixture or v-block and by using a indicator rotating the tool holder and reading the total indicator movement of the inspection gage.

There are 2 distinct ways of checking the tool holder, with or without cutting tool or simulator in place. In most cases a simulator is used, usually a precision gage pin or arbor.

#### Type 1 - Taper to Taper or Taper to Bore

The popular way of checking holders today is taper to taper. While this provides a very accurate number the number gives you a false sense of what the holder will do with a cutter in place. Because the indicator is a single line inspection technique and there is no way of checking the complete taper or bore simultaneously this inspection technique does not compensate for taper tolerance or back taper in the tool holder. Some manufacturers use air / electronic gages to check tapers. While this is a very accurate system the gage is actually checking only 2-3 points along the taper and extrapolating the results.



#### **Example: 1/2 End Mill Adapter**

*Industry standard for a bore size is to use ISO 286, H5 bore tolerance = 8 microns or 0.0003". This give you a bore size of 0.5000/0.5003".*

*1/2 End Mills are held to ISO 286 h6 shank tolerance = 11 microns or 0.0004" which gives you a shank of 0.5000/0.4996".*

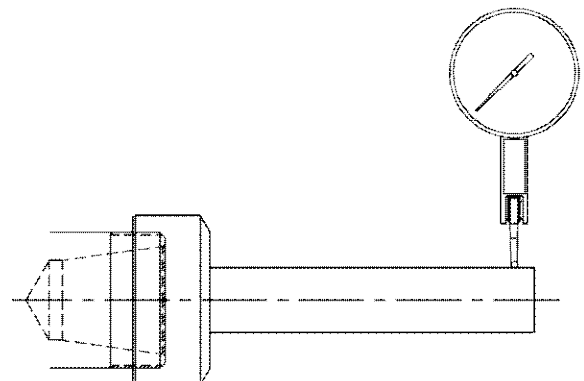
*If the bore is ground to the maximum and the shank to the minimum the offset is 0.0007" or TIR of 0.014". This reading is based on "0" run out in the spindle and the flutes of the cutter on center with "0" deviation.*

*HPI - PIONEER end mill adapters bore are ground 3 microns or 0.0001" maximum run out (TIR). Even with this run out if the cutter shanks are undersize TIR can be as high as 0.014" and everything is within tolerance. This is of course the worst case possible and most manufactures like HPI - PIONEER hold manufacturing tolerances to the mean dimension.*

#### Type 2 - Inspection from Gage Pin or Arbor

While this is not as popular to report run out this way it is much more accurate than Type 1. HPI - PIONEER Mill Chucks TIR specification is 5 microns or 0.0002" and is measured with gage pins and at 100mm or 4" from the face of the chuck. By using this method of inspection the holder effective run out is what was gaged and due to the design of the Mill Chuck cutting tools that are on the low side of the tolerance will not effect this number.

HPI - PIONEER meets and exceeds industry standards on TIR with all of our products. This is how we can guarantee better tool life and finish.





HPI - PIONEER

## HPI - PIONEER Balance

Balance is the most mis-understood, mis-advertised subject in machining today. What you are told and what you are getting are 2 different things and pre-balancing tools does help machine spindle life, tool life and finish, True balance give you even more!

The 2 primary types of balance are Static and Dynamic.

### Static

Static Balance also called Production Balance is where you balance the tool by removing weight in production or in a non rotating process. This is also called Symmetrical / Symmetry balance or manufacturing.

This process does improve the quality of the tool holder slightly. Today's spindle speeds this process is not accurate enough. This process is very common with most domestic tool holder manufacturers and is still used today.

### Dynamic

Everyone today is familiar with Dynamic balance, the wheels on your car are Dynamically balanced or spin balanced. This is done by a machine that measures the displacement of the tire or in our case the tool holder and tells us where to add or remove weight.

With tool holders we have adopted ISO "G" rating system to qualify the grade of balance. The "G" rating is not the actual grams but a scale. The amount of allowable displacement is determined by the weight of the tool and the speed of operation. When you get your tires balanced they do not spin them up to 70 MPH but a lower speed and they calculate the displacement and the weight required to achieve a greater than highway speed. Tool Holders are done exactly the same way except we do not add material, we remove material.

When you balance the tires on your car, you are not necessarily balancing the rim but compensating for the tire. When you change your tire your dealer has to rebalance them together, if they do not you will chop your tires and wear them out in weeks instead of months or years. If you remove your tire and put it back on the same rim your dealer still has to re-balance because the high spot may have moved causing imbalance.

Because all cutting tools are different lengths, sizes and materials (weight) it is impossible for any tool holder manufacture to guarantee the balance grade once assembled. The axial movement of the preset screw or collet nut shift the center of gravity of the tool holder and can effect the balance of the tool. This means if you preset your cutters at 1.5" and balance then move the cutting tool to 2" the balance can be and usually checks out of specification. Large cutters will have more effect on balance than small cutters. Longer tools will have more effect than short tools.

Most of the industry has adopted G6.3 as the balance grade for standard production tool holders. The common belief is the amount of difference between G6.3 and G2.5 is minimal and the cutting tools have more negative effect than the difference in the 2 grades. The math and testing backs up that assumption.

If you need guaranteed G2.5 @ 20,000 RPM you must balance the holder, cutter and retention knob assembled and locked in place. It is the only way to guarantee the balance out of the spindle. When you change cutters you must re-balance, the change of cutters 80% of the time will take the tool out of balance.

HPI - PIONEER balances all tool holders within adopted industry standards or better. Each catalog page indicates the balanced performed before shipping for that product. We also have a balancing machines at our main office for trim balancing and inspection.





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# HPI - PIONEER Holding Power

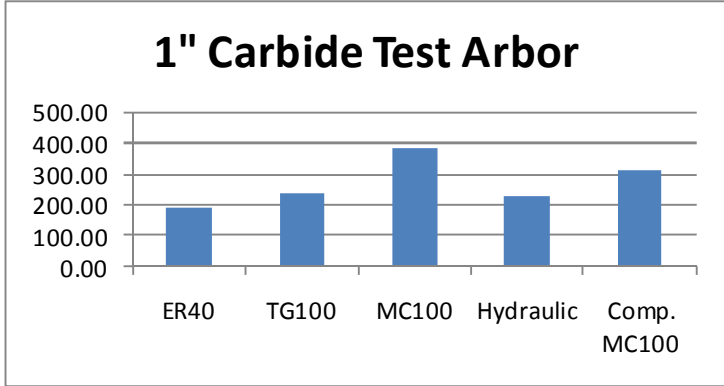
What makes a truly great holder is performance for the price. Tool holder selection today is based more on trend than actual performance.

## Best Performance Comparison

Using a 1" Carbide arbor we did radial slip torque testing on ER40, TG100, MC100, 1" Hydraulic and competitors 1" Mill Chuck. The HPI - PIONEER MC100 Mill Chuck provided double the holding power of a ER40 Collet Chuck, 21% Higher holding power than a competitors MC 1" and 40% more holding power than a 1" Hydraulic Holder.

The other noticeable item was on standard collet chucks. TG100 provided 19% more holding power than comparable ER40 system with more consistent run out and a lower cost of ownership.

## Best Performance Comparison



## HPI - PIONEER Application Recommendation

### Finish Milling, Drilling, Reaming, Thread Milling

- MX & GMX - Ultra-Precision 2.5 Micron TIR @ 4X Tool Diameter
- MC - Ultra-Precision 5 Micron TIR @ 100m
- SX - Ultra-Precision 7-10 Micron TIR @ 100mm (5 micron available)
- SD (Shrinker) - 3 Micron @ Nose
- ER - 10 Micron @ 2.5X Tool Diameter (5 micron available) - Better than DIN standard
- TG - 10 Micron @ 100mm (5 micron available)

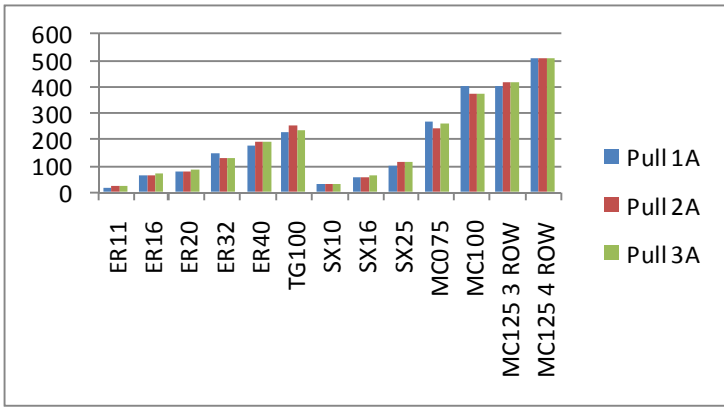
### Semi-Roughing / Roughing

- D3 - Dual Contact or Face Contact
- MC - Ultra-Precision 5 Micron TIR @ 100mm
- SX - Ultra-Precision 7-10 Micron TIR @ 100mm (5 micron available)
- SD (Shrinker) - 3 Micron @ Nose
- TG - 10 Micron @ 100mm (5 micron available)
- EM - 3-5 Micron @ Nose
- FD & FX- 5 Micron @ Pilot

### Extreme Roughing

- EM - 3-5 Micron @ Nose
- FD & FX- 5 Micron @ Pilot

## Standard Product Comparison—Multiple Pulls







HPI - PIONEER

## HPI - PIONEER Tool Holders

What makes an HPI - PIONEER Tool Holder great is the differences. Making a tool holder with 1/2 the guaranteed runout of the competition. Dynamically Balancing to a grade that exceeds most machine builders maximum RPM and requirements. Changing the look to match the quality of the tool while keeping the price point competitive and reasonable.

### Standard Shanks

- Cat40
- Cat50
- BT30
- BT40
- BT50
- HSK 63A
- HSK 100A

Standard Shanks Available from  
PIONEER Japan and Germany

- DIN 69871 (also conforms to ISO-7388)
  - SK40
  - SK50
- DIN 2080
  - NT30
  - NT40
  - NT50

### Special Shanks Available

- HSK 32-120 A-F Series
- Cat30
- Cat45
- BT35
- BT45
- NMTB (MM)
- DIN 2080 Modified NAS Standard

We have manufactured just about any special shank you can think of. If you have a special machine, old machine or something completely custom we are confident we can manufacture at a fair market price. Contact our sales staff at [sales@gohpi.com](mailto:sales@gohpi.com) with your requirements.



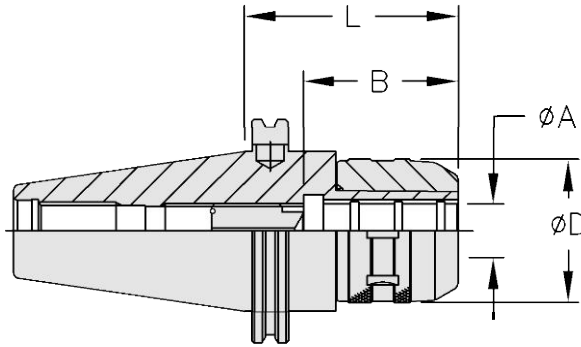


**HPI - PIONEER**

**MC - Milling Chuck**

**Features**

- 5 µm - 0.0002" Runout @ 4" out
- Coolant Thru w/ Nylon Screw Seal
- Balanced @ 20,000 RPM
- Radial Slip Torque 4X ER Chucks
- DIN AD+B Available in some models (See Chart)
- Balanceable Available in some models (See Chart)
- Order Collets & Wrench Separately



Part Number	A Bore	L Projection	B	D	Preset Screw	Collet	Wrench	DIN AD+B	Balanceable
CAT40-MC075-0335		3.35							
3/4 CAT40-MC075-0335-S	0.7500	3.35	2.76	2.09	ASC-MC	MC075	MCW20	Y	Y
CAT40-MC075-0472		4.72							
CAT40-MC075-0591-S		5.91						Y	Y
CAT40-MC100-0335		3.35							
1 CAT40-MC100-0374-S	1.0000	3.74	2.91	2.44	ASC-MC	MC100	MCW25	Y	Y
CAT40-MC100-0413		4.13							
CAT40-MC100-0591-S		5.91						Y	Y
CAT40-MC125-0354 *		3.54							
CAT40-MC125-0413		4.13							
1-1/4 CAT40-MC125-0472	1.2500	4.72	3.07	2.76	ASC-MC	MC125	MCW32		
CAT40-MC125-0472-S		4.72						Y	Y
CAT40-MC125-0591-S		5.91						Y	Y

\* No ANSI Safety Area - will not function in umbrella style tool changers

G6.3 @ 20,000 RPM

Dynamically Balanced

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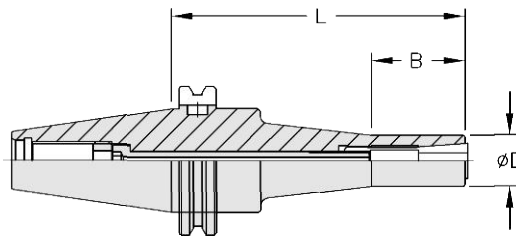


## MX - Mini Collet Chuck

### Features

- 2.5 µm - 0.0001" Runout @ 4X Diameter
- Collet tightened thru retention knob
- Sealed up to 1,500 PSI Coolant (See Chart)
- Balanced G2.5 @ 20,000 RPM
- DIN-B Coolant upon request
- Balanceable upon request
- Order Collets & Wrench Separately

HPI - PIONEER



Part Number	Collet Range	L Projection	D	B	Collet	Coolant Thru	Wrench
CAT40-MX06-085	1/4 0.031 - 0.250	3.35	0.50	1.42	MX06	N	MXW05
CAT40-MX06-085-C		3.35		1.42		Y	
CAT40-MX06-150		5.91		1.42		N	
CAT40-MX06-150-C		5.91		1.42		Y	
CAT40-MX08-085	3/8 0.125 - 0.394	3.35	0.87	1.42	MX08	Y	
CAT40-MX08-120		4.72		1.42		Y	
CAT40-MX08-150		5.91		1.42		Y	
CAT40-MX12-090	1/2 0.157 - 0.500	3.54	1.18	1.38	MX12	Y	
CAT40-MX12-120		4.72		1.38		Y	

G2.5 @ 20,000 RPM

Dynamically Balanced



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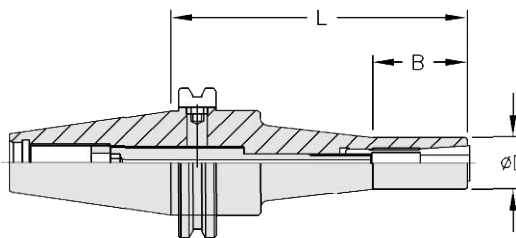


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## GMX - Gear Mini Collet Chuck

### Features

- 2.5 µm - 0.0001" Runout @ 4X Diameter
- Collet tightened thru the drive slots
- Sealed up to 1,500 PSI Coolant
- Balanced G2.5 @ 20,000 RPM
- DIN-B Coolant upon request
- Balanceable upon request
- Order Collets & Wrench Separately



Part Number	Collet Range	L Projection	D	B	Collet	Wrench
CAT40-GMX08-085	3/8 0.125 - 0.394	3.35	0.87	1.42	MX08	MXW05
CAT40-GMX08-120		4.72		1.42		
CAT40-GMX08-150		5.91		1.42		
CAT40-GMX12-090	1/2 0.157 - 0.500	3.54	1.18	1.38	MX12	
CAT40-GMX12-120		4.72		1.38		

G2.5 @ 20,000 RPM

Dynamically Balanced



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CAT40  
CAT50  
BT30  
BT40  
BT50  
HSK 63A  
HSK100A  
STRAIGHT SHANK  
SPECIAL MACHINE  
RETENTION KNOBS  
STRAIGHT SHANK  
COLLETS  
NUTS & WRENCH

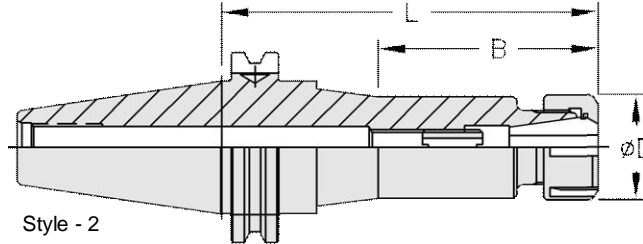
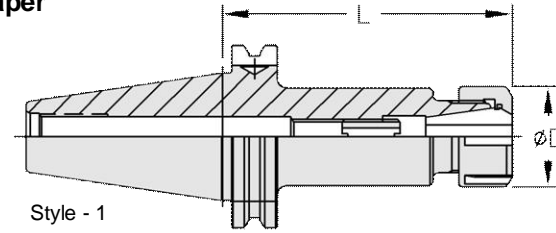


**HPI - PIONEER**

**ER Collet Chucks**

**Features**

- 3 µm - 0.0001" Runout Taper to Taper
- Coolant Thru Center
- DIN AD+B Coolant
- Balanced G6.3 @ 20,000 RPM
- Order Collets & Wrench Separately



	Part Number	Range	L Projection	B	D	Collet	Screw	Nut	Wrench	Style
1/4	CAT40-ER11H-0250		2.50	-						1
	CAT40-ER11H-0400	.019-.276	4.00	-	0.74	ER11	ASC-ER11	ERN-11H	ERW-11H	1
	CAT40-ER11H-0600		6.00	1.835						2
3/8	CAT40-ER16H-0250		2.50	-						1
	CAT40-ER16H-0400	.019-.394	4.00	-	1.10	ER16	ASC-ER16	ERN-16H	ERW-16H	1
	CAT40-ER16H-0600		6.00	-						1
	CAT40-ER16H-0800		8.00	-						1
1/2	CAT40-ER20H-0250		2.50	-						1
	CAT40-ER20H-0400	.019-.512	4.00	-	1.33	ER20	ASC-ER20	ERN-20H	ERW-20H	1
	CAT40-ER20H-0600		6.00	-						1
	CAT40-ER20H-0800		8.00	-						1
5/8	CAT40-ER25-0250		2.50	-						1
	CAT40-ER25-0400	.019-.630	4.00	-	1.65	ER25	ASC-ER25	ERN-25	ERW-25	1
	CAT40-ER25-0600		6.00	-						1
	CAT40-ER25-0800		8.00	-						1
3/4	CAT40-ER32-0250		2.50	-						1
	CAT40-ER32-0400	.039-.787	4.00	-	1.96	ER32	ASC-ER32	ERN-32	ERW-32	1
	CAT40-ER32-0600		6.00	-						1
	CAT40-ER32-0800		8.00	-						1
1	CAT40-ER40-0250		2.50	-						1
	CAT40-ER40-0400	.079-1.024	4.00	-	2.48	ER40	ASC-ER40	ERN-40	ERW-40	1
	CAT40-ER40-0600		6.00	-						1

G6.3 @ 20,000 RPM

Dynamically Balanced

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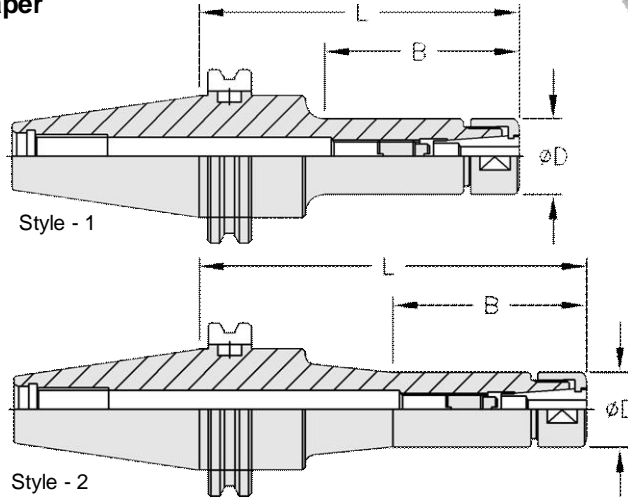


# SX Collet Chucks

## Features

- 3 μm - 0.0001” Runout Taper to Taper
- Optional Coolant Thru
- DIN B Coolant Opional
- Balanced G6.3 @ 20,000 RPM
- Order Collets & Wrench Separately

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	Part Number	Range	L Projection	B	D	Collet	Nut	Wrench	Stop Screw	Style
	CAT40-SX06-090		3.54	-						1
1/4	CAT40-SX06-120	.030 - .250	4.72	2.362	0.77	SX06	SXN-06	SXW-06	AS-SX06	2
	CAT40-SX06-150		5.91	2.362						2
	CAT40-SX10-090		3.54	-						1
3/8	CAT40-SX10-120	.069 - .394	4.72	2.756	1.08	SX10	SXN-10	SXW-10	AS-SX10	2
	CAT40-SX10-150		5.91	2.756						2
	CAT40-SX16-090		3.54	-						1
5/8	CAT40-SX16-120	.108 - .630	4.72	-	1.58	SX16	SXN-16	SXW-16	AS-SX16	1
	CAT40-SX16-150		5.91	-						1
	CAT40-SX25-090		3.54	-						1
1	CAT40-SX25-120	.630 - 1.000	4.72	-	2.17	SX25	SXN-25	SXW-25	AS-SX25	1

G6.3 @ 20,000 RPM

Dynamically Balanced

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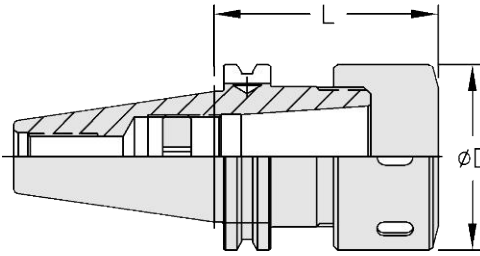


HPI - PIONEER

**TG Collet Chucks**

**Features**

- 3  $\mu\text{m}$  - 0.0001" Runout Taper to Taper
- Coolant Thru Center
- DIN AD+B Coolant
- Balanced G6.3 @ 20,000 RPM
- Order Collets & Wrench Separately



	Part Number	Range	L Projection	D	Collet	Screw	Nut	Wrench
3/4	CAT40-TG075-0300	.094 - .750	3.00	1.97	TG075	ASC-TG075	TGN075	TGW075
	CAT40-TG075-0500		5.00					
1	CAT40-TG100-0300	.094 - 1.00	3.00	2.48	TG100	ASC-ER40	TGN100	TGW100
	CAT40-TG100-0550		5.50					

G6.3 @ 20,000 RPM

Dynamically Balanced

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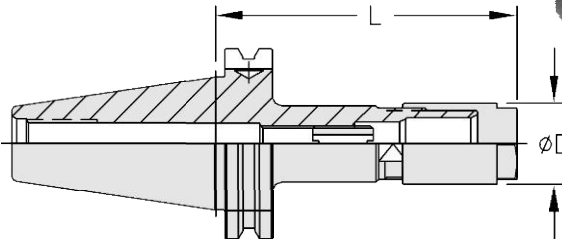
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**DA Collet Chucks**

**Features**

- Coolant Thru Center
- DIN AD+B Coolant
- Balanced G6.3 @ 20,000 RPM
- Order Collets & Wrench Separately



	Part Number	Range	L Projection	D	Collet	Screw	Nut	Wrench
1/4	CAT40-DA300-0338	3/64 - 1/4	3.38	0.57	DA300	ASC-DA300	DAN300	DAW300
3/8	CAT40-DA200-0300	1/16 - 3/8	3.00	0.83	DA200	ASC-ER16	DAN200	DAW200
	CAT40-DA200-0500		5.00					
9/16	CAT40-DA100-0350	1/16 - 9/16	3.50	1.06	DA100	ASC-DA100	DAN100	DAW100
	CAT40-DA100-0600		6.00					
3/4	CAT40-DA180-0295	1/16 - 3/4	2.95	1.48	DA180	ASC-TG075	DAN180	DAW180
	CAT40-DA180-0515		5.15					

G6.3 @ 20,000 RPM

Dynamically Balanced

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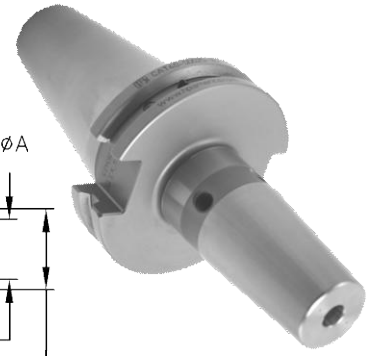
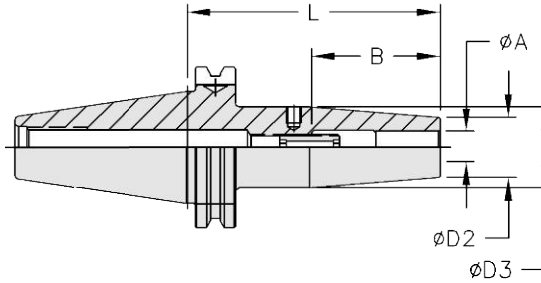


**SD Shrink Fit**

**Features**

- 2µm 0.0001" Runout L < 6.00
- 4µm 0.0002" Runout L ≥ 6.00
- Coolant Thru Center
- DIN AD+B Coolant
- Balanced G2.5 @ 25,000 RPM
- Shrink Fit Machine Sold Separately

**HPI - PIONEER**



Inch	Part Number	A Bore	L Projection	B	D2	D3
1/8	CAT40-SD012-0315	0.1250	3.15	0.35	0.39	0.75
3/16	CAT40-SD018-0315	0.1875	3.15	0.47		
1/4	CAT40-SD025-0315	0.2500	3.15	1.42	0.83	1.06
	CAT40-SD025-0512		5.12			
	CAT40-SD025-0630		6.30			
3/8	CAT40-SD037-0315	0.3750	3.15	1.65	0.94	1.26
	CAT40-SD037-0512		5.12			
	CAT40-SD037-0630		6.30			
1/2	CAT40-SD050-0315	0.5000	3.15	1.85	0.94	1.26
	CAT40-SD050-0512		5.12			
	CAT40-SD050-0630		6.30			
5/8	CAT40-SD062-0315	0.6250	3.15	1.97	1.06	1.34
	CAT40-SD062-0512		5.12			
	CAT40-SD062-0630		6.30			
3/4	CAT40-SD075-0315	0.7500	3.15	2.05	1.30	1.65
	CAT40-SD075-0512		5.12			
	CAT40-SD075-0630		6.30			
1	CAT40-SD100-0394	1.0000	3.94	2.28	1.73	2.09
	CAT40-SD100-0512		5.12			
	CAT40-SD100-0630		6.30			
1 1/4	CAT40-SD125-0394	1.2500	3.94	2.28	1.73	2.09
	CAT40-SD125-0512		5.12			
	CAT40-SD125-0630		6.30			

MM	Part Number	A Bore	L Projection	B	D2	D3
3	CAT40-SDM03-080	3.000	80.0	9.0	10.0	19.6
4	CAT40-SDM04-080	4.000	80.0	12.0	10.0	19.6
5	CAT40-SDM05-080	5.000	80.0	15.0	10.0	19.6
6	CAT40-SDM06-080	6.000	80.0	36.0	21.0	27.0
8	CAT40-SDM08-080	8.000	80.0	36.0	21.0	27.0
10	CAT40-SDM10-080	10.000	80.0	42.0	24.0	32.0
12	CAT40-SDM12-080	12.000	80.0	47.0	24.0	32.0
14	CAT40-SDM14-080	14.000	80.0	47.0	27.0	34.0
16	CAT40-SDM16-080	16.000	80.0	50.0	27.0	34.0
20	CAT40-SDM20-080	20.000	80.0	52.0	33.0	42.0
25	CAT40-SDM25-080	25.000	80.0	58.0	44.0	53.0
32	CAT40-SDM32-080	32.000	80.0	58.0	44.0	53.0

G2.5 @ 25,000 RPM

Dynamically Balanced

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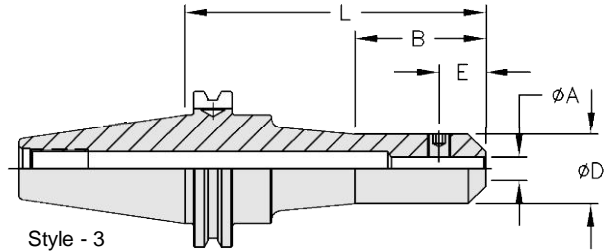
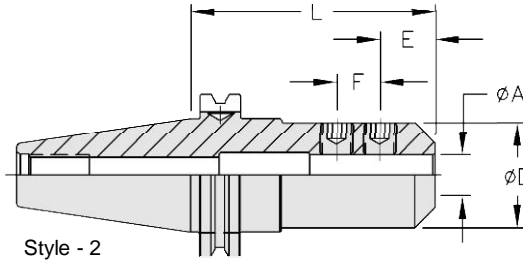
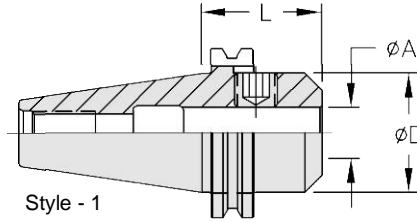


**HPI - PIONEER**

**EM End Mill Adapters**

**Features**

- 3 μm - 0.0001" Bore Runout
- H5 Bore Tolerance
- Coolant Thru Center
- DIN AD+B Coolant
- Balanced G6.3 @ 20,000 RPM
- Order Wrench Separately



	Part Number	A - Bore	L - Projection	B	D	E	F	Screw	Style
1/8	CAT40-EM012-0175	0.1250	1.75	-	0.69	0.19	-	SCW-EM012	1
	CAT40-EM012-0250		2.50	-	0.69	0.19	-		2
	CAT40-EM012-0400		4.00	-	1.00	0.19	-		2
	CAT40-EM012-0500		5.00	1.57	1.00	0.19	-		3
	CAT40-EM012-0600		6.00	1.57	1.00	0.19	-		3
3/16	CAT40-EM018-0175	0.1875	1.75	-	0.69	0.44	-	SCW-EM012	1
	CAT40-EM018-0250		2.50	-	0.69	0.44	-		2
	CAT40-EM018-0400		4.00	-	1.00	0.44	-		2
	CAT40-EM018-0600		6.00	2.50	1.00	0.44	-		3
1/4	CAT40-EM025-0175	0.2500	1.75	-	0.88	0.44	-	SCW-EM025	1
	CAT40-EM025-0250		2.50	-	0.88	0.44	-		2
	CAT40-EM025-0400		4.00	-	1.00	0.44	-		2
	CAT40-EM025-0500		5.00	2.50	1.00	0.44	-		3
	CAT40-EM025-0600		6.00	2.50	1.00	0.44	-		3
5/16	CAT40-EM031-0175	0.3125	1.75	-	1.00	0.44	-	SCW-EM025	1
	CAT40-EM031-0250		2.50	-	1.00	0.44	-		2
	CAT40-EM031-0400		4.00	-	1.00	0.44	-		2
	CAT40-EM031-0600		6.00	3.00	1.00	0.44	-		3
3/8	CAT40-EM037-0175	0.3750	1.75	-	1.00	0.75	-	SCW-EM037	1
	CAT40-EM037-0250		2.50	-	1.00	0.75	-		2
	CAT40-EM037-0400		4.00	-	1.00	0.75	-		2
	CAT40-EM037-0450		4.50	1.00	1.00	0.75	-		3
	CAT40-EM037-0500		5.00	1.00	1.00	0.75	-		3
	CAT40-EM037-0600		6.00	2.50	1.00	0.75	-		3
7/16	CAT40-EM043-0250	0.4375	2.50	-	1.25	0.75	-	SCW-EM037	2
1/2	CAT40-EM050-0175	0.5000	1.75	-	1.75	0.88	-	SCW-EM050	1
	CAT40-EM050-0250		2.50	-	1.25	0.88	-		2
	CAT40-EM050-0262		2.62	-	1.25	0.88	-		2
	CAT40-EM050-0400		4.00	-	1.25	0.88	-		2
	CAT40-EM050-0462		4.62	-	1.25	0.88	-		2
	CAT40-EM050-0500		5.00	-	1.25	0.88	-		2
	CAT40-EM050-0600		6.00	3.00	1.25	0.88	-		3

G6.3 @ 20,000 RPM

Dynamically Balanced P-104 P-132

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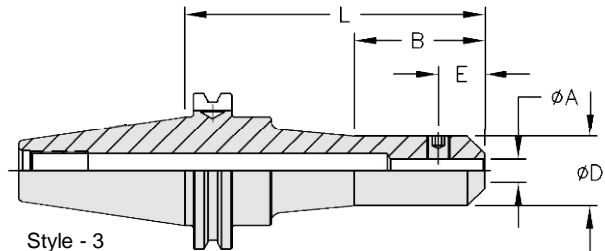
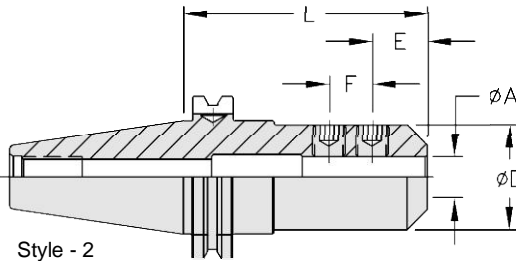
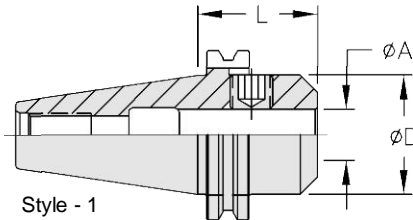


# EM End Mill Adapters

## Features

- 3 μm - 0.0001" Bore Runout
- H5 Bore Tolerance
- Coolant Thru Center
- DIN AD+B Coolant
- Balanced G6.3 @ 20,000 RPM
- Order Wrench Separately

HPI - PIONEER



	Part Number	A - Bore	L - Projection	B	D	E	F	Screw	Style
5/8	CAT40-EM062-0175	0.6250	1.75	-	1.75	0.94	-	SCW-EM062	1
	CAT40-EM062-0250		2.50	-	1.50	0.94	-		2
	CAT40-EM062-0300		3.00	-	1.50	0.94	-		2
	CAT40-EM062-0400		4.00	-	1.50	0.94	-		2
	CAT40-EM062-0500		5.00	-	1.50	0.94	-		2
	CAT40-EM062-0600		6.00	-	1.50	0.94	-		2
3/4	CAT40-EM075-0175	0.7500	1.75	-	1.75	1.00	-	SCW-EM075	1
	CAT40-EM075-0250		2.50	-	1.75	1.00	-		2
	CAT40-EM075-0300		3.00	-	1.75	1.00	-		2
	CAT40-EM075-0350		3.50	-	1.75	1.00	-		2
	CAT40-EM075-0400		4.00	-	1.75	1.00	-		2
	CAT40-EM075-0500		5.00	-	1.75	1.00	-		2
	CAT40-EM075-0600		6.00	-	1.75	1.00	-		2
7/8	CAT40-EM087-0175	0.8750	1.75	-	1.75	1.00	-	SCW-EM075	1
	CAT40-EM087-0350		3.50	-	1.75	1.00	0.81		2
	CAT40-EM087-0600		6.00	-	1.88	1.00	0.81		2
1	CAT40-EM100-0175	1.0000	1.75	-	1.75	1.12	-	SCW-EM100	1
	CAT40-EM100-0300		3.00	-	2.00	1.12	1.00	SCW-EM100 & S	2
	CAT40-EM100-0400		4.00	-	2.00	1.12	1.00	SCW-EM100	2
	CAT40-EM100-0500		5.00	-	2.00	1.12	1.00	SCW-EM125	2
	CAT40-EM100-0600		6.00	-	2.00	1.12	1.00	SCW-EM125	2
1 1/4	CAT40-EM125-0200	1.2500	2.00	-	2.25	1.12	-	SCW-EM100S	1
	CAT40-EM125-0400		4.00	-	2.50	1.12	1.00	SCW-EM125	2
	CAT40-EM125-0425		4.25	-	2.50	1.12	1.00	SCW-EM125	2
	CAT40-EM125-0600		6.00	-	2.50	1.12	1.00	SCW-EM125	2
1 1/2	CAT40-EM150-0400	1.5000	4.00	-	2.62	1.12	1.00	SCW-EM125	2
	CAT40-EM150-0462		4.62	-	2.62	1.12	1.00	SCW-EM125	2
	CAT40-EM150-0600		6.00	-	2.62	1.12	1.00	SCW-EM125	2

G6.3 @ 20,000 RPM

Dynamically Balanced

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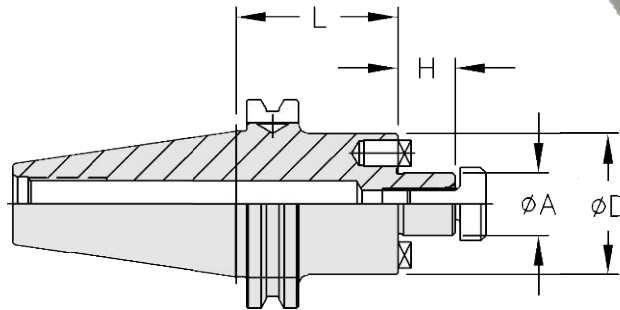


**HPI - PIONEER**

**SM Shell Mill Adapters**

**Features**

- 0.0004" Runout
- Body - Coolant Thru Center
- DIN AD+B Coolant
- Balanced G6.3 @ 20,000 RPM
- Order Wrench Separately



	Part Number	A - Pilot	L Projection	D	H	Drive Key	Drive Key Part Number	Screw	Screw Part Number
3/4"	CAT40-SM075-0175		1.75	1.75					
	CAT40-SM075-0400	0.7500	4.00	1.75	0.69	0.312	DK-SM075	3/8-24	SCW-SM075
	CAT40-SM075-0600		6.00	1.75					
	CAT40-SM075-0800		8.00	1.75					
CAT40-SM100-0200	2.00		1.97						
1"	CAT40-SM100-0400	1.0000	4.00	2.36	0.69	0.375	DK-SM100	1/2-20	SCW-SM100
	CAT40-SM100-0600		6.00	2.36					
	CAT40-SM100-0800		8.00	2.36					
	1-1/4"		CAT40-SM125-0225	1.2500					
1-1/2"	CAT40-SM150-0240	1.5000	2.40	3.82	0.94	0.625	DK-SM150	3/4-16	SCW-SM150
2"	CAT40-SM200-0240	2.0000	2.40	4.37	0.94	0.750	DK-SM200	1-14	SCW-SM200

G6.3 @ 20,000 RPM

Dynamically Balanced

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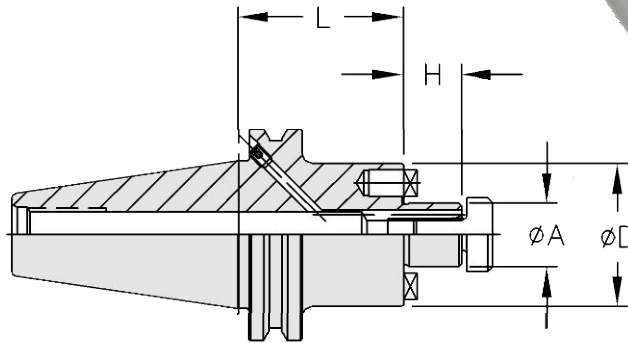


# FX Shell Mill Adapters

## Features

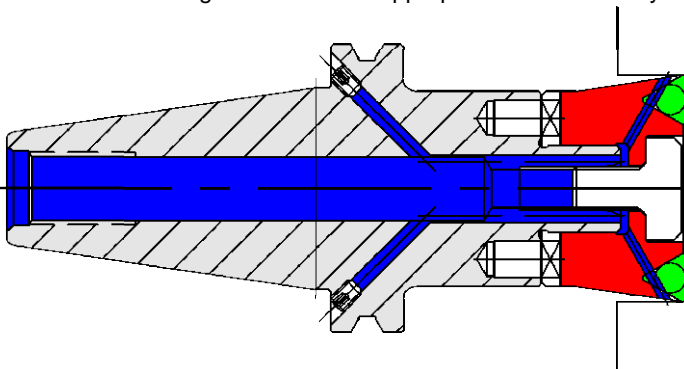
- 0.0004" Runout
- Ported for Insert Coolant Feed
- DIN AD+B Coolant
- Balanced G6.3 @ 20,000 RPM
- Order Wrench Separately

HPI - PIONEER



	Part Number	A - Pilot	L Projection	D	H	Drive Key	Drive Key Part Number	Screw	Screw Part Number
3/4"	CAT40-SM075-0175-F	0.7500	1.75	1.75	0.69	0.312	DK-SM075	3/8-24	SCW-SM075
	CAT40-SM075-0400-F		4.00	1.75					
	CAT40-SM075-0600-F		6.00	1.75					
	CAT40-SM075-0800-F		8.00	1.75					
1"	CAT40-SM100-0200-F	1.0000	2.00	1.97	0.69	0.375	DK-SM100	1/2-20	SCW-SM100
	CAT40-SM100-0400-F		4.00	2.36					
	CAT40-SM100-0600-F		6.00	2.36					
	CAT40-SM100-0800-F		8.00	2.36					
1-1/4"	CAT40-SM125-0225-F	1.2500	2.25	2.87	0.69	0.500	DK-SM125	5/8-18	SCW-SM125
1-1/2"	CAT40-SM150-0240-F	1.5000	2.40	3.82	0.94	0.625	DK-SM150	3/4-16	SCW-SM150
2"	CAT40-SM200-0240-F	2.0000	2.40	4.37	0.94	0.750	DK-SM200	1-14	SCW-SM200

Coolant Flow using FX holder with appropriate Shell Mill body.



G6.3 @ 20,000 RPM

Dynamically Balanced

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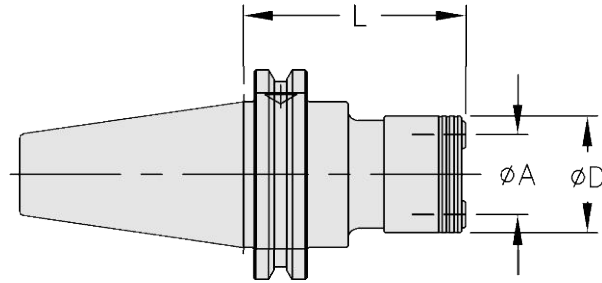


**HPI - PIONEER**

**RT - QC Rigid Tap Drivers**

**Features**

- Body - Coolant Thru Center



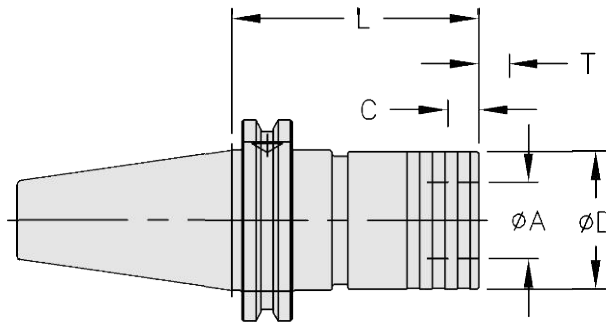
Adapter Size	Part Number	Capacity	A	L Projection	D
1	CAT40-RT1-72	#6-9/16	0.75	2.83	1.34
2	CAT40-RT2-91	5/16-7/8	1.22	3.58	1.93
3	CAT40-RT3-130	9/16-1-3/8	1.89	5.12	2.89



**TC - QC Tension / Compression Tap Drivers**

**Features**

- Tension and Compression Stroke for improved tap life
- Pressure Point Mechanism to increase the cutting pressure and ensure a positive start



Adapter Size	Part Number	Capacity	A	L Projection	D	T - TENSION	C - COMP.
1	CAT40-TC1-59	#6-9/16	0.75	2.32	1.42	0.30	0.30
2	CAT40-TC2-97	5/16-7/8	1.22	3.82	2.09	0.49	0.49
3	CAT40-TC3-149	9/16-1-3/8	1.89	5.87	3.07	0.79	0.79





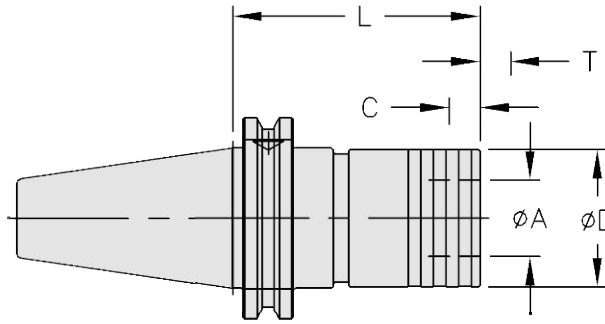


## TCC - QC Coolant Thru T&C Tap Drivers

HPI - PIONEER

### Features

- Coolant Thru the Center Design
- Tension and Compression Stroke for improved tap life



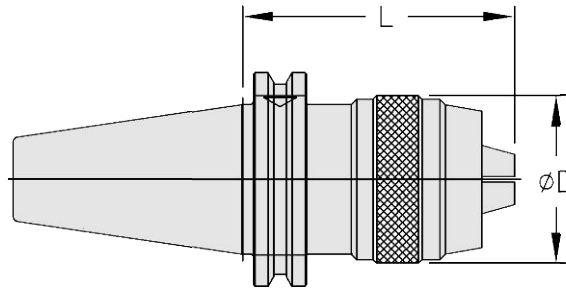
Adapter Size	Part Number	Capacity	A	L Projection	D	T - TENSION	C - COMP.
1	CAT40-TCC1-79	#6-9/16	0.75	3.11	1.42	0.30	0.30
2	CAT40-TCC2-105	5/16-7/8	1.22	4.13	2.09	0.49	0.49
3	CAT40-TCC3-164	9/16-1-3/8	1.89	6.46	3.07	0.79	0.79



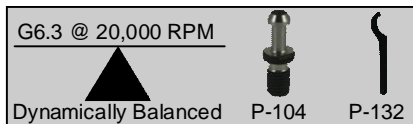
## DC Drill Chuck

### Features

- Order Wrench Separately



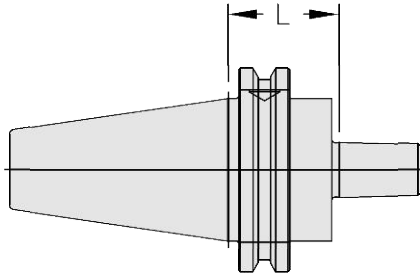
	Part Number	Range	L Projection	D	Wrench
1/2	CAT40-DC050-0413	0.04 - 0.50	4.13	1.96	DCW13





**HPI - PIONEER**

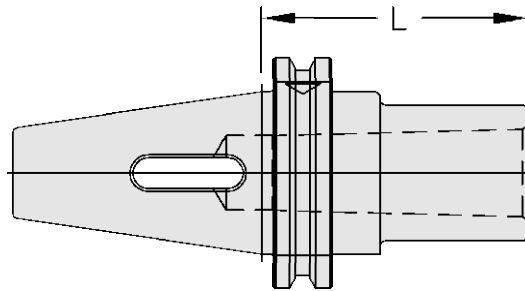
**JT - Jacobs Taper Adapter**



Part Number	JT No.	L Projection
CAT40-JT02-0177	2	1.77
CAT40-JT02-0354	2	3.54
CAT40-JT03-0177	3	1.77
CAT40-JT03-0354	3	3.54
CAT40-JT06-0177	6	1.77
CAT40-JT06-0354	6	3.54
CAT40-JT33-0177	33	1.77
CAT40-JT33-0354	33	3.54



**MT - Morse Taper Adapter**



Part Number	MT No.	L Projection
CAT40-MA1-0177	1	1.77
CAT40-MA1-0472	1	4.72
CAT40-MA2-0236	2	2.36
CAT40-MA2-0472	2	4.72
CAT40-MA3-0295	3	2.95
CAT40-MA3-0531	3	5.31
CAT40-MA4-0374	4	3.74
CAT40-MA4-0650	4	6.5



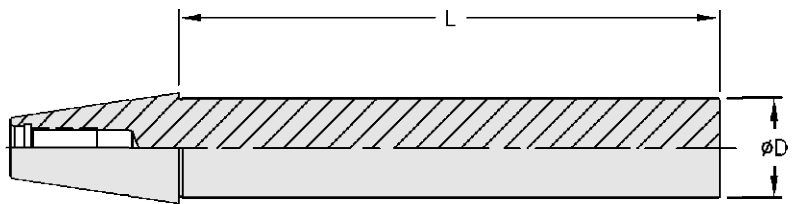


### Test Bar

#### Features

- Concentric to Taper within 3µm (0.0001") TIR
- Hardened & Normalized for consistency
- 100% Individually inspected with Certification Sheet included
- Optional Wood Box (Sold Separately)
- M16 Retention Knob Threads - Conversion knobs for all machines available upon request

HPI - PIONEER

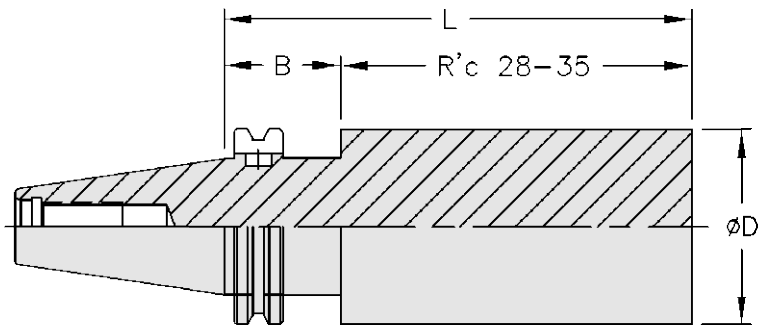


Part Number	D	L Projection
SK40-TB40-300	1.575	11.811

### Soft Blank

#### Features

- Nose End R'c 28-35
- Finished Shank



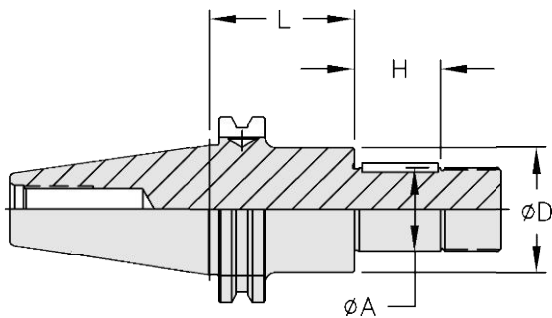
Part Number	D	L Projection	B
CAT40-BL250-0600	2.50	6.00	1.38
CAT40-BL250-1100	2.50	11.00	1.38



### SB Stub Arbors

#### Features

- Spacers, Nut and Drive Key Included



Part Number	A Pilot	L Projection	D	H	Key	Threads
CAT40-SB050-0300	0.5000	3.00	0.79	1.18	-	M12
CAT40-SB100-0300	1.0000	3.00	1.50	1.24	0.25	1"-12
CAT40-SB125-0350	1.2500	3.50	1.81	1.18	0.31	M30





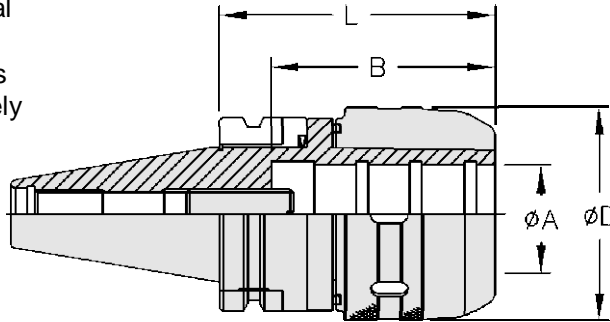
HPI - PIONEER



**MC - Milling Chuck**

**Features**

- 5  $\mu\text{m}$  - 0.0002" Runout @ 4" out
- Coolant Thru w/ Nylon Screw Seal
- Balanced @ 20,000 RPM
- Radial Slip Torque 4X ER Chucks
- Order Collets & Wrench Separately



Part Number	A Bore	L Projection	B	D	Collet	Wrench
FCAT40-MC075-0374	0.7500	3.74	2.56	2.09	MC075	MCW075
FCAT40-MC125-0433	1.2500	4.33	3.11	2.68	MC125	MCW125

G6.3 @ 20,000 RPM

Dynamically Balanced

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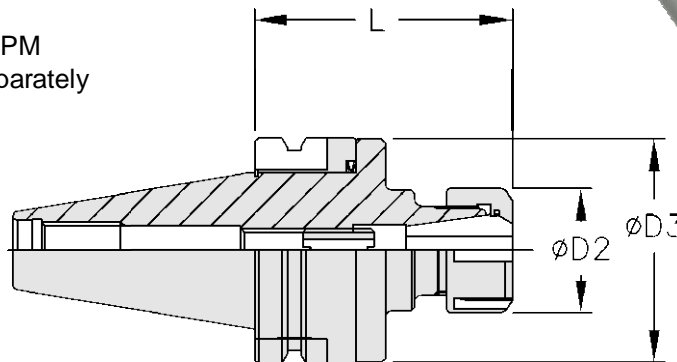
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**ER Collet Chucks**

**Features**

- 3  $\mu\text{m}$  - 0.0001" Runout Taper to Taper
- Coolant Thru Center
- Balanced G6.3 @ 20,000 RPM
- Order Collets & Wrench Separately



Part Number	Range	L Projection	D	Nut	Wrench
FCAT40-ER16-0354	.019-.394	3.54	1.10	ERN-16H	ERW-16H
FCAT40-ER16-0472	.019-.394	4.72	1.10	ERN-16H	ERW-16H
FCAT40-ER25-0354	.019-.630	3.54	1.65	ERN-25	ERW-25
FCAT40-ER25-0472	.019-.630	4.72	1.65	ERN-25	ERW-25
FCAT40-ER32-0354	.079-.787	3.54	1.96	ERN-32	ERW-32

G6.3 @ 20,000 RPM

Dynamically Balanced

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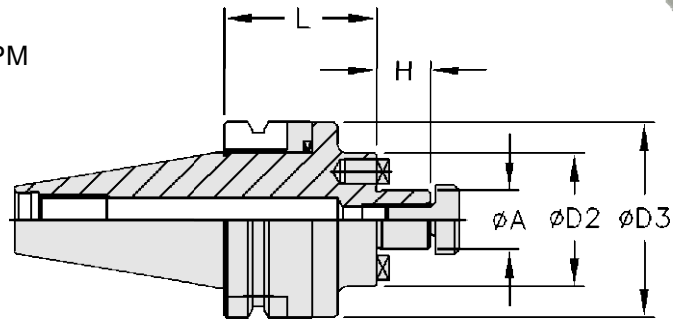


### SM Shell Mill Adapters

#### Features

- 0.0004" Runout
- Body - Coolant Thru Center
- Balanced G6.3 @ 20,000 RPM
- Order Wrench Separately

HPI - PIONEER



Part Number	A Pilot	D2	D3	L Projection	H	Drive Key	Screw
FCAT40-SM075-0197				1.97			
FCAT40-SM075-0394	0.7500	1.77	2.69	3.94	0.69	0.312	3/8-24
FCAT40-SM075-0591				5.91			
FCAT40-SM100-0197				1.97			
FCAT40-SM100-0394	1.0000	2.28	2.69	3.94	0.69	0.375	1/2-20
FCAT40-SM100-0591				5.91			

G6.3 @ 20,000 RPM

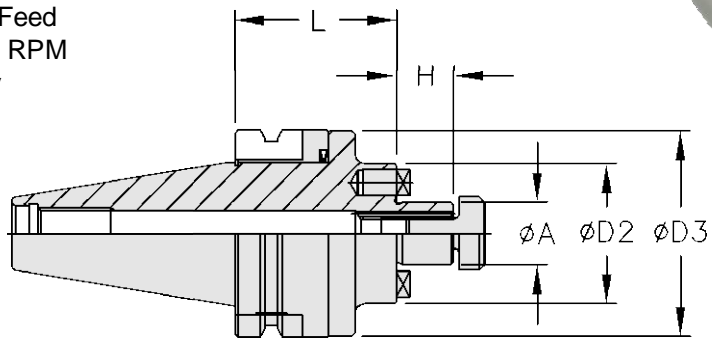
Dynamically Balanced

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### FX Shell Mill Adapters

#### Features

- 0.0004" Runout
- Ported for Insert Coolant Feed
- Balanced G6.3 @ 20,000 RPM
- Order Wrench Separately



Part Number	A Pilot	D2	D3	L Projection	H	Drive Key	Screw
FCAT40-SM075-0197-F				1.97			
FCAT40-SM075-0394-F	0.7500	1.77	2.69	3.94	0.69	0.312	3/8-24
FCAT40-SM075-0591-F				5.91			
FCAT40-SM100-0197-F				1.97			
FCAT40-SM100-0394-F	1.0000	2.28	2.69	3.94	0.69	0.375	1/2-20
FCAT40-SM100-0591-F				5.91			

G6.3 @ 20,000 RPM

Dynamically Balanced

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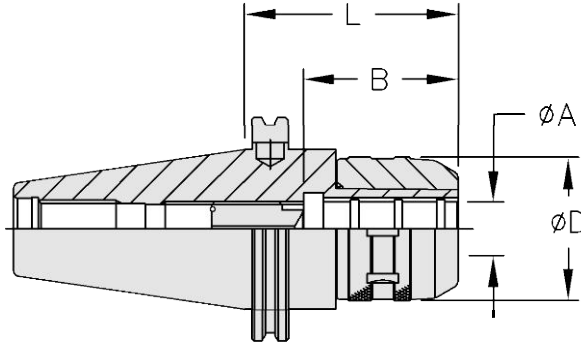


**HPI - PIONEER**

**MC - Milling Chuck**

**Features**

- 5 µm - 0.0002" Runout @ 4" out
- Coolant Thru w/ Nylon Screw Seal
- Balanced @ 20,000 RPM
- Radial Slip Torque 4X ER Chucks
- DIN AD+B Available in some models (See Chart)
- Balanceable Available in some models (See Chart)
- Order Collets & Wrench Separately



Part Number	A Bore	B	D	L Projection	Preset Screw	Collet	Wrench	DIN AD+B	Balanceable
CAT50-MC075-0354-S				3.54				Y	Y
CAT50-MC075-0413				4.13					
3/4 CAT50-MC075-0531	0.7500	2.76	2.09	5.31	ASC-MC	MC075	MCW20		
CAT50-MC075-0650				6.50					
CAT50-MC075-0650-S				6.50				Y	Y
CAT50-MC100-0315				3.15					
CAT50-MC100-0354-S				3.54				Y	Y
1 CAT50-MC100-0413	1.0000	2.95	2.44	4.13	ASC-MC	MC100	MCW25		
CAT50-MC100-0531				5.31					
CAT50-MC100-0531-S				5.31				Y	Y
CAT50-MC100-0650-S				6.50				Y	Y
CAT50-MC125-0354				3.54					
CAT50-MC125-0354-S				3.54				Y	Y
CAT50-MC125-0413				4.13					
1-1/4 CAT50-MC125-0531	1.2500	3.23	2.76	5.31	ASC-MC	MC125	MCW32		
CAT50-MC125-0531-S				5.31				Y	Y
CAT50-MC125-0650				6.50					
CAT50-MC125-0650-S				6.50				Y	Y

G6.3 @ 15,000 RPM

Dynamically Balanced

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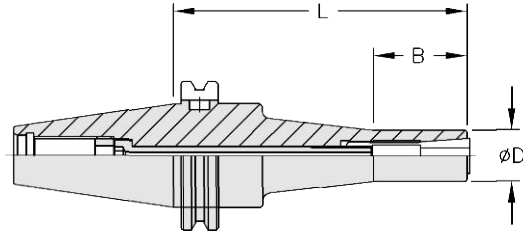


# MX - Mini Collet Chuck

## Features

- 2.5 µm - 0.0001" Runout @ 4X Diameter
- Collet tightened thru retention knob
- Sealed up to 1,500 PSI Coolant (See Chart)
- Balanced G2.5 @ 20,000 RPM
- DIN-B Coolant upon request
- Balanceable upon request
- Order Collets & Wrench Separately

HPI - PIONEER



	Part Number	Collet Range	L Projection	D	B	Collet	Wrench
3/8	CAT50-MX08-110	0.125 - 0.394	4.33	0.87	1.42	MX08	MXW05
	CAT50-MX08-165		6.50				
1/2	CAT50-MX12-105	0.157 - 0.500	4.13	1.18	1.38	MX12	MXW05
	CAT50-MX12-165		6.50				

G2.5 @ 15,000 RPM

Dynamically Balanced

P-109 P-104 P-132

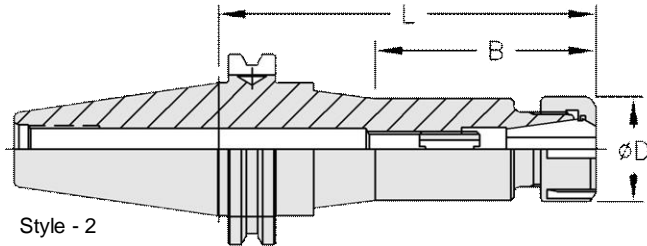
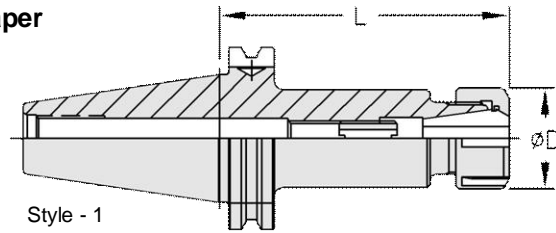


**HPI - PIONEER**

**ER Collet Chucks**

**Features**

- **3 μm - 0.0001" Runout Taper to Taper**
- Coolant Thru Center
- DIN AD+B Coolant  
(\* 15" Projection Holders additional fee)
- Balanced G6.3 @ 20,000 RPM
- Order Collets & Wrench Separately



	Part Number	Range	L Projection	B	D	Screw	Nut	Wrench	Style
ER16	CAT50-ER16H-0250		2.50	-					1
	CAT50-ER16H-0400		4.00	-					1
	CAT50-ER16H-0600		6.00	2.38					2
	CAT50-ER16H-0800	.019-.394	8.00	2.38	1.10	ASC-ER16	ERN-16H	ERW-16H	2
	CAT50-ER16H-1000		10.00	2.38					2
	CAT50-ER16H-1200		12.00	2.38					2
	CAT50-ER16H-1500*		15.00	2.38					2
ER20	CAT50-ER20H-0250		2.50	-					1
	CAT50-ER20H-0400	.019-.512	4.00	-	1.33	ASC-ER20	ERN-20H	ERW-20H	1
	CAT50-ER20H-0600		6.00	2.42					2
	CAT50-ER20H-0800		8.00	2.42					2
ER25	CAT50-ER25-0250		2.50	-					1
	CAT50-ER25-0400	.019-.630	4.00	-	1.65	ASC-ER25	ERN-25	ERW-25	1
	CAT50-ER25-0600		6.00	-					1
	CAT50-ER25-0800		8.00	2.44					2
ER32	CAT50-ER32-0250		2.50	-					1
	CAT50-ER32-0400		4.00	-					1
	CAT50-ER32-0500		5.00	-					1
	CAT50-ER32-0600	.039-.787	6.00	-	1.96	ASC-ER32	ERN-32	ERW-32	1
	CAT50-ER32-0800		8.00	-					1
	CAT50-ER32-1000		10.00	4.45					2
	CAT50-ER32-1200		12.00	4.45					2
	CAT50-ER32-1500*		15.00	4.45					2
ER40	CAT50-ER40-0400		4.00	-					1
	CAT50-ER40-0500	.079-1.024	5.00	-	2.48	ASC-ER40	ERN-40	ERW-40	1
	CAT50-ER40-0600		6.00	-					1
	CAT50-ER40-0800		8.00	-					1

G6.3 @ 15,000 RPM

Dynamically Balanced

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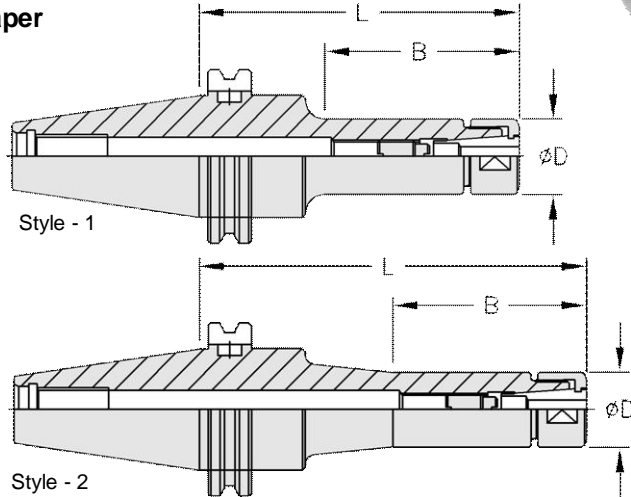


# SX Collet Chucks

## Features

- 3 μm - 0.0001" Runout Taper to Taper
- Optional Coolant Thru
- DIN B Coolant Opional
- Balanced G6.3 @ 20,000 RPM
- Order Collets & Wrench Separately

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	Part Number	Range	L Projection	B	D	Collet	Nut	Wrench	Stop Screw	Style
SX06	CAT50-SX06-105	.030 - .236	4.13	2.36	0.77	SX6	SXM-06	SXW-06	AS-SX06	2
	CAT50-SX06-165		6.50	2.36						2
SX10	CAT50-SX10-105	.069 - .394	4.13	-	1.08	SX10	SXM-10	SXW-10	AS-SX10	1
	CAT50-SX10-135		5.31	2.95						2
	CAT50-SX10-165		6.50	2.95						2
SX16	CAT50-SX16-105	.108 - .630	4.13	-	1.58	SX16	SXM-16	SXW-16	AS-SX16	1
	CAT50-SX16-135		5.31	-						1
	CAT50-SX16-165		6.50	3.54						2
SX25	CAT50-SX25-105	.630 - 1.000	4.13	-	2.17	SX25	SXM-25	SXW-25	AS-SX25	1
	CAT50-SX25-135		5.31	-						1
	CAT50-SX25-165		6.50	-						1

G6.3 @ 15,000 RPM

Dynamically Balanced

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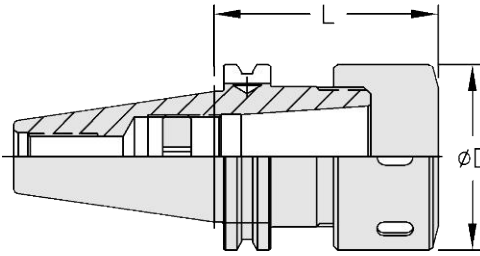


HPI - PIONEER

**TG Collet Chucks**

**Features**

- 3  $\mu\text{m}$  - 0.0001" Runout Taper to Taper
- Coolant Thru Center
- DIN AD+B Coolant
- Balanced G6.3 @ 20,000 RPM
- Order Collets & Wrench Separately



	Part Number	Range	L Projection	D	Collet	Screw	Nut	Wrench
1	CAT50-TG100-0350		3.50					
	CAT50-TG100-0550	.094 - 1.00	5.50	2.48	TG100	ASC-ER40	TGN100	TGW100
	CAT50-TG100-0750		7.50					
1-1/2	CAT50-TG150-0350		3.50					
	CAT50-TG150-0550	.500 - 1.50	5.50	3.23	TG150	ASC-TG150	TGN150	TGW150

G6.3 @ 15,000 RPM

Dynamically Balanced

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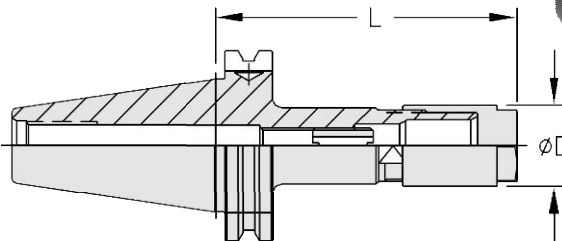
P-104

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**DA Collet Chucks**

**Features**

- Coolant Thru Center
- DIN AD+B Coolant
- Balanced G6.3 @ 20,000 RPM
- Order Collets & Wrench Separately



	Part Number	Range	L Projection	D	Collet	Screw	Nut	Wrench
3/4	CAT50-DA180-0338		3.38					
	CAT50-DA180-0600	1/16 - 3/4	6.00	1.48	DA180	ASC-TG075	DAN180	DAW180

G6.3 @ 15,000 RPM

Dynamically Balanced

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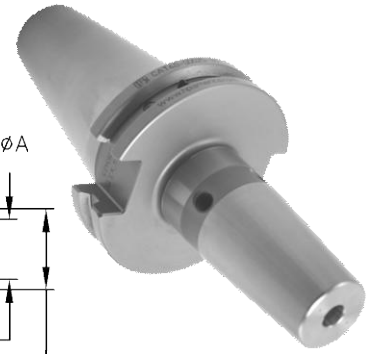
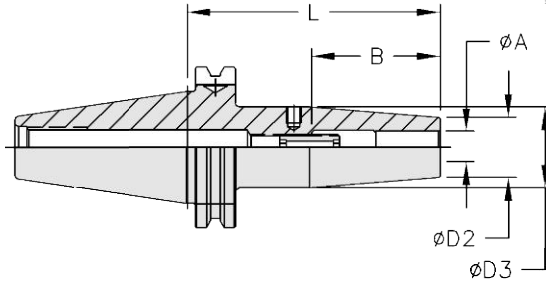


**SD Shrink Fit**

**Features**

- 2µm 0.0001" Runout L < 6.00
- 4µm 0.0002" Runout L ≥ 6.00
- Coolant Thru Center
- DIN AD+B Coolant
- Balanced G2.5 @ 25,000 RPM
- Shrink Fit Machine Sold Separately

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Inch	Part Number	A Bore	L Projection	B	D2	D3
1/4	CAT50-SD025-0315	0.2500	3.15	1.42	0.83	1.06
	CAT50-SD025-0630		6.30			
3/8	CAT50-SD037-0315	0.3750	3.15	1.65	0.94	1.26
	CAT50-SD037-0630		6.30			
1/2	CAT50-SD050-0315	0.5000	3.15	1.85	0.94	1.26
	CAT50-SD050-0630		6.30			
5/8	CAT50-SD062-0315	0.6250	3.15	1.97	1.06	1.34
	CAT50-SD062-0630		6.30			
3/4	CAT50-SD075-0315	0.7500	3.15	2.05	1.30	1.65
	CAT50-SD075-0630		6.30			
1	CAT50-SD100-0394	1.0000	3.94	2.28	1.73	2.09
	CAT50-SD100-0630		6.30			
1 1/4	CAT50-SD125-0394	1.2500	3.94	2.28	1.73	2.09
	CAT50-SD125-0630		6.30			
1 1/2	CAT50-SD150-0472	1.5000	4.72	3.54	3.12	3.12
2	CAT50-SD200-0472	2.0000	4.72	3.54	3.54	3.54

MM	Part Number	A Bore	L Projection	B	D2	D3
6	CAT50-SDM06-080	6.000	80.0	36.0	21.0	27.0
	CAT50-SDM06-160		160.0			
8	CAT50-SDM08-080	8.000	80.0	36.0	21.0	27.0
	CAT50-SDM08-160		160.0			
10	CAT50-SDM10-080	10.000	80.0	42.0	24.0	32.0
	CAT50-SDM10-160		160.0			
12	CAT50-SDM12-080	12.000	80.0	47.0	24.0	32.0
	CAT50-SDM12-160		160.0			
14	CAT50-SDM14-080	14.000	80.0	47.0	27.0	34.0
	CAT50-SDM14-160		160.0			
16	CAT50-SDM16-080	16.000	80.0	50.0	27.0	34.0
	CAT50-SDM16-160		160.0			
20	CAT50-SDM20-080	20.000	80.0	52.0	33.0	42.0
	CAT50-SDM20-160		160.0			
25	CAT50-SDM25-080	25.000	80.0	58.0	44.0	53.0
	CAT50-SDM25-160		160.0			
32	CAT50-SDM32-080	32.000	80.0	58.0	44.0	53.0
	CAT50-SDM32-160		160.0			

G2.5 @ 25,000 RPM

Dynamically Balanced

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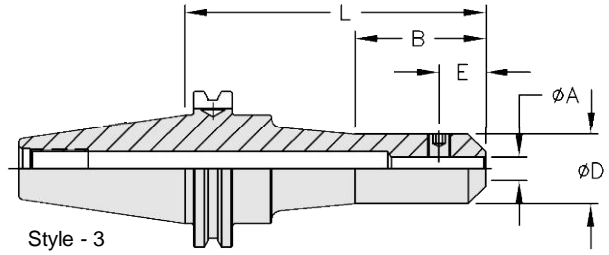
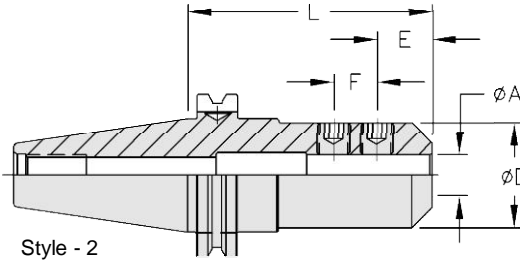
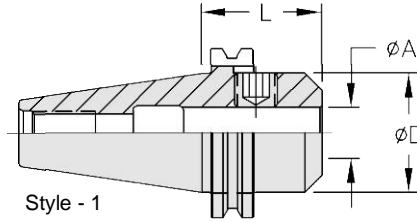


**HPI - PIONEER**

**EM End Mill Adapters**

**Features**

- **3 μm - 0.0001" Bore Runout**
- H5 Bore Tolerance
- Coolant Thru Center
- DIN AD+B Coolant
- (\* 15" Projection Holders additional fee)
- Balanced G6.3 @ 15,000 RPM
- Order Wrench Separately



	Part Number	A - Bore	L Projection	B	D	E	F	Screw	Style
1/8	CAT50-EM012-0250		2.50	-					2
	CAT50-EM012-0531	0.1250	5.31	1.58	0.69	0.19	-	SCW-EM012	3
3/16	CAT50-EM018-0250		2.50	-					2
	CAT50-EM018-0531	0.1875	5.31	1.58	0.69	0.44	-	SCW-EM012	3
1/4	CAT50-EM025-0250		2.50	-					2
	CAT50-EM025-0400		4.00	-					2
	CAT50-EM025-0531	0.2500	5.31	1.58	0.88	0.44	-	SCW-EM025	3
	CAT50-EM025-0600		6.00	1.58					3
5/16	CAT50-EM031-0250		2.50	-					2
	CAT50-EM031-0400		4.00	-					2
	CAT50-EM031-0531	0.3125	5.31	1.58	1.00	0.44	-	SCW-EM025	3
	CAT50-EM031-0600		6.00	1.58					3
3/8	CAT50-EM037-0250		2.50	-					2
	CAT50-EM037-0300		3.00	-					2
	CAT50-EM037-0400		4.00	-					2
	CAT50-EM037-0450		4.50	-					2
	CAT50-EM037-0600		6.00	3.00	1.00	0.75	-	SCW-EM037	3
	CAT50-EM037-0650	0.3750	6.50	3.00					3
	CAT50-EM037-0800		8.00	3.00					3
	CAT50-EM037-1000		10.00	3.00					3
	CAT50-EM037-1200		12.00	3.00					3
	CAT50-EM037-1500*		15.00	3.00					3
7/16	CAT50-EM043-0262		2.62	-					2
	CAT50-EM043-0400	0.4375	4.00	-	1.25	0.88	-	SCW-EM037	2
	CAT50-EM043-0600		6.00	1.97					3
1/2	CAT50-EM050-0262		2.62	-					2
	CAT50-EM050-0300		3.00	-					2
	CAT50-EM050-0400		4.00	-					2
	CAT50-EM050-0462		4.62	-					2
	CAT50-EM050-0600		6.00	3.13	1.25	0.88	-	SCW-EM050	3
	CAT50-EM050-0662	0.5000	6.62	3.13					3
	CAT50-EM050-0800		8.00	3.13					3
	CAT50-EM050-1000		10.00	3.13					3
	CAT50-EM050-1200		12.00	3.13					3
	CAT50-EM050-1500*		15.00	3.13					3
9/16	CAT50-EM056-0262	0.5625	2.62	-	1.50	0.88	-	SCW-EM050	2
	CAT50-EM062-0300		3.00	-					2
5/8	CAT50-EM062-0375		3.75	-					2
	CAT50-EM062-0400	0.6250	4.00	-	1.50	0.94	-	SCW-EM062	2
	CAT50-EM062-0600		6.00	-					2
	CAT50-EM062-0775		7.75	4.25					3



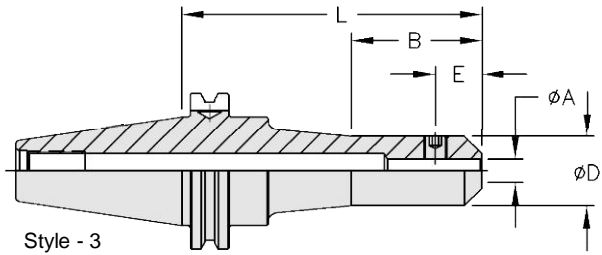
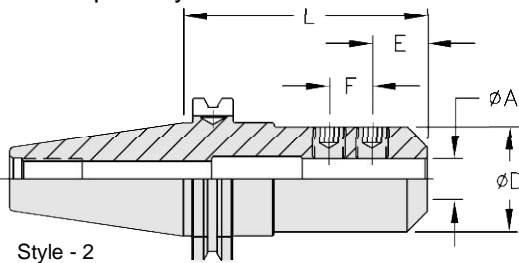
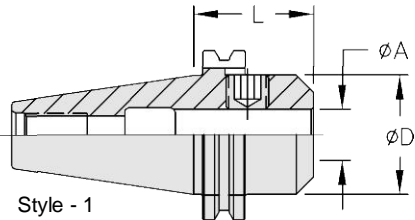
# EM End Mill Adapters

**HPI - PIONEER**



**Features**

- 3 μm - 0.0001" Bore Runout
- H5 Bore Tolerance
- Coolant Thru Center
- DIN AD+B Coolant
- Balanced G6.3 @ 15,000 RPM  
(\* 15" Projection Holders additional fee)
- Order Wrench Separately



	Part Number	A - Bore	L Projection	B	D	E	F	Screw	Style
3/4	CAT50-EM075-0175		1.75	-					1
	CAT50-EM075-0300		3.00	-					2
	CAT50-EM075-0375		3.75	-					2
	CAT50-EM075-0400		4.00	-					2
	CAT50-EM075-0575		5.75	-					2
	CAT50-EM075-0600	0.7500	6.00	1.97	1.75	1.00	-	SCW-EM075	3
	CAT50-EM075-0800		8.00	1.97					3
	CAT50-EM075-1000		10.00	1.97					3
	CAT50-EM075-1200		12.00	1.97					3
	CAT50-EM075-1500*		15.00	1.97					3
7/8	CAT50-EM087-0350		3.50	-					2
	CAT50-EM087-0600	0.8750	6.00	-	1.88	1.00	0.81	SCW-EM075	2
	CAT50-EM087-0775		7.75	-					2
1	CAT50-EM100-0162		1.62	-	2.75		-		1
	CAT50-EM100-0300		3.00	-			-		1
	CAT50-EM100-0400	1.0000	4.00	-		1.12	1.00	SCW-EM100	2
	CAT50-EM100-0600		6.00	-	2.00		1.00		2
	CAT50-EM100-0800		8.00	-			1.00		2
	CAT50-EM100-1000		10.00	4.50			1.00		3
1 1/4	CAT50-EM125-0200		2.00	-	2.62	1.50	-		1
	CAT50-EM125-0300		3.00	-					2
	CAT50-EM125-0400	1.2500	4.00	-				SCW-EM125	2
	CAT50-EM125-0600		6.00	-	2.50	1.12	1.00		2
	CAT50-EM125-0800		8.00	-					2
	CAT50-EM125-1000		10.00	-					2
1 1/2	CAT50-EM150-0225		2.25	-		1.50	-	SCW-EM100	1
	CAT50-EM150-0400		4.00	-					2
	CAT50-EM150-0600	1.5000	6.00	-	2.75	1.12	1.00	SCW-EM125	2
	CAT50-EM150-0800		8.00	-					2
	CAT50-EM150-1000		10.00	-					2
2	CAT50-EM200-0362		3.62	-				SCW-EM200 & S	2
	CAT50-EM200-0562	2.0000	5.62	-	3.75	1.41	1.50	SCW-EM200	2
	CAT50-EM200-0800		8.00	-					2
	CAT50-EM200-1000		10.00	-					2
2 1/2	CAT50-EM250-0650	2.5000	6.50	-	4.00	1.50	1.56	SCW-EM200	2

G6.3 @ 15,000 RPM

Dynamically Balanced

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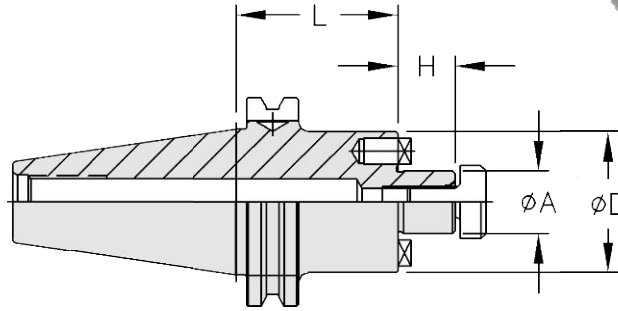


**HPI - PIONEER**

**SM Shell Mill Adapters**

**Features**

- 0.0004" Runout
- Body - Coolant Thru Center
- DIN AD+B Coolant
- Balanced G6.3 @ 15,000 RPM
- Order Wrench Separately



	Part Number	A Pilot	D	L Projection	H	Drive Key	Drive Key Part Number	Screw	Screw Part Number
3/4	CAT50-SM075-0150			1.50					
	CAT50-SM075-0350			3.50					
	CAT50-SM075-0550	0.7500	1.75	5.50	0.69	0.312	DK-SM075	3/8-24	SCW-SM075
	CAT50-SM075-0800			8.00					
	CAT50-SM075-1000			10.00					
	CAT50-SM075-1200			12.00					
1	CAT50-SM100-0200			2.00					
	CAT50-SM100-0400			4.00					
	CAT50-SM100-0600	1.0000	2.36	6.00	0.69	0.375	DK-SM100	1/2-20	SCW-SM100
	CAT50-SM100-0800			8.00					
	CAT50-SM100-1000			10.00					
	CAT50-SM100-1200			12.00					
1-1/4	CAT50-SM125-0150		2.75	1.50					
	CAT50-SM125-0350	1.2500	2.87	3.50	0.69	0.500	DK-SM125	5/8-18	SCW-SM125
	CAT50-SM125-0550		2.87	5.50					
	CAT50-SM125-0800		2.87	8.00					
1-1/2	CAT50-SM150-0240			2.40					
	CAT50-SM150-0400	1.5000	3.82	4.00	0.94	0.625	DK-SM150	3/4-16	SCW-SM150
	CAT50-SM150-0600			6.00					
	CAT50-SM150-0800			8.00					
2	CAT50-SM200-0240	2.0000	4.37	2.40	0.94	0.750	DK-SM200	1"-14	SCW-SM200
	CAT50-SM200-0400			4.00					

G6.3 @ 15,000 RPM

Dynamically Balanced

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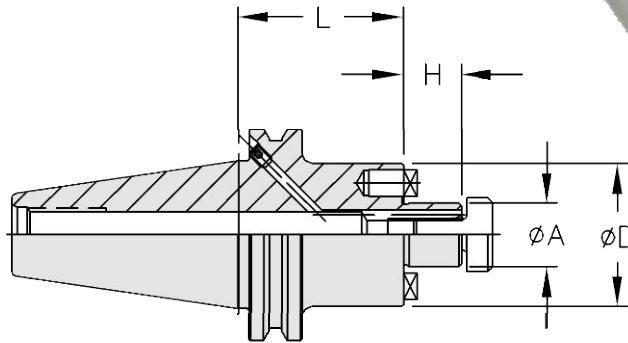


**FX Shell Mill Adapters**

**Features**

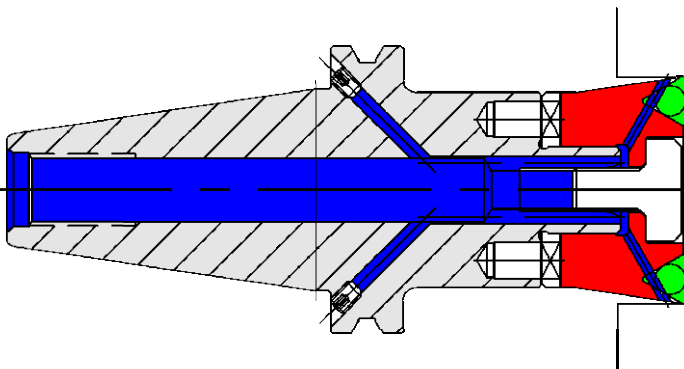
- 0.0004" Runout
- Ported for Insert Coolant Feed
- DIN AD+B Coolant
- Balanced G6.3 @ 15,000 RPM
- Order Wrench Separately

**HPI - PIONEER**



	Part Number	A Pilot	D	L Projection	H	Drive Key	Drive Key Part Number	Screw	Screw Part Number
3/4	CAT50-SM075-0150-F			1.50					
	CAT50-SM075-0350-F			3.50					
	CAT50-SM075-0550-F	0.7500	1.75	5.50	0.69	0.312	DK-SM075	3/8-24	SCW-SM075
	CAT50-SM075-0800-F			8.00					
	CAT50-SM075-1000-F			10.00					
	CAT50-SM075-1200-F			12.00					
1	CAT50-SM100-0200-F			2.00					
	CAT50-SM100-0400-F			4.00					
	CAT50-SM100-0600-F	1.0000	2.36	6.00	0.69	0.375	DK-SM100	1/2-20	SCW-SM100
	CAT50-SM100-0800-F			8.00					
	CAT50-SM100-1000-F			10.00					
	CAT50-SM100-1200-F			12.00					
1-1/4	CAT50-SM125-0150-F		2.75	1.50					
	CAT50-SM125-0350-F	1.2500	2.87	3.50	0.69	0.500	DK-SM125	5/8-18	SCW-SM125
	CAT50-SM125-0550-F		2.87	5.50					
	CAT50-SM125-0800-F		2.87	8.00					
1-1/2	CAT50-SM150-0240-F			2.40					
	CAT50-SM150-0400-F	1.5000	3.82	4.00	0.94	0.625	DK-SM150	3/4-16	SCW-SM150
	CAT50-SM150-0600-F			6.00					
	CAT50-SM150-0800-F			8.00					
2	CAT50-SM200-0240-F	2.0000	4.37	2.40	0.94	0.750	DK-SM200	1"-14	SCW-SM200
	CAT50-SM200-0400-F			4.00					

Coolant Flow using FX holder with appropriate Shell Mill body.



G6.3 @ 15,000 RPM

Dynamically Balanced

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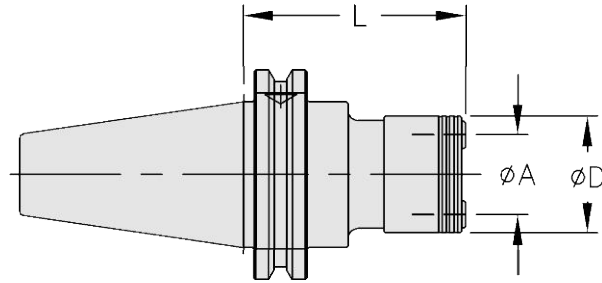


**RT - QC Rigid Tap Drivers**

HPI - PIONEER

**Features**

- Body - Coolant Thru Center



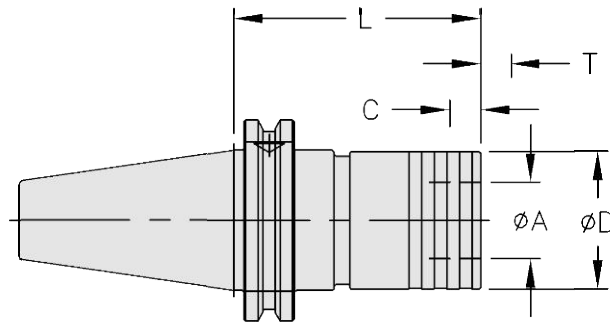
Part Number	Capacity	Adapter Size	L - Projection	A	D
CAT50-RT1-72	#6-9/16	1	2.83	0.75	1.34
CAT50-RT2-91	5/16-7/8	2	3.58	1.22	1.93
CAT50-RT3-130	9/16-1-3/8	3	5.12	1.89	2.89



**TC - QC Tension / Compression Tap Drivers**

**Features**

- Tension and Compression Stroke for improved tap life
- Pressure Point Mechanism to increase the cutting pressure and ensure a positive start



Part Number	Capacity	Adapter Size	A	L - Projection	D	T - TENSION	C - COMP.
CAT50-TC1-59	#6-9/16	1	0.75	2.32	1.42	0.30	0.30
CAT50-TC2-97	5/16-7/8	2	1.22	3.82	2.09	0.49	0.49
CAT50-TC3-149	9/16-1-3/8	3	1.89	5.87	3.07	0.79	0.79



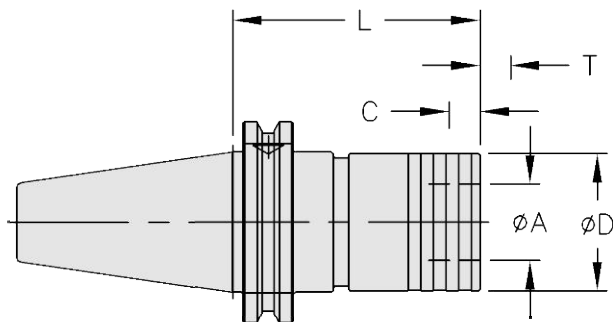


### TCC - QC Coolant Thru T&C Tap Drivers

#### Features

- Coolant Thru the Center Design
- Tension and Compression Stroke for improved tap life

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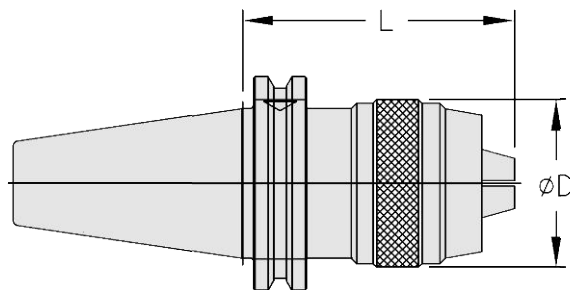
Part Number	Capacity	Adapter Size	A	L - Projection	D	T - TENSION	C - COMP.
CAT50-TCC1-59	#6-9/16	1	0.75	3.11	1.42	0.30	0.30
CAT50-TCC2-97	5/16-7/8	2	1.22	4.13	2.09	0.49	0.49
CAT50-TCC3-149	9/16-1-3/8	3	1.89	5.59	3.07	0.79	0.79



### DC Drill Chuck

#### Features

- Order Wrench Separately



Order No.	Range	L - Projection	D
CAT50-DC050-0394	0.04-0.50	3.94	1.96

G6.3 @ 20,000 RPM

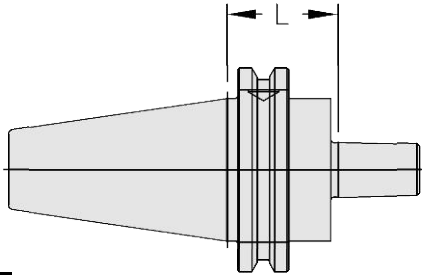
Dynamically Balanced

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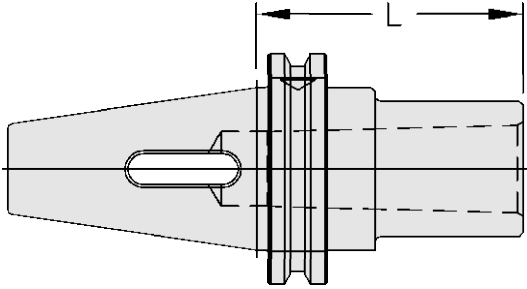
**JT - Jacobs Taper Adapter**



Part Number	JT No.	L Projection
CAT50-JT03-0177	3	1.77
CAT50-JT03-0413	3	4.13
CAT50-JT06-0177	6	1.77
CAT50-JT06-0413	6	4.13
CAT50-JT33-0177	33	1.77
CAT50-JT33-0413	33	4.13



**MT - Morse Taper Adapter**



Part Number	MT No.	L Projection
CAT50-MA1-0177	1	1.77
CAT50-MA2-0177	2	1.77
CAT50-MA2-0531	2	5.31
CAT50-MA2-0709	2	7.09
CAT50-MA3-0177	3	1.77
CAT50-MA3-0591	3	5.91
CAT50-MA3-0709	3	7.09
CAT50-MA4-0295	4	2.95
CAT50-MA4-0709	4	7.09
CAT50-MA5-0413	5	4.13





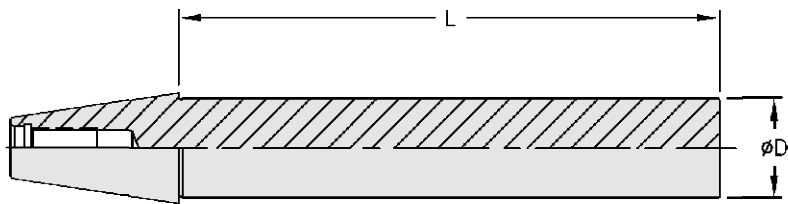


### Test Bar

#### Features

- Concentric to Taper within 3µm (0.0001") TIR
- Hardened & Normalized for consistency
- 100% Individually inspected with Certification Sheet included
- Optional Wood Box (Sold Separately)
- M16 Retention Knob Threads - Conversion knobs for all machines available upon request

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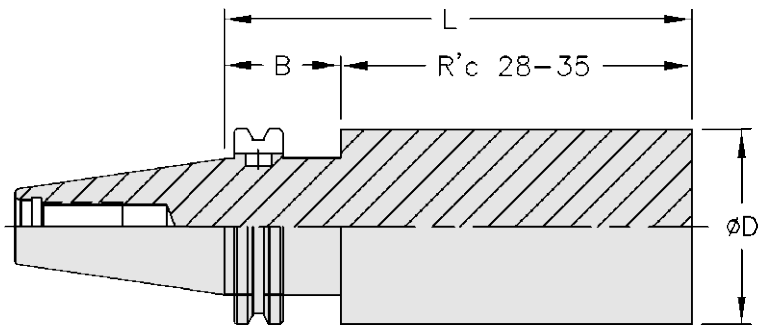


Part Number	D	L Projection
SK50-TB50-300	1.969	11.811

### Soft Blank

#### Features

- Nose End R'c 28-35
- Finished Shank



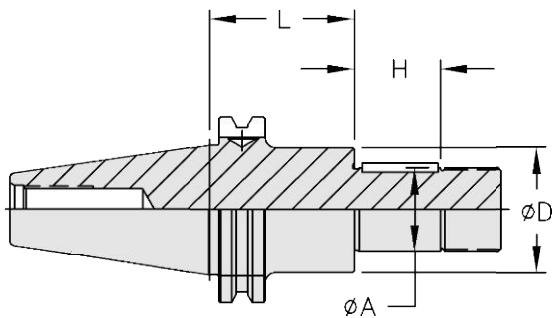
Part Number	D	L Projection	B
CAT50-BL388-0600	3.88	6.00	1.38
CAT50-BL388-1100	3.88	11.00	1.38



### SB Stub Arbors

#### Features

- Spacers, Nut and Drive Key Included



Part Number	A	L Projection	D	H	Key	Threads
CAT50-SB100-0300	1.0000	3.00	1.50	1.24	0.25	1-12
CAT50-SB125-0300	1.2500	3.00	1.75	1.24	0.31	1.1/4-12





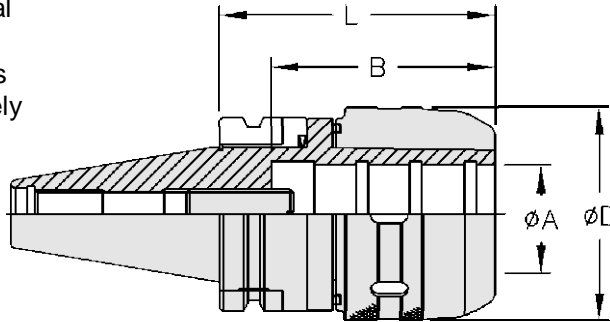
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**MC - Milling Chuck**

**Features**

- 5  $\mu\text{m}$  - 0.0002" Runout @ 4" out
- Coolant Thru w/ Nylon Screw Seal
- Balanced @ 20,000 RPM
- Radial Slip Torque 4X ER Chucks
- Order Collets & Wrench Separately



Part Number	A	L Projection	B	D	Collet	Wrench
FCAT50-MC075-0433	0.75	4.33	2.76	2.09	MC075	MCW075
FCAT50-MC075-0531	0.75	5.31	2.76	2.09	MC075	MCW075
FCAT50-MC075-0650	0.75	6.50	2.76	2.09	MC075	MCW075
FCAT50-MC125-0472	1.25	4.72	4.13	2.68	MC125	MCW125
FCAT50-MC125-0531	1.25	5.31	4.13	2.68	MC125	MCW125
FCAT50-MC125-0650	1.25	6.50	4.13	2.68	MC125	MCW125

G6.3 @ 20,000 RPM

Dynamically Balanced

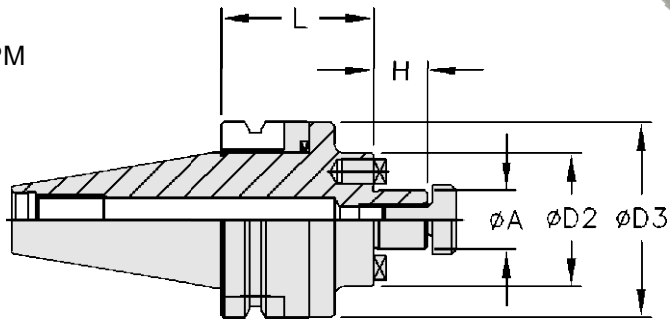
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### SM Shell Mill Adapters

#### Features

- 0.0004" Runout
- Body - Coolant Thru Center
- Balanced G6.3 @ 20,000 RPM
- Order Wrench Separately



Part Number	A	D	L Projection	H	Drive Key	Screw
FCAT50-SM075-0256	0.7500	1.77	2.56	0.69	0.312	3/8-24
FCAT50-SM075-0354	0.7500	1.77	3.54	0.69	0.312	3/8-24
FCAT50-SM075-0591	0.7500	1.77	5.91	0.69	0.312	3/8-24
FCAT50-SM100-0256	1.0000	2.28	2.56	0.69	0.375	1/2-20
FCAT50-SM100-0354	1.0000	2.28	3.54	0.69	0.375	1/2-20
FCAT50-SM100-0591	1.0000	2.28	5.91	0.69	0.375	1/2-20

G6.3 @ 20,000 RPM

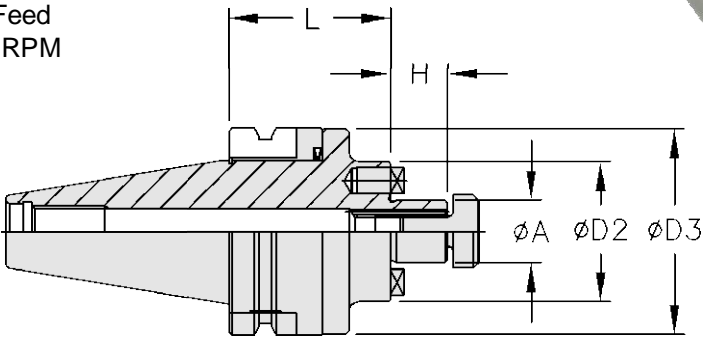
Dynamically Balanced

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### FX Shell Mill Adapters

#### Features

- 0.0004" Runout
- Ported for Insert Coolant Feed
- Balanced G6.3 @ 20,000 RPM
- Order Wrench Separately



Part Number	A	D	L Projection	H	Drive Key	Screw
FCAT50-SM075-0256-F	0.7500	1.77	2.56	0.69	0.312	3/8-24
FCAT50-SM075-0354-F	0.7500	1.77	3.54	0.69	0.312	3/8-24
FCAT50-SM075-0591-F	0.7500	1.77	5.91	0.69	0.312	3/8-24
FCAT50-SM100-0256-F	1.0000	2.28	2.56	0.69	0.375	1/2-20
FCAT50-SM100-0354-F	1.0000	2.28	3.54	0.69	0.375	1/2-20
FCAT50-SM100-0591-F	1.0000	2.28	5.91	0.69	0.375	1/2-20

G6.3 @ 20,000 RPM

Dynamically Balanced

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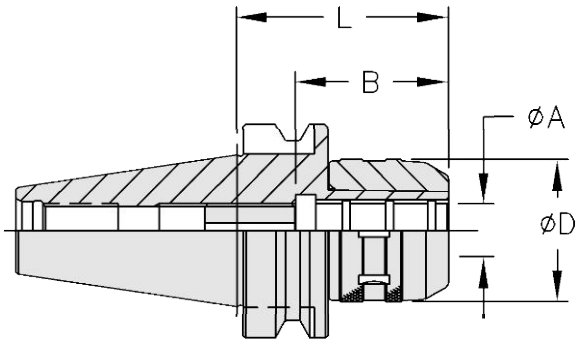
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**MC - Milling Chuck**

**Features**

- **5 µm - 0.0002" Runout @ 4" out**
- Coolant Thru w/ Nylon Screw Seal
- Balanced @ 20,000 RPM
- Radial Slip Torque 4X ER Chucks
- Balanceable Available in some models (See Chart)
- Order Collets & Wrench Separately



	Part Number	A Bore	B	D	L Projection	Preset Screw	Collet	Wrench	Balanceable
3/4	BT30-MC075-0315	0.7500	2.76	2.09	3.15	ASC-MC20-30	MC075	MCW20	-
	BT30-MC075-0335-S	0.7500			3.35				Y
20mm	BT30-MC20-080	20mm	2.76	2.09	3.15	ASC-MC20-30	MC20	MCW20	-

G6.3 @ 20,000 RPM

Dynamically Balanced

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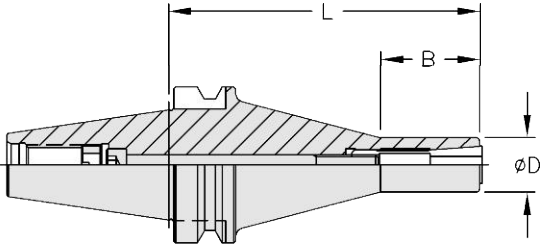


### MX - Mini Collet Chuck

#### Features

- 2.5 µm - 0.0001" Runout @ 4X Diameter
- Collet tightened thru retention knob
- Sealed up to 1,500 PSI Coolant (See Chart)
- Balanced G2.5 @ 20,000 RPM
- Balanceable upon request
- Order Collets & Wrench Separately

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	Part Number	Collet Range	L Projection	B	D	Collet	Coolant Thru	Wrench
1/4	BT30-MX06-090	0.031-0.250	3.54	1.42	0.50	MX06	N	MXW05
	BT30-MX06-090-C						Y	
3/8	BT30-MX08-090	0.125 - 0.394	3.54	1.42	0.87	MX08	Y	
1/2	BT30-MX12-105	0.157 - 0.500	4.13	1.38	1.18	MX12	Y	

G2.5 @ 20,000 RPM

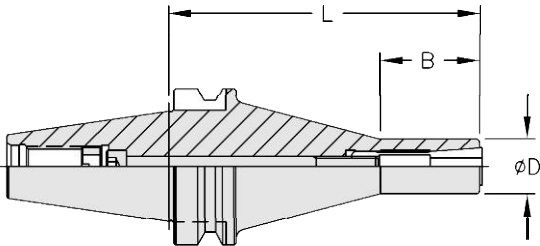
Dynamically Balanced

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### GMX - Gear Mini Collet Chuck

#### Features

- 2.5 µm - 0.0001" Runout @ 4X Diameter
- Collet tightened thru the drive slots
- Sealed up to 1,500 PSI Coolant
- Balanced G2.5 @ 20,000 RPM
- Balanceable upon request
- Order Collets & Wrench Separately



	Part Number	Collet Range	L Projection	B	D	Collet	Wrench
1/4	BT30-GMX06-090	0.031 - 0.250	3.54	1.42	0.50	MX06	MXW05
3/8	BT30-GMX08-090	0.125 - 0.394	3.54	1.42	0.87	MX08	MXW05
1/2	BT30-GMX12-105	0.157 - 0.500	4.13	1.38	1.18	MX12	MXW05

G2.5 @ 20,000 RPM

Dynamically Balanced

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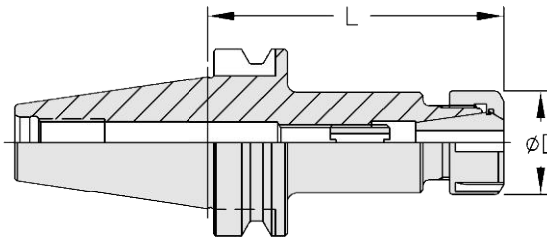


**HPI - PIONEER**

**ER Collet Chucks**

**Features**

- **3 μm - 0.0001” Runout Taper to Taper**
- Coolant Thru Center
- Balanced G6.3 @ 20,000 RPM
- Order Collets & Wrench Separately



	Part Number	Range	L Projection	D	Collet	Screw	Nut	Wrench
1/4	BT30-ER11H-070	.019-.276	2.76	0.74	ER11	ASC-ER11	ERN-11H	ERW-11H
	BT30-ER11H-100		3.94					
3/8	BT30-ER16H-070	.019-.394	2.76	1.10	ER16	ASC-ER16	ERN-16H	ERW-16H
	BT30-ER16H-100		3.94					
1/2	BT30-ER20H-070	.019-.512	2.76	1.33	ER20	ASC-ER20	ERN-20H	ERW-20H
	BT30-ER20H-100		3.94					
5/8	BT30-ER25-070	.019-.630	2.76	1.65	ER25	ASC-ER25	ERN-25	ERW-25
	BT30-ER25-100		3.94					
3/4	BT30-ER32-070	.039-.787	2.76	1.96	ER32	ASC-ER32	ERN-32	ERW-32

G6.3 @ 20,000 RPM

Dynamically Balanced

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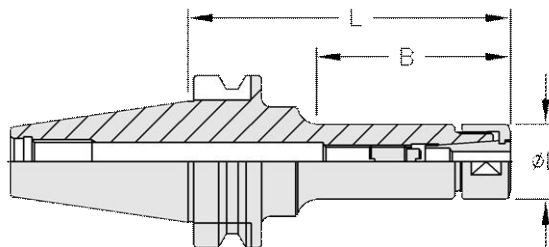
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**SX Collet Chucks**

**Features**

- **3 μm - 0.0001” Runout Taper to Taper**
- Optional Coolant Thru
- Balanced G6.3 @ 20,000 RPM
- Order Collets & Wrench Separately



	Part Number	Range	L Projection	B	D	Collet	Nut	Wrench	Stop Screw
1/4	BT30-SX 6 - 60	.030 - .236	2.36	1.30	0.77	SX6	SXN-06	SXW-06	AS-SX06
	BT30-SX 6 - 90		3.54	2.20					
3/8	BT30-SX10 - 45	.069 - .394	1.77	0.87	1.08	SX10	SXN-10	SXW-10	AS-SX10
	BT30-SX10 - 60		2.36	1.38					
	BT30-SX10 - 90		3.54	2.56					
5/8	BT30-SX16 - 60	.108 - .630	2.36	1.46	1.58	SX16	SXN-16	SXW-16	AS-SX16
	BT30-SX16 - 90		3.54	2.64					
1	BT30-SX25 - 90	.630 - 1.000	3.54	2.68	2.17	SX25	SXN-25	SXW-25	AS-SX25

G6.3 @ 20,000 RPM

Dynamically Balanced

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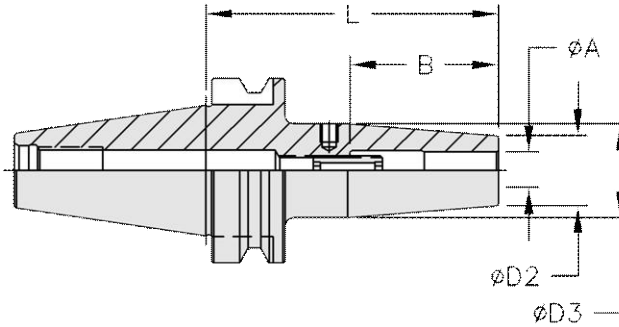


# SD Shrink Fit

**HPI - PIONEER**

**Features**

- 2µm 0.0001" Runout L < 6.00
- 4µm 0.0002" Runout L ≥ 6.00
- Coolant Thru Center
- Balanced G2.5 @ 25,000 RPM
- Shrink Fit Machine Sold Separately



Inch	Part Number	A Bore	L Projection	B	D2	D3
1/8	BT30-SD012-0236	0.1250	2.36	0.35	0.39	
	BT30-SD012-0315		3.15			
3/16	BT30-SD018-0236	0.1875	2.36	0.47	0.39	
	BT30-SD018-0315		3.15			
1/4	BT30-SD025-0236	0.2500	2.36	1.42	0.91	
	BT30-SD025-0315		3.15		0.83	
3/8	BT30-SD037-0236	0.3750	2.36	1.65	1.06	
	BT30-SD037-0315		3.15		0.94	
1/2	BT30-SD050-0236	0.5000	2.36	1.85	1.06	
	BT30-SD050-0315		3.15		0.94	
5/8	BT30-SD062-0236	0.6250	2.36	1.97	1.18	
	BT30-SD062-0315		3.15		1.06	
3/4	BT30-SD075-0236	0.7500	2.36	2.05	1.39	
	BT30-SD075-0315		3.15		1.30	

MM	Part Number	A Bore	L Projection	B	D2	D3
3	BT30-SDM03-060	3.000	60.0	9.0	10.0	19.6
	BT30-SDM03-080		80.0			
4	BT30-SDM04-060	4.000	60.0	12.0	10.0	19.6
	BT30-SDM04-080		80.0			
5	BT30-SDM05-060	5.000	60.0	15.0	10.0	19.6
	BT30-SDM05-080		80.0			
6	BT30-SDM06-060	6.000	60.0	36.0	23.0	
	BT30-SDM06-080		80.0		21.0	
8	BT30-SDM08-060	8.000	60.0	36.0	23.0	
	BT30-SDM08-080		80.0		21.0	
10	BT30-SDM10-060	10.000	60.0	42.0	27.0	
	BT30-SDM10-080		80.0		24.0	
12	BT30-SDM12-060	12.000	60.0	47.0	27.0	
	BT30-SDM12-080		80.0		24.0	
14	BT30-SDM14-060	14.000	60.0	47.0	30.0	
	BT30-SDM14-080		80.0		27.0	
16	BT30-SDM16-060	16.000	60.0	50.0	30.0	
	BT30-SDM16-080		80.0		27.0	
20	BT30-SDM20-060	20.000	60.0	52.0	35.5	
	BT30-SDM20-080		80.0		33.0	

G2.5 @ 25,000 RPM

Dynamically Balanced P-104 P-132

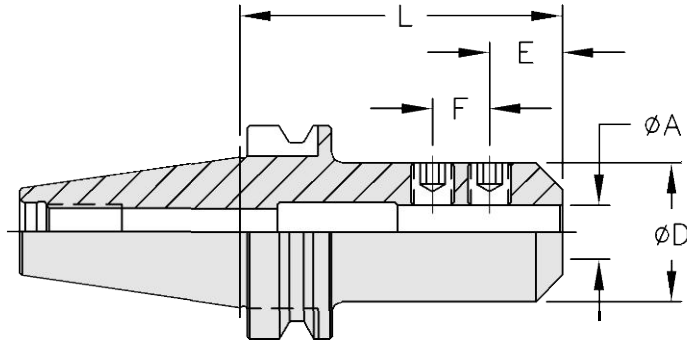


**HPI - PIONEER**

**EM End Mill Adapters**

**Features**

- 3  $\mu\text{m}$  - 0.0001" Bore Runout
- H5 Bore Tolerance
- Coolant Thru Center
- Balanced G6.3 @ 20,000 RPM
- Order Wrench Separately



	Part Number	A Bore	L Projection	D	E	F	Screw
1/8	BT30-EM012-0236	0.1250	2.36	0.75	0.38	-	SCW-EM012
	BT30-EM012-0400		4.00			-	
3/16	BT30-EM018-0236	0.1875	2.36	0.75	0.50	-	SCW-EM018
	BT30-EM018-0400		4.00			-	
1/4	BT30-EM025-0236	0.2500	2.36	0.81	0.38	-	SCW-EM025
	BT30-EM025-0400		4.00			-	
5/16	BT30-EM031-0236	0.3125	2.36	1.00	0.60	-	SCW-EM031-BT30
	BT30-EM031-0400		4.00			-	
3/8	BT30-EM037-0236	0.3750	2.36	1.38	0.75	-	SCW-EM037
	BT30-EM037-0400		4.00			-	
1/2	BT30-EM050-0236	0.5000	2.36	1.38	0.88	-	SCW-EM050
	BT30-EM050-0400		4.00			-	
5/8	BT30-EM062-0236	0.6250	2.36	1.44	0.94	-	SCW-EM062
	BT30-EM062-0400		4.00			-	
3/4	BT30-EM075-0236	0.7500	2.36	2.00	1.00	-	SCW-EM075
	BT30-EM075-0400		4.00			-	
7/8	BT30-EM087-0354	0.8750	3.54	2.00	1.00	0.81	SCW-EM075
1	BT30-EM100-0275	1.0000	2.75	2.38	1.12	-	SCW-EM100

G6.3 @ 20,000 RPM

Dynamically Balanced

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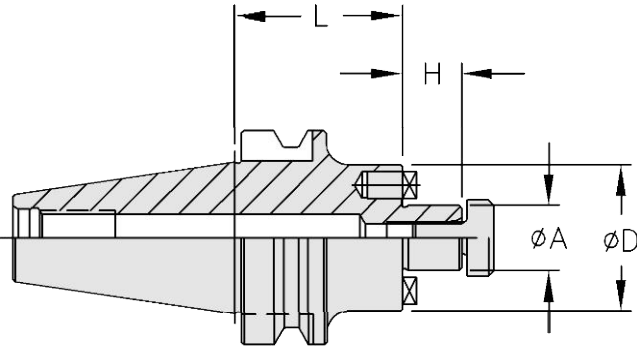


### SM Shell Mill Adapters

#### Features

- 0.0004" Runout
- Body - Coolant Thru Center
- Balanced G6.3 @ 20,000 RPM
- Order Wrench Separately

HPI - PIONEER



	Part Number	A Pilot	D	L Projection	H	Drive Key	Drive Key Part Number	Screw	Screw Part Number
1/2	BT30-SM050-0119	0.5000	1.38	1.19	0.57	0.250	DK-SM050	1/4-28	SCW-SM050
3/4	BT30-SM075-0119	0.7500	1.75	1.19	0.69	0.312	DK-SM075	3/8-24	SCW-SM075
1	BT30-SM100-0119	1.0000	2.36	1.19	0.69	0.375	DK-SM100	1/2-20	SCW-SM100

G6.3 @ 20,000 RPM

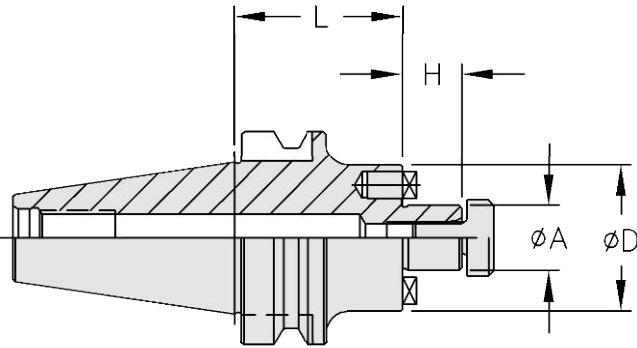
Dynamically Balanced

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### FX Shell Mill Adapters

#### Features

- 0.0004" Runout
- Ported for Insert Coolant Feed
- Balanced G6.3 @ 20,000 RPM
- Order Wrench Separately

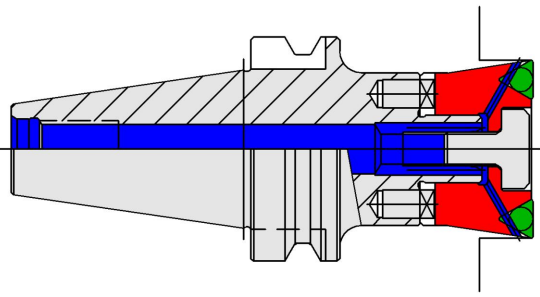


	Part Number	A Pilot	D	L Projection	H	Drive Key	Drive Key Part Number	Screw	Screw Part Number
1/2	BT30-SM050-0119-F	0.5000	1.38	1.19	0.57	0.250	DK-SM050	1/4-28	SCW-SM050
3/4	BT30-SM075-0119-F	0.7500	1.75	1.19	0.69	0.312	DK-SM075	3/8-24	SCW-SM075
1	BT30-SM100-0119-F	1.0000	2.36	1.19	0.69	0.375	DK-SM100	1/2-20	SCW-SM100

G6.3 @ 20,000 RPM

Dynamically Balanced

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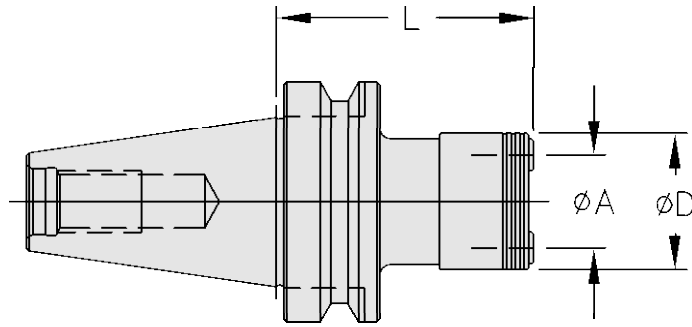


**HPI - PIONEER**

**RT - QC Rigid Tap Drivers**

**Features**

- Body - Coolant Thru Center
- 2 Piece Construction



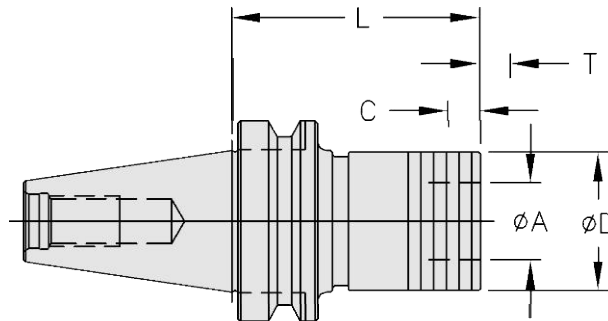
Adapter Size	Part Number	Capacity	L Projection	A	D
1	BT30-RT1-0432	#6-9/16	4.32	0.75	1.34
2	BT30-RT2-0511	5/16-7/8	5.11	1.22	1.93



**TC - QC Tension / Compression Tap Drivers**

**Features**

- Tension and Compression Stroke for improved tap life
- Pressure Point Mechanism to increase the cutting pressure and ensure a positive start
- 2 Piece Construction



Adapter Size	Part Number	Capacity	A	L Projection	D	T TENSION	C COMP.
1	BT30-TC1-0452	#6-9/16	0.75	4.52	1.54	0.30	0.30
2	BT30-TC2-0504	5/16-7/8	1.22	5.04	2.36	0.49	0.49



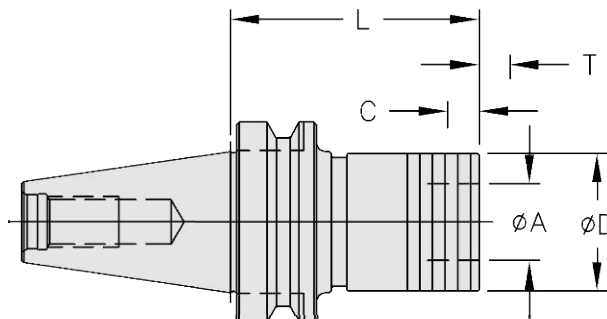


## TCC - QC Coolant Thru T&C Tap Drivers

HPI - PIONEER

### Features

- Coolant Thru the Center Design
- Tension and Compression Stroke for improved tap life
- 2 Piece Construction



Adapter Size	Part Number	Capacity	A	L Projection	D	T TENSION	C COMP.
1	BT30-TCC1-0519	#6-9/16	0.75	5.19	1.54	0.30	0.30
2	BT30-TCC2-0661	5/16-7/8	1.22	6.61	2.36	0.49	0.49



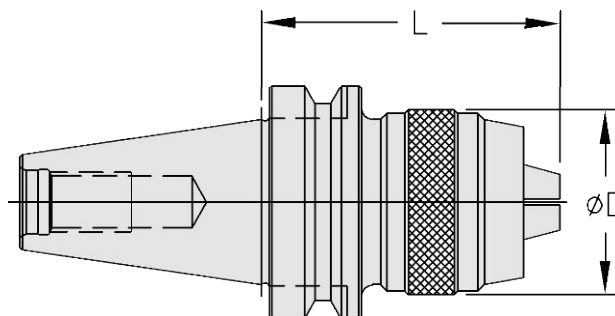
## DC Drill Chuck

### Features

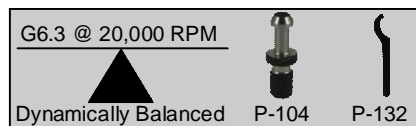
Order Wrench Separately

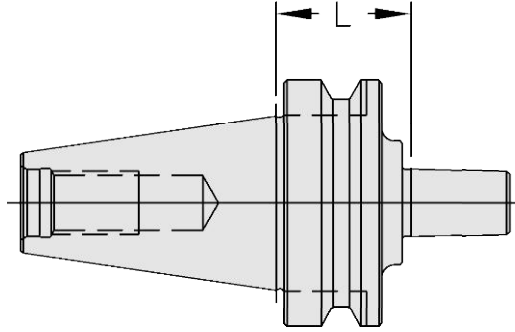
### Features

- Order Wrench Separately

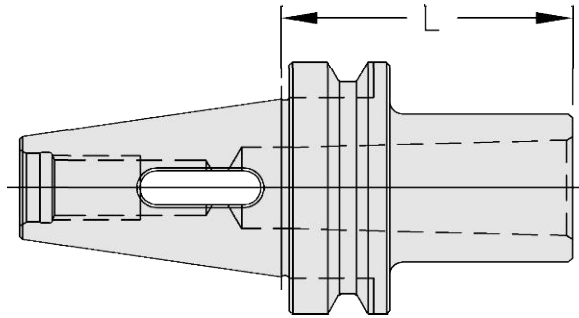


Part Number	Range	L Projection	D
1/2 BT30-DC13-105	0.04-0.50	4.13	1.96



**JT - Jacobs Taper Adapter****HPI - PIONEER**

Part Number	JT No.	L Projection
BT30-JT01-030	1	1.18
BT30-JT02-030	2	1.18
BT30-JT06-030	6	1.18

**MT - Morse Taper Adapter**

Part Number	MT No.	L Projection
BT30-MA1-045	1	1.77
BT30-MA2-060	2	2.36







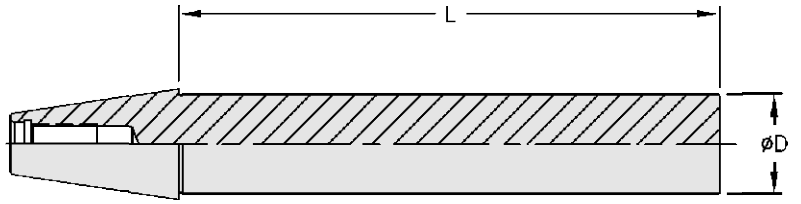
### Test Bar

HPI - PIONEER



#### Features

- Concentric to Taper within 3µm (0.0001”) TIR
- Hardened & Normalized for consistency
- 100% Individually inspected with Certification Sheet included
- Optional Wood Box (Sold Separately)
- M16 Retention Knob Threads - Conversion knobs for all machines available upon request



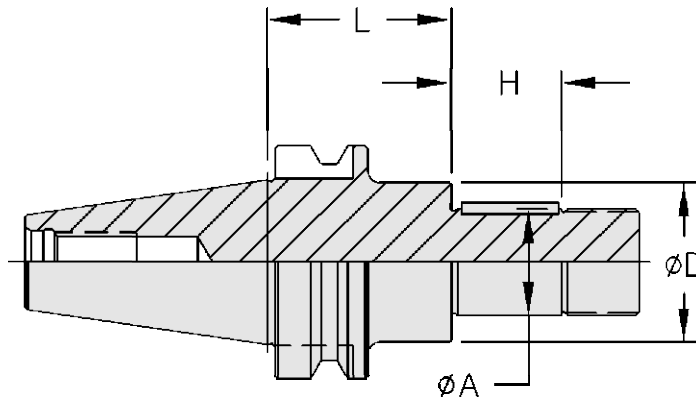
Part Number	D	L Projection
SK30-TB32-200	1.2598	7.874



### SB Stub Arbors

#### Features

- Spacers, Nut and Drive



Part Number	A Pilot	L Projection	D	H	Key	Threads
BT30-SB100-0300	1.0000	2.36	1.57	1.18	0.28	M24



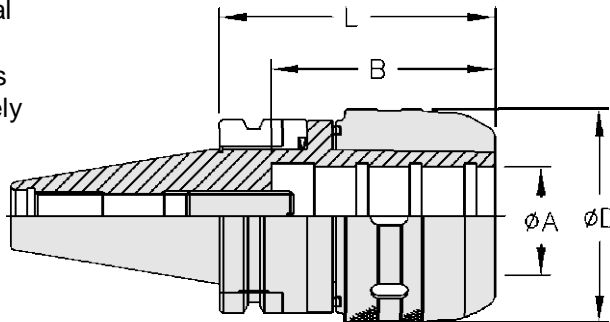


**HPI - PIONEER**

**MC - Milling Chuck**

**Features**

- 5 µm - 0.0002" Runout @ 4" out
- Coolant Thru w/ Nylon Screw Seal
- Balanced @ 20,000 RPM
- Radial Slip Torque 4X ER Chucks
- Order Collets & Wrench Separately



	Part Number	A Bore	L Projection	B	D	Screw	Collet	Wrench
3/4	FBT30-MC075-0335	0.75	3.35	2.36	2.09		MC075	MCW075

G6.3 @ 20,000 RPM

Dynamically Balanced

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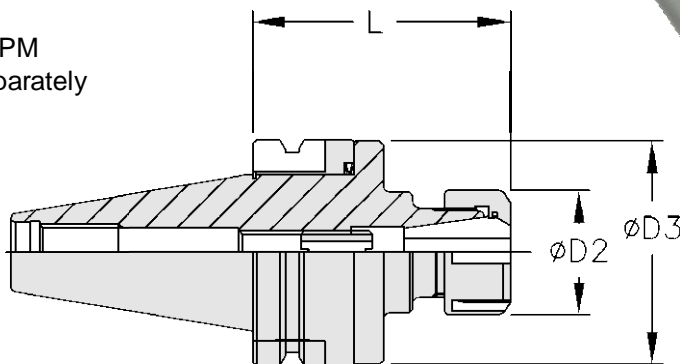
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**ER Collet Chucks**

**Features**

- 3 µm - 0.0001" Runout Taper to Taper
- Coolant Thru Center
- Balanced G6.3 @ 20,000 RPM
- Order Collets & Wrench Separately



	Part Number	Range	L Projection	D	Screw	Nut	Wrench
3/8	FBT30-ER16-0256	.019-.394	2.56	1.10		ERN-16H	ERW-16H
5/8	FBT30-ER25-0256	.019-.630	2.56	1.65		ERN-25	ERW-25

G6.3 @ 20,000 RPM

Dynamically Balanced

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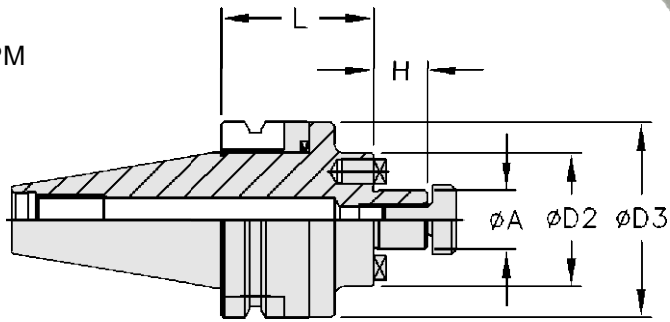
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### SM Shell Mill Adapters

**Features**

- 0.0004" Runout
- Body - Coolant Thru Center
- Balanced G6.3 @ 20,000 RPM
- Order Wrench Separately



	Part Number	A Pilot	D	L Projection	H	Drive Key	Screw
3/4	FBT30-SM075-0157	0.7500	1.77	1.57	0.69	0.312	3/8-24
1	FBT30-SM100-0157	1.0000	2.28	1.57	0.69	0.375	1/2-20

G6.3 @ 20,000 RPM

Dynamically Balanced

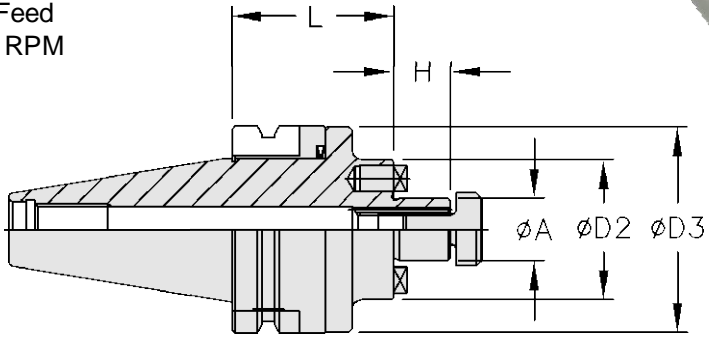
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### FX Shell Mill Adapters

**Features**

- 0.0004" Runout
- Ported for Insert Coolant Feed
- Balanced G6.3 @ 20,000 RPM
- Order Wrench Separately



	Part Number	A Pilot	D	L Projection	H	Drive Key	Screw
3/4	FBT30-SM075-0157-F	0.7500	1.77	1.57	0.69	0.312	3/8-24
1	FBT30-SM100-0157-F	1.0000	2.28	1.57	0.69	0.375	1/2-20

G6.3 @ 20,000 RPM

Dynamically Balanced

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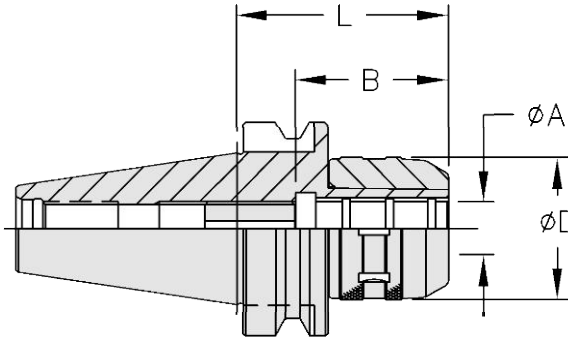


**HPI - PIONEER**

**MC - Milling Chuck**

**Features**

- 5 µm - 0.0002" Runout @ 4" out
- Coolant Thru w/ Nylon Screw Seal
- Balanced @ 20,000 RPM
- Radial Slip Torque 4X ER Chucks
- DIN AD+B Available in some models (See Chart)
- Balanceable Available in some models (See Chart)
- Order Collets & Wrench Separately



Part Number	A Bore	B	D	L Projection	Preset Screw	Collet	Wrench	DIN AD+B	Balanceable
BT40-MC075-0295				2.95					
BT40-MC075-0295-S				2.95				Y	Y
3/4 BT40-MC075-0354	0.7500	2.76	2.09	3.54	ASC-MC20	MC075	MCW20		
BT40-MC075-0472				4.72					
BT40-MC075-0472-S				4.72				Y	Y
BT40-MC100-0315				3.15					
1 BT40-MC100-0335-S	1.0000	2.91	2.44	3.35	ASC-MC20	MC100	MCW25	Y	Y
BT40-MC100-0413				4.13					
BT40-MC100-0472-S				4.72				Y	Y
BT40-MC125-0335				3.35					
1-1/4 BT40-MC125-0354-S	1.2500	3.07	2.76	3.54	ASC-MC20	MC125	MCW32	Y	Y
BT40-MC125-0472				4.72					
BT40-MC125-0472-S				4.72				Y	Y
20mm BT40-MC20-75				2.95					
BT40-MC20-90				3.54					
BT40-MC20-105	20mm	2.76	2.09	4.13	AS-MC20	MC20	MCW20		
BT40-MC20-120				4.72					
32mm BT40-MC32-85				3.35					
BT40-MC32-105	32mm	3.07	2.76	4.13	AS-MC20	MC32	MCW32		
BT40-MC32-120				4.72					

G6.3 @ 20,000 RPM

Dynamically Balanced

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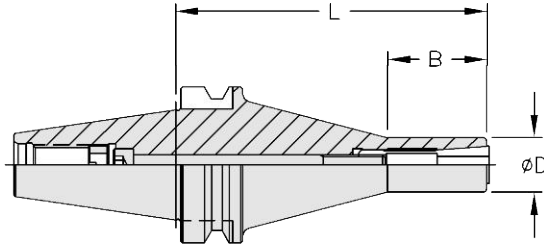


# MX - Mini Collet Chuck

## Features

- **2.5 µm - 0.0001" Runout @ 4X Diameter**
- Collet tightened thru retention knob
- Sealed up to 1,500 PSI Coolant (See Chart)
- Balanced G2.5 @ 20,000 RPM
- DIN-B Coolant upon request
- Balanceable upon request
- Order Collets & Wrench Separately

HPI - PIONEER



	Part Number	Collet Range	L Projection	D	C	Collet	Wrench
1/4	BT40-MX06-085	0.031 - 0.250	3.35	0.50	1.42	MX06	MXW05
	BT40-MX06-150		5.91				
3/8	BT40-MX08-085	0.125 - 0.394	3.35	0.87	1.42	MX08	
	BT40-MX08-120		4.72				
1/2	BT40-MX12-090	0.157 - 0.500	3.54	1.18	1.38	MX12	

G2.5 @ 20,000 RPM

Dynamically Balanced

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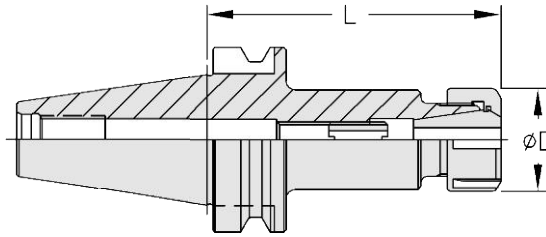


**HPI - PIONEER**

**ER Collet Chucks**

**Features**

- **3 μm - 0.0001” Runout Taper to Taper**
- Coolant Thru Center
- DIN AD+B Coolant Standard
- Balanced G6.3 @ 20,000 RPM
- Order Collets & Wrench Separately



	Part Number	Range	L Projection	D	Screw	Collet	Nut	Wrench
1/4	BT40-ER11H-060		2.36					
	BT40-ER11H-100	0.019-0.276	3.94	0.74	ASC-ER11	ER11	ERN-11H	ERW-11H
	BT40-ER11H-150		5.91					
3/8	BT40-ER16H-060		2.36					
	BT40-ER16H-100	0.019-0.394	3.94	1.10	ASC-ER16	ER16	ERN-16H	ERW-16H
	BT40-ER16H-160		6.30					
1/2	BT40-ER20H-070		2.76					
	BT40-ER20H-100	0.019-0.512	3.94	1.33	ASC-ER20	ER20	ERN-20H	ERW-20H
	BT40-ER20H-160		6.30					
5/8	BT40-ER25-060		2.36					
	BT40-ER25-100	0.019-0.630	3.94	1.65	ASC-ER25	ER25	ERN-25	ERW-25
	BT40-ER25-160		6.30					
3/4	BT40-ER32-075		2.95					
	BT40-ER32-100	0.039-0.787	3.94	1.96	ASC-ER32	ER32	ERN-32	ERW-32
	BT40-ER32-160		6.30					
1	BT40-ER40-080	0.079-1.024	3.15	2.48 2.48	ASC-ER40	ER40	ERN-40	ERW-40
	BT40-ER40-160		6.30					

G6.3 @ 20,000 RPM

Dynamically Balanced

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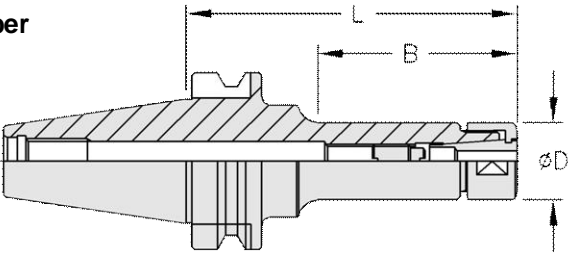


# SX Collet Chucks

### Features

- 3 µm - 0.0001" Runout Taper to Taper
- Optional Coolant Thru
- DIN B Coolant Opional
- Balanced G6.3 @ 20,000 RPM
- Order Collets & Wrench Separately

HPI - PIONEER



	Part Number	Range	L Projection	B	D	Collet	Nut	Wrench	Screw
1/4	BT40-SX06-090	0.030 - 0.236	3.54	2.36	0.77	SX06	SXN-06	SXW-06	AS-SX06
	BT40-SX06-120		4.72	2.36					
3/8	BT40-SX10-090	0.069 - 0.394	3.54	2.36	1.08	SX10	SXN-10	SXW-10	AS-SX10
	BT40-SX10-120		4.72	2.76					
	BT40-SX10-150		5.91	2.87					
5/8	BT40-SX16-090	0.108 - 0.630	3.54	2.28	1.58	SX16	SXN-16	SXW-16	AS-SX16
	BT40-SX16-120		4.72	3.46					
	BT40-SX16-150		5.91	4.65					
1	BT40-SX25-090	0.630 - 1.000	3.54	2.40	2.17	SX25	SXN-25	SXW-25	AS-SX25

G6.3 @ 20,000 RPM

Dynamically Balanced

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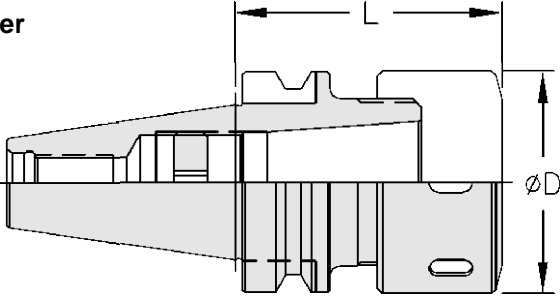


**HPI - PIONEER**

**TG Collet Chucks**

**Features**

- 3 µm - 0.0001" Runout Taper to Taper
- Coolant Thru Center
- DIN AD+B Coolant
- Balanced G6.3 @ 20,000 RPM
- Order Collets & Wrench Separately



	Part Number	Range	L Projection	D	Screw	Collet	Nut	Wrench
1	BT40-TG100-0300	0.094 - 1.000	3.00	2.48	ASC-TG100	TG100	TGN100	TGW100
	BT40-TG100-0550		5.50					

G6.3 @ 20,000 RPM

Dynamically Balanced

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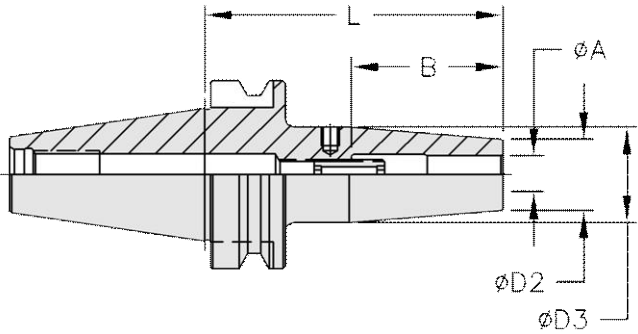


# SD Shrink Fit

## HPI - PIONEER

### Features

- 2µm 0.0001" Runout L < 6.00
- 4µm 0.0002" Runout L ≥ 6.00
- Coolant Thru Center
- DIN AD+B Coolant
- Balanced G2.5 @ 25,000 RPM
- Shrink Fit Machine Sold Separately



	Part Number	A Bore	L Projection	B	D2	D3
1/8	BT40-SD012-0315	0.1250	3.15	0.35	0.39	0.75
3/16	BT40-SD018-0315	0.1875	3.15	0.47	0.39	0.75
1/4	BT40-SD025-0315	0.2500	3.15	1.42	0.83	1.06
	BT40-SD025-0512		5.12			
	BT40-SD025-0630		6.30			
3/8	BT40-SD037-0315	0.3750	3.15	1.65	0.94	1.26
	BT40-SD037-0512		5.12			
	BT40-SD037-0630		6.30			
1/2	BT40-SD050-0315	0.5000	3.15	1.85	0.94	1.26
	BT40-SD050-0512		5.12			
	BT40-SD050-0630		6.30			
5/8	BT40-SD062-0315	0.6250	3.15	1.97	1.06	1.34
	BT40-SD062-0512		5.12			
	BT40-SD062-0630		6.30			
3/4	BT40-SD075-0315	0.7500	3.15	2.05	1.30	1.65
	BT40-SD075-0512		5.12			
	BT40-SD075-0630		6.30			
1	BT40-SD100-0394	1.0000	3.94	2.28	1.73	2.09
	BT40-SD100-0512		5.12			
	BT40-SD100-0630		6.30			
1 1/4	BT40-SD125-0394	1.2500	3.94	2.28	1.73	2.09
	BT40-SD125-0512		5.12			
	BT40-SD125-0630		6.30			

MM	Part Number	A Bore	L Projection	B	D2	D3
3	BT40-SDM03-080	3.000	80.0	9.0	10.0	19.6
4	BT40-SDM04-080	4.000	80.0	12.0	10.0	19.6
5	BT40-SDM05-080	5.000	80.0	15.0	10.0	19.6
6	BT40-SDM06-080	6.000	80.0	36.0	21.0	27.0
8	BT40-SDM08-080	8.000	80.0	36.0	21.0	27.0
10	BT40-SDM10-080	10.000	80.0	42.0	24.0	32.0
12	BT40-SDM12-080	12.000	80.0	47.0	24.0	32.0
14	BT40-SDM14-080	14.000	80.0	47.0	27.0	34.0
16	BT40-SDM16-080	16.000	80.0	50.0	27.0	34.0
20	BT40-SDM20-080	20.000	80.0	52.0	33.0	42.0
25	BT40-SDM25-080	25.000	80.0	58.0	44.0	53.0
32	BT40-SDM32-080	32.000	80.0	58.0	44.0	53.0

G2.5 @ 25,000 RPM

Dynamically Balanced

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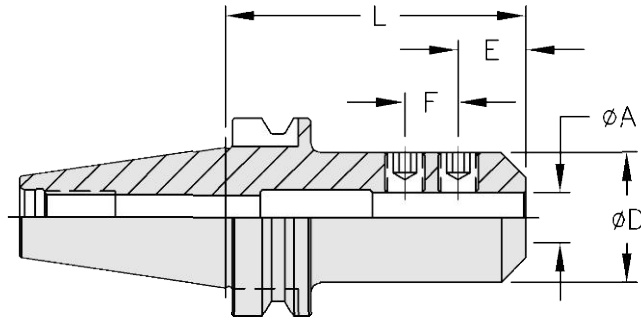


**HPI - PIONEER**

**EM End Mill Adapters**

**Features**

- **3 μm - 0.0001" Bore Runout**
- H5 Bore Tolerance
- Coolant Thru Center
- DIN AD+B Coolant
- Balanced G6.3 @ 20,000 RPM
- Order Wrench Separately



	Part Number	A Bore	L Projection	D	E	F	Screw
1/8	BT40-EM012-0250	0.1250	2.50	0.69	0.19	-	SCW-EM012
	BT40-EM012-0400		4.00				
3/16	BT40-EM018-0250	0.1875	2.50	0.69	0.44	-	SCW-EM012
	BT40-EM018-0400		4.00				
1/4	BT40-EM025-0250	0.2500	2.50	0.88	0.44	-	SCW-EM025
	BT40-EM025-0400		4.00				
	BT40-EM025-0600		6.00				
5/16	BT40-EM031-0250	0.3125	2.50	1.00	0.44	-	SCW-EM025
	BT40-EM031-0400		4.00				
3/8	BT40-EM037-0250	0.3750	2.50	1.00	0.75	-	SCW-EM037
	BT40-EM037-0400		4.00				
	BT40-EM037-0600		6.00				
1/2	BT40-EM050-0175	0.5000	1.75	1.25	0.88	-	SCW-EM050
	BT40-EM050-0250		2.50				
	BT40-EM050-0400		4.00				
	BT40-EM050-0600		6.00				
5/8	BT40-EM062-0250	0.6250	2.50	1.50	0.94	-	SCW-EM062
	BT40-EM062-0400		4.00				
	BT40-EM062-0600		6.00				
3/4	BT40-EM075-0175	0.7500	1.75	1.75	1.00	-	SCW-EM075
	BT40-EM075-0250		2.50				
	BT40-EM075-0400		4.00				
	BT40-EM075-0600		6.00				
7/8	BT40-EM087-0335	0.8750	3.35	1.88	1.00	0.81	SCW-EM075
	BT40-EM087-0500		5.00				
1	BT40-EM100-0200	1.0000	2.00	2.00	1.12	-	SCW-EM100
	BT40-EM100-0300		3.00				
	BT40-EM100-0400		4.00				
	BT40-EM100-0600		6.00				
1 1/4	BT40-EM125-0200	1.2500	2.00	2.25	1.12	-	SCW-EM125
	BT40-EM125-0356		3.56				
	BT40-EM125-0600		6.00				
1 1/2	BT40-EM150-0433	1.5000	4.33	2.62	1.12	1.00	SCW-EM125

G6.3 @ 20,000 RPM

Dynamically Balanced

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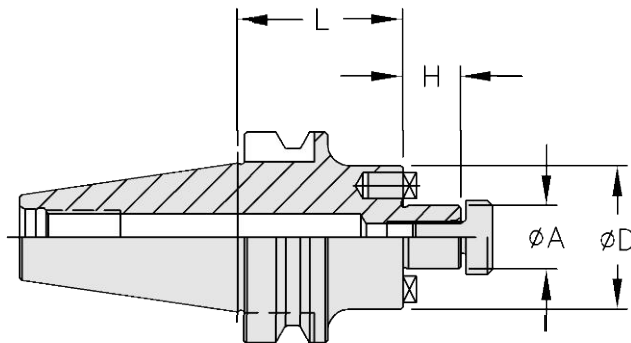


## SM Shell Mill Adapters

### Features

- 0.0004" Runout
- Body - Coolant Thru Center
- DIN AD+B Coolant
- Balanced G6.3 @ 20,000 RPM
- Order Wrench Separately

HPI - PIONEER



	Part Number	A Pilot	D	L Projection	H	Drive Key	Drive Key Part Number	Screw	Screw Part Number
3/4	BT40-SM075-0175	0.7500	1.75	1.75	0.69	0.312	DK-SM075	3/8-24	SCW-SM075
	BT40-SM075-0400			4.00					
1	BT40-SM100-0175	1.0000	2.36	1.75	0.69	0.375	DK-SM100	1/2-20	SCW-SM100
	BT40-SM100-0400			4.00					
1-1/4	BT40-SM125-0200	1.2500	2.87	2.00	0.69	0.500	DK-SM125	5/8-18	SCW-SM125
	BT40-SM125-0400			4.00					
1-1/2	BT40-SM150-0200	1.5000	3.82	2.00	0.94	0.625	DK-SM150	3/4-16	SCW-SM150

G6.3 @ 20,000 RPM

Dynamically Balanced

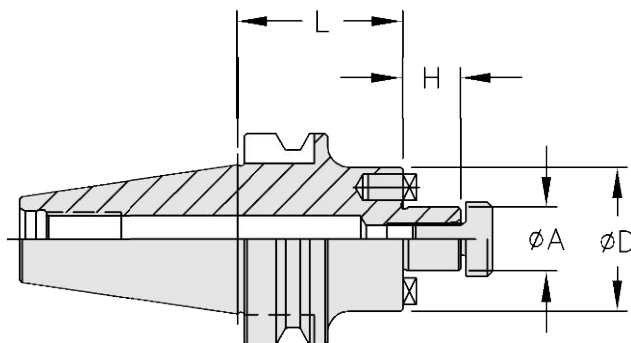
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## FX Shell Mill Adapters

### Features

- 0.0004" Runout
- Ported for Insert Coolant Feed
- DIN AD+B Coolant
- Balanced G6.3 @ 20,000 RPM
- Order Wrench Separately



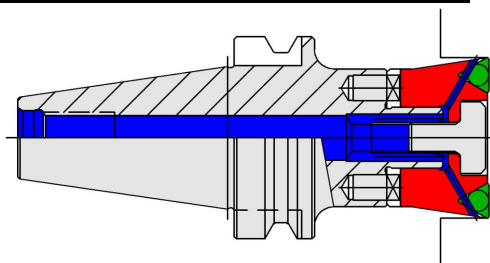
	Part Number	A Pilot	D	L Projection	H	Drive Key	Drive Key Part Number	Screw	Screw Part Number
3/4	BT40-SM075-0175-F	0.7500	1.75	1.75	0.69	0.312	DK-SM075	3/8-24	SCW-SM075
	BT40-SM075-0400-F			4.00					
1	BT40-SM100-0175-F	1.0000	2.36	1.75	0.69	0.375	DK-SM100	1/2-20	SCW-SM100
	BT40-SM100-0400-F			4.00					
1-1/4	BT40-SM125-0200-F	1.2500	2.87	2.00	0.69	0.500	DK-SM125	5/8-18	SCW-SM125
	BT40-SM125-0400-F			4.00					
1-1/2	BT40-SM150-0200-F	1.5000	3.82	2.00	0.94	0.625	DK-SM150	3/4-16	SCW-SM150

G6.3 @ 20,000 RPM

Dynamically Balanced

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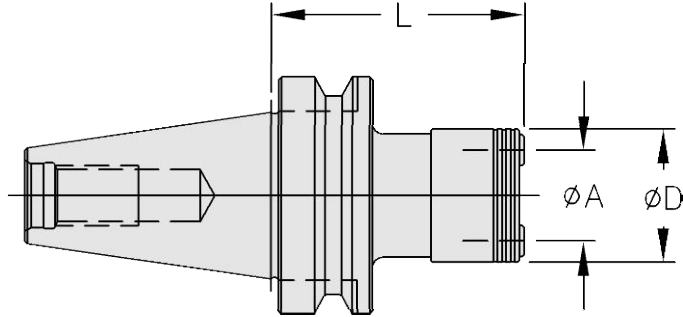


**RT - QC Rigid Tap Drivers**

HPI - PIONEER

**Features**

- Body - Coolant Thru Center



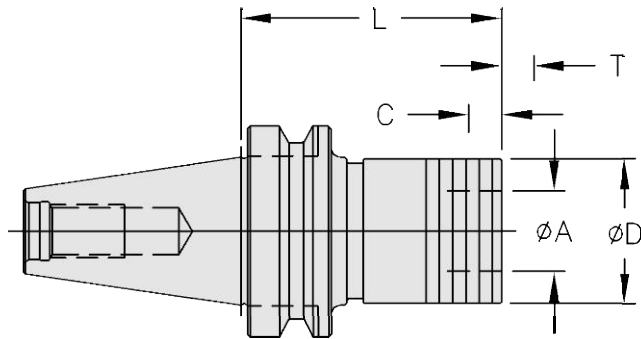
Part Number	Capacity	Adapter Size	L Projection	A	D
BT40-RT1-72	#6-9/16	1	2.83	0.75	1.34
BT40-RT2-91	5/16-7/8	2	3.58	1.22	1.93
BT40-RT3-130	9/16-1-3/8	3	5.12	1.89	2.89



**TC - QC Tension / Compression Tap Drivers**

**Features**

- Tension and Compression Stroke for improved tap life
- Pressure Point Mechanism to increase the cutting pressure and ensure a positive start



Part Number	Capacity	Adapter Size	A	L Projection	D	T TENSION	C COMP.
BT40-TC1-67	#6-9/16	1	0.75	2.64	1.42	0.30	0.30
BT40-TC2-94	5/16-7/8	2	1.22	3.70	2.09	0.49	0.49
BT40-TC3-167	9/16-1-3/8	3	1.89	6.57	3.07	0.79	0.79





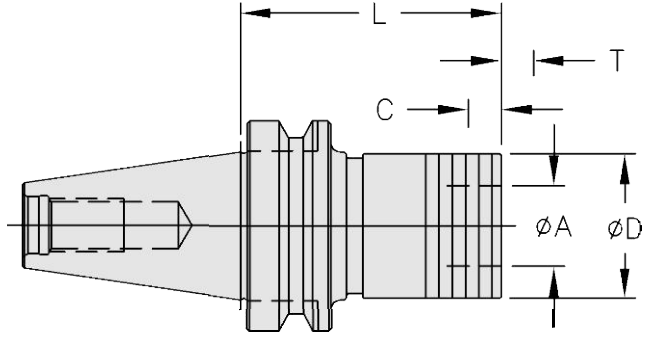


### TCC - QC Coolant Thru T&C Tap Drivers

HPI - PIONEER

**Features**

- Coolant Thru the Center Design
- Tension and Compression Stroke for improved tap life



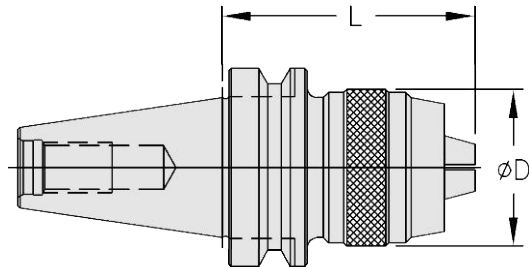
Part Number	Capacity	Adapter Size	A	L Projection	D	T TENSION	C COMP.
BT40-TCC1-0382	#6-9/16	1	0.75	3.82	1.42	0.30	0.30
BT40-TCC2-0524	5/16-7/8	2	1.22	5.24	2.09	0.49	0.49
BT40-TCC3-0717	9/16-1-3/8	3	1.89	7.17	3.07	0.79	0.79



### DC Drill Chuck

**Features**

- Order Wrench Separately



Part Number	Range	L Projection	D
1/2 BT40-DC13-110	0.04-0.50	4.33	1.96

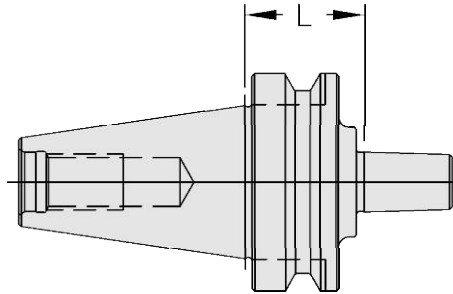
G6.3 @ 20,000 RPM

Dynamically Balanced



HPI - PIONEER

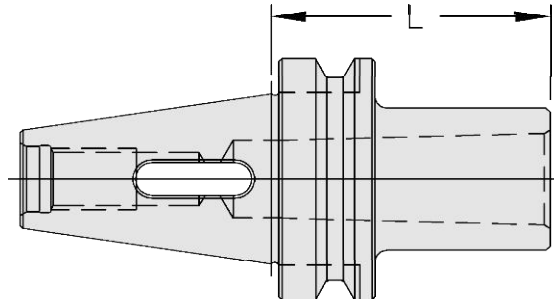
**JT - Jacobs Taper Adapter**



Part Number	JT No.	L Projection
BT40-JT02-0177	2	1.77
BT40-JT03-0177	3	1.77
BT40-JT03-0354	3	3.54
BT40-JT06-0177	6	1.77
BT40-JT06-0354	6	3.54
BT40-JT33-0177	33	1.77
BT40-JT33-0354	33	3.54



**MT - Morse Taper Adapter**



Part Number	MT No.	L Projection
BT40-MA1-0177	1	1.77
BT40-MA1-0472	1	4.72
BT40-MA2-0197	2	1.97
BT40-MA2-0472	2	4.72
BT40-MA3-0276	3	2.76
BT40-MA3-0531	3	5.31
BT40-MA4-0374	4	3.74
BT40-MA4-0650	4	6.50





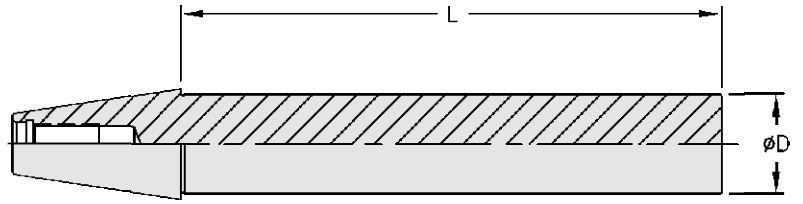
### Test Bar

HPI - PIONEER



#### Features

- Concentric to Taper within 3µm (0.0001”) TIR
- Hardened & Normalized for consistency
- 100% Individually inspected with Certification Sheet included
- Optional Wood Box (Sold Separately)
- M16 Retention Knob Threads - Conversion knobs for all machines available upon request



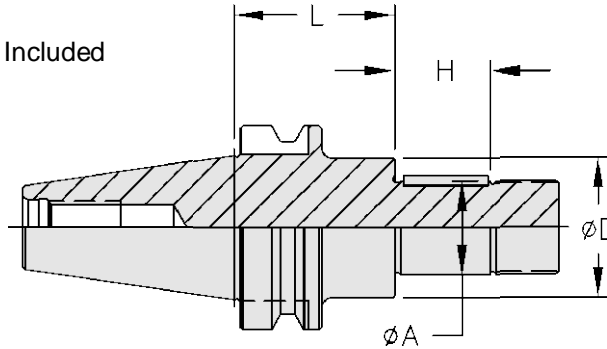
Part Number	D	L Projection
SK40-TB40-300	1.575	11.811



### SB Stub Arbors

#### Features

- Spacers, Nut and Drive Key Included



Part Number	A Pilot	L Projection	D	H	Key	Threads
BT40-SB100-0300	1.0000	3.00	1.50	1.24	0.25	1"-12
BT40-SB125-0300	1.2500	3.00	1.81	1.18	0.31	1.1/4-12



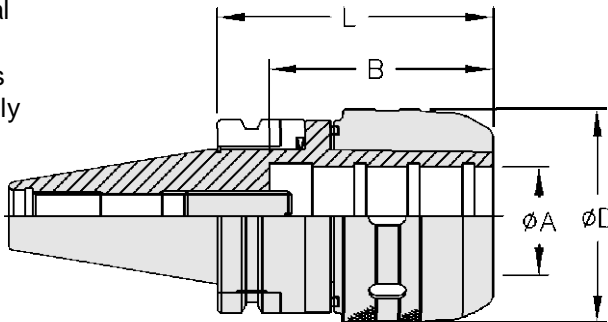


**HPI - PIONEER**

**MC - Milling Chuck**

**Features**

- 5 µm - 0.0002" Runout @ 4" out
- Coolant Thru w/ Nylon Screw Seal
- Balanced @ 20,000 RPM
- Radial Slip Torque 4X ER Chucks
- Order Collets & Wrench Separately



	Part Number	A Bore	L Projection	B	D	Collet	Wrench
3/4	FBT40-MC075-0354	0.7500	3.54	2.56	2.09	MC075	MCW075
1	FBT40-MC125-0413	1.2500	4.13	3.11	2.68	MC125	MCW125

G6.3 @ 20,000 RPM

Dynamically Balanced

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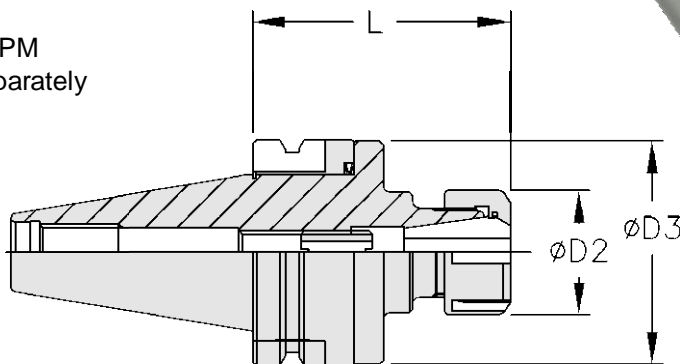
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**ER Collet Chucks**

**Features**

- 3 µm - 0.0001" Runout Taper to Taper
- Coolant Thru Center
- Balanced G6.3 @ 20,000 RPM
- Order Collets & Wrench Separately



	Part Number	Range	L Projection	D	Collet	Nut	Wrench
3/8	FBT40-ER16-0354	.019-.394	3.54	1.10	ER16	ERN-16H	ERW-16H
	FBT40-ER16-0472	.019-.394	4.72				
5/8	FBT40-ER25-0354	.019-.630	3.54	1.65	ER25	ERN-25	ERW-25
	FBT40-ER25-0472	.019-.630	4.72				

G6.3 @ 20,000 RPM

Dynamically Balanced

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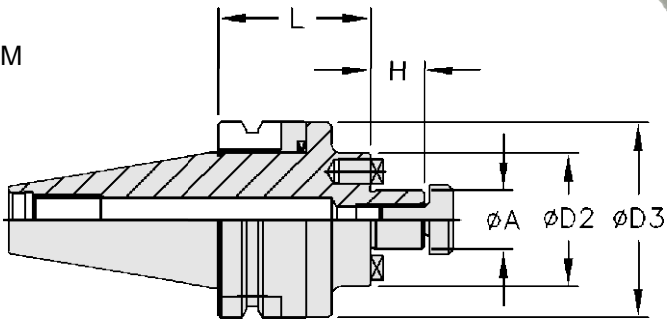


### SM Shell Mill Adapters

**Features**

- 0.0004" Runout
- Body - Coolant Thru Center
- Balanced G6.3 @ 20,000 RPM
- Order Wrench Separately

HPI - PIONEER



	Part Number	A Pilot	D	L Projection	H	Drive Key	Screw
1	FBT40-SM100-0177	1.0000	2.28	1.77	0.69	0.375	1/2-20

G6.3 @ 20,000 RPM

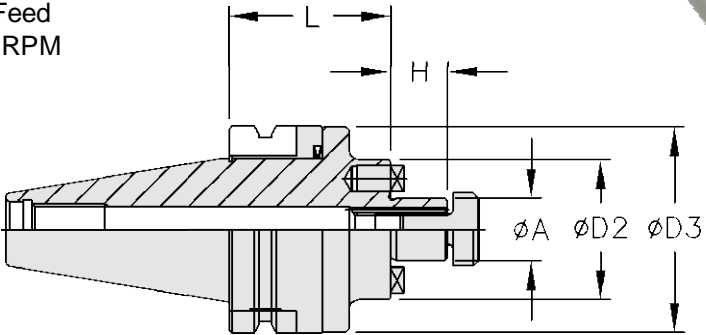
Dynamically Balanced

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### FX Shell Mill Adapters

**Features**

- 0.0004" Runout
- Ported for Insert Coolant Feed
- Balanced G6.3 @ 20,000 RPM
- Order Wrench Separately



	Part Number	A Pilot	D	L Projection	H	Drive Key	Screw
1	FBT40-SM100-0177-F	1.0000	2.28	1.77	0.69	0.375	1/2-20

G6.3 @ 20,000 RPM

Dynamically Balanced

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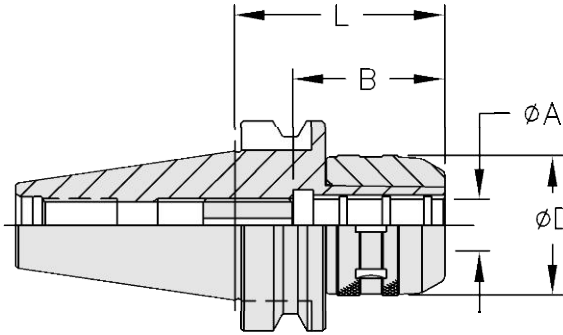


**HPI - PIONEER**

**MC - Milling Chuck**

**Features**

- 5 µm - 0.0002" Runout @ 4" out
- Coolant Thru w/ Nylon Screw Seal
- Balanced @ 20,000 RPM
- Radial Slip Torque 4X ER Chucks
- DIN AD+B Available in some models (See Chart)
- Order Collets & Wrench Separately



	Part Number	A Bore	B	D	L Projection	Screw	Collet	Wrench	DIN AD+B
3/4	BT50-MC075-0413	0.7500	2.76	2.09	4.13	ASC-MC20	MC075	MCW20	Y
	BT50-MC075-0413-S	0.7500			4.13				
1	BT50-MC100-0413-S	1.0000	2.91	2.44	4.13	ASC-MC20	MC100	MCW25	Y
	BT50-MC125-0354	1.2500			3.54				
1-1/4	BT50-MC125-0413	1.2500	3.74	2.91	4.13	ASC-MC20	MC125	MCW32	Y
	BT50-MC125-0413-S	1.2500			4.13				
	BT50-MC125-0531	1.2500			5.31				
	BT50-MC125-0650	1.2500			6.50				
20mm	BT50-MC20-105	20mm	2.76	2.09	4.13	AS-MC20	MC20	MCW20	
	BT50-MC20-135	20mm			5.31				
	BT50-MC20-165	20mm			6.50				
32mm	BT50-MC32-105	32mm	3.74	2.91	4.13	AS-MC20	MC32	MCW32	
	BT50-MC32-120	32mm			4.72				
	BT50-MC32-135	32mm			5.31				
	BT50-MC32-165	32mm			6.50				
42mm	BT50-MC42-105	42mm	3.86	3.62	4.13	AS-MC20	MC42	MCW42	
	BT50-MC42-120	42mm			4.72				
	BT50-MC42-135	42mm			5.31				
	BT50-MC42-165	42mm			6.50				

G6.3 @ 15,000 RPM

Dynamically Balanced

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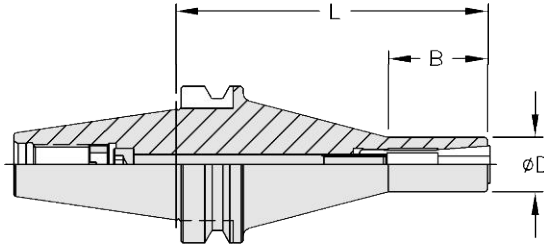


# MX - Mini Collet Chuck

## Features

- 2.5 µm - 0.0001" Runout @ 4X Diameter
- Collet tightened thru retention knob
- Sealed up to 1,500 PSI Coolant (See Chart)
- Balanced G2.5 @ 20,000 RPM
- DIN-B Coolant upon request
- Balanceable upon request
- Order Collets & Wrench Separately

HPI - PIONEER



	Part Number	Collet Range	L Projection	D	C	Collet	Wrench
3/8	BT50-MX08-105	0.125 - 0.394	4.13	0.87	1.42	MX08	MXW05
	BT50-MX08-165	0.125 - 0.394	6.50				
1/2	BT50-MX12-105	0.157 - 0.500	4.13	1.18	1.38	MX12	MXW05

G2.5 @ 15,000 RPM

Dynamically Balanced

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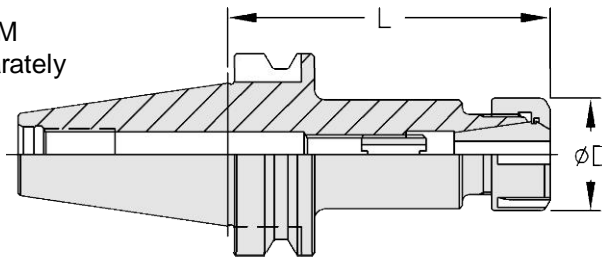


**HPI - PIONEER**

**ER Collet Chucks**

**Features**

- **3 μm - 0.0001" Runout Taper to Taper**
- Coolant Thru Center
- DIN AD+B Coolant Standard
- Balanced G6.3 @ 20,000 RPM
- Order Collets & Wrench Separately



	Part Number	Range	L Projection	D	Screw	Collet	Nut	Wrench
3/8	BT50-ER16-063		2.48					
	BT50-ER16-100	.019-.394	3.94	1.24	ASC-ER16	ER16	ERN-16	ERW-16
	BT50-ER16-160		6.30					
1/2	BT50-ER20-070		2.76					
	BT50-ER20-105	.019-.512	4.13	1.38	ASC-ER20	ER20	ERN-20	ERW-20
	BT50-ER20-150		5.91					
5/8	BT50-ER25-070		2.76					
	BT50-ER25-100	.019-.630	3.94	1.65	ASC-ER25	ER25	ERN-25	ERW-25
	BT50-ER25-150		5.91					
3/4	BT50-ER32-070		2.76					
	BT50-ER32-100	.039-.787	3.94	1.96	ASC-ER32	ER32	ERN-32	ERW-32
	BT50-ER32-150		5.91					
1	BT50-ER40-080		3.15					
	BT50-ER40-100	.079-1.024	3.94	2.48	ASC-ER40	ER40	ERN-40	ERW-40
	BT50-ER40-150		5.91					

G6.3 @ 15,000 RPM

Dynamically Balanced

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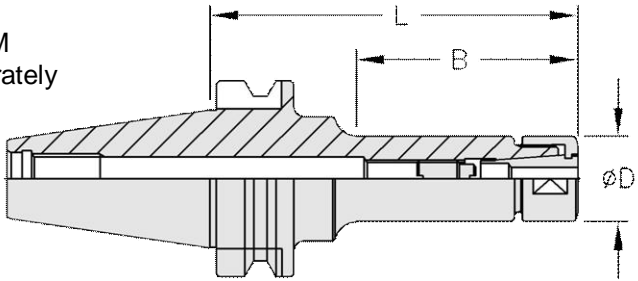


# SX Collet Chucks

### Features

- 3 µm - 0.0001" Runout Taper to Taper
- Optional Coolant Thru
- DIN B Coolant Opional
- Balanced G6.3 @ 20,000 RPM
- Order Collets & Wrench Separately

HPI - PIONEER



	Part Number	Range	L Projection	B	D	Collet	Nut	Wrench	Stop Screw
1/4	BT50-SX06-105		4.13						
	BT50-SX06-165	.030 - .236	6.50		0.77	SX06	SXN-06	SXW-06	AS-SX06
	BT50-SX06-195		7.68						
3/8	BT50-SX10-105		4.13	2.75					
	BT50-SX10-165	.069 - .394	6.50	2.75	1.08	SX10	SXN-10	SXW-10	AS-SX10
	BT50-SX10-195		7.68	2.75					
5/8	BT50-SX16-105		4.13	2.75					
	BT50-SX16-165	.108 - .630	6.50	3.54	1.58	SX16	SXN-16	SXW-16	AS-SX16
	BT50-SX16-195		7.68	3.54					
1	BT50-SX25-105		4.13	2.75					
	BT50-SX25-165	.630 - 1.000	6.50	5.12	2.17	SX25	SXN-25	SXW-25	AS-SX25
	BT50-SX25-195		7.68	5.12					

G6.3 @ 15,000 RPM

Dynamically Balanced

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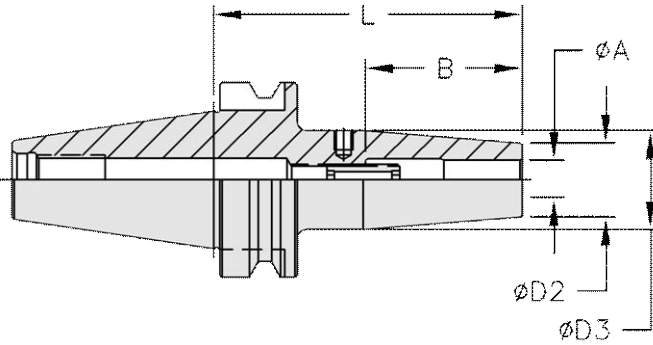


**HPI - PIONEER**

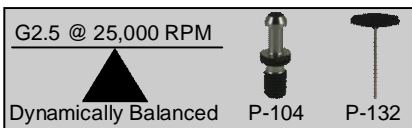
**SD Shrink Fit**

**Features**

- 2µm 0.0001" Runout L < 6.00
- 4µm 0.0002" Runout L ≥ 6.00
- Coolant Thru Center
- DIN AD+B Coolant
- Balanced G2.5 @ 25,000 RPM
- Shrink Fit Machine Sold Separately



	Part Number	A Bore	L Projection	B	D2	D3
6	BT50-SDM06-100	6.000	100.0	36.0	21.0	27.0
	BT50-SDM06-160	6.000	160.0	36.0	21.0	27.0
	BT50-SDM06-200	6.000	200.0	36.0	21.0	27.0
8	BT50-SDM08-100	8.000	100.0	36.0	21.0	27.0
	BT50-SDM08-160	8.000	160.0	36.0	21.0	27.0
	BT50-SDM08-200	8.000	200.0	36.0	21.0	27.0
10	BT50-SDM10-100	10.000	100.0	42.0	24.0	32.0
	BT50-SDM10-160	10.000	160.0	42.0	24.0	32.0
	BT50-SDM10-200	10.000	200.0	42.0	24.0	32.0
12	BT50-SDM12-100	12.000	100.0	47.0	24.0	32.0
	BT50-SDM12-160	12.000	160.0	47.0	24.0	32.0
	BT50-SDM12-200	12.000	200.0	47.0	24.0	32.0
14	BT50-SDM14-100	14.000	100.0	47.0	27.0	34.0
	BT50-SDM14-160	14.000	160.0	47.0	27.0	34.0
	BT50-SDM14-200	14.000	200.0	47.0	27.0	34.0
16	BT50-SDM16-100	16.000	100.0	50.0	27.0	34.0
	BT50-SDM16-160	16.000	160.0	50.0	27.0	34.0
	BT50-SDM16-200	16.000	200.0	50.0	27.0	34.0
20	BT50-SDM20-100	20.000	100.0	52.0	33.0	42.0
	BT50-SDM20-160	20.000	160.0	52.0	33.0	42.0
	BT50-SDM20-200	20.000	200.0	52.0	33.0	42.0
25	BT50-SDM25-100	25.000	100.0	58.0	44.0	53.0
	BT50-SDM25-160	25.000	160.0	58.0	44.0	53.0
	BT50-SDM25-200	25.000	200.0	58.0	44.0	53.0
32	BT50-SDM32-100	32.000	100.0	58.0	44.0	53.0
	BT50-SDM32-160	32.000	160.0	58.0	44.0	53.0
	BT50-SDM32-200	32.000	200.0	58.0	44.0	53.0



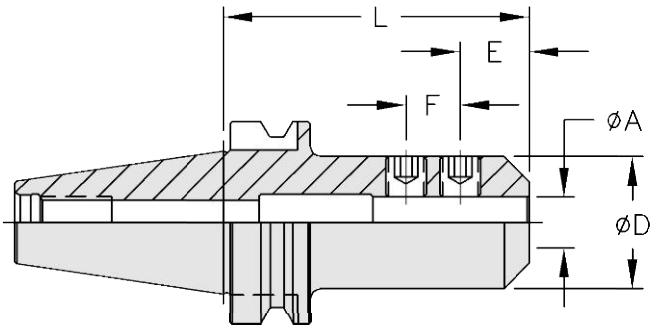


# EM End Mill Adapters

HPI - PIONEER

**Features**

- 3 μm - 0.0001" Bore Runout
- H5 Bore Tolerance
- Coolant Thru Center
- DIN AD+B Coolant
- Balanced G6.3 @ 15,000 RPM
- Order Wrench Separately



	Part Number	A Bore	L Projection	D	E	F	Screw
3/16	BT50-EM018-0531	0.1875	5.31	0.69	0.44	-	SCW-EM012
1/4	BT50-EM025-0531	0.2500	5.31	0.88	0.44	-	SCW-EM025
5/16	BT50-EM031-0531	0.3125	5.31	1.00	0.44	-	SCW-EM025
3/8	BT50-EM037-0300	0.3750	3.00	1.00	0.75	-	SCW-EM037
	BT50-EM037-0531		5.31				
1/2	BT50-EM050-0300	0.5000	3.00	1.25	0.88	-	SCW-EM050
	BT50-EM050-0531		5.31				
5/8	BT50-EM062-0300	0.6250	3.00	1.50	0.94	-	SCW-EM062
	BT50-EM062-0531		5.31				
3/4	BT50-EM075-0300	0.7500	3.00	1.75	1.00	-	SCW-EM075
	BT50-EM075-0531		5.31				
7/8	BT50-EM087-0354	0.8750	3.54	1.88	1.00	0.81	SCW-EM075
	BT50-EM087-0600		6.00				
1	BT50-EM100-0400	1.0000	4.00	2.00	1.12	1.00	SCW-EM100
	BT50-EM100-0600		6.00				
1 1/4	BT50-EM125-0400	1.2500	4.00	2.50	1.12	1.00	SCW-EM125
	BT50-EM125-0600		6.00				
1 1/2	BT50-EM150-0450	1.5000	4.50	2.75	1.12	1.00	SCW-EM125
	BT50-EM150-0600		6.00				
2	BT50-EM200-0500	2.0000	5.00	3.75	1.41	1.50	SCW-EM200

G6.3 @ 15,000 RPM

Dynamically Balanced

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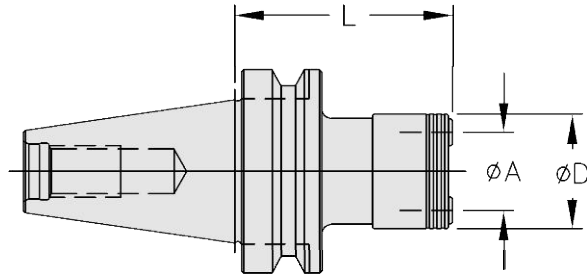


**RT - QC Rigid Tap Drivers**

HPI - PIONEER

**Features**

- Body - Coolant Thru Center



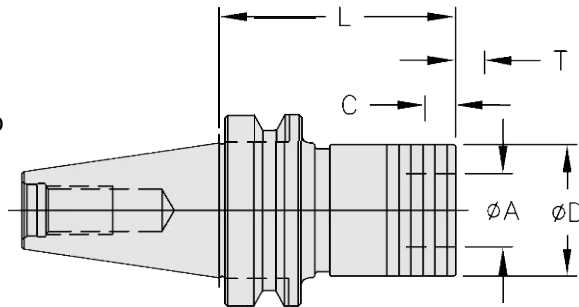
Part Number	Capacity	Adapter Size	L Projection	A	D
BT50-RT1-72	#6-9/16	1	2.83	0.75	1.34
BT50-RT2-91	5/16-7/8	2	3.58	1.22	1.93
BT50-RT3-130	9/16-1-3/8	3	5.12	1.89	2.89



**TC - QC Tension / Compression Tap Drivers**

**Features**

- Tension and Compression Stroke for improved tap life
- Pressure Point Mechanism to increase the cutting pressure and ensure a positive start



Part Number	Capacity	Adapter Size	A	L Projection	D	T TENSION	C COMP.
BT50-TC1-59	#6-9/16	1	0.75	2.32	1.42	0.30	0.30
BT50-TC2-97	5/16-7/8	2	1.22	3.82	2.09	0.49	0.49
BT50-TC3-149	9/16-1-3/8	3	1.89	5.87	3.07	0.79	0.79





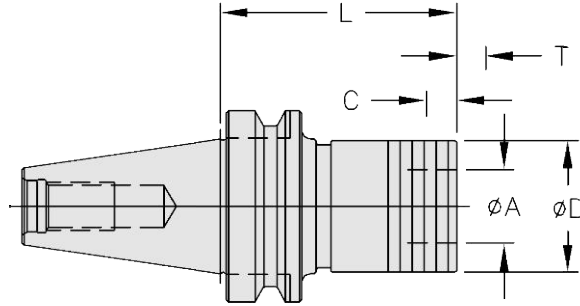


## TCC - QC Coolant Thru T&C Tap Drivers

HPI - PIONEER

### Features

- Coolant Thru the Center Design
- Tension and Compression Stroke for improved tap life



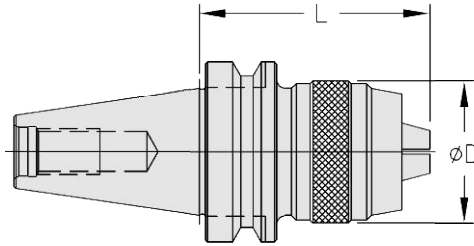
Part Number	Capacity	Adapter Size	A	L Projection	D	T TENSION	C COMP.
BT50-TCC1-0394	#6-9/16	1	0.75	3.94	1.42	0.30	0.30
BT50-TCC2-0535	5/16-7/8	2	1.22	5.35	2.09	0.49	0.49
BT50-TCC3-0728	9/16-1-3/8	3	1.89	7.28	3.07	0.79	0.79



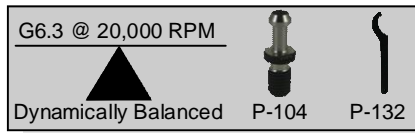
## DC Drill Chuck

### Features

- Order Wrench Separately



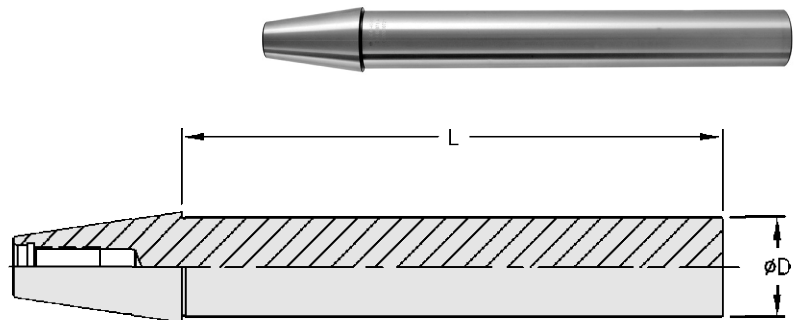
Part Number	Range	L Projection	D
BT50-DC13-120	0.04-0.50	4.72	1.96



## Test Bar

### Features

- Concentric to Taper within 3 $\mu$ m (0.0001") TIR
- Hardened & Normalized for consistency
- 100% Individually inspected with Certification Sheet included
- Optional Wood Box (Sold Separately)
- M16 Retention Knob Threads - Conversion knobs for all machines available upon request



Part Number	D	L Projection
SK50-TB50-300	1.969	11.811

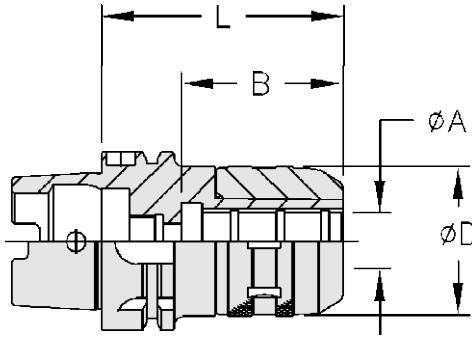


HPI - PIONEER

## MC - Milling Chuck

### Features

- 5  $\mu\text{m}$  - 0.0002" Runout @ 4" out
- Coolant Thru w/ Nylon Screw Seal
- Balanced @ 20,000 RPM
- Radial Slip Torque 4X ER Chucks
- Balanceable Available in some models (See Chart)
- Order Collets & Wrench Separately



	Part Number	A Bore	B	D	L Projection	Preset Screw	Collet	Wrench	Balanceable
3/4	HSK63A-MC075-0374				3.74	-	MC075	MCW20	
	HSK63A-MC075-0433-S	0.7500	2.36	2.09	4.33	ASC-MC32	MC075	MCW20	Y
1	HSK63A-MC100-0394				3.94	-	MC100	MCW25	
	HSK63A-MC100-0472-S	1.0000	2.40	2.44	4.72	ASC-MC32	MC100	MCW25	Y
1-1/4	HSK63A-MC125-0394				3.94	-	MC125	MCW32	
	HSK63A-MC125-0472-S	1.2500	2.99	2.76	4.72	ASC-MC32	MC125	MCW32	Y
20mm	HSK63A-MC20-110-S	20mm	2.36	2.09	4.33	ASC-MC32	MC20	MCW20	Y
32mm	HSK63A-MC32-120-S	32mm	2.99	2.76	4.72	ASC-MC32	MC32	MCW32	Y

G6.3 @ 20,000 RPM

Dynamically Balanced

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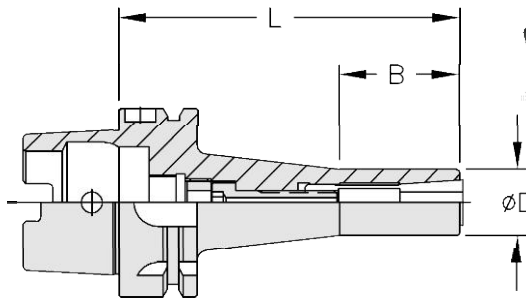
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## MX - Mini Collet Chuck

### Features

- 2.5  $\mu\text{m}$  - 0.0001" Runout @ 4X Diameter
- Collet tightened thru retention knob
- Sealed up to 1,500 PSI Coolant (See Chart)
- Balanced G2.5 @ 20,000 RPM
- Balanceable upon request
- Order Collets & Wrench Separately



	Part Number	Collet Range	L	D	B	Collet	Wrench
1/4	HSK 63A-MX06-100	0.031 - 0.250	3.94	0.50	1.42	MX06	MXW05
3/8	HSK 63A-MX08-100	0.125 - 0.394	3.94	0.87	1.42	MX08	MXW05
1/2	HSK 63A-MX12-110	0.157 - 0.500	4.33	1.18	1.54	MX12	MXW05

G2.5 @ 20,000 RPM

Dynamically Balanced

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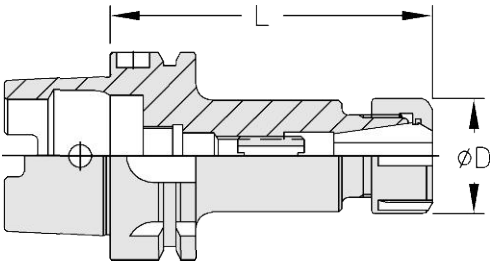


### ER Collet Chucks

**Features**

- 3 µm - 0.0001" Runout Taper to Taper
- Coolant Thru Center
- Balanced G6.3 @ 20,000 RPM
- Order Collets & Wrench Separately

**HPI - PIONEER**



	Part Number	Range	L Projection	D	Collet	Screw	Nut	Wrench
3/8	HSK63A-ER16H-100G	.019-.394	3.94	1.10	ER16	ASC-ER16	ERN-16H	ERW-16H
1/2	HSK63A-ER20H-100G	.019-.512	3.94	1.33	ER20	ASC-ER20	ERN-20H	ERW-20H
5/8	HSK63A-ER25-100G	.019-.630	3.94	1.65	ER25	ASC-ER25	ERN-25	ERW-25
3/4	HSK63A-ER32-100G	.039-.787	3.94	1.96	ER32	ASC-ER32	ERN-32	ERW-32
1	HSK63A-ER40-120G	.079-1.024	4.72	2.48	ER40	ASC-ER40	ERN-40	ERW-40
1	HSK63A-ER40-150G	.079-1.024	5.91	2.48	ER40	ASC-ER40	ERN-40	ERW-40

G6.3 @ 20,000 RPM

Dynamically Balanced

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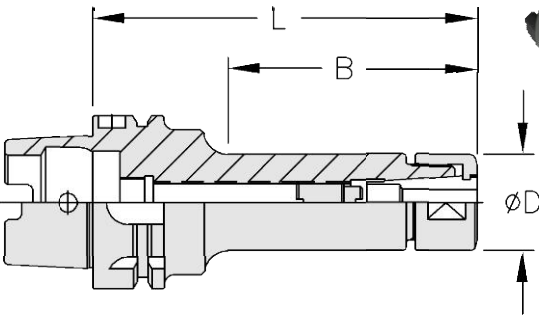
P-132

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### SX Collet Chucks

**Features**

- 3 µm - 0.0001" Runout Taper to Taper
- Optional Coolant Thru
- Balanced G6.3 @ 20,000 RPM
- Order Collets & Wrench Separately



	Part Number	Range	L Projection	D	B	Collet	Nut	Wrench	Screw
1/4	HSK 63A-SX 6C-100	.030 - .236	3.94	0.77		SX06	SXN-06	SXW-06	ASC-SX06
	HSK 63A-SX 6C-150		5.91						
3/8	HSK63A-SX10C-105	.069 - .394	4.13	1.08		SX10	SXN-10	SXW-10	ASC-SX10
	HSK 63A-SX10C-150		5.91						
5/8	HSK63A-SX16C-120	.108 - .630	4.72	1.58		SX16	SXN-16	SXW-16	ASC-SX16
	HSK 63A-SX16C-150		5.91						
1	HSK 63A-SX25C-135	.630 - 1.000	5.31	2.17		SX25	SXN-25	SXW-25	ASC-SX25

G6.3 @ 20,000 RPM

Dynamically Balanced

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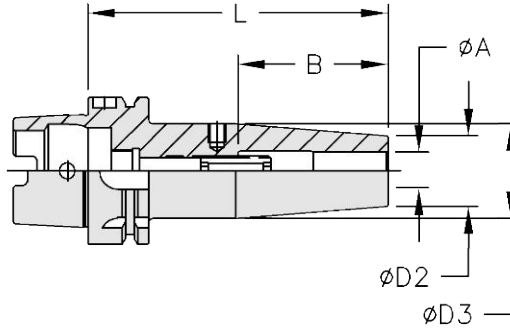
## SD Shrink Fit

### Features

- 2µm 0.0001" Runout L < 6.00
- 4µm 0.0002" Runout L ≥ 6.00
- Coolant Thru Center
- Balanced G2.5 @ 25,000 RPM
- Shrink Fit Machine Sold Separately



### HPI - PIONEER



Inch	Part Number	A Bore	L Projection	B	D2	D3
1/8	HSK63A-SD012-0315	0.1250	3.15	-	0.39	-
3/16	HSK63A-SD018-0315	0.1875	3.15	-	0.39	-
1/4	HSK63A-SD025-0315	0.2500	3.15	1.42	0.83	1.06
	HSK63A-SD025-0630		6.30			
3/8	HSK63A-SD037-0335	0.3750	3.35	1.65	0.94	1.26
	HSK63A-SD037-0512		5.12			
	HSK63A-SD037-0630		6.30			
1/2	HSK63A-SD050-0354	0.5000	3.54	1.85	0.94	1.26
	HSK63A-SD050-0512		5.12			
	HSK63A-SD050-0630		6.30			
5/8	HSK63A-SD062-0374	0.6250	3.74	1.97	1.06	1.34
	HSK63A-SD062-0512		5.12			
	HSK63A-SD062-0630		6.30			
3/4	HSK63A-SD075-0394	0.7500	3.94	2.05	1.30	1.65
	HSK63A-SD075-0512		5.12			
	HSK63A-SD075-0630		6.30			
1	HSK63A-SD100-0453	1.0000	4.53	2.28	1.73	2.09
	HSK63A-SD100-0630		6.30			
1 1/4	HSK63A-SD125-0472	1.2500	4.72	2.28	1.73	2.09
	HSK63A-SD125-0630		6.30			

MM	Part Number	A Bore	L Projection	B	D2	D3
3	HSK63A-SDM03-080	3.000	80.0	9.0	10.0	19.6
4	HSK63A-SDM04-080	4.000	80.0	12.0	10.0	19.6
5	HSK63A-SDM05-080	5.000	80.0	15.0	10.0	19.6
6	HSK63A-SDM06-080	6.000	80.0	36.0	21.0	27.0
	HSK63A-SDM06-160		160.0			
8	HSK63A-SDM08-080	8.000	80.0	36.0	21.0	27.0
	HSK63A-SDM08-160		160.0			
10	HSK63A-SDM10-085	10.000	85.0	42.0	24.0	32.0
	HSK63A-SDM10-160		160.0			
12	HSK63A-SDM12-090	12.000	90.0	47.0	24.0	32.0
	HSK63A-SDM12-160		160.0			
16	HSK63A-SDM16-095	16.000	95.0	50.0	27.0	34.0
	HSK63A-SDM16-160		160.0			
20	HSK63A-SDM20-100	20.000	100.0	52.0	33.0	42.0
	HSK63A-SDM20-160		160.0			
25	HSK63A-SDM25-115	25.000	115.0	58.0	44.0	53.0
32	HSK63A-SDM32-120	32.000	120.0	58.0	44.0	53.0

G2.5 @ 25,000 RPM

Dynamically Balanced

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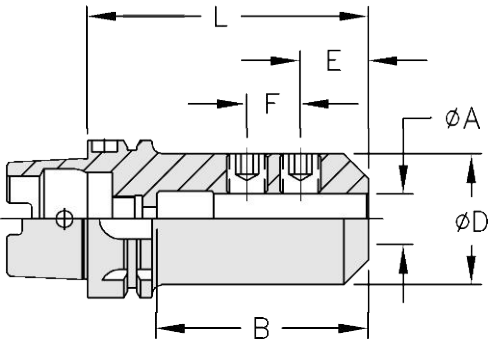


# EM End Mill Adapters

### Features

- 3 µm - 0.0001" Bore Runout
- H5 Bore Tolerance
- Coolant Thru Center
- Balanced G6.3 @ 20,000 RPM
- Order Wrench Separately

HPI - PIONEER



	Part Number	A Bore	L Projection	B	D	E	F	Screw
	1/8 HSK63A-EM012-0250	0.1250	2.50		1.00	0.19	-	SCW-EM012
	3/16 HSK63A-EM018-0250	0.1875	2.50		1.00	0.44	-	SCW-EM012
	1/4 HSK63A-EM025-0250	0.2500	2.50		1.00	0.44	-	SCW-EM025
	5/16 HSK63A-EM031-0250	0.3125	2.50		1.00	0.44	-	SCW-EM025
	3/8 HSK63A-EM037-0250	0.3750	2.50		1.00	0.75	-	SCW-EM037
	1/2 HSK63A-EM050-0315	0.5000	3.15		1.25	0.88	-	SCW-EM050
	5/8 HSK63A-EM062-0315	0.6250	3.15		1.50	0.94	-	SCW-EM062
	3/4 HSK63A-EM075-0315	0.7500	3.15		1.75	1.00	-	SCW-EM075
	1 HSK63A-EM100-0400	1.0000	4.00		2.00	1.12	1.00	SCW-EM100
	1 1/4 HSK63A-EM125-0435	1.2500	4.35		2.50	1.12	1.00	SCW-EM125

G6.3 @ 20,000 RPM

Dynamically Balanced P-132 P-132

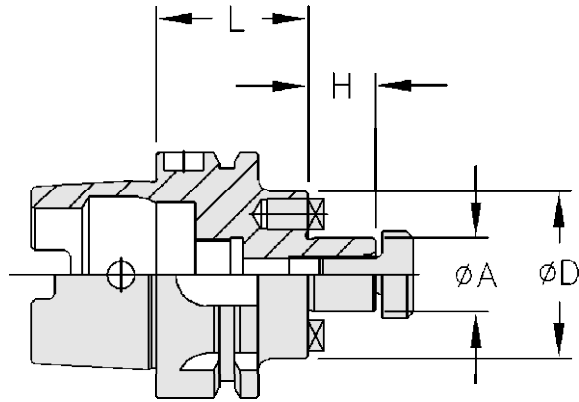


**SM Shell Mill Adapters**

**HPI - PIONEER**

**Features**

- 0.0004" Runout
- Body - Coolant Thru Center
- Balanced G6.3 @ 20,000 RPM
- Order Wrench Separately



	Part Number	A Bore	D	H	L Projection	Drive Key	Screw
3/4	HSK63A-SM075-0177				1.77		
	HSK63A-SM075-0394	0.7500	1.71	0.69	3.94	0.312	3/8-24
	HSK63A-SM075-0630				6.30		
1	HSK63A-SM100-0197				1.97		
	HSK63A-SM100-0394	1.0000	2.17	0.69	3.94	0.375	1/2-20
	HSK63A-SM100-0630				6.30		
1-1/4	HSK63A-SM125-0236				2.36		
	HSK63A-SM125-0394	1.2500	2.75	0.69	3.94	0.500	5/8-18
	HSK63A-SM125-0630				6.30		
1-1/2	HSK63A-SM150-0236				2.36		
	HSK63A-SM150-0394	1.5000	3.78	0.94	3.94	0.625	3/4-16
	HSK63A-SM150-0630				6.30		

G2.5 @ 25,000 RPM

Dynamically Balanced

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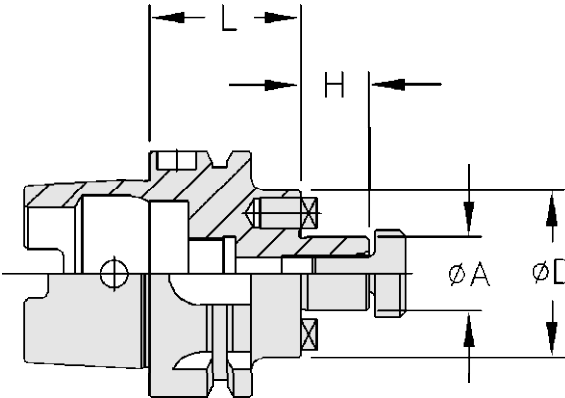


**FX Shell Mill Adapters**

**Features**

- 0.0004" Runout
- Ported for Insert Coolant Feed
- Balanced G6.3 @ 20,000 RPM
- Order Wrench Separately

**HPI - PIONEER**



	Part Number	A Bore	D	H	L Projection	Drive Key	Screw
3/4	HSK63A-SM075-0177-F				1.77		
	HSK63A-SM075-0394-F	0.7500	1.71	0.69	3.94	0.312	3/8-24
	HSK63A-SM075-0630-F				6.30		
1	HSK63A-SM100-0197-F				1.97		
	HSK63A-SM100-0394-F	1.0000	2.17	0.69	3.94	0.375	1/2-20
	HSK63A-SM100-0630-F				6.30		
1-1/4	HSK63A-SM125-0236-F				2.36		
	HSK63A-SM125-0394-F	1.2500	2.75	0.69	3.94	0.500	5/8-18
	HSK63A-SM125-0630-F				6.30		
1-1/2	HSK63A-SM150-0236-F				2.36		
	HSK63A-SM150-0394-F	1.5000	3.78	0.94	3.94	0.625	3/4-16
	HSK63A-SM150-0630-F				6.30		

G2.5 @ 25,000 RPM

Dynamically Balanced

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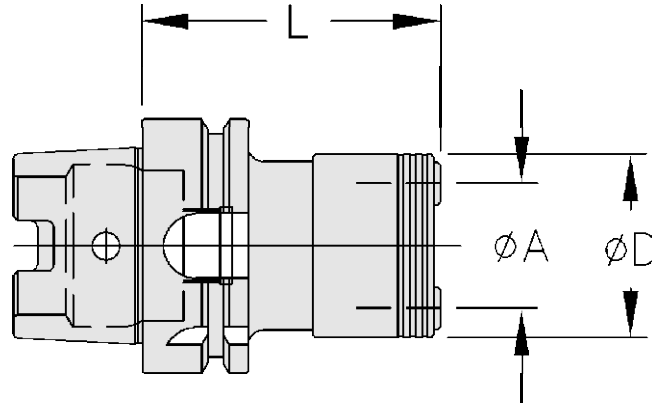


**RT - QC Rigid Tap Drivers**

**Features**

- Body - Coolant Thru Center

HPI - PIONEER



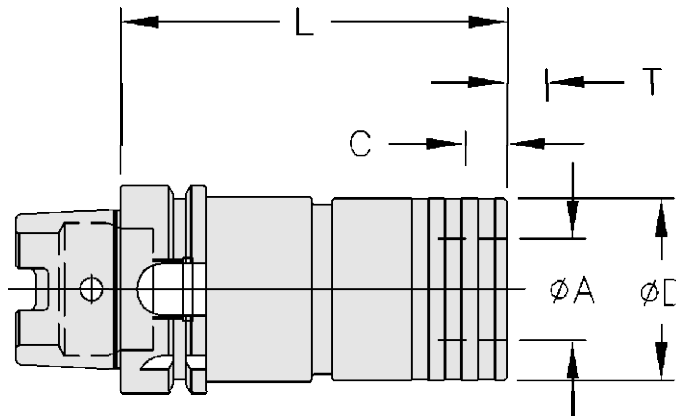
Part number	Capacity	Adapter Size	L Projection	A	D
HSK 63A-RT1-65	#6-9/16	1	2.56	0.75	1.34
HSK 63A-RT2-98	5/16-7/8	2	3.86	1.22	1.93



**TC - QC Tension / Compression Tap Drivers**

**Features**

- Tension and Compression Stroke for improved tap life
- Pressure Point Mechanism to increase the cutting pressure and ensure a positive start



Part Number	Capacity	Adapter Size	A	L Projection	D	T TENSION	C COMP.
HSK 63A-TC1-102	#6-9/16	1	0.75	4.02	1.42	0.30	0.30
HSK 63A-TC2-137	5/16-7/8	2	1.22	5.39	2.09	0.49	0.49



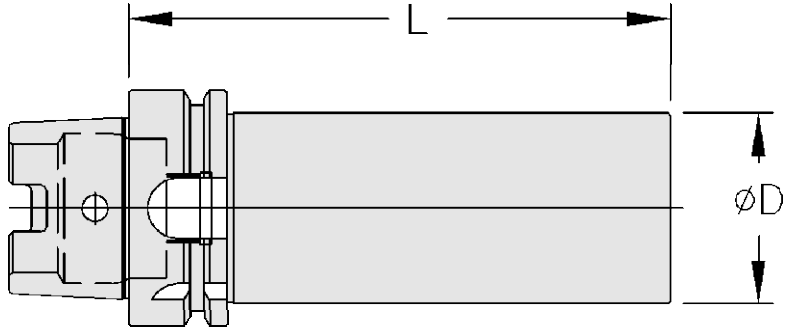


### Test Bar

#### Features

- Concentric to Taper within 3µm (0.0001") TIR
- Hardened & Normalized for consistency
- 100% Individually inspected with Certification Sheet included
- Optional Wood Box (Sold Separately)

HPI - PIONEER

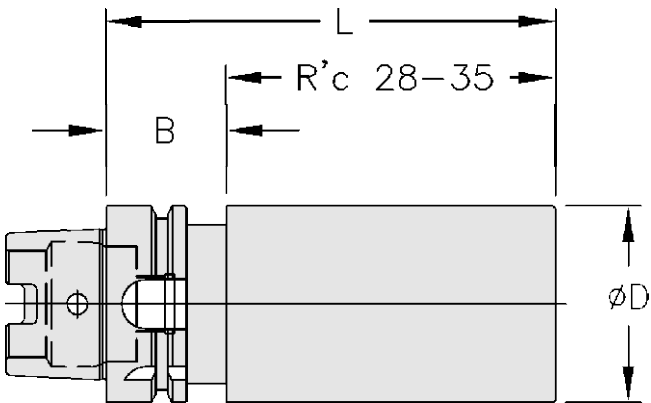


Part Number	D	L Projection
HSK63A-TB40-300	1.5748	11.811

### Soft Blank

#### Features

- Nose End R'c 28-35
- Finished Shank



Part Number	D	L Projection	B
HSK63A-BL250-0600	2.50	6.00	



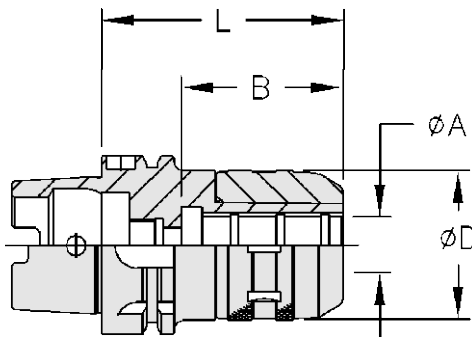


HPI - PIONEER

## MC - Milling Chuck

### Features

- 5 µm - 0.0002" Runout @ 4" out
- Coolant Thru w/ Nylon Screw Seal
- Balanced @ 20,000 RPM
- Radial Slip Torque 4X ER Chucks
- Balanceable Available in some models (See Chart)
- Order Collets & Wrench Separately



	Part Number	A Bore	B	D	L Projection	Preset Screw	Collet	Wrench	Balanceable
3/4	HSK100A-MC075-0413	0.7500	2.52	2.09	4.13	-	MC075	MCW20	
	HSK100A-MC075-0453-S	0.7500	2.52	2.09	4.53	ASC-MC32	MC075	MCW20	Y
1	HSK100A-MC100-0512-S	1.0000	2.40	2.44	5.12	ASC-MC32	MC100	MCW25	Y
1-1/4	HSK100A-MC125-0433	1.2500	3.07	2.76	4.33	-	MC125	MCW32	
	HSK100A-MC125-0531	1.2500	3.07	2.76	5.31	ASC-MC32	MC125	MCW32	
	HSK100A-MC125-0531-S	1.2500	3.07	2.76	5.31	ASC-MC32	MC125	MCW32	Y
20	HSK100A-MC20-115-S	20mm	2.52	2.09	4.53	ASC-MC32	MC20	MCW20	Y
32	HSK100A-MC32-135-S	32mm	3.07	2.76	5.31	ASC-MC32	MC32	MCW32	Y

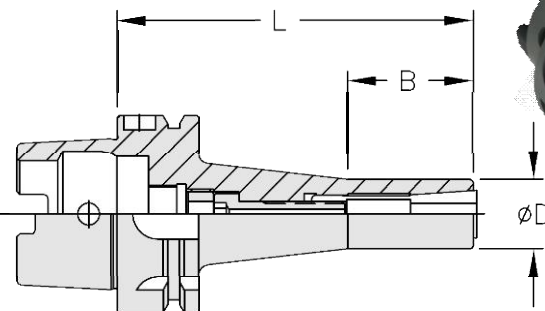
G6.3 @ 15,000 RPM

Dynamically Balanced

## MX - Mini Collet Chuck

### Features

- 2.5 µm - 0.0001" Runout @ 4X Diameter
- Collet tightened thru retention knob
- Sealed up to 1,500 PSI Coolant (See Chart)
- Balanced G2.5 @ 20,000 RPM
- Balanceable upon request
- Order Collets & Wrench Separately



	Part Number	Collet Range	L Projection	D	C	Collet	Wrench
3/8	HSK100A-MX08-110	0.125 - 0.394	4.33	0.87	1.42	MX08	MXW05
1/2	HSK100A-MX12-120	0.157 - 0.500	4.72	1.18	1.54	MX12	MXW05

G2.5 @ 15,000 RPM

Dynamically Balanced

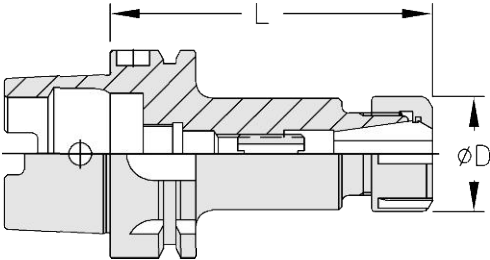


### ER Collet Chucks

**Features**

- 3 µm - 0.0001" Runout Taper to Taper
- Coolant Thru Center
- Balanced G6.3 @ 20,000 RPM
- Order Collets & Wrench Separately

HPI - PIONEER



	Part Number	Range	D	L Projection	Collet	Nut	Wrench
3/8	HSK100A-ER16H-0394	.019-.394	1.10	3.94	ER16	ERN-16H	ERW-16H
	HSK100A-ER16H-0630	.019-.394	1.10	6.30	ER16	ERN-16H	ERW-16H
1/2	HSK100A-ER20H-0394	.019-.512	1.33	3.94	ER20	ERN-20H	ERW-20H
	HSK100A-ER20H-0630	.019-.512	1.33	6.30	ER20	ERN-20H	ERW-20H
5/8	HSK100A-ER25-0394	.019-.630	1.65	3.94	ER25	ERN-25	ERW-25
	HSK100A-ER25-0630	.019-.630	1.65	6.30	ER25	ERN-25	ERW-25
3/4	HSK100A-ER32-0394	.039-.787	1.96	3.94	ER32	ERN-32	ERW-32
	HSK100A-ER32-0630	.039-.787	1.96	6.30	ER32	ERN-32	ERW-32
1	HSK100A-ER40-0472	.079-1.024	2.48	4.72	ER40	ERN40	ERW40
	HSK100A-ER40-0630	.079-1.024	2.48	6.30	ER40	ERN40	ERW40

G6.3 @ 20,000 RPM

Dynamically Balanced

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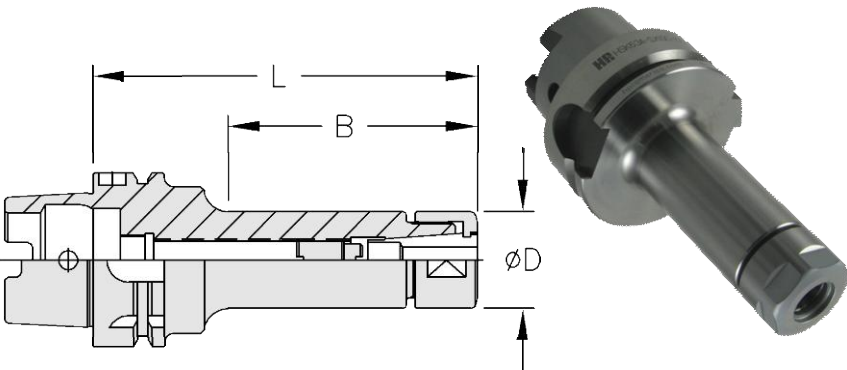
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### SX Collet Chucks

**Features**

- 3 µm - 0.0001" Runout Taper to Taper
- Coolant Thru Center
- Balanced G6.3 @ 20,000 RPM
- Order Collets & Wrench Separately



	Part Number	Range	L Projection	D	B	Collet	Nut	Wrench	Stop Screw
3/8	HSK100A-SX10C-105	.069 - .394	4.13	1.08		SX10	SXN-10	SXW-10	ASC-SX10
	HSK100A-SX10C-150	.069 - .394	5.91	1.08		SX10	SXN-10	SXW-10	ASC-SX10
5/8	HSK100A-SX16C-120	.108 - .630	4.72	1.58		SX16	SXN-16	SXW-16	ASC-SX16
	HSK100A-SX16C-150	.108 - .630	5.91	1.58		SX16	SXN-16	SXW-16	ASC-SX16
1	HSK100A-SX25C-145	.630 - 1.000	5.71	2.17		SX25	SXN-25	SXW-25	ASC-SX25

G6.3 @ 20,000 RPM

Dynamically Balanced

P-120

P-132

P-132

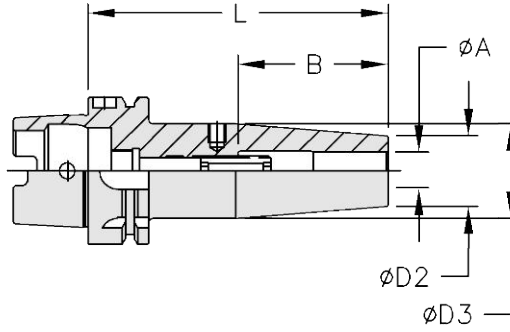
## SD Shrink Fit

### Features

- 2µm 0.0001" Runout L < 6.00
- 4µm 0.0002" Runout L ≥ 6.00
- Coolant Thru Center
- DIN AD+B Coolant
- Balanced G2.5 @ 25,000 RPM
- Shrink Fit Machine Sold Separately



### HPI - PIONEER



Inch	Part Number	A Bore	L Projection	B	D2	D3
1/4	HSK100A-SD025-0315	0.2500	3.35	1.42	0.83	1.06
	HSK100A-SD025-0512	0.2500	5.12	1.42	0.83	1.06
	HSK100A-SD025-0630	0.2500	6.30	1.42	0.83	1.06
	HSK100A-SD025-0787	0.2500	7.87	1.42	0.83	1.06
3/8	HSK100A-SD037-0335	0.3750	3.54	1.65	0.94	1.26
	HSK100A-SD037-0512	0.3750	5.12	1.65	0.94	1.26
	HSK100A-SD037-0630	0.3750	6.30	1.65	0.94	1.26
	HSK100A-SD037-0787	0.3750	7.87	1.65	0.94	1.26
1/2	HSK100A-SD050-0354	0.5000	3.74	1.85	0.94	1.26
	HSK100A-SD050-0512	0.5000	5.12	1.85	0.94	1.26
	HSK100A-SD050-0630	0.5000	6.30	1.85	0.94	1.26
	HSK100A-SD050-0787	0.5000	7.87	1.85	0.94	1.26
5/8	HSK100A-SD062-0374	0.6250	3.94	1.97	1.06	1.34
	HSK100A-SD062-0512	0.6250	5.12	1.97	1.06	1.34
	HSK100A-SD062-0630	0.6250	6.30	1.97	1.06	1.34
	HSK100A-SD062-0787	0.6250	7.87	1.97	1.06	1.34
3/4	HSK100A-SD075-0394	0.7500	4.13	2.05	1.30	1.65
	HSK100A-SD075-0512	0.7500	5.12	2.05	1.30	1.65
	HSK100A-SD075-0630	0.7500	6.30	2.05	1.30	1.65
	HSK100A-SD075-0787	0.7500	7.87	2.05	1.30	1.65
1	HSK100A-SD100-0453	1.0000	4.53	2.28	1.73	2.09
	HSK100A-SD100-0512	1.0000	5.12	2.28	1.73	2.09
	HSK100A-SD100-0630	1.0000	6.30	2.28	1.73	2.09
	HSK100A-SD100-0787	1.0000	7.87	2.28	1.73	2.09
1 1/4	HSK100A-SD125-0472	1.2500	4.72	2.28	1.73	2.09
	HSK100A-SD125-0512	1.2500	5.12	2.28	1.73	2.09
	HSK100A-SD125-0630	1.2500	6.30	2.28	1.73	2.09
	HSK100A-SD125-0787	1.2500	7.87	2.28	1.73	2.09
MM	Part Number	A Bore	L Projection	B	D2	D3
6	HSK100A-SDM06-085	6.000	85.0	36.0	21.0	27.0
	HSK100A-SDM06-160	6.000	160.0	36.0	21.0	27.0
8	HSK100A-SDM08-085	8.000	85.0	36.0	21.0	27.0
	HSK100A-SDM08-160	8.000	160.0	36.0	21.0	27.0
10	HSK100A-SDM10-090	10.000	90.0	42.0	24.0	32.0
	HSK100A-SDM10-160	10.000	160.0	42.0	24.0	32.0
12	HSK100A-SDM12-095	12.000	95.0	47.0	24.0	32.0
	HSK100A-SDM12-160	12.000	160.0	47.0	24.0	32.0
16	HSK100A-SDM16-100	16.000	100.0	50.0	27.0	34.0
	HSK100A-SDM16-160	16.000	160.0	50.0	27.0	34.0
20	HSK100A-SDM20-105	20.000	105.0	52.0	33.0	42.0
	HSK100A-SDM20-160	20.000	160.0	52.0	33.0	42.0
25	HSK100A-SDM25-115	25.000	115.0	58.0	44.0	53.0
	HSK100A-SDM25-160	25.000	160.0	58.0	44.0	53.0
32	HSK100A-SDM32-120	32.000	120.0	58.0	44.0	53.0
	HSK100A-SDM32-160	32.000	160.0	58.0	44.0	53.0

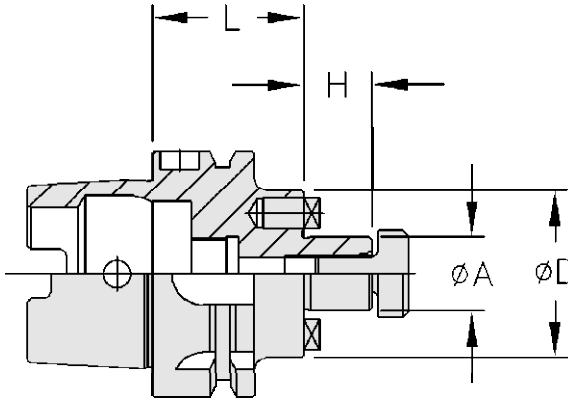


**SM Shell Mill Adapters**

**Features**

- 0.0004" Runout
- Ported for Insert Coolant Feed
- Balanced G6.3 @ 20,000 RPM
- Order Wrench Separately

**HPI - PIONEER**



	Part Number	A Pilot	D	L Projection	H	Drive Key	Screw
3/4	HSK100A-SM075-0197	0.7500	1.71	1.77	0.69	0.312	3/8-24
	HSK100A-SM075-0394	0.7500	1.71	3.94	0.69	0.312	3/8-24
	HSK100A-SM075-0630	0.7500	1.71	6.30	0.69	0.312	3/8-24
1	HSK100A-SM100-0236	1.0000	2.17	1.97	0.69	0.375	1/2-20
	HSK100A-SM100-0394	1.0000	2.17	3.94	0.69	0.375	1/2-20
	HSK100A-SM100-0630	1.0000	2.17	6.30	0.69	0.375	1/2-20
1-1/4	HSK100A-SM125-0236	1.2500	2.75	2.36	0.69	0.500	5/8-18
	HSK100A-SM125-0394	1.2500	2.75	3.94	0.69	0.500	5/8-18
	HSK100A-SM125-0630	1.2500	2.75	6.30	0.69	0.500	5/8-18
1-1/2	HSK100A-SM150-0236	1.5000	3.78	2.36	0.94	0.625	3/4-16
	HSK100A-SM150-0394	1.5000	3.78	3.94	0.94	0.625	3/4-16
	HSK100A-SM150-0630	1.5000	3.78	6.30	0.94	0.625	3/4-16
2	HSK100A-SM200-0236	2.0000	4.84	2.36	0.94	0.750	1"-14
	HSK100A-SM200-0394	2.0000	4.84	3.94	0.94	0.750	1"-14
	HSK100A-SM200-0630	2.0000	4.84	6.30	0.94	0.750	1"-14

G2.5 @ 25,000 RPM

Dynamically Balanced

P-132

P-132



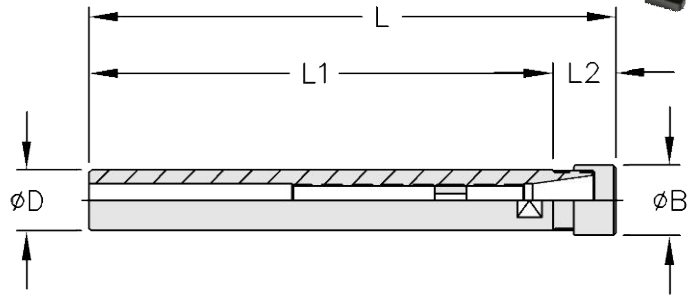
HPI - PIONEER



## Mini-Nut ER Straight Shank

### Features

- 3µm 0.0001" Runout Shank to Taper
- Coolant Thru Center
- Mini-Nut for Close Center Work

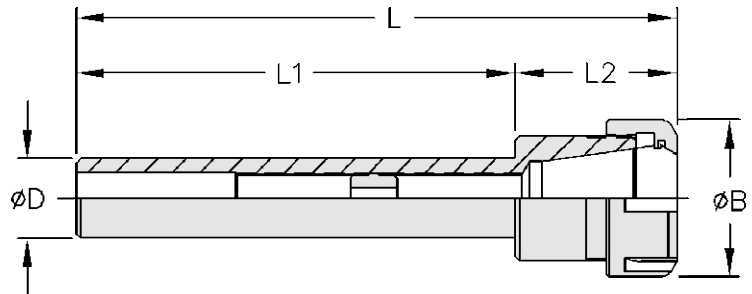


Part Number	Collet Type	B	D	L	L1	L2	Set Screw	Wrench	Nut Type
S037-ER08M-0394	ER8	0.47	3/8"	4.88	3.94	0.94	-	ERW-08M	Mini
S050-ER11M-0552	ER11	0.63	1/2"	6.56	5.51	1.04	-	ERW-11M	Mini
S050-ER16M-0552	ER16	0.87	1/2"	6.97	5.51	1.46	-	ERW-16M	Mini
S062-ER11M-0552	ER11	0.63	5/8"	6.24	5.51	0.73	-	ERW-11M	Mini
S075-ER16M-0552	ER16	0.87	3/4"	6.50	5.51	0.98	ASC-ER16-SS	ERW-16M	Mini
S075-ER25M-0394	ER25	1.38	3/4"	5.87	3.94	1.93	ASC-ER25-SS	ERW-25M	Mini
S100-ER20M-0552	ER20	1.10	1"	6.61	5.51	1.10	ASC-ER16-SS	ERW-20M	Mini

## ER Straight Shank Extensions

### Features

- 3µm 0.0001" Runout Shank to Taper
- Coolant Thru Center



Part Number	Collet Type	B	D	L	L1	L2	Set Screw	Wrench	Nut Type
S050-ER11H-0552	ER11	0.75	1/2"	6.87	5.51	0.85	-	ERW-11H	Hex
S062-ER11H-0552	ER11	0.75	5/8"	6.87	5.51	0.85	-	ERW-11H	Hex
S062-ER16H-0236	ER16	1.10	5/8"	3.74	2.36	1.38	-	ERW-16H	Hex
S075-ER16H-0197	ER16	1.10	3/4"	3.35	1.97	1.38	ASC-ER16-SS	ERW-16H	Hex
S075-ER16H-0394	ER16	1.10	3/4"	5.32	3.94	1.38	ASC-ER16-SS	ERW-16H	Hex
S075-ER16H-0552	ER16	1.10	3/4"	6.89	5.51	1.38	ASC-ER16-SS	ERW-16H	Hex
S075-ER20H-0250	ER20	1.34	3/4"	3.94	2.50	1.50	ASC-ER16-SS	ERW-20H	Hex
S100-ER20H-0552	ER20	1.34	1"	7.11	5.51	1.59	ASC-ER16-SS	ERW-20H	Hex
S100-ER25-0197	ER25	1.65	1"	3.98	1.97	2.01	ASC-ER32-SS	ERW-25A	Slotted
S100-ER32-0197	ER32	1.97	1"	4.00	1.97	2.03	ASC-ER32-SS	ERW-32A	Slotted
S100-ER32-0552	ER32	1.97	1"	7.54	5.51	2.03	ASC-ER16-SS	ERW-32A	Slotted
S100-ER40-0197	ER40	2.48	1"	4.53	1.97	2.56	ASC-ER16-SS	ERW-40A	Slotted
S125-ER32-0236	ER32	1.97	1 1/4"	4.39	2.36	2.03	ASC-ER32-SS	ERW-32A	Slotted
S16M-ER11H-0552	ER11	0.75	16mm	6.87	5.51	0.85	-	ERW-11H	Hex





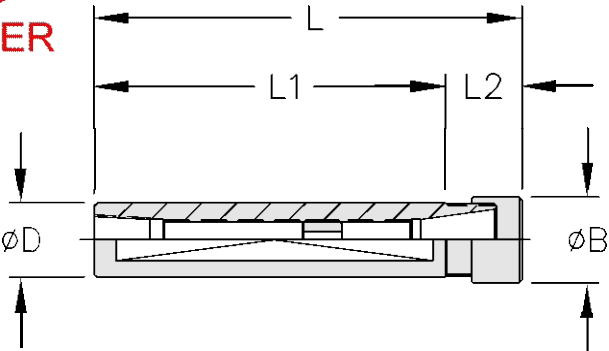


### Coolant Thru Straight Shank

**Features**

- 3µm 0.0001" Runout Shank to Taper
- Coolant Thru Center
- Seals up to 1,500 PSI
- Flat on the Shank for Positive Lock
- Includes Pipe Thread for Coolant Line

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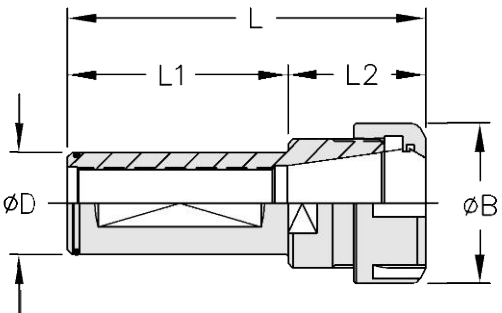


Part Number	Collet Type	B	D	L	L1	L2	Thread	Set Screw	Wrench	Nut Type
S075C-ER16M-0342	ER16	0.87	3/4"	4.34	3.42	0.92	1/4" NPT	ASC-ER16-SS	ERW-16M	Mini
S100C-ER20M-0331	ER20	1.10	1"	4.38	3.31	1.07	3/8" NPT	ASC-ER25-SS	ERW-20M	Mini
S125C-ER32-0236	ER32	1.97	1 1/4"	4.52	2.36	2.16	3/8" NPT	ASC-ER25-SS	ERW-32A	Slotted

### CNC Lathe ER Straight Shank

**Features**

- 3µm 0.0001" Runout Shank to Taper
- Coolant Thru Center
- Seals up to 1,500 PSI
- Flat on the Shank for Positive Lock
- O'ring on the end of the shank for bore seal

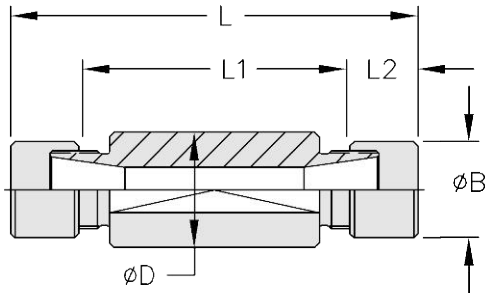


Part Number	Collet Type	B	D	L	L1	L2	ID Thread	Wrench	Nut Type
S125NC-ER25-0236	ER25	1.65	1-1/4"	3.82	2.36	1.46	M18 x 1.5	ERW-25A	Slotted
S125NC-ER32-0236	ER32	1.97	1-1/4"	4.06	2.36	1.69	M22 x 1.5	ERW-32A	Slotted
S125NC-ER40-0236	ER40	2.48	1-1/4"	4.72	2.36	2.36	M28 x 1.5	ERW-40A	Slotted
S150NC-ER32-0315	ER32	1.97	1-1/2"	4.65	3.15	1.50	M22 x 1.5	ERW-32A	Slotted
S150NC-ER40-0295	ER40	2.48	1-1/2"	5.31	2.95	2.36	M28 x 1.5	ERW-40A	Slotted

### Swiss Double Ended Collet Holder

**Features**

- 3µm 0.0001" Runout Shank to Taper
- Designed for CNC Swiss Style Machines



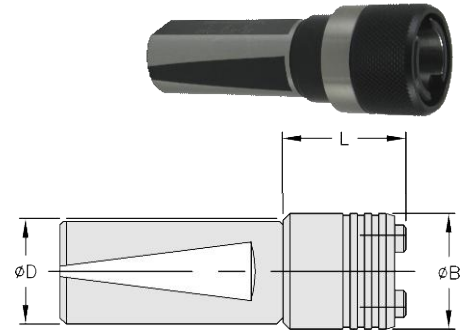
Part Number	Collet Type	B	D	L	L1	L2	Wrench	Nut Type
S075DE-ER11M-0173	ER11	0.63	3/4"	2.68	1.73	0.47	ERW-11M	Mini
S075DE-ER11M-0256	ER11	0.63	3/4"	3.50	2.56	0.47	ERW-11M	Mini
S075DE-ER11M-0303	ER11	0.63	3/4"	3.98	3.03	0.47	ERW-11M	Mini
S075DE-ER11M-0392	ER11	0.63	3/4"	4.86	3.92	0.47	ERW-11M	Mini



## Rigid Quick Change Holder

### Features:

- Coolant Thru
- Flats for Lathe Applications
- Compatible with industry standards

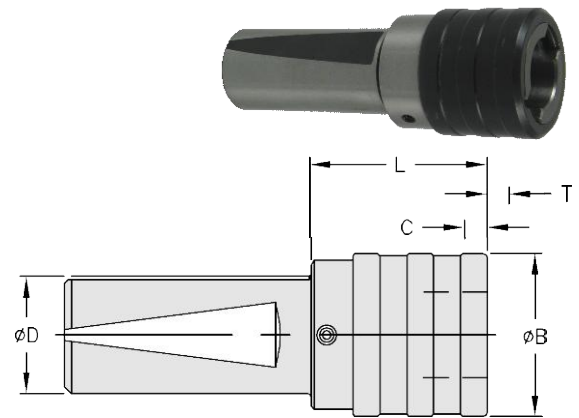


Part Number	Capacity	Adapter Size	B	D	L Projection
S075-RT0-040	#0 - 1/4	0	0.91	3/4"	1.57
S100-RT1-040	#6 - 9/16	1	1.34	1"	1.57
S100-RT2-060	5/16 - 7/8	2	1.93	1"	2.36
S125-RT3-095	9/16 - 1-3/8	3	2.89	1-1/4"	3.74

## Length Compensating Quick Change Holder

### Features:

- Non Coolant
- Flats for Lathe Applications
- Compatible with industry standards

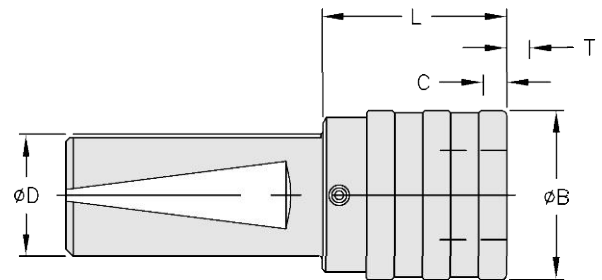


Non Coolant Part Number	Capacity	Adapter Size	B	D	L Projection	T - TENSION	C - COMP.
S075-TC1-040	#0 - 1/4	0	1.02	3/4"	1.57	0.25	0.25
S100-TC1-040	#6 - 9/16	1	1.42	1"	1.57	0.30	0.30
S100-TC2-065	5/16 - 7/8	2	2.09	1"	2.36	0.49	0.49
S125-TC3-100	9/16 - 1-3/8	3	3.07	1-1/4"	3.94	0.79	0.79

## Length Compensating Quick Change Holder High Pressure Coolant Thru

### Features:

- High Pressure Coolant - 725 PSI (50 Bar)
- Flats for Lathe Applications
- Compatible with industry standards



Non Coolant Part Number	Capacity	Adapter Size	B	D	L Projection	T - TENSION	C - COMP.
S100-TCC1-062	#6 - 9/16	1	1.54	1"	2.44	0.30	0.30
S100-TCC2-098	5/16 - 7/8	2	2.36	1"	3.86	0.39	0.39
S125-TCC3-147	9/16 - 1-3/8	3	3.39	1-1/4"	5.79	0.69	0.69



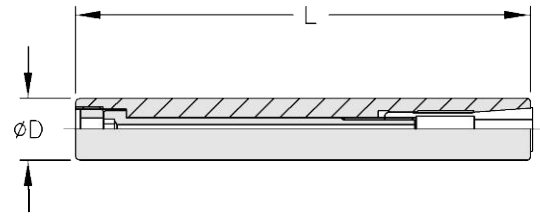


## MX - Collet Chuck Extension

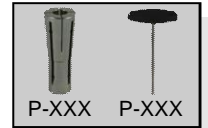
HPI - PIONEER

### Features

- 2.5  $\mu\text{m}$  - 0.0001" Runout @ 4X Diameter
- Collet tightened thru back of the shank
- Sealed up to 1,500 PSI Coolant (See Chart)
- Order Collets & Wrench Separately



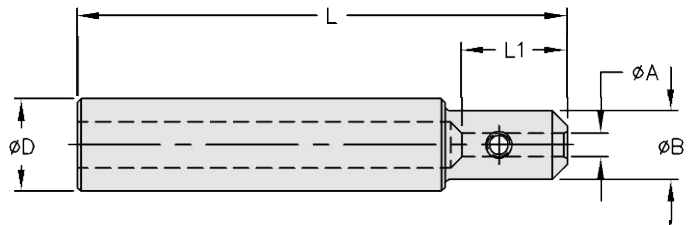
Part Number	Collet Range	D	L	Collet	Wrench
S050-MX06-0400	0.031 - 0.250	0.5000	4.00	MX06	MXW05
S050-MX06-0600			6.00		
S075-MX08-0600	0.125 - 0.394	0.7500	6.00	MX08	
S075-MX08-0800			8.00		
S100-MX12-0600	0.157 - 0.500	1.0000	6.00	MX12	
S100-MX12-0800			8.00		



## End Mill Holders

### Features:

- Coolant Thru
- Flats for Lathe Applications

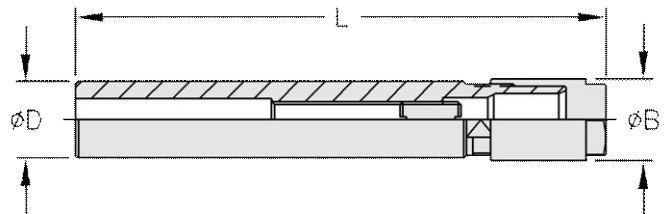


Part Number	A	B	D	L	L1	Set Screw
S075-EM012-0600	0.1250	0.50	0.7500	6.00	0.63	SCW-EMX012
S075-EM018-0600	0.1875	0.56	0.7500	6.00	0.86	SCW-EMX018
S075-EM025-0600	0.2500	0.75	0.7500	6.00	1.10	SCW-EMX025
S075-EM031-0600	0.3125	0.75	0.7500	6.00	1.26	SCW-EMX031
S100-EM037-0600	0.3750	1.00	1.0000	6.00	1.26	SCW-EMX037
S100-EM050-0600	0.5000	1.00	1.0000	6.00	1.49	SCW-EMX050

## DA Collet Extensions

### Features

- Mini-Nut for Close Center Work



Part Number	Collet Range	B	D	L	Adjust Screw	Nut	Wrench
S050-DA300-0709	3/64 - 1/4	0.57	0.5000	7.09	AS-DAX300	DAN300	DAW300
S075-DA200-0709	1/16 - 3/8	0.83	0.7500	7.08	AS-DAX200	DAN200	DAW200
S100-DA100-0748	1/16 - 9/16	1.06	1.0000	7.48	AS-DAX100	DAN100	DAW100
S125-DA180-0748	1/16 - 3/4	1.48	1.2500	7.48	AS-DAX125	DAN180	DAW180





### Shrink Fit Extensions

#### Why use a Shrinker Extension?

- Cost effective solution to special length holders.
- Replacement costs are lower than special length holders.
- HPI Extensions are manufactured from H13 Tool Steel and Tempered at 1050°F for long life.

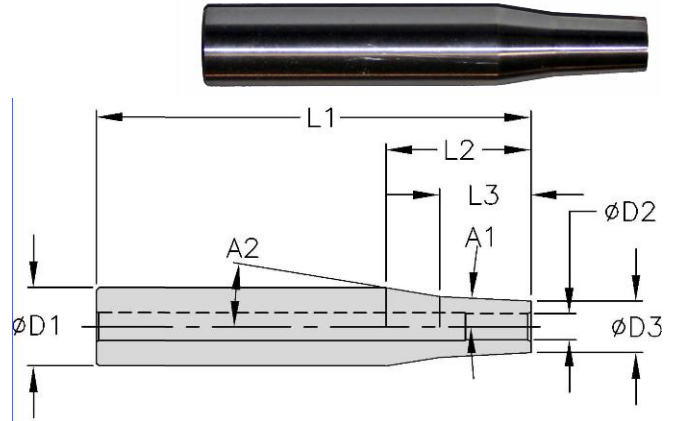
#### Why use an HPI Milling Chuck with Shrinker Extensions?

- HPI Milling Chucks Mass provides outstanding vibration dampening.
- Allows you to preset lengths within microns.
- Cost effective modular Shrinker system.
- Coupled with an HPI Milling Chuck will provide similar effective run out as rigid holders.



### Shrink Fit Standard Extensions

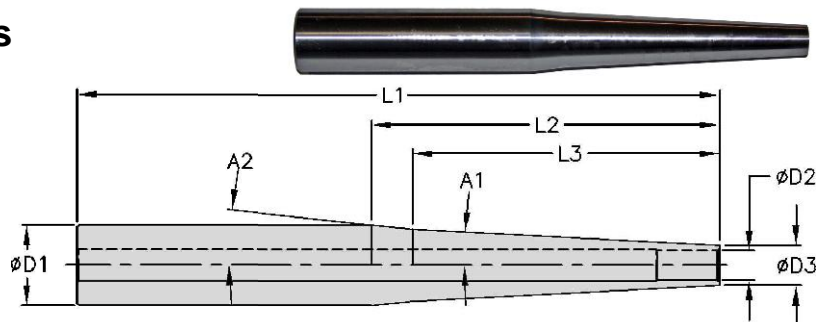
- Designed to work in standard Milling Chucks
- Designed for Cutting Tools with h6 tolerances
- Close Center to clear fixtures or part walls
- Specials available upon request



Part Number	D1	D2	D3	L1	L2	L3	A1	A2
S075-SD025-0415	0.7500	0.2500	0.49	4.15	1.38	0.87	3.0	9.4
S075-SD031-0415	0.7500	0.3125	0.55	4.15	1.38	0.87	3.0	6.1
S075-SD037-0415	0.7500	0.3750	0.61	4.15	1.33	-	3.0	-
S100-SD050-0415	1.0000	0.5000	0.81	4.15	1.37	0.87	2.5	6.5
S100-SD025-0800	1.0000	0.2500	0.49	8.00	2.17	1.65	3.0	17.9
S100-SD031-0800	1.0000	0.3125	0.55	8.00	2.17	1.65	3.0	14.9
S100-SD037-0800	1.0000	0.3750	0.61	8.00	2.17	1.65	3.0	11.8
S100-SD050-0800	1.0000	0.5000	0.81	8.00	1.71	1.43	2.5	6.5

### Shrink Fit Small Nose Extensions

- Designed to work in standard Milling Chucks
- Designed for Cutting Tools with h6 tolerances
- Close Center to clear fixtures or part walls
- Specials available upon request

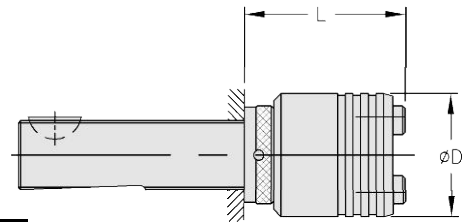


Part Number	D1	D2	D3	L1	L2	L3	A1	A2
S037-SN012-0315	0.3750	0.1250	0.24	3.15	1.40	-	2.8	-
S037-SN018-0315	0.3750	0.1875	0.31	3.15	1.40	-	1.5	-
S050-SN025-0315	0.5000	0.2500	0.37	3.15	1.40	-	2.8	-
S075-SN012-0800	0.7500	0.1250	0.24	8.00	4.46	3.95	3.0	5.4
S075-SN018-0800	0.7500	0.1875	0.31	8.00	4.46	-	2.9	-
S075-SN025-0800	0.7500	0.2500	0.37	8.00	4.46	-	2.5	-
S100-SN037-0800	1.0000	0.3750	0.49	8.00	4.33	3.82	3.0	6.0
S100-SN050-0800	1.0000	0.5000	0.62	8.00	4.33	3.82	2.0	6.0



## Rigid Quick Change Holders w/ Automotive Acme Shanks

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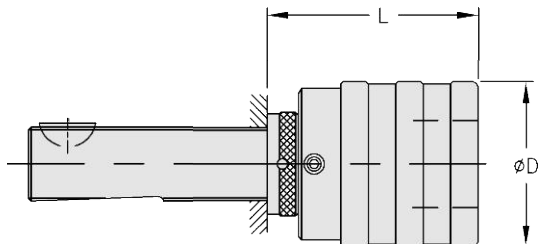


**Features:**

- HSK, Morse and Jacobs Mounts Available

Part Number	Shank	Adapter Size	Tap Range	D	L
A062-QC0	5/8 ACME	0	#0 - 1/4	0.91	1.77
A075-QC0	3/4 ACME				
TR16-QC0	16MM TRAP				
TR20-QC0	20MM TRAP				
A062-QC1	5/8 ACME	1	#6 - 9/16	1.26	1.93
A075-QC1	3/4 ACME				
A106-QC1	1-1/16 ACME				
TR16-QC1	16MM TRAP				
TR20-QC1	20MM TRAP	2	5/16 - 7/8	1.97	2.60
TR28-QC1	28MM TRAP				
A075-QC2	3/4 ACME				
A106-QC2	1-1/16 ACME				
A137-QC2	1-3/8 ACME	2	5/16 - 7/8	1.97	2.68
TR20-QC2	20MM TRAP				
TR28-QC2	28MM TRAP				
TR36-QC2	36MM TRAP				
A106-QC3	1-1/16 ACME	3	3/4 - 1-3/8	2.83	3.74
A137-QC3	1-3/8 ACME				
A188-QC3	1-7/8 ACME				
TR28-QC3	28MM TRAP				
TR36-QC3	36MM TRAP	3	3/4 - 1-3/8	2.83	3.82
A106-QC3	1-1/16 ACME				
A137-QC3	1-3/8 ACME				
A188-QC3	1-7/8 ACME				
TR28-QC3	28MM TRAP	3	3/4 - 1-3/8	2.83	3.74
TR36-QC3	36MM TRAP				
A106-QC3	1-1/16 ACME				
A137-QC3	1-3/8 ACME				

## Short Length Compensating Quick Change Holders w/ Automotive Acme Shanks



**Features:**

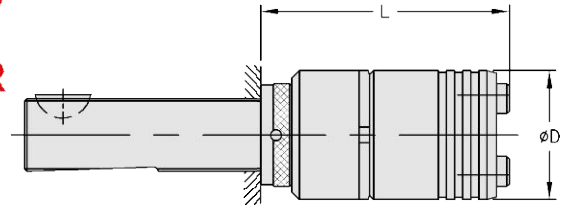
- TR - Trapezoidal, Morse and Jacobs Mounts Available

Part Number	Shank	Adapter Size	Tap Range	Tension (Expansion)	Compression	D	L
A062-QCLK0	5/8 ACME	0	#0 - 1/4	0.26	0.26	1.024	1.97
A075-QCLK0	3/4 ACME						
TR16-QCLK0	16MM TRAP						
TR20-QCLK0	20MM TRAP						
A062-QCLK1	5/8 ACME	1	#6 - 9/16	0.295	0.295	1.42	2.05
A075-QCLK1	3/4 ACME						
A106-QCLK1	1-1/16 ACME						
TR16-QCLK1	16MM TRAP						
TR20-QCLK1	20MM TRAP	2	5/16 - 7/8	0.49	0.49	2.09	2.99
TR28-QCLK1	28MM TRAP						
A075-QCLK2	3/4 ACME						
A106-QCLK2	1-1/16 ACME						
A137-QCLK2	1-3/8 ACME	2	5/16 - 7/8	0.49	0.49	2.09	3.07
TR20-QCLK2	20MM TRAP						
TR28-QCLK2	28MM TRAP						
TR36-QCLK2	36MM TRAP						
A106-QCLK3	1-1/16 ACME	3	3/4 - 1-3/8	0.79	0.79	3.07	4.29
A137-QCLK3	1-3/8 ACME						
A188-QCLK3	1-7/8 ACME						
TR28-QCLK3	28MM TRAP						
TR36-QCLK3	36MM TRAP	3	3/4 - 1-3/8	0.79	0.79	3.07	4.53
A106-QCLK3	1-1/16 ACME						
A137-QCLK3	1-3/8 ACME						
A188-QCLK3	1-7/8 ACME						
TR28-QCLK3	28MM TRAP	3	3/4 - 1-3/8	0.79	0.79	3.07	4.29
TR36-QCLK3	36MM TRAP						
A106-QCLK3	1-1/16 ACME						
A137-QCLK3	1-3/8 ACME						





**Radial Floating QC Holders w/ Automotive Acme Shanks**

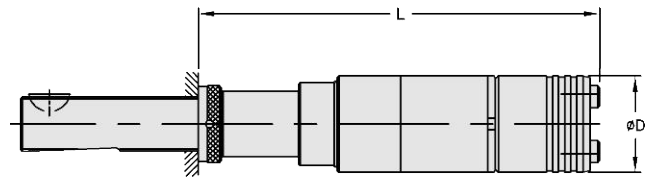


**Features:**

- Radial Float for Tapping or Reaming pre-drilled or cored holes
- HSK, Morse and Jacobs Mounts Available

Part Number	Shank	Adapter Size	Tap Range	Total Float	D	L
A062-QF0	5/8 ACME	0	#0 - 1/4	0.020	0.984	2.56
A075-QF0	3/4 ACME					
TR16-QF0	16MM TRAP					
TR20-QF0	20MM TRAP					
A062-QF1	5/8 ACME	1	#6 - 9/16	0.039	1.26	2.76
A075-QF1	3/4 ACME					
A106-QF1	1-1/16 ACME					
TR16-QF1	16MM TRAP					
TR20-QF1	20MM TRAP					
TR28-QF1	28MM TRAP					
A075-QF2	3/4 ACME	2	5/16 - 7/8	0.079	1.97	3.78
A106-QF2	1-1/16 ACME					3.78
A137-QF2	1-3/8 ACME					3.86
TR20-QF2	20MM TRAP					3.78
TR28-QF2	28MM TRAP					3.78
TR36-QF2	36MM TRAP					3.86
A106-QF3	1-1/16 ACME	3	3/4 - 1-3/8	0.118	2.83	5.35
A137-QF3	1-3/8 ACME					5.43
A188-QF3	1-7/8 ACME					5.59
TR28-QF3	28MM TRAP					5.35
TR36-QF3	36MM TRAP					5.43

**Length Compensating QC Holders w/ Radial Float w/ Automotive Acme Shanks**



**Features:**

- Length Compensating for backlash, lead screw and thread pitch
- Full Tension and Full Compression Available
- Radial Float for Tapping or Reaming pre-drilled or cored holes
- Non Floating version available
- HSK, TR - Trapezoidal, Morse and Jacobs Mounts Available

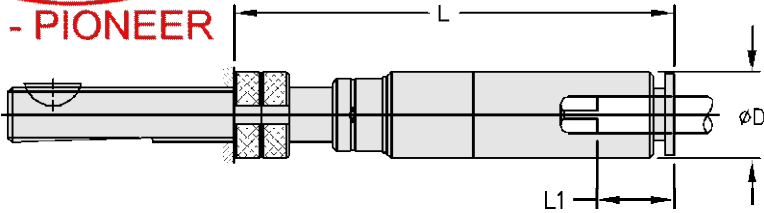
Part Number	Shank	Adapter Size	Tap Range	Total Radial Float	Tension (Expansion)	Compression	D	L
A062-QCFL030-15	5/8 ACME	0	#0 - 1/4	0.02	0.59	0.59	0.91	5.28
A075-QCFL030-15	3/4 ACME							
A062-QCFL140-20	5/8 ACME	1	#6 - 9/16	0.039	0.79	0.79	1.38	6.06
A075-QCFL140-20	3/4 ACME							
A106-QCFL140-20	1-1/16 ACME							
A075-QCFL240-20	3/4 ACME	2	5/16 - 7/8	0.079	0.79	0.79	1.97	7.40
A106-QCFL240-20	1-1/16 ACME							7.40
A137-QCFL240-20	1-3/8 ACME							7.48
A106-QCFL340-20	1-1/16 ACME							9.61
A137-QCFL340-20	1-3/8 ACME	3	3/4 - 1-3/8	0.118	0.79	0.79	2.835	9.69





**Length Compensating  
Close Center Dedicated Tap  
Tension Only  
w/ Automotive Acme Shanks**

HPI - PIONEER



**Features:**

- Length Compensating for backlash, lead screw and thread pitch
- Tension & Compression and Full Compression Available
- HSK, TR - Trapezoidal, Morse and Jacobs Mounts Available
- DIN, ISO and JIS Tap Sizes Available

Shank	Part Number	Tension (Expansion)	D	L	#0 - #6	#8	#10	#12	1/4	5/16	3/8	7/16	1/2	9/16
3/8 Acme	A037-QLS0	0.27	0.50	1.56	-141	-168	-194	-220	-255					
1/2 Acme	A050-QLS0	0.27	0.50	1.56	-141	-168	-194	-220	-255					
3/4 Acme	A075-QLS1	0.39	0.87	1.80	-141	-168	-194	-220	-255	-318	-381	-323	-367	-429
7/8 Acme	A087-QLS1	0.39	0.87	1.80	-141	-168	-194	-220	-255	-318	-381	-323	-367	-429
1" Acme	A100-QLS1	0.39	0.87	1.80	-141	-168	-194	-220	-255	-318	-381	-323	-367	-429
1-1/16 Acme	A106-QLS1	0.39	0.87	1.80	-141	-168	-194	-220	-255	-318	-381	-323	-367	-429
8mm TRAP	TR08-QLS0	0.27	0.50	1.56	-141	-168	-194	-220	-255					
10mm TRAP	TR10-QLS0	0.39	0.50	1.56	-141	-168	-194	-220	-255					
12MM TRAP	TR12-QLS0	0.39	0.50	1.56	-141	-168	-194	-220	-255					





**Pull Studs (Retention Knobs)**

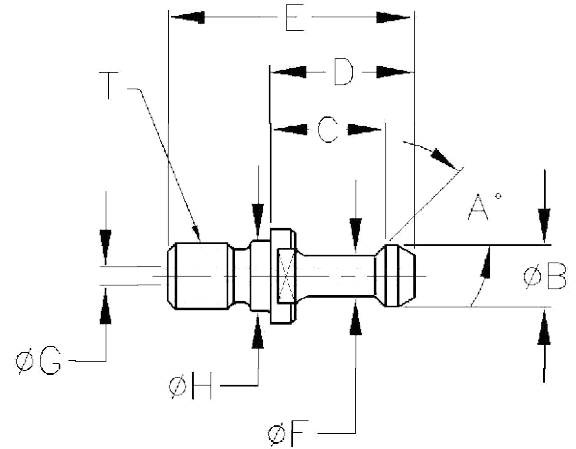


**Features**

- Manufactured to the Industry Standards or machine builders specifications.

**Note:**

- Other pull studs and special pull studs are available upon request.
- Please specify dimension and machine make and model when inquiring pull studs.
- It is critical that the correct retention knob is used with each machining center. Please verify all dimensions prior to ordering. Machine specifications will be located in your machine manual.



Part No.	A	B	C	D	E	F	G	H	T	Notes	
BT30	HPS- 16	45	0.433	0.709	0.906	1.693	0.276	-	0.492	M12	MAS P30T-1
	HPS- 17	60	0.433	0.709	0.906	1.693	0.276	-	0.492		MAS P30T-2
BT40	HPS- 1	45	0.591	1.102	1.378	2.362	0.394	-	0.669	M16	MAS P40T-1
	HPS- 2	60	0.591	1.102	1.378	2.362	0.394	-	0.669		MAS P40T-2
	HPS-806 -1	75	0.748	0.906	1.142	2.126	0.551	0.236	0.669		JIS B6339. Coolant
	HPS-G51	45	0.740	0.552	0.752	1.736	0.490	0.276	0.669		Mazak type. Coolant
	HPS-O 8	90	0.591	1.102	1.378	2.362	0.394	-	0.669		90 degree angle type
CAT40	HPS- 26	60	0.591	0.992	1.268	2.252	0.394	-	0.630	3/4-16	MAS P40T-2 type
	HPS- 72	45	0.591	0.990	1.266	2.250	0.394	-	0.641		MAS P40T-1 type
	HPS- 72C	45	0.591	0.990	1.266	2.250	0.394	0.120	0.641		MAS P40T-1 type
	HPS-806U-1	75	0.748	0.787	1.024	1.882	0.551	0.236	-		JIS B6339 type. Coolant
	HPS-B64-1	45	0.740	0.440	0.640	1.624	0.490	0.157	0.641		Okuma type. Coolant
	HPS-D72	45	0.740	0.440	0.640	1.500	0.490	0.283	-		ANSI / ASME B5. 50-1985
	HPS-G53	45	0.740	0.440	0.640	1.624	0.490	0.276	0.641		Mazak type. Coolant
	HPS-G60	45	0.740	0.440	0.640	1.624	0.490	-	0.641		Mazak / Okuma type.
	HPS-H30	45	0.591	0.992	1.268	2.252	0.394	-	-		Hitachi Seiki type
HPS-O14	90	0.591	0.984	1.260	2.244	0.394	-	-	Mori Seiki type		
CAT50	HPS- 53	45	0.906	1.386	1.780	3.354	0.669	-	1.031	1"-8	MAS P50T-1 type
	HPS- 54	45	0.906	1.386	1.780	3.354	0.669	0.236	1.031		MAS P50T-1 type. Coolant
	HPS- 63	60	0.906	1.378	1.772	3.248	0.669	-	1.024		MAS P50T-2 type
	HPS-B61	60	0.906	1.378	1.772	3.248	0.669	0.236	0.984		Okuma type. Coolant
	HPS-D92	45	1.140	0.700	1.000	2.300	0.820	0.461	-		ANSI / ASME B5. 50-1985
	HPS-G43	45	1.140	0.700	1.000	2.303	0.820	0.394	1.031		Mazak type. Coolant
	HPS-O19	90	0.906	1.386	1.780	3.346	0.669	-	-		Mori-Seiki 90 degree angle type
	HPS-P14	90	0.945	0.906	1.220	2.520	0.709	0.315	-		Mitsui-Seiki type. Coolant



**Pull Studs (Retention Knobs)**

**HPI - PIONEER**



**Due to the continual changes by the machine builders the list below can only be used as a guide and all dimensions must be verified prior to ordering.**

Machine Builder	BT30	BT40	CAT40	CAT50
BRIDGEPORT	HPS-17	HPS-1	HPS-D72	
BROTHER	HPS-17			
DAEWOO			HPS-72	
DOOSAN		HPS-806-1	HPS-806U-1	
ENSHU	HPS-16	HPS-1 / 2	HPS-72 / 72C	HPS-53 / 54
FADAL			HPS-D72	
FANUC	HPS-16			
HAAS			HPS-72 / 72C	HPS-53 / 54
HITACHI SEIKI	HPS-16	HPS-H28	HPS-H30	HPS-53 / 54
HOWA		HPS-1	HPS-72	
HURCO		HPS-1	HPS-D72 / D2	
JOHNFORD		HPS-1		
KIA		HPS-1 / 08	HPS-72 / O14	
KIRA	HPS-16	HPS-1 / 2	HPS-26	
KITAMURA		HPS-1	HPS-72	HPS-53 / 54
KIWA	HPS-17	HPS-1		
KURAKI		HPS-1 / 2	HPS-72	HPS-53 / 54
LEADWELL		HPS-1	HPS-72	
MAKINO		HPS-806-1	HPS-806U-1	
MATSUURA	HPS17	HPS-806-1	HPS-806U-1	HPS-63
MAZAK		HPS-G51	HPS-G53	HPS-G43
MIGHTY		HPS-1	HPS-72	
MILLTRONICS			HPS-26	
MITSUBISHI		HPS-1	HPS-72	HPS-63
MITSUI SEIKI	HPS-P10	HPS-P5	HPS-P53	HPS-P11 / P14
MIYANO	HPS-17	HPS-1	HPS-72	
MORI SEIKI		HPS-O8	HPS-O14	HPS-O19
NIIGATA		HPS-2		HPS-63
NTC		HPS-1	HPS-72	
OKK	HPS-16	HPS-1 / O8	HPS-72 / O14	HPS-53 / O19
OKUMA & HOWA		HPS-1	HPS-72	HPS-63
OKUMA	HPS-17	HPS-1 / 2 / B62-1	HPS-B64 / G60	HPS-B61 / 63B
PARPAS		HPS-1 / 2		
ROKU-ROKU	HPS-16	HPS-1 / 2	HPS-72	
SHIZUOKA		HPS-O8	HPS-72	HPS-O19
TAKISAWA		HPS-1	HPS-72	HPS-53 / 54
TOSHIBA	HPS-16	HPS-1	HPS-72	HPS-53 / 54
TOYODA		HPS-1		
YASDA		HPS-806-1	HPS-72	HPS-53 / 54
YCI		HPS-1	HPS-72	HPS-53 / 54



HPI - PIONEER

## MC - Milling Chuck Collets

MC Collets are Straight Sleeves that allow you to expand the capabilities of your Mill Chuck.

- **3µm - 0.0001" Runout**
- Interchangeable with most competitive models
- Axial Preset model available



### MC 3/4 Inch Collets

Collet OD	Cutter Shank Size	MC075
3/4	1/8	0.1250 MC075-0125
	3/16	0.1875 MC075-0187
	1/4	0.2500 MC075-0250
	5/16	0.3125 MC075-0312
	3/8	0.3750 MC075-0375
	7/16	0.4375 MC075-0437
	1/2	0.5000 MC075-0500
	9/16	0.5625 MC075-0562
	5/8	0.6250 MC075-0625

### MC 1 Inch Collets

Collet OD	Cutter Shank Size	MC100
1	1/8	0.1250 MC100-0125
	3/16	0.1875 MC100-0187
	1/4	0.2500 MC100-0250
	5/16	0.3125 MC100-0312
	3/8	0.3750 MC100-0375
	7/16	0.4375 MC100-0437
	1/2	0.5000 MC100-0500
	9/16	0.5625 MC100-0562
	5/8	0.6250 MC100-0625
	3/4	0.7500 MC100-0750
7/8	0.8750 MC100-0875	

### MC 1-1/4 Inch Collets

Collet OD	Cutter Shank Size	MC125
1-1/4	1/8	0.1250 MC125-0125
	3/16	0.1875 MC125-0187
	1/4	0.2500 MC125-0250
	5/16	0.3125 MC125-0312
	3/8	0.3750 MC125-0375
	7/16	0.4375 MC125-0437
	1/2	0.5000 MC125-0500
	9/16	0.5625 MC125-0562
	5/8	0.6250 MC125-0625
	11/16	0.6875 MC125-0687
	3/4	0.7500 MC125-0750
	13/16	0.8125 MC125-0812
	7/8	0.8750 MC125-0875
	15/16	0.9375 MC125-0937
	1	1.0000 MC125-1000

### MC 20mm Inch Collets

Collet OD	Cutter Shank Size	MC20
20mm	1/8	0.1250 MC20-0125
	3/16	0.1875 MC20-0187
	1/4	0.2500 MC20-0250
	5/16	0.3125 MC20-0312
	3/8	0.3750 MC20-0375
	7/16	0.4375 MC20-0437
	1/2	0.5000 MC20-0500
	9/16	0.5625 MC20-0562
	5/8	0.6250 MC20-0625

### MC 32mm Inch Collets

Collet OD	Cutter Shank Size	MC32
32mm	1/8	0.1250 MC32-0125
	3/16	0.1875 MC32-0187
	7/32	0.2188 MC32-0219
	1/4	0.2500 MC32-0250
	17/64	0.2656 MC32-0265
	9/32	0.2813 MC32-0281
	19/64	0.2969 MC32-0296
	5/16	0.3125 MC32-0312
	21/64	0.3281 MC32-0328
	11/32	0.3438 MC32-0343
	23/64	0.3594 MC32-0359
	3/8	0.3750 MC32-0375
	25/64	0.3906 MC32-0390
	13/32	0.4063 MC32-0406
	7/16	0.4375 MC32-0437
	1/2	0.5000 MC32-0500
	9/16	0.5625 MC32-0562
	5/8	0.6250 MC32-0625
	11/16	0.6875 MC32-0687
	3/4	0.7500 MC32-0750
	13/16	0.8125 MC32-0812
	7/8	0.8750 MC32-0875
	15/16	0.9375 MC32-0937
	1	1.0000 MC32-1000

### MC 42mm Inch Collets

Collet OD	Cutter Shank Size	MC42
42mm	3/16	0.1875 MC42-0187
	1/4	0.2500 MC42-0250
	5/16	0.3125 MC42-0312
	3/8	0.3750 MC42-0375
	7/16	0.4375 MC42-0437
	1/2	0.5000 MC42-0500
	9/16	0.5625 MC42-0562
	5/8	0.6250 MC42-0625
	3/4	0.7500 MC42-0750
	7/8	0.8750 MC42-0875
	1	1.0000 MC42-1000
	1 1/8	1.1250 MC42-1125
	1 1/4	1.2500 MC42-1250
1 1/2	1.5000 MC42-1500	

### Collet Sets

Part Number	Collet Size	Pieces	Includes
MC075-ISET	MC075	9	1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8
MC100-ISET	MC100	11	1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8
MC125-ISET	MC125	12	1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1"
MC20-ISET	MC20	9	1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8
MC32-ISET	MC32	12	1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 3/4, 7/8, 1"
MC42-ISET	MC42	13	1/8, 3/16, 1/4, 5/16, 3/8, 7/16, 1/2, 5/8, 3/4, 7/8, 1, 1-1/4, 1-1/2



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- **3µm - 0.0001" Runout**
- Interchangeable with most competitive models
- Axial Preset model available



**HPI - PIONEER**

### MC 3/4 Metric Collets

Collet OD	Cutter Shank Size		MC075
3/4	6mm	0.2362	MC075-M060
	8mm	0.3150	MC075-M080
	10mm	0.3937	MC075-M100
	12mm	0.4724	MC075-M120
	14mm	0.5512	MC075-M140
	16mm	0.6299	MC075-M160

### MC 20mm Metric Collets

Collet OD	Cutter Shank Size		MC20
20mm	4mm	0.1575	MC20-M040
	5mm	0.1969	MC20-M050
	6mm	0.2362	MC20-M060
	8mm	0.3150	MC20-M080
	10mm	0.3937	MC20-M100
	12mm	0.4724	MC20-M120
	14mm	0.5512	MC20-M140
	16mm	0.6299	MC20-M160
	18mm	0.7087	MC20-M180

### MC 1 Metric Collets

Collet OD	Cutter Shank Size		MC100
1	6mm	0.2362	MC100-M060
	8mm	0.3150	MC100-M080
	10mm	0.3937	MC100-M100
	12mm	0.4724	MC100-M120
	14mm	0.5512	MC100-M140
	16mm	0.6299	MC100-M160
	18mm	0.7087	MC100-M180
	20mm	0.7874	MC100-M200

### MC 32mm Metric Collets

Collet OD	Cutter Shank Size		MC32
32mm	4mm	0.1575	MC32-M040
	5mm	0.1969	MC32-M060
	6mm	0.2362	MC32-M070
	8mm	0.3150	MC32-M080
	10mm	0.3937	MC32-M100
	11mm	0.4331	MC32-M110
	12mm	0.4724	MC32-M120
	14mm	0.5512	MC32-M140
	16mm	0.6299	MC32-M160
	18mm	0.7087	MC32-M180
	19mm	0.7480	MC32-M190
	20mm	0.7874	MC32-M200
	21mm	0.8268	MC32-M210
	22mm	0.8661	MC32-M220
	24mm	0.9449	MC32-M240
	25mm	0.9843	MC32-M250

### MC 1-1/4 Metric Collets

Collet OD	Cutter Shank Size		MC125
1-1/4	3mm	0.1181	MC125-M030
	4mm	0.1575	MC125-M040
	5mm	0.1969	MC125-M050
	6mm	0.2362	MC125-M060
	8mm	0.3150	MC125-M080
	10mm	0.3937	MC125-M100
	12mm	0.4724	MC125-M120
	14mm	0.5512	MC125-M140
	16mm	0.6299	MC125-M160
	18mm	0.7087	MC125-M180
	20mm	0.7874	MC125-M200
	22mm	0.8661	MC125-M220
	25mm	0.9843	MC125-M250

### MC 42mm Metric Collets

Collet OD	Cutter Shank Size		MC42
42mm	5mm	0.1969	MC42-M050
	6mm	0.2362	MC42-M080
	8mm	0.3150	MC42-M090
	10mm	0.3937	MC42-M100
	12mm	0.4724	MC42-M120
	14mm	0.5512	MC42-M160
	16mm	0.6299	MC42-M190
	18mm	0.7087	MC42-M200
	20mm	0.7874	MC42-M220
	22mm	0.8661	MC42-M250
	25mm	0.9843	MC42-M300
	32mm	1.2598	MC42-M320

### Collet Sets

Part Number	Collet Size	Pieces	Includes
MC075-MSET	MC075	6	6, 8, 10, 12, 14, 16
MC100-MSET	MC100	8	6, 8, 10, 12, 14, 16, 18, 20
MC125-MSET	MC125	10	6, 8, 10, 12, 14, 16, 18, 20, 22, 25
MC20-MSET	MC20	7	6, 8, 10, 12, 14, 16, 18
MC32-MSET	MC32	10	6, 8, 10, 12, 14, 16, 18, 20, 22, 25
MC42-MSET	MC42	11	6, 8, 10, 12, 14, 16, 18, 20, 22, 25, 32



**NC - Milling Chuck Collets  
w/ Axial Adjustment**

NC Collets are Straight Sleeves that allow you to expand the capabilities of your Mill Chuck.

Each collet comes with a preset screw to set tool lengths in the collet.

- **3µm - 0.0001” Runout**
- Interchangeable with most competitive models
- Specials Available

**NC 3/4 Inch Collets**

Collet OD	Cutter Shank Size		NC075
3/4	1/8	0.1250	NC075-0125
	3/16	0.1875	NC075-0187
	1/4	0.2500	NC075-0250
	5/16	0.3125	NC075-0312
	3/8	0.3750	NC075-0375
	7/16	0.4375	NC075-0437
	1/2	0.5000	NC075-0500
	9/16	0.5625	NC075-0562
	5/8	0.6250	NC075-0625

**NC 1-1/4 Inch Collets**

Collet OD	Cutter Shank Size		NC125
1-1/4	1/8	0.1250	NC125-0125
	3/16	0.1875	NC125-0187
	1/4	0.2500	NC125-0250
	5/16	0.3125	NC125-0312
	3/8	0.3750	NC125-0375
	7/16	0.4375	NC125-0437
	1/2	0.5000	NC125-0500
	9/16	0.5625	NC125-0562
	5/8	0.6250	NC125-0625
	3/4	0.7500	NC125-0750
	7/8	0.8750	NC125-0875
	1	1.0000	NC125-1000



**MX Collets**

- **2.5µm - 0.0001” Runout @ 4X Diameter**
- Seals up to 1,500 PSI Coolant
- Jet Coolant Slots available upon request. Please add “C” after the part number



**MX06 Inch Collets**

Tool Shank	Tool Max	MX 06
1/32	0.0313	MX06-0031
1/16	0.0625	MX06-0062
3/32	0.0938	MX06-0093
1/8	0.1250	MX06-0125
5/32	0.1563	MX06-0156
3/16	0.1875	MX06-0187
7/32	0.2188	MX06-0218
1/4	0.2500	MX06-0250

**MX06 Metric Collets**

Tool Shank	Tool Max	MX 06
1.0	0.0394	MX06-M010
1.5	0.0591	MX06-M015
2.0	0.0787	MX06-M020
2.5	0.0984	MX06-M025
3.0	0.1181	MX06-M030
3.5	0.1378	MX06-M035
4.0	0.1575	MX06-M040
4.5	0.1772	MX06-M045
5.0	0.1969	MX06-M050
5.5	0.2165	MX06-M055
6.0	0.2362	MX06-M060

**MX08 Inch Collets**

Tool Shank	Tool Max	MX 08
1/8	0.1250	MX08-0125
5/32	0.1563	MX08-0156
3/16	0.1875	MX08-0187
1/4	0.2500	MX08-0250
5/16	0.3125	MX08-0312
3/8	0.3750	MX08-0375

**MX08 Metric Collets**

Tool Shank	Tool Max	MX 08
3	0.1181	MX08-M030
4	0.1575	MX08-M040
5	0.1969	MX08-M050
6	0.2362	MX08-M060
7	0.2756	MX08-M070
8	0.3150	MX08-M080
9	0.3543	MX08-M090
10	0.3937	MX08-M100

**MX12 Inch Collets**

Tool Shank	Tool Max	MX 12
3/16	0.1875	MX12-0187
1/4	0.2500	MX12-0250
5/16	0.3125	MX12-0312
3/8	0.3750	MX12-0375
7/16	0.4375	MX12-0437
1/2	0.5000	MX12-0500

**MX12 Metric Collets**

Tool Shank	Tool Max	MX 12
4	0.1575	MX12-M040
5	0.1969	MX12-M050
6	0.2362	MX12-M060
8	0.3150	MX12-M080
10	0.3937	MX12-M100
12	0.4724	MX12-M120

**Collet Sets**

Part Number	Collet Size	Pieces	Range	Increments
MX06-MSET	SX06	11	1.0mm - 6.0mm	0.5mm
MX06-ISET	SX06	8	1/32 - 1/4”	1/32
MX08-MSET	SX08	8	3.0mm - 6.0mm	1.0mm
MX08-ISET	SX08	5	1/8 - 3/8”	1/16
MX12-MSET	SX12	6	4.0mm - 12.0mm	1.0mm
MX12-ISET	SX12	6	3/16 - 1/2”	1/16



## ER Precision Inch Collets

- Standard .0004" T.I.R.
- Ultra Precision .0002" T.I.R.
- Collapse Range: 1mm (.039)

**Note:**

For Ultra Precision place "P" at the end of the part number.

Example: ER32-0375P



### Collet Sets

Part Number	Collet Size	Pieces	Includes
ER11-ISET	ER11	7	1/16 - 1/4" by 1/32"
ER16-ISET	ER16	10	3/32 - 3/8" by 1/32"
ER20-ISET	ER20	12	5/32 - 1/2" by 1/32"
ER25-ISET	ER25	16	5/32 - 5/8" by 1/32"
ER32-ISET	ER32	18	7/32 - 3/4" by 1/32"
ER40-ISET	ER40	13	1/8 - 1" by 1/16"

### ER11 Inch Collets

Drill Shank	Tool Max	Tool Min	ER 11
1/16	0.0625	0.0425	ER11-0062
3/32	0.0938	0.0544	ER11-0093
1/8	0.1250	0.0856	ER11-0125
5/32	0.1563	0.1169	ER11-0156
3/16	0.1875	0.1481	ER11-0187
7/32	0.2188	0.1794	ER11-0218
1/4	0.2500	0.2106	ER11-0250

### ER16 Inch Collets

Drill Shank	Tool Max	Tool Min	ER 16
1/16	0.0625	0.0231	ER16-0062
3/32	0.0938	0.0544	ER16-0093
1/8	0.1250	0.0856	ER16-0125
5/32	0.1563	0.1169	ER16-0156
3/16	0.1875	0.1481	ER16-0187
7/32	0.2188	0.1794	ER16-0218
1/4	0.2500	0.2106	ER16-0250
9/32	0.2813	0.2419	ER16-0281
5/16	0.3125	0.2731	ER16-0312
11/32	0.3438	0.3044	ER16-0344
3/8	0.3750	0.3356	ER16-0375
13/32	0.4063	0.3669	ER16-0406

### ER20 Inch Collets

Drill Shank	Tool Max	Tool Min	ER 20
3/32	0.0938	0.0544	ER20-0093
1/8	0.1250	0.0856	ER20-0125
5/32	0.1563	0.1169	ER20-0156
3/16	0.1875	0.1481	ER20-0187
7/32	0.2188	0.1794	ER20-0218
1/4	0.2500	0.2106	ER20-0250
9/32	0.2813	0.2419	ER20-0281
5/16	0.3125	0.2731	ER20-0312
11/32	0.3438	0.3044	ER20-0344
3/8	0.3750	0.3356	ER20-0375
13/32	0.4063	0.3669	ER20-0406
7/16	0.4375	0.3981	ER20-0438
15/32	0.4688	0.4294	ER20-0469
1/2	0.5000	0.4606	ER20-0500





### ER Precision Inch Collets

- Standard .0004" T.I.R.
- Ultra Precision .0002" T.I.R.
- Collapse Range: 1mm (.039)

**Note:**

For Ultra Precision place "P" at the end of the part number.  
 Example: ER32-0375P



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### ER25 Inch Collets

Drill Shank	Tool Max	Tool Min	ER 25
3/32	0.0938	0.0544	ER25-0093
1/8	0.1250	0.0856	ER25-0125
5/32	0.1563	0.1169	ER25-0156
3/16	0.1875	0.1481	ER25-0187
7/32	0.2188	0.1794	ER25-0218
1/4	0.2500	0.2106	ER25-0250
9/32	0.2813	0.2419	ER25-0281
5/16	0.3125	0.2731	ER25-0312
11/32	0.3438	0.3044	ER25-0344
3/8	0.3750	0.3356	ER25-0375
13/32	0.4063	0.3669	ER25-0406
7/16	0.4375	0.3981	ER25-0438
15/32	0.4688	0.4294	ER25-0469
1/2	0.5000	0.4606	ER25-0500
17/32	0.5313	0.4919	ER25-0531
9/16	0.5625	0.5231	ER25-0563
19/32	0.5938	0.5544	ER25-0594
5/8	0.6250	0.5856	ER25-0625

### ER40 Inch Collets

Drill Shank	Tool Max	Tool Min	ER 40
1/8	0.1250	0.0856	ER40-0125
5/32	0.1563	0.1169	ER40-0156
3/16	0.1875	0.1481	ER40-0187
7/32	0.2188	0.1794	ER40-0218
1/4	0.2500	0.2106	ER40-0250
9/32	0.2813	0.2419	ER40-0281
5/16	0.3125	0.2731	ER40-0312
11/32	0.3438	0.3044	ER40-0344
3/8	0.3750	0.3356	ER40-0375
13/32	0.4063	0.3669	ER40-0406
7/16	0.4375	0.3981	ER40-0438
15/32	0.4688	0.4294	ER40-0469
1/2	0.5000	0.4606	ER40-0500
17/32	0.5313	0.4919	ER40-0531
9/16	0.5625	0.5231	ER40-0563
19/32	0.5938	0.5544	ER40-0594
5/8	0.6250	0.5856	ER40-0625
21/32	0.6563	0.6169	ER40-0656
11/16	0.6875	0.6481	ER40-0688
23/32	0.7188	0.6794	ER40-0719
3/4	0.7500	0.7106	ER40-0750
25/32	0.7813	0.7419	ER40-0781
13/16	0.8125	0.7731	ER40-0813
27/32	0.8438	0.8044	ER40-0844
7/8	0.8750	0.8356	ER40-0875
29/32	0.9063	0.8669	ER40-0906
15/16	0.9375	0.8981	ER40-0938
31/32	0.9688	0.9294	ER40-0939
1	1.0000	0.9606	ER40-1000
1 1/32	1.0313	0.9919	ER40-1031
1 1/16	1.0625	1.0231	ER40-1063
1 3/32	1.0938	1.0544	ER40-1094
1 1/8	1.1250	1.0856	ER40-1125
1 5/32	1.1563	1.1169	ER40-1156

### ER32 Inch Collets

Drill Shank	Tool Max	Tool Min	ER 32
3/32	0.0938	0.0544	ER32-0093
1/8	0.1250	0.0856	ER32-0125
5/32	0.1563	0.1169	ER32-0156
3/16	0.1875	0.1481	ER32-0187
7/32	0.2188	0.1794	ER32-0218
1/4	0.2500	0.2106	ER32-0250
9/32	0.2813	0.2419	ER32-0281
5/16	0.3125	0.2731	ER32-0312
11/32	0.3438	0.3044	ER32-0344
3/8	0.3750	0.3356	ER32-0375
13/32	0.4063	0.3669	ER32-0406
7/16	0.4375	0.3981	ER32-0438
15/32	0.4688	0.4294	ER32-0469
1/2	0.5000	0.4606	ER32-0500
17/32	0.5313	0.4919	ER32-0531
9/16	0.5625	0.5231	ER32-0563
19/32	0.5938	0.5544	ER32-0594
5/8	0.6250	0.5856	ER32-0625
21/32	0.6563	0.6169	ER32-0656
11/16	0.6875	0.6481	ER32-0688
23/32	0.7188	0.6794	ER32-0719
3/4	0.7500	0.7106	ER32-0750



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**ER Precision Metric Collets**

- Standard .0004" T.I.R.
- Ultra Precision .0002" T.I.R.
- Collapse Range: .039



**Note:**

For Ultra Precision place "P" at the end of the part number.  
Example: ER32-M100P

**ER08 Metric Collets**

Tool Max	Tool Min	Tool Max"	Tool Min"	ER 8
1.0	0.5	0.0394	0.0197	ER08-M010
1.5	1.0	0.0591	0.0394	ER08-M015
2.0	1.5	0.0787	0.0591	ER08-M020
2.5	2.0	0.0984	0.0787	ER08-M025
3.0	2.5	0.1181	0.0984	ER08-M030
3.5	3.0	0.1378	0.1181	ER08-M035
4.0	3.5	0.1575	0.1378	ER08-M040
4.5	4.0	0.1772	0.1575	ER08-M045
5.0	4.5	0.1969	0.1772	ER08-M050

**Collet Sets**

Part Number	Collet Size	Pieces	Includes
ER08-MSET	ER8	9	1 - 5mm by 0.5mm
ER11-MSET	ER11	13	1 - 7mm by 0.5mm
ER16-MSET	ER16	10	1 - 10mm by 1.0mm
ER20-MSET	ER20	12	2 - 13mm by 1.0mm
ER25-MSET	ER25	15	2 - 16mm by 1.0mm
ER32-MSET	ER32	18	3 - 20mm by 1.0mm
ER40-MSET	ER40	23	4 - 26mm by 1.0mm
ER50-MSET	ER50	17	6 - 34mm by 2.0mm

**ER11 Metric Collets**

Tool Max	Tool Min	Tool Max"	Tool Min"	ER 11
1.0	0.5	0.0394	0.0197	ER11-M010
1.5	1.0	0.0591	0.0394	ER11-M015
2.0	1.5	0.0787	0.0591	ER11-M020
2.5	2.0	0.0984	0.0787	ER11-M025
3.0	2.5	0.1181	0.0984	ER11-M030
3.5	3.0	0.1378	0.1181	ER11-M035
4.0	3.5	0.1575	0.1378	ER11-M040
4.5	4.0	0.1772	0.1575	ER11-M045
5.0	4.5	0.1969	0.1772	ER11-M050
5.5	5.0	0.2165	0.1969	ER11-M055
6.0	5.5	0.2362	0.2165	ER11-M060
6.5	6.0	0.2559	0.2362	ER11-M065
7.0	6.5	0.2756	0.2559	ER11-M070

**ER16 Metric Collets**

Tool Max	Tool Min	Tool Max"	Tool Min"	ER 16
1.0	0.5	0.0394	0.0197	ER16-M010
1.5	1.0	0.0591	0.0394	ER16-M015
2.0	1.0	0.0787	0.0394	ER16-M020
2.5	2.0	0.0984	0.0787	ER16-M025
3.0	2.0	0.1181	0.0787	ER16-M030
3.5	3.0	0.1378	0.1181	ER16-M035
4.0	3.0	0.1575	0.1181	ER16-M040
5.0	4.0	0.1969	0.1575	ER16-M050
6.0	5.0	0.2362	0.1969	ER16-M060
7.0	6.0	0.2756	0.2362	ER16-M070
8.0	7.0	0.3150	0.2756	ER16-M080
9.0	8.0	0.3543	0.3150	ER16-M090
10.0	9.0	0.3937	0.3543	ER16-M100



### ER Precision Metric Collets

- Standard .0004" T.I.R.
- Ultra Precision .0002" T.I.R.
- Collapse Range: .039

**Note:**  
 For Ultra Precision place "P" at the end of the part number.  
 Example: ER32-M100P

### ER20 Metric Collets

Tool Max	Tool Min	Tool Max"	Tool Min"	ER 20
1.0	0.5	0.0394	0.0197	ER20-M010
1.5	1.0	0.0591	0.0394	ER20-M015
2.0	1.0	0.0787	0.0394	ER20-M020
2.5	1.5	0.0984	0.0591	ER20-M025
3.0	2.0	0.1181	0.0787	ER20-M030
3.5	2.5	0.1378	0.0984	ER20-M035
4.0	3.0	0.1575	0.1181	ER20-M040
5.0	4.0	0.1969	0.1575	ER20-M050
6.0	5.0	0.2362	0.1969	ER20-M060
7.0	6.0	0.2756	0.2362	ER20-M070
8.0	7.0	0.3150	0.2756	ER20-M080
9.0	8.0	0.3543	0.3150	ER20-M090
10.0	9.0	0.3937	0.3543	ER20-M100
11.0	10.0	0.4331	0.3937	ER20-M110
12.0	11.0	0.4724	0.4331	ER20-M120
13.0	12.0	0.5118	0.4724	ER20-M130

### ER32 Metric Collets

Tool Max	Tool Min	Tool Max"	Tool Min"	ER 25
1.5	0.5	0.0591	0.0197	ER25-M015
2.0	1.0	0.0787	0.0394	ER25-M020
2.5	1.5	0.0984	0.0591	ER25-M025
3.0	2.0	0.1181	0.0787	ER25-M030
3.5	2.5	0.1378	0.0984	ER25-M035
4.0	3.0	0.1575	0.1181	ER25-M040
5.0	4.0	0.1969	0.1575	ER25-M050
6.0	5.0	0.2362	0.1969	ER25-M060
7.0	6.0	0.2756	0.2362	ER25-M070
8.0	7.0	0.3150	0.2756	ER25-M080
9.0	8.0	0.3543	0.3150	ER25-M090
10.0	9.0	0.3937	0.3543	ER25-M100
11.0	10.0	0.4331	0.3937	ER25-M110
12.0	11.0	0.4724	0.4331	ER25-M120
13.0	12.0	0.5118	0.4724	ER25-M130
14.0	13.0	0.5512	0.5118	ER25-M140
15.0	14.0	0.5906	0.5512	ER25-M150
16.0	15.0	0.6299	0.5906	ER25-M160

### ER25 Metric Collets

Tool Max	Tool Min	Tool Max"	Tool Min"	ER 32
2.0	1.5	0.0787	0.0591	ER32-M020
2.5	2.0	0.0984	0.0787	ER32-M025
3.0	2.0	0.1181	0.0787	ER32-M030
3.5	3.0	0.1378	0.1181	ER32-M035
4.0	3.0	0.1575	0.1181	ER32-M040
5.0	4.0	0.1969	0.1575	ER32-M050
6.0	5.0	0.2362	0.1969	ER32-M060
7.0	6.0	0.2756	0.2362	ER32-M070
8.0	7.0	0.3150	0.2756	ER32-M080
9.0	8.0	0.3543	0.3150	ER32-M090
10.0	9.0	0.3937	0.3543	ER32-M100
11.0	10.0	0.4331	0.3937	ER32-M110
12.0	11.0	0.4724	0.4331	ER32-M120
13.0	12.0	0.5118	0.4724	ER32-M130
14.0	13.0	0.5512	0.5118	ER32-M140
15.0	14.0	0.5906	0.5512	ER32-M150
16.0	15.0	0.6299	0.5906	ER32-M160
17.0	16.0	0.6693	0.6299	ER32-M170
18.0	17.0	0.7087	0.6693	ER32-M180
19.0	18.0	0.7480	0.7087	ER32-M190
20.0	19.0	0.7874	0.7480	ER32-M200

### ER40 Metric Collets

Tool Max	Tool Min	Tool Max"	Tool Min"	ER 40
3.0	2.5	0.1181	0.0984	ER40-M030
3.5	3.0	0.1378	0.1181	ER40-M035
4.0	3.0	0.1575	0.1181	ER40-M040
5.0	4.0	0.1969	0.1575	ER40-M050
6.0	5.0	0.2362	0.1969	ER40-M060
7.0	6.0	0.2756	0.2362	ER40-M070
8.0	7.0	0.3150	0.2756	ER40-M080
9.0	8.0	0.3543	0.3150	ER40-M090
10.0	9.0	0.3937	0.3543	ER40-M100
11.0	10.0	0.4331	0.3937	ER40-M110
12.0	11.0	0.4724	0.4331	ER40-M120
13.0	12.0	0.5118	0.4724	ER40-M130
14.0	13.0	0.5512	0.5118	ER40-M140
15.0	14.0	0.5906	0.5512	ER40-M150
16.0	15.0	0.6299	0.5906	ER40-M160
17.0	16.0	0.6693	0.6299	ER40-M170
18.0	17.0	0.7087	0.6693	ER40-M180
19.0	18.0	0.7480	0.7087	ER40-M190
20.0	19.0	0.7874	0.7480	ER40-M200
21.0	20.0	0.8268	0.7874	ER40-M210
22.0	21.0	0.8661	0.8268	ER40-M220
23.0	22.0	0.9055	0.8661	ER40-M230
24.0	23.0	0.9449	0.9055	ER40-M240
25.0	24.0	0.9843	0.9449	ER40-M250
26.0	25.0	1.0236	0.9843	ER40-M260
27.0	26.0	1.0630	1.0236	ER40-M270
28.0	27.0	1.1024	1.0630	ER40-M280
29.0	28.0	1.1417	1.1024	ER40-M290
30.0	29.0	1.1811	1.1417	ER40-M300



**SSER Steel Sealed - Inch ER Coolant Collets**

- High Pressure Coolant - 1,500 PSI
- Standard .0004" T.I.R.
- Ultra Precision .0002" T.I.R.
- Collapse Range (see chart)



**Note:**

For Ultra Precision place "P" at the end of the part number.  
Example: SSER32-0375P

**SSER16 Inch Collets**

Cutter Shank	Tool Max	Tool Min	SSER 16
3/32	0.0938	0.0908	SSER16-0093
1/8	0.1250	0.1200	SSER16-0125
5/32	0.1563	0.1463	SSER16-0156
3/16	0.1875	0.1775	SSER16-0187
7/32	0.2188	0.2038	SSER16-0218
1/4	0.2500	0.2350	SSER16-0250
9/32	0.2813	0.2663	SSER16-0281
5/16	0.3125	0.2975	SSER16-0312
11/32	0.3438	0.3288	SSER16-0344
3/8	0.3750	0.3550	SSER16-0375
13/32	0.4063	0.3863	SSER16-0406

**Collet Sets - Inch and Metric**

Part Number	Collet Size	Pieces	Includes
SSER16-MSET	ER16	8	3 - 10mm by 1.0mm
SSER20-MSET	ER20	11	3 - 13mm by 1.0mm
SSER25-MSET	ER25	14	3 - 16mm by 1.0mm
SSER32-MSET	ER32	18	3 - 20mm by 1.0mm
SSER40-MSET	ER40	23	6 - 26mm by 1.0mm
SSER16-ISET	ER16	10	3/32 - 3/8" by 1/32"
SSER20-ISET	ER20	12	5/32 - 1/2" by 1/32"
SSER25-ISET	ER25	16	5/32 - 5/8" by 1/32"
SSER32-ISET	ER32	18	7/32 - 3/4" by 1/32"
SSER40-ISET	ER40	13	1/4 - 1" by 1/16"

**SSER20 Inch Collets**

Cutter Shank	Tool Max	Tool Min	SSER 20
5/32	0.1563	0.1463	SSER20-0156
3/16	0.1875	0.1725	SSER20-0187
7/32	0.2188	0.2038	SSER20-0218
1/4	0.2500	0.2350	SSER20-0250
9/32	0.2813	0.2663	SSER20-0281
5/16	0.3125	0.2925	SSER20-0312
11/32	0.3438	0.3238	SSER20-0344
3/8	0.3750	0.3500	SSER20-0375
13/32	0.4063	0.3813	SSER20-0406
7/16	0.4375	0.4125	SSER20-0438
15/32	0.4688	0.4438	SSER20-0469
1/2	0.5000	0.4606	SSER20-0500

**SSER25 Inch Collets**

Cutter Shank	Tool Max	Tool Min	SSER 25
5/32	0.1563	0.1523	SSER25-0156
3/16	0.1875	0.1835	SSER25-0187
7/32	0.2188	0.2148	SSER25-0218
1/4	0.2500	0.2450	SSER25-0250
9/32	0.2813	0.2763	SSER25-0281
5/16	0.3125	0.3025	SSER25-0312
11/32	0.3438	0.3338	SSER25-0344
3/8	0.3750	0.3650	SSER25-0375
13/32	0.4063	0.3913	SSER25-0406
7/16	0.4375	0.4225	SSER25-0438
15/32	0.4688	0.4538	SSER25-0469
1/2	0.5000	0.4800	SSER25-0500
17/32	0.5313	0.5113	SSER25-0531
9/16	0.5625	0.5425	SSER25-0563
19/32	0.5938	0.5688	SSER25-0594
5/8	0.6250	0.6000	SSER25-0625



### SSER Steel Sealed - Inch ER Coolant Collets

HPI - PIONEER



- High Pressure Coolant - 1,500 PSI
- Standard .0004" T.I.R.
- Ultra Precision .0002" T.I.R.
- Collapse Range (see chart)

**Note:**

For Ultra Precision place "P" at the end of the part number.

Example: SSER32-0375P

#### SSER32 Inch Collets

Cutter Shank	Tool Max	Tool Min	SSER 32
5/32	0.1563	0.1533	SSER32-0156
3/16	0.1875	0.1825	SSER32-0187
7/32	0.2188	0.2138	SSER32-0219
1/4	0.2500	0.2400	SSER32-0250
9/32	0.2813	0.2713	SSER32-0281
5/16	0.3125	0.3025	SSER32-0312
11/32	0.3438	0.3338	SSER32-0344
3/8	0.3750	0.3650	SSER32-0375
13/32	0.4063	0.3963	SSER32-0406
7/16	0.4375	0.4275	SSER32-0438
15/32	0.4688	0.4588	SSER32-0469
1/2	0.5000	0.4900	SSER32-0500
17/32	0.5313	0.5163	SSER32-0531
9/16	0.5625	0.5475	SSER32-0563
19/32	0.5938	0.5788	SSER32-0594
5/8	0.6250	0.6100	SSER32-0625
21/32	0.6563	0.6413	SSER32-0656
11/16	0.6875	0.6725	SSER32-0688
23/32	0.7188	0.7038	SSER32-0719
3/4	0.7500	0.7350	SSER32-0750

#### SSER40 Inch Collets

Cutter Shank	Tool Max	Tool Min	SSER 40
5/32	0.1563	0.1533	SSER40-0156
3/16	0.1875	0.1845	SSER40-0187
7/32	0.2188	0.2158	SSER40-0218
1/4	0.2500	0.2470	SSER40-0250
9/32	0.2813	0.2763	SSER40-0281
5/16	0.3125	0.3075	SSER40-0312
11/32	0.3438	0.3388	SSER40-0344
3/8	0.3750	0.3700	SSER40-0375
13/32	0.4063	0.4013	SSER40-0406
7/16	0.4375	0.4325	SSER40-0438
15/32	0.4688	0.4638	SSER40-0469
1/2	0.5000	0.4900	SSER40-0500
17/32	0.5313	0.5213	SSER40-0531
9/16	0.5625	0.5525	SSER40-0563
19/32	0.5938	0.5838	SSER40-0594
5/8	0.6250	0.6150	SSER40-0625
21/32	0.6563	0.6463	SSER40-0656
11/16	0.6875	0.6725	SSER40-0688
23/32	0.7188	0.7038	SSER40-0719
3/4	0.7500	0.7350	SSER40-0750
25/32	0.7813	0.7663	SSER40-0781
13/16	0.8125	0.7975	SSER40-0812
27/32	0.8438	0.8288	SSER40-0844
7/8	0.8750	0.8600	SSER40-0875
29/32	0.9063	0.8913	SSER40-0906
15/16	0.9375	0.9225	SSER40-0937
31/32	0.9688	0.9538	SSER40-0969
1	1.0000	0.9800	SSER40-1000
1 1/32	1.0313	1.0113	SSER40-1031
1 1/16	1.0625	1.0425	SSER40-1062
1 3/32	1.0938	1.0738	SSER40-1094
1 1/8	1.1250	1.1050	SSER40-1125
1 5/32	1.1563	1.1263	SSER40-1156



**SSER Steel Sealed - Metric ER Coolant Collets**

- High Pressure Coolant - 1,500 PSI
- Standard .0004" T.I.R.
- Ultra Precision .0002" T.I.R.
- Collapse Range (see chart)

**Note:**

For Ultra Precision place "P" at the end of the part number.  
Example: SSER32-M010P

**SSER16 Metric Collets**

Tool Max	Tool Min	Tool Max"	Tool Min"	ER 16
3.0	2.9	0.1181	0.1151	SSER16-M030
4.0	3.7	0.1575	0.1475	SSER16-M040
5.0	4.7	0.1969	0.1869	SSER16-M050
6.0	5.6	0.2362	0.2212	SSER16-M060
7.0	6.6	0.2756	0.2606	SSER16-M070
8.0	7.6	0.3150	0.3000	SSER16-M080
9.0	8.6	0.3543	0.3393	SSER16-M090
10.0	9.5	0.3937	0.3737	SSER16-M100

**SSER20 Metric Collets**

Tool Max	Tool Min	Tool Max"	Tool Min"	ER 20
3.0	2.9	0.1181	0.1131	SSER20-M030
4.0	3.7	0.1575	0.1475	SSER20-M040
5.0	4.6	0.1969	0.1819	SSER20-M050
6.0	5.6	0.2362	0.2212	SSER20-M060
7.0	6.6	0.2756	0.2606	SSER20-M070
8.0	7.5	0.3150	0.2950	SSER20-M080
9.0	8.5	0.3543	0.3343	SSER20-M090
10.0	9.4	0.3937	0.3687	SSER20-M100
11.0	10.4	0.4331	0.4081	SSER20-M110
12.0	11.4	0.4724	0.4474	SSER20-M120
13.0	12.0	0.5118	0.4724	SSER20-M130

**SSER25 Metric Collets**

Tool Max	Tool Min	Tool Max"	Tool Min"	ER 25
3.0	2.9	0.1181	0.1141	SSER25-M030
4.0	3.9	0.1575	0.1535	SSER25-M040
5.0	4.9	0.1969	0.1929	SSER25-M050
6.0	5.9	0.2362	0.2312	SSER25-M060
7.0	6.9	0.2756	0.2706	SSER25-M070
8.0	7.7	0.3150	0.3050	SSER25-M080
9.0	8.7	0.3543	0.3443	SSER25-M090
10.0	9.7	0.3937	0.3837	SSER25-M100
11.0	10.6	0.4331	0.4181	SSER25-M110
12.0	11.6	0.4724	0.4574	SSER25-M120
13.0	12.5	0.5118	0.4918	SSER25-M130
14.0	13.5	0.5512	0.5312	SSER25-M140
15.0	14.4	0.5906	0.5656	SSER25-M150
16.0	15.4	0.6299	0.6049	SSER25-M160

**SSER32 Metric Collets**

Tool Max	Tool Min	Tool Max"	Tool Min"	ER 32
3.0	2.9	0.1181	0.1151	SSER32-M030
4.0	3.9	0.1575	0.1525	SSER32-M040
5.0	4.9	0.1969	0.1919	SSER32-M050
6.0	5.7	0.2362	0.2262	SSER32-M060
7.0	6.7	0.2756	0.2656	SSER32-M070
8.0	7.7	0.3150	0.3050	SSER32-M080
9.0	8.7	0.3543	0.3443	SSER32-M090
10.0	9.7	0.3937	0.3837	SSER32-M100
11.0	10.7	0.4331	0.4231	SSER32-M110
12.0	11.7	0.4724	0.4624	SSER32-M120
13.0	12.6	0.5118	0.4968	SSER32-M130
14.0	13.6	0.5512	0.5362	SSER32-M140
15.0	14.6	0.5906	0.5756	SSER32-M150
16.0	15.6	0.6299	0.6149	SSER32-M160
17.0	16.6	0.6693	0.6543	SSER32-M170
18.0	17.6	0.7087	0.6937	SSER32-M180
19.0	18.6	0.7480	0.7330	SSER32-M190
20.0	19.6	0.7874	0.7724	SSER32-M200

**SSER40 Metric Collets**

Tool Max	Tool Min	Tool Max"	Tool Min"	ER 40
6.0	5.9	0.2362	0.2312	SSER40-M060
7.0	6.9	0.2756	0.2706	SSER40-M070
8.0	7.9	0.3150	0.3100	SSER40-M080
9.0	8.9	0.3543	0.3493	SSER40-M090
10.0	9.9	0.3937	0.3887	SSER40-M100
11.0	10.9	0.4331	0.4281	SSER40-M110
12.0	11.7	0.4724	0.4624	SSER40-M120
13.0	12.7	0.5118	0.5018	SSER40-M130
14.0	13.7	0.5512	0.5412	SSER40-M140
15.0	14.7	0.5906	0.5806	SSER40-M150
16.0	15.7	0.6299	0.6199	SSER40-M160
17.0	16.7	0.6693	0.6593	SSER40-M170
18.0	17.7	0.7087	0.6987	SSER40-M180
19.0	18.6	0.7480	0.7330	SSER40-M190
20.0	19.6	0.7874	0.7724	SSER40-M200
21.0	20.6	0.8268	0.8118	SSER40-M210
22.0	21.6	0.8661	0.8511	SSER40-M220
23.0	22.6	0.9055	0.8905	SSER40-M230
24.0	23.6	0.9449	0.9299	SSER40-M240
25.0	24.5	0.9843	0.9643	SSER40-M250
26.0	25.5	1.0236	1.0036	SSER40-M260
27.0	26.5	1.0630	1.0430	SSER40-M270
28.0	27.5	1.1024	1.0824	SSER40-M280
29.0	28.5	1.1417	1.1217	SSER40-M290
30.0	29.2	1.1811	1.1511	SSER40-M300





**ER Rigid Tap Collets  
Standard and Steel Sealed**

**HPI - PIONEER**



Special design locks tap flats into the collet slots preventing the tap from spinning inside the collet.

- ANSI Shank and Square Standard
- Steel Seal rated for 1,500 PSI
- Metric versions available upon request. Please provide shank and square of the tap prior to ordering.

**TER16 Inch Collets**

Shank	Square	Tap Size	ER 16	Steel Sealed ER16
0.141	0.110	#6	TER16-141	STER16-141
0.168	0.131	#8	TER16-168	STER16-168
0.194	0.152	#10	TER16-194	STER16-194
0.220	0.165	#12	TER16-220	STER16-220
0.255	0.191	1/4"	TER16-255	STER16-255

**TER20 Inch Collets**

Shank	Square	Tap Size	ER20	Steel Sealed ER16
0.141	0.110	#6	TER20-141	STER20-141
0.168	0.131	#8	TER20-168	STER20-168
0.194	0.152	#10	TER20-194	STER20-194
0.220	0.165	#12	TER20-220	STER20-220
0.255	0.191	1/4"	TER20-255	STER20-255
0.318	0.238	5/16"	TER20-318	STER20-318
0.323	0.242	7/16"	TER20-323	STER20-323
0.367	0.275	1/2"	TER20-367	STER20-367
0.381	0.286	3/8"	TER20-381	STER20-381

**TER25 Inch Collets**

Shank	Square	Tap Size	ER 25	Steel Sealed ER 25
0.141	0.110	#6	TER25-141	STER25-141
0.168	0.131	#8	TER25-168	STER25-168
0.194	0.152	#10	TER25-194	STER25-194
0.220	0.165	#12	TER25-220	STER25-220
0.255	0.191	1/4"	TER25-255	STER25-255
0.318	0.238	5/16"	TER25-318	STER25-318
0.323	0.242	7/16"	TER25-323	STER25-323
0.367	0.275	1/2"	TER25-367	STER25-367
0.381	0.286	3/8"	TER25-381	STER25-381
0.429	0.322	9/16"	TER25-429	STER25-429
0.437	0.328	1/8" NPT	TER25-437	STER25-437
0.480	0.360	5/8"	TER25-480	STER25-480

**TER32 Inch Collets**

Shank	Square	Tap Size	ER 32	Steel Sealed ER 32
0.141	0.110	#6	TER32-141	STER32-141
0.168	0.131	#8	TER32-168	STER32-168
0.194	0.152	#10	TER32-194	STER32-194
0.220	0.165	#12	TER32-220	STER32-220
0.255	0.191	1/4"	TER32-255	STER32-255
0.318	0.238	5/16"	TER32-318	STER32-318
0.323	0.242	7/16"	TER32-323	STER32-323
0.367	0.275	1/2"	TER32-367	STER32-367
0.381	0.286	3/8"	TER32-381	STER32-381
0.429	0.322	9/16"	TER32-429	STER32-429
0.437	0.328	1/8" NPT	TER32-437	STER32-437
0.480	0.360	5/8"	TER32-480	STER32-480
0.542	0.406	11/16"	TER32-542	STER32-542
0.562	0.421	1/4" NPT	TER32-562	STER32-562
0.590	0.442	3/4"	TER32-590	STER32-590
0.652	0.489	13/16"	TER32-652	STER32-652

**TER40 Inch Collets**

Shank	Square	Tap Size	ER 40	Steel Sealed ER 40
0.141	0.110	#6	TER40-141	STER40-141
0.168	0.131	#8	TER40-168	STER40-168
0.194	0.152	#10	TER40-194	STER40-194
0.220	0.165	#12	TER40-220	STER40-220
0.255	0.191	1/4"	TER40-255	STER40-255
0.318	0.238	5/16"	TER40-318	STER40-318
0.323	0.242	7/16"	TER40-323	STER40-323
0.367	0.275	1/2"	TER40-367	STER40-367
0.381	0.286	3/8"	TER40-381	STER40-381
0.429	0.322	9/16"	TER40-429	STER40-429
0.437	0.328	1/8" NPT	TER40-437	STER40-437
0.480	0.360	5/8"	TER40-480	STER40-480
0.542	0.406	11/16"	TER40-542	STER40-542
0.562	0.421	1/4" NPT	TER40-562	STER40-562
0.590	0.442	3/4"	TER40-590	STER40-590
0.652	0.489	13/16"	TER40-652	STER40-652
0.687	0.515	1/2" NPT	TER40-687	STER40-687
0.697	0.523	7/8"	TER40-697	STER40-697
0.700	0.531	3/8" NPT	TER40-700	STER40-700
0.760	0.570	15/16"	TER40-760	STER40-760
0.800	0.600	1"	TER40-800	STER40-800





**SER Rubber Sealed - Metric ER Coolant Collets**

- High Pressure Coolant - 750 PSI
- Standard .0004" T.I.R.
- Ultra Precision .0002" T.I.R.
- Collapse Range (see chart)

**Note:**

For Ultra Precision place "P" at the end of the part number.  
 Example: SER32-M010P

**SER16 Metric Collets**

Range	Range mm	ER 16
0.098 - 0.118"	3.0 - 2.5mm	SER16 - 03.0
0.118 - 0.137"	3.5 - 3.0mm	SER16 - 03.5
0.137 - 0.157"	4.0 - 3.5mm	SER16 - 04.0
0.157 - 0.177"	4.5 - 4.0mm	SER16 - 04.5
0.177 - 0.197"	5.0 - 4.5mm	SER16 - 05.0
0.197 - 0.216"	5.5 - 5.0mm	SER16 - 05.5
0.216 - 0.236"	6.0 - 5.5mm	SER16 - 06.0
0.236 - 0.256"	6.5 - 6.0mm	SER16 - 06.5
0.256 - 0.276"	7.0 - 6.5mm	SER16 - 07.0
0.276 - 0.295"	7.5 - 7.0mm	SER16 - 07.5
0.295 - 0.315"	8.0 - 7.5mm	SER16 - 08.0
0.315 - 0.335"	8.5 - 8.0mm	SER16 - 08.5
0.335 - 0.354"	9.0 - 8.5mm	SER16 - 09.0
0.354 - 0.374"	9.5 - 9.0mm	SER16 - 09.5
0.374 - 0.394"	10.0 - 9.5mm	SER16 - 10.0

**SER20 Metric Collets**

Range	Range mm	ER 20
0.098 - 0.118"	3.0 - 2.5mm	SER20 - 03.0
0.118 - 0.137"	3.5 - 3.0mm	SER20 - 03.5
0.137 - 0.157"	4.0 - 3.5mm	SER20 - 04.0
0.157 - 0.177"	4.5 - 4.0mm	SER20 - 04.5
0.177 - 0.197"	5.0 - 4.5mm	SER20 - 05.0
0.197 - 0.216"	5.5 - 5.0mm	SER20 - 05.5
0.216 - 0.236"	6.0 - 5.5mm	SER20 - 06.0
0.236 - 0.256"	6.5 - 6.0mm	SER20 - 06.5
0.256 - 0.276"	7.0 - 6.5mm	SER20 - 07.0
0.276 - 0.295"	7.5 - 7.0mm	SER20 - 07.5
0.295 - 0.315"	8.0 - 7.5mm	SER20 - 08.0
0.315 - 0.335"	8.5 - 8.0mm	SER20 - 08.5
0.335 - 0.354"	9.0 - 8.5mm	SER20 - 09.0
0.354 - 0.374"	9.5 - 9.0mm	SER20 - 09.5
0.374 - 0.394"	10.0 - 9.5mm	SER20 - 10.0
0.394 - 0.413"	10.5 - 10.0mm	SER20 - 10.5
0.413 - 0.433"	11.0 - 10.5mm	SER20 - 11.0
0.433 - 0.452"	11.5 - 11.0mm	SER20 - 11.5
0.452 - 0.472"	12.0 - 11.5mm	SER20 - 12.0
0.472 - 0.492"	12.5 - 12.0mm	SER20 - 12.5
0.480 - 0.500"	12.7 - 12.2mm	SER20 - 1/2
0.500 - 0.512"	13.0 - 12.5mm	SER20 - 13.0

**SER25 Metric Collets**

Range	Range mm	ER 25
0.098 - 0.118"	3.0 - 2.5mm	SER25 - 03.0
0.118 - 0.137"	3.5 - 3.0mm	SER25 - 03.5
0.137 - 0.157"	4.0 - 3.5mm	SER25 - 04.0
0.157 - 0.177"	4.5 - 4.0mm	SER25 - 04.5
0.177 - 0.197"	5.0 - 4.5mm	SER25 - 05.0
0.197 - 0.216"	5.5 - 5.0mm	SER25 - 05.5
0.216 - 0.236"	6.0 - 5.5mm	SER25 - 06.0
0.236 - 0.256"	6.5 - 6.0mm	SER25 - 06.5
0.256 - 0.276"	7.0 - 6.5mm	SER25 - 07.0
0.276 - 0.295"	7.5 - 7.0mm	SER25 - 07.5
0.295 - 0.315"	8.0 - 7.5mm	SER25 - 08.0
0.315 - 0.335"	8.5 - 8.0mm	SER25 - 08.5
0.335 - 0.354"	9.0 - 8.5mm	SER25 - 09.0
0.354 - 0.374"	9.5 - 9.0mm	SER25 - 09.5
0.374 - 0.394"	10.0 - 9.5mm	SER25 - 10.0
0.394 - 0.413"	10.5 - 10.0mm	SER25 - 10.5
0.413 - 0.433"	11.0 - 10.5mm	SER25 - 11.0
0.433 - 0.452"	11.5 - 11.0mm	SER25 - 11.5
0.452 - 0.472"	12.0 - 11.5mm	SER25 - 12.0
0.472 - 0.492"	12.5 - 12.0mm	SER25 - 12.5
0.480 - 0.500"	12.7 - 12.2mm	SER25 - 1/2
0.500 - 0.512"	13.0 - 12.5mm	SER25 - 13.0
0.512 - 0.532"	13.5 - 13.0mm	SER25 - 13.5
0.532 - 0.551"	14.0 - 13.5mm	SER25 - 14.0
0.551 - 0.571"	14.5 - 14.0mm	SER25 - 14.5
0.571 - 0.590"	15.0 - 14.5mm	SER25 - 15.0
0.590 - 0.610"	15.5 - 15.0mm	SER25 - 15.5
0.610 - 0.630"	16.0 - 15.5mm	SER25 - 16.0



## SER Rubber Sealed - Metric ER Coolant Collets

HPI - PIONEER



- High Pressure Coolant - 750 PSI
- Standard .0004" T.I.R.
- Ultra Precision .0002" T.I.R.
- Collapse Range (see chart)

**Note:**

For Ultra Precision place "P" at the end of the part number.

Example: SER32-M010P

### SER32 Metric Collets

Range	Range mm	ER 32
0.098 - 0.118"	3.0 - 2.5mm	SER32 - 03.0
0.118 - 0.137"	3.5 - 3.0mm	SER32 - 03.5
0.137 - 0.157"	4.0 - 3.5mm	SER32 - 04.0
0.157 - 0.177"	4.5 - 4.0mm	SER32 - 04.5
0.177 - 0.197"	5.0 - 4.5mm	SER32 - 05.0
0.197 - 0.216"	5.5 - 5.0mm	SER32 - 05.5
0.216 - 0.236"	6.0 - 5.5mm	SER32 - 06.0
0.236 - 0.256"	6.5 - 6.0mm	SER32 - 06.5
0.256 - 0.276"	7.0 - 6.5mm	SER32 - 07.0
0.276 - 0.295"	7.5 - 7.0mm	SER32 - 07.5
0.295 - 0.315"	8.0 - 7.5mm	SER32 - 08.0
0.315 - 0.335"	8.5 - 8.0mm	SER32 - 08.5
0.335 - 0.354"	9.0 - 8.5mm	SER32 - 09.0
0.354 - 0.374"	9.5 - 9.0mm	SER32 - 09.5
0.374 - 0.394"	10.0 - 9.5mm	SER32 - 10.0
0.394 - 0.413"	10.5 - 10.0mm	SER32 - 10.5
0.413 - 0.433"	11.0 - 10.5mm	SER32 - 11.0
0.433 - 0.452"	11.5 - 11.0mm	SER32 - 11.5
0.452 - 0.472"	12.0 - 11.5mm	SER32 - 12.0
0.472 - 0.492"	12.5 - 12.0mm	SER32 - 12.5
0.480 - 0.500"	12.7 - 12.2mm	SER32 - 1/2
0.500 - 0.512"	13.0 - 12.5mm	SER32 - 13.0
0.512 - 0.532"	13.5 - 13.0mm	SER32 - 13.5
0.532 - 0.551"	14.0 - 13.5mm	SER32 - 14.0
0.551 - 0.571"	14.5 - 14.0mm	SER32 - 14.5
0.571 - 0.590"	15.0 - 14.5mm	SER32 - 15.0
0.590 - 0.610"	15.5 - 15.0mm	SER32 - 15.5
0.610 - 0.630"	16.0 - 15.5mm	SER32 - 16.0
0.630 - 0.649"	16.5 - 16.0mm	SER32 - 16.5
0.649 - 0.669"	17.0 - 16.5mm	SER32 - 17.0
0.669 - 0.689"	17.5 - 17.0mm	SER32 - 17.5
0.689 - 0.708"	18.0 - 17.5mm	SER32 - 18.0
0.708 - 0.728"	18.5 - 18.0mm	SER32 - 18.5
0.728 - 0.750"	19.0 - 18.5mm	SER32 - 3/4
0.751 - 0.767"	19.5 - 19.0mm	SER32 - 19.5
0.767 - 0.787"	20.0 - 19.5mm	SER32 - 20.0

### SER40 Metric Collets

Range	Range mm	ER 40
0.216 - 0.236"	6.0 - 5.5mm	SER40 - 06.0
0.236 - 0.256"	6.5 - 6.0mm	SER40 - 06.5
0.256 - 0.276"	7.0 - 6.5mm	SER40 - 07.0
0.276 - 0.295"	7.5 - 7.0mm	SER40 - 07.5
0.295 - 0.315"	8.0 - 7.5mm	SER40 - 08.0
0.315 - 0.335"	8.5 - 8.0mm	SER40 - 08.5
0.335 - 0.354"	9.0 - 8.5mm	SER40 - 09.0
0.354 - 0.374"	9.5 - 9.0mm	SER40 - 09.5
0.374 - 0.394"	10.0 - 9.5mm	SER40 - 10.0
0.394 - 0.413"	10.5 - 10.0mm	SER40 - 10.5
0.413 - 0.433"	11.0 - 10.5mm	SER40 - 11.0
0.433 - 0.452"	11.5 - 11.0mm	SER40 - 11.5
0.452 - 0.472"	12.0 - 11.5mm	SER40 - 12.0
0.472 - 0.492"	12.5 - 12.0mm	SER40 - 12.5
0.480 - 0.500"	12.7 - 12.2mm	SER40 - 1/2
0.500 - 0.512"	13.0 - 12.5mm	SER40 - 13.0
0.512 - 0.532"	13.5 - 13.0mm	SER40 - 13.5
0.532 - 0.551"	14.0 - 13.5mm	SER40 - 14.0
0.551 - 0.571"	14.5 - 14.0mm	SER40 - 14.5
0.571 - 0.590"	15.0 - 14.5mm	SER40 - 15.0
0.590 - 0.610"	15.5 - 15.0mm	SER40 - 15.5
0.610 - 0.630"	16.0 - 15.5mm	SER40 - 16.0
0.630 - 0.649"	16.5 - 16.0mm	SER40 - 16.5
0.649 - 0.669"	17.0 - 16.5mm	SER40 - 17.0
0.669 - 0.689"	17.5 - 17.0mm	SER40 - 17.5
0.689 - 0.708"	18.0 - 17.5mm	SER40 - 18.0
0.708 - 0.728"	18.5 - 18.0mm	SER40 - 18.5
0.728 - 0.750"	19.0 - 18.5mm	SER40 - 3/4
0.751 - 0.767"	19.5 - 19.0mm	SER40 - 19.5
0.767 - 0.787"	20.0 - 19.5mm	SER40 - 20.0
0.787 - 0.807"	20.5 - 20.0mm	SER40 - 20.5
0.807 - 0.827"	21.0 - 20.5mm	SER40 - 21.0
0.827 - 0.846"	21.5 - 21.0mm	SER40 - 21.5
0.846 - 0.866"	22.0 - 21.5mm	SER40 - 22.0
0.866 - 0.886"	22.5 - 22.0mm	SER40 - 22.5
0.886 - 0.906"	23.0 - 22.5mm	SER40 - 23.0
0.906 - 0.926"	23.5 - 23.0mm	SER40 - 23.5



**SX Collets**  
Standard and Steel Sealed

**Features**

- 10µm - 0.0004" T.I.R. @ 4X tool diameter
- Reduced OD for Close Center Applications
- Flat ground shoulder guarantees the collet to be seated correctly for optimal repeatability.
- 5µm - 0.0002" T.I.R. Ultra Precision collets available upon request. Please add "P" after the part number.
- Steel Sealed (Sealed by Design) Slotting system rates collets for 1,500 PSI.
- A Type Collets
  - On Size Collets—h6 Tool Shank Required
- Standard Collets (following page)
  - Up to 0.020" (0.5mm) Collapse Range

**Note:**

For Ultra Precision place "P" at the end of the part number.  
Example: SX16-M010P

**Collet Sets**

Part Number	Collet Size	Pieces	Range	Increments
SX06-SET09	SX06	9	2.0mm - 6.0mm	0.5mm
SX10-SET17	SX10	17	2.0mm - 10.0mm	0.5mm
SX16-SET27	SX16	27	3.0mm - 16.0mm	0.5mm
SX25-SET20	SX25	20	16.0mm - 25.4mm	0.5mm
SX10-SETA	SX10	5	1/8 - 3/8"	See Chart
SX16-SETA	SX16	9	1/8 - 5/8"	See Chart
SX25-SETA	SX25	11	3/16 - 1"	See Chart
SSSX06-SET09	SX06	9	2.0mm - 6.0mm	0.5mm
SSSX10-SET17	SX10	17	2.0mm - 10.0mm	0.5mm
SSSX16-SET27	SX16	27	3.0mm - 16.0mm	0.5mm
SSSX25-SET20	SX25	20	16.0mm - 25.4mm	0.5mm

**SX Collet Assembly Tool**

- Tool is required for assembly and removal of the SX collets from the nut.

SERIES	PART NUMBER
SX06	SXR-06
SX10	SXR-10
SX16	SXR-16
SX25	SXR-25



**A - Type Collets**

- On Size Collets
- h6 Shank Size

**SX 06 Inch Collets**

Cutter Size	Tool Size"	SX06	Steel Sealed
1/8	0.1250	SX06-0125A	SSSX06-0125A
3/16	0.1875	SX06-0187A	SSSX06-0187A

**SX 10 Inch Collets**

Cutter Size	Tool Size"	SX10	Steel Sealed
1/8	0.1250	SX10-0125A	SSSX10-0125A
3/16	0.1875	SX10-0187A	SSSX10-0187A
1/4	0.2500	SX10-0250A	SSSX10-0250A
5/16	0.3125	SX10-0312A	SSSX10-0312A
3/8	0.3750	SX10-0375A	SSSX10-0375A

**SX 16 Inch Collets**

Cutter Size	Tool Size"	SX16	Steel Sealed
1/8	0.1250	SX16-0125A	SSSX16-0125A
3/16	0.1875	SX16-0187A	SSSX16-0187A
1/4	0.2500	SX16-0250A	SSSX16-0250A
5/16	0.3125	SX16-0312A	SSSX16-0312A
3/8	0.3750	SX16-0375A	SSSX16-0375A
7/16	0.4375	SX16-0437A	SSSX16-0437A
1/2	0.5000	SX16-0500A	SSSX16-0500A
9/16	0.5625	SX16-0562A	SSSX16-0562A
5/8	0.6250	SX16-0625A	SSSX16-0625A

**SX 25 Inch Collets**

Cutter Size	Tool Size"	SX25	Steel Sealed
3/16	0.1875	SX25-0187A	SSSX25-0187A
1/4	0.2500	SX25-0250A	SSSX25-0250A
5/16	0.3125	SX25-0312A	SSSX25-0312A
3/8	0.3750	SX25-0375A	SSSX25-0375A
7/16	0.4375	SX25-0437A	SSSX25-0437A
1/2	0.5000	SX25-0500A	SSSX25-0500A
9/16	0.5625	SX25-0562A	SSSX25-0562A
5/8	0.6250	SX25-0625A	SSSX25-0625A
3/4	0.7500	SX25-0750A	SSSX25-0750A
7/8	0.8750	SX25-0875A	SSSX25-0875A
1	1.0000	SX25-M254	SSSX25-M254



# SX Collets Standard and Steel Sealed

HPI - PIONEER



### Features

- 10µm - 0.0004" T.I.R. @ 4X tool diameter
- Flat ground shoulder guarantees the collet to be seated correctly for optimal repeatability.
- 5µm - 0.0002" T.I.R. Ultra Precision collets available upon request. Please add "P" after the part number.
- Steel Sealed (Sealed by Design) Slotting system rates collets for 1,500 PSI.
- Up to 0.020" (0.5mm) Collapse Range

### Note:

For Ultra Precision place "P" at the end of the part number. Example: SX16-M010P

### SX 06 Metric Collets

Tool Max	Tool Min	Tool Max"	Tool Min"	SX06	Steel Sealed
0.80	0.70	0.0315	0.0276	SX06-M008	
1.00	0.90	0.0394	0.0354	SX06-M010	
1.25	1.15	0.0492	0.0453	SX06-M0125	
1.50	1.30	0.0591	0.0512	SX06-M015	
1.75	1.55	0.0689	0.0610	SX06-M0175	
2.00	1.80	0.0787	0.0709	SX06-M020	SSSX06-M020
2.25	2.05	0.0886	0.0807	SX06-M0225	
2.50	2.30	0.0984	0.0906	SX06-M025	SSSX06-M025
2.75	2.55	0.1083	0.1004	SX06-M0275	
3.00	2.80	0.1181	0.1102	SX06-M030	SSSX06-M030
3.50	3.00	0.1378	0.1181	SX06-M035	SSSX06-M035
4.00	3.50	0.1575	0.1378	SX06-M040	SSSX06-M040
4.50	4.00	0.1772	0.1575	SX06-M045	SSSX06-M045
5.00	4.50	0.1969	0.1772	SX06-M050	SSSX06-M050
5.50	5.00	0.2165	0.1969	SX06-M055	SSSX06-M055
6.00	5.50	0.2362	0.2165	SX06-M060	SSSX06-M060

### SX 16 Metric Collets

Tool Max	Tool Min	Tool Max"	Tool Min"	SX16	Steel Sealed
3.00	2.75	0.1181	0.1083	SX16-M030	SSSX16-M030
3.50	3.00	0.1378	0.1181	SX16-M035	SSSX16-M035
4.00	3.50	0.1575	0.1378	SX16-M040	SSSX16-M040
4.50	4.00	0.1772	0.1575	SX16-M045	SSSX16-M045
5.00	4.50	0.1969	0.1772	SX16-M050	SSSX16-M050
5.50	5.00	0.2165	0.1969	SX16-M055	SSSX16-M055
6.00	5.50	0.2362	0.2165	SX16-M060	SSSX16-M060
6.50	6.00	0.2559	0.2362	SX16-M065	SSSX16-M065
7.00	6.50	0.2756	0.2559	SX16-M070	SSSX16-M070
7.50	7.00	0.2953	0.2756	SX16-M075	SSSX16-M075
8.00	7.50	0.3150	0.2953	SX16-M080	SSSX16-M080
8.50	8.00	0.3346	0.3150	SX16-M085	SSSX16-M085
9.00	8.50	0.3543	0.3346	SX16-M090	SSSX16-M090
9.50	9.00	0.3740	0.3543	SX16-M095	SSSX16-M095
10.00	9.50	0.3937	0.3740	SX16-M100	SSSX16-M100
10.50	10.00	0.4134	0.3937	SX16-M105	SSSX16-M105
11.00	10.50	0.4331	0.4134	SX16-M110	SSSX16-M110
11.50	11.00	0.4528	0.4331	SX16-M115	SSSX16-M115
12.00	11.50	0.4724	0.4528	SX16-M120	SSSX16-M120
12.50	12.00	0.4921	0.4724	SX16-M125	SSSX16-M125
13.00	12.50	0.5118	0.4921	SX16-M130	SSSX16-M130
13.50	13.00	0.5315	0.5118	SX16-M135	SSSX16-M135
14.00	13.50	0.5512	0.5315	SX16-M140	SSSX16-M140
14.50	14.00	0.5709	0.5512	SX16-M145	SSSX16-M145
15.00	14.50	0.5906	0.5709	SX16-M150	SSSX16-M150
15.50	15.00	0.6102	0.5906	SX16-M155	SSSX16-M155
16.00	15.50	0.6299	0.6102	SX16-M160	SSSX16-M160

### SX 10 Metric Collets

Tool Max	Tool Min	Tool Max"	Tool Min"	SX10	Steel Sealed
2.00	1.75	0.0787	0.0689	SX10-M020	SSSX10-M020
2.25	2.00	0.0886	0.0787	SX10-M0225	
2.50	2.25	0.0984	0.0886	SX10-M025	SSSX10-M025
2.75	2.50	0.1083	0.0984	SX10-M0275	
3.00	2.75	0.1181	0.1083	SX10-M030	SSSX10-M030
3.50	3.00	0.1378	0.1181	SX10-M035	SSSX10-M035
4.00	3.50	0.1575	0.1378	SX10-M040	SSSX10-M040
4.50	4.00	0.1772	0.1575	SX10-M045	SSSX10-M045
5.00	4.50	0.1969	0.1772	SX10-M050	SSSX10-M050
5.50	5.00	0.2165	0.1969	SX10-M055	SSSX10-M055
6.00	5.50	0.2362	0.2165	SX10-M060	SSSX10-M060
6.50	6.00	0.2559	0.2362	SX10-M065	SSSX10-M065
7.00	6.50	0.2756	0.2559	SX10-M070	SSSX10-M070
7.50	7.00	0.2953	0.2756	SX10-M075	SSSX10-M075
8.00	7.50	0.3150	0.2953	SX10-M080	SSSX10-M080
8.50	8.00	0.3346	0.3150	SX10-M085	SSSX10-M085
9.00	8.50	0.3543	0.3346	SX10-M090	SSSX10-M090
9.50	9.00	0.3740	0.3543	SX10-M095	SSSX10-M095
10.00	9.50	0.3937	0.3740	SX10-M100	SSSX10-M100

### SX 25 Metric Collets

Tool Max	Tool Min	Tool Max"	Tool Min"	SX25	Steel Sealed
16.00	15.50	0.6299	0.6102	SX25-M160	SSSX25-M160
16.50	16.00	0.6496	0.6299	SX25-M165	SSSX25-M165
17.00	16.50	0.6693	0.6496	SX25-M170	SSSX25-M170
17.50	17.00	0.6890	0.6693	SX25-M175	SSSX25-M175
18.00	17.50	0.7087	0.6890	SX25-M180	SSSX25-M180
18.50	18.00	0.7283	0.7087	SX25-M185	SSSX25-M185
19.00	18.50	0.7480	0.7283	SX25-M190	SSSX25-M190
19.50	19.00	0.7677	0.7480	SX25-M195	SSSX25-M195
20.00	19.50	0.7874	0.7677	SX25-M200	SSSX25-M200
20.50	20.00	0.8071	0.7874	SX25-M205	SSSX25-M205
21.00	20.50	0.8268	0.8071	SX25-M210	SSSX25-M210
21.50	21.00	0.8465	0.8268	SX25-M215	SSSX25-M215
22.00	21.50	0.8661	0.8465	SX25-M220	SSSX25-M220
22.50	22.00	0.8858	0.8661	SX25-M225	SSSX25-M225
23.00	22.50	0.9055	0.8858	SX25-M230	SSSX25-M230
23.50	23.00	0.9252	0.9055	SX25-M235	SSSX25-M235
24.00	23.50	0.9449	0.9252	SX25-M240	SSSX25-M240
24.50	24.00	0.9646	0.9449	SX25-M245	SSSX25-M245
25.00	24.50	0.9843	0.9646	SX25-M250	SSSX25-M250
25.40	25.00	1.0000	0.9843	SX25-M254	SSSX25-M254

**TG Precision Inch Collets**

**Features:**

- Standard .0004" T.I.R.
- Collapse Range: .020

Our TG collets are the most accurate in the industry. We use only the best material and a Swiss grinding technique that ensures accuracy on each grind.



**TG075 Inch Collets**

Nominal Tool	Tool Max	Tool Min	TG075
3/32	0.0938	0.0781	TG075-0094
7/64	0.1094	0.0938	TG075-0109
1/8	0.1250	0.1094	TG075-0125
9/64	0.1406	0.1250	TG075-0141
5/32	0.1563	0.1406	TG075-0156
11/64	0.1719	0.1563	TG075-0172
3/16	0.1875	0.1719	TG075-0188
13/64	0.2031	0.1875	TG075-0203
7/32	0.2188	0.2031	TG075-0219
15/64	0.2344	0.2188	TG075-0234
1/4	0.2500	0.2344	TG075-0250
17/64	0.2656	0.2500	TG075-0266
9/32	0.2813	0.2656	TG075-0281
19/64	0.2969	0.2813	TG075-0297
5/16	0.3125	0.2969	TG075-0313

Nominal Tool	Tool Max	Tool Min	TG075
21/64	0.3281	0.3125	TG075-0328
11/32	0.3438	0.3281	TG075-0344
23/64	0.3594	0.3438	TG075-0359
3/8	0.3750	0.3594	TG075-0375
25/64	0.3906	0.3750	TG075-0391
13/32	0.4063	0.3906	TG075-0406
27/64	0.4219	0.4063	TG075-0422
7/16	0.4375	0.4219	TG075-0438
29/64	0.4531	0.4375	TG075-0453
15/32	0.4688	0.4531	TG075-0469
31/64	0.4844	0.4688	TG075-0484
1/2	0.5000	0.4844	TG075-0500
33/64	0.5156	0.5000	TG075-0516
17/32	0.5313	0.5156	TG075-0531
35/64	0.5469	0.5313	TG075-0547

Nominal Tool	Tool Max	Tool Min	TG075
9/16	0.5625	0.5469	TG075-0563
37/64	0.5781	0.5625	TG075-0578
19/32	0.5938	0.5781	TG075-0594
39/64	0.6094	0.5938	TG075-0609
5/8	0.6250	0.6094	TG075-0625
41/64	0.6406	0.6250	TG075-0641
21/32	0.6563	0.6406	TG075-0656
43/64	0.6719	0.6563	TG075-0672
11/16	0.6875	0.6719	TG075-0688
45/64	0.7031	0.6875	TG075-0703
23/32	0.7188	0.7031	TG075-0719
47/64	0.7344	0.7188	TG075-0734
3/4	0.7500	0.7344	TG075-0750

**Collet Sets**

Part Number	Collet Size	Pieces	Range	Increments
TG75-SET11	TG75	11	3/32-3/4	1/16
TG75-SET22	TG75	22	3/32-3/4	1/32
TG75-SET43	TG75	43	3/32-3/4	1/64
TG10-SET15	TG100	15	1/8-1"	1/16
TG10-SET21	TG100	21	3/8-1"	1/32
TG10-SET30	TG100	30	3/32-1"	1/32
TG10-SET41	TG100	41	3/8-1"	1/64
TG10-SET59	TG100	59	3/32-1"	1/64
TG15-SET17	TG150	17	1/2-1-1/2	1/16
TG15-SET33	TG150	33	1/2-1-1/2	1/32
TG15-SET65	TG150	65	1/2-1-1/2	1/64





HPI - PIONEER

### TG Precision Inch Collets

Features:

- Standard .0004" T.I.R.
- Collapse Range: .020



Our TG collets are the most accurate in the industry. We use only the best material and a Swiss grinding technique that ensures accuracy on each grind.

### TG100 Inch Collets

Nominal Tool	Tool Max	Tool Min	TG100
3/32	0.0938	0.0781	TG100-0094
7/64	0.1094	0.0938	TG100-0109
1/8	0.1250	0.1094	TG100-0125
9/64	0.1406	0.1250	TG100-0141
5/32	0.1563	0.1406	TG100-0156
11/64	0.1719	0.1563	TG100-0172
3/16	0.1875	0.1719	TG100-0188
13/64	0.2031	0.1875	TG100-0203
7/32	0.2188	0.2031	TG100-0219
15/64	0.2344	0.2188	TG100-0234
1/4	0.2500	0.2344	TG100-0250
17/64	0.2656	0.2500	TG100-0266
9/32	0.2813	0.2656	TG100-0281
19/64	0.2969	0.2813	TG100-0297
5/16	0.3125	0.2969	TG100-0313
21/64	0.3281	0.3125	TG100-0328
11/32	0.3438	0.3281	TG100-0344
23/64	0.3594	0.3438	TG100-0359
3/8	0.3750	0.3594	TG100-0375
25/64	0.3906	0.3750	TG100-0391

Nominal Tool	Tool Max	Tool Min	TG100
13/32	0.4063	0.3906	TG100-0406
27/64	0.4219	0.4063	TG100-0422
7/16	0.4375	0.4219	TG100-0438
29/64	0.4531	0.4375	TG100-0453
15/32	0.4688	0.4531	TG100-0469
31/64	0.4844	0.4688	TG100-0484
1/2	0.5000	0.4844	TG100-0500
33/64	0.5156	0.5000	TG100-0516
17/32	0.5313	0.5156	TG100-0531
35/64	0.5469	0.5313	TG100-0547
9/16	0.5625	0.5469	TG100-0563
37/64	0.5781	0.5625	TG100-0578
19/32	0.5938	0.5781	TG100-0594
39/64	0.6094	0.5938	TG100-0609
5/8	0.6250	0.6094	TG100-0625
41/64	0.6406	0.6250	TG100-0641
21/32	0.6563	0.6406	TG100-0656
43/64	0.6719	0.6563	TG100-0672
11/16	0.6875	0.6719	TG100-0688
45/64	0.7031	0.6875	TG100-0703

Nominal Tool	Tool Max	Tool Min	TG100
23/32	0.7188	0.7031	TG100-0719
47/64	0.7344	0.7188	TG100-0734
3/4	0.7500	0.7344	TG100-0750
49/64	0.7656	0.7500	TG100-0766
25/32	0.7813	0.7656	TG100-0781
51/64	0.7969	0.7813	TG100-0797
13/16	0.8125	0.7969	TG100-0813
53/64	0.8281	0.8125	TG100-0828
27/32	0.8438	0.8281	TG100-0844
55/64	0.8594	0.8438	TG100-0859
7/8	0.8750	0.8594	TG100-0875
57/64	0.8906	0.8750	TG100-0891
29/32	0.9063	0.8906	TG100-0906
59/64	0.9219	0.9063	TG100-0922
15/16	0.9375	0.9219	TG100-0938
61/64	0.9531	0.9375	TG100-0953
31/32	0.9688	0.9531	TG100-0969
63/64	0.9844	0.9688	TG100-0984
1	1.0000	0.9844	TG100-1000

### TG150 Inch Collets

Nominal Tool	Tool Max	Tool Min	TG150
1/2	0.5000	0.4844	TG150-0500
33/64	0.5156	0.5000	TG150-0516
17/32	0.5313	0.5156	TG150-0531
35/64	0.5469	0.5313	TG150-0547
9/16	0.5625	0.5469	TG150-0563
37/64	0.5781	0.5625	TG150-0578
19/32	0.5938	0.5781	TG150-0594
39/64	0.6094	0.5938	TG150-0609
5/8	0.6250	0.6094	TG150-0625
41/64	0.6406	0.6250	TG150-0641
21/32	0.6563	0.6406	TG150-0656
43/64	0.6719	0.6563	TG150-0672
11/16	0.6875	0.6719	TG150-0688
45/64	0.7031	0.6875	TG150-0703
23/32	0.7188	0.7031	TG150-0719
47/64	0.7344	0.7188	TG150-0734
3/4	0.7500	0.7344	TG150-0750
49/64	0.7656	0.7500	TG150-0766
25/32	0.7813	0.7656	TG150-0781
51/64	0.7969	0.7813	TG150-0797
13/16	0.8125	0.7969	TG150-0813
53/64	0.8281	0.8125	TG150-0828

Nominal Tool	Tool Max	Tool Min	TG150
27/32	0.8438	0.8281	TG150-0844
55/64	0.8594	0.8438	TG150-0859
7/8	0.8750	0.8594	TG150-0875
57/64	0.8906	0.8750	TG150-0891
29/32	0.9063	0.8906	TG150-0906
59/64	0.9219	0.9063	TG150-0922
15/16	0.9375	0.9219	TG150-0938
61/64	0.9531	0.9375	TG150-0953
31/32	0.9688	0.9531	TG150-0969
63/64	0.9844	0.9688	TG150-0984
1	1.0000	0.9844	TG150-1000
1 1/64	1.0156	1.0000	TG150-1016
1 1/32	1.0313	1.0156	TG150-1031
1 3/64	1.0469	1.0313	TG150-1047
1 1/16	1.0625	1.0469	TG150-1063
1 5/64	1.0781	1.0625	TG150-1078
1 3/32	1.0938	1.0781	TG150-1094
1 7/64	1.1094	1.0938	TG150-1109
1 1/8	1.1250	1.1094	TG150-1125
1 9/64	1.1406	1.1250	TG150-1141
1 5/32	1.1563	1.1406	TG150-1156
1 11/64	1.1719	1.1563	TG150-1172

Nominal Tool	Tool Max	Tool Min	TG150
1 3/16	1.1875	1.1719	TG150-1188
1 13/64	1.2031	1.1875	TG150-1203
1 7/32	1.2188	1.2031	TG150-1219
1 15/64	1.2344	1.2188	TG150-1234
1 1/4	1.2500	1.2344	TG150-1250
1 17/64	1.2656	1.2500	TG150-1266
1 9/32	1.2813	1.2656	TG150-1281
1 19/64	1.2969	1.2813	TG150-1297
1 5/16	1.3125	1.2969	TG150-1313
1 21/64	1.3281	1.3125	TG150-1328
1 11/32	1.3438	1.3281	TG150-1344
1 23/64	1.3594	1.3438	TG150-1359
1 3/8	1.3750	1.3594	TG150-1375
1 25/64	1.3906	1.3750	TG150-1391
1 13/32	1.4063	1.3906	TG150-1406
1 27/64	1.4219	1.4063	TG150-1422
1 7/16	1.4375	1.4219	TG150-1438
1 29/64	1.4531	1.4375	TG150-1453
1 15/32	1.4688	1.4531	TG150-1469
1 31/64	1.4844	1.4688	TG150-1484
1 1/2	1.5000	1.4844	TG150-1500



**SSTG Precision Inch Collets**

**Features:**

- High Pressure Coolant - 1,500 PSI
- Standard .0004" T.I.R.
- Ultra Precision .0002" T.I.R.
- Collapse Range 0.5mm (0.020")

Our TG collets are the most accurate in the industry. We use only the best material and a Swiss grinding technique that ensures accuracy on each grind.



**SSTG075 Inch Collets**

Nominal Tool	Tool Max	Tool Min	SSTG075
3/32	0.0938	0.0781	SSTG075-0094
7/64	0.1094	0.0938	SSTG075-0109
1/8	0.1250	0.1094	SSTG075-0125
9/64	0.1406	0.1250	SSTG075-0141
5/32	0.1563	0.1406	SSTG075-0156
11/64	0.1719	0.1563	SSTG075-0172
3/16	0.1875	0.1719	SSTG075-0188
13/64	0.2031	0.1875	SSTG075-0203
7/32	0.2188	0.2031	SSTG075-0219
15/64	0.2344	0.2188	SSTG075-0234
1/4	0.2500	0.2344	SSTG075-0250
17/64	0.2656	0.2500	SSTG075-0266
9/32	0.2813	0.2656	SSTG075-0281
19/64	0.2969	0.2813	SSTG075-0297
5/16	0.3125	0.2969	SSTG075-0313

Nominal Tool	Tool Max	Tool Min	SSTG075
21/64	0.3281	0.3125	SSTG075-0328
11/32	0.3438	0.3281	SSTG075-0344
23/64	0.3594	0.3438	SSTG075-0359
3/8	0.3750	0.3594	SSTG075-0375
25/64	0.3906	0.3750	SSTG075-0391
13/32	0.4063	0.3906	SSTG075-0406
27/64	0.4219	0.4063	SSTG075-0422
7/16	0.4375	0.4219	SSTG075-0438
29/64	0.4531	0.4375	SSTG075-0453
15/32	0.4688	0.4531	SSTG075-0469
31/64	0.4844	0.4688	SSTG075-0484
1/2	0.5000	0.4844	SSTG075-0500
33/64	0.5156	0.5000	SSTG075-0516
17/32	0.5313	0.5156	SSTG075-0531
35/64	0.5469	0.5313	SSTG075-0547

Nominal Tool	Tool Max	Tool Min	SSTG075
9/16	0.5625	0.5469	SSTG075-0563
37/64	0.5781	0.5625	SSTG075-0578
19/32	0.5938	0.5781	SSTG075-0594
39/64	0.6094	0.5938	SSTG075-0609
5/8	0.6250	0.6094	SSTG075-0625
41/64	0.6406	0.6250	SSTG075-0641
21/32	0.6563	0.6406	SSTG075-0656
43/64	0.6719	0.6563	SSTG075-0672
11/16	0.6875	0.6719	SSTG075-0688
45/64	0.7031	0.6875	SSTG075-0703
23/32	0.7188	0.7031	SSTG075-0719
47/64	0.7344	0.7188	SSTG075-0734
3/4	0.7500	0.7344	SSTG075-0750

**Collet Sets**

Part Number	Collet Size	Pieces	Range	Increments
SSTG75-SET11	TG75	11	3/32-3/4	1/16
SSTG75-SET22	TG75	22	3/32-3/4	1/32
SSTG75-SET43	TG75	43	3/32-3/4	1/64
SSTG10-SET15	TG100	15	1/8-1"	1/16
SSTG10-SET21	TG100	21	3/8-1"	1/32
SSTG10-SET30	TG100	30	3/32-1"	1/32
SSTG10-SET41	TG100	41	3/8-1"	1/64
SSTG10-SET59	TG100	59	3/32-1"	1/64
SSTG15-SET17	TG150	17	1/2-1-1/2	1/16
SSTG15-SET33	TG150	33	1/2-1-1/2	1/32
SSTG15-SET65	TG150	65	1/2-1-1/2	1/64





HPI - PIONEER

### SSTG Precision Inch Collets

Features:

- High Pressure Coolant - 1,500 PSI
- Standard .0004" T.I.R.
- Ultra Precision .0002" T.I.R.
- Collapse Range 0.5mm (0.020")



### SSTG100 Inch Collets

Nominal Tool	Tool Max	Tool Min	SSTG100
3/32	0.0938	0.0781	SSTG100-0094
7/64	0.1094	0.0938	SSTG100-0109
1/8	0.1250	0.1094	SSTG100-0125
9/64	0.1406	0.1250	SSTG100-0141
5/32	0.1563	0.1406	SSTG100-0156
11/64	0.1719	0.1563	SSTG100-0172
3/16	0.1875	0.1719	SSTG100-0188
13/64	0.2031	0.1875	SSTG100-0203
7/32	0.2188	0.2031	SSTG100-0219
15/64	0.2344	0.2188	SSTG100-0234
1/4	0.2500	0.2344	SSTG100-0250
17/64	0.2656	0.2500	SSTG100-0266
9/32	0.2813	0.2656	SSTG100-0281
19/64	0.2969	0.2813	SSTG100-0297
5/16	0.3125	0.2969	SSTG100-0313
21/64	0.3281	0.3125	SSTG100-0328
11/32	0.3438	0.3281	SSTG100-0344
23/64	0.3594	0.3438	SSTG100-0359
3/8	0.3750	0.3594	SSTG100-0375
25/64	0.3906	0.3750	SSTG100-0391

Nominal Tool	Tool Max	Tool Min	SSTG100
13/32	0.4063	0.3906	SSTG100-0406
27/64	0.4219	0.4063	SSTG100-0422
7/16	0.4375	0.4219	SSTG100-0438
29/64	0.4531	0.4375	SSTG100-0453
15/32	0.4688	0.4531	SSTG100-0469
31/64	0.4844	0.4688	SSTG100-0484
1/2	0.5000	0.4844	SSTG100-0500
33/64	0.5156	0.5000	SSTG100-0516
17/32	0.5313	0.5156	SSTG100-0531
35/64	0.5469	0.5313	SSTG100-0547
9/16	0.5625	0.5469	SSTG100-0563
37/64	0.5781	0.5625	SSTG100-0578
19/32	0.5938	0.5781	SSTG100-0594
39/64	0.6094	0.5938	SSTG100-0609
5/8	0.6250	0.6094	SSTG100-0625
41/64	0.6406	0.6250	SSTG100-0641
21/32	0.6563	0.6406	SSTG100-0656
43/64	0.6719	0.6563	SSTG100-0672
11/16	0.6875	0.6719	SSTG100-0688
45/64	0.7031	0.6875	SSTG100-0703

Nominal Tool	Tool Max	Tool Min	SSTG100
23/32	0.7188	0.7031	SSTG100-0719
47/64	0.7344	0.7188	SSTG100-0734
3/4	0.7500	0.7344	SSTG100-0750
49/64	0.7656	0.7500	SSTG100-0766
25/32	0.7813	0.7656	SSTG100-0781
51/64	0.7969	0.7813	SSTG100-0797
13/16	0.8125	0.7969	SSTG100-0813
53/64	0.8281	0.8125	SSTG100-0828
27/32	0.8438	0.8281	SSTG100-0844
55/64	0.8594	0.8438	SSTG100-0859
7/8	0.8750	0.8594	SSTG100-0875
57/64	0.8906	0.8750	SSTG100-0891
29/32	0.9063	0.8906	SSTG100-0906
59/64	0.9219	0.9063	SSTG100-0922
15/16	0.9375	0.9219	SSTG100-0938
61/64	0.9531	0.9375	SSTG100-0953
31/32	0.9688	0.9531	SSTG100-0969
63/64	0.9844	0.9688	SSTG100-0984
1	1.0000	0.9844	SSTG100-1000

### SSTG150 Inch Collets

Nominal Tool	Tool Max	Tool Min	SSTG150
1/2	0.5000	0.4844	SSTG150-0500
33/64	0.5156	0.5000	SSTG150-0516
17/32	0.5313	0.5156	SSTG150-0531
35/64	0.5469	0.5313	SSTG150-0547
9/16	0.5625	0.5469	SSTG150-0563
37/64	0.5781	0.5625	SSTG150-0578
19/32	0.5938	0.5781	SSTG150-0594
39/64	0.6094	0.5938	SSTG150-0609
5/8	0.6250	0.6094	SSTG150-0625
41/64	0.6406	0.6250	SSTG150-0641
21/32	0.6563	0.6406	SSTG150-0656
43/64	0.6719	0.6563	SSTG150-0672
11/16	0.6875	0.6719	SSTG150-0688
45/64	0.7031	0.6875	SSTG150-0703
23/32	0.7188	0.7031	SSTG150-0719
47/64	0.7344	0.7188	SSTG150-0734
3/4	0.7500	0.7344	SSTG150-0750
49/64	0.7656	0.7500	SSTG150-0766
25/32	0.7813	0.7656	SSTG150-0781
51/64	0.7969	0.7813	SSTG150-0797
13/16	0.8125	0.7969	SSTG150-0813
53/64	0.8281	0.8125	SSTG150-0828

Nominal Tool	Tool Max	Tool Min	SSTG150
27/32	0.8438	0.8281	SSTG150-0844
55/64	0.8594	0.8438	SSTG150-0859
7/8	0.8750	0.8594	SSTG150-0875
57/64	0.8906	0.8750	SSTG150-0891
29/32	0.9063	0.8906	SSTG150-0906
59/64	0.9219	0.9063	SSTG150-0922
15/16	0.9375	0.9219	SSTG150-0938
61/64	0.9531	0.9375	SSTG150-0953
31/32	0.9688	0.9531	SSTG150-0969
63/64	0.9844	0.9688	SSTG150-0984
1	1.0000	0.9844	SSTG150-1000
1 1/64	1.0156	1.0000	SSTG150-1016
1 1/32	1.0313	1.0156	SSTG150-1031
1 3/64	1.0469	1.0313	SSTG150-1047
1 1/16	1.0625	1.0469	SSTG150-1063
1 5/64	1.0781	1.0625	SSTG150-1078
1 3/32	1.0938	1.0781	SSTG150-1094
1 7/64	1.1094	1.0938	SSTG150-1109
1 1/8	1.1250	1.1094	SSTG150-1125
1 9/64	1.1406	1.1250	SSTG150-1141
1 5/32	1.1563	1.1406	SSTG150-1156
1 11/64	1.1719	1.1563	SSTG150-1172

Nominal Tool	Tool Max	Tool Min	SSTG150
1 3/16	1.1875	1.1719	SSTG150-1188
1 13/64	1.2031	1.1875	SSTG150-1203
1 7/32	1.2188	1.2031	SSTG150-1219
1 15/64	1.2344	1.2188	SSTG150-1234
1 1/4	1.2500	1.2344	SSTG150-1250
1 17/64	1.2656	1.2500	SSTG150-1266
1 9/32	1.2813	1.2656	SSTG150-1281
1 19/64	1.2969	1.2813	SSTG150-1297
1 5/16	1.3125	1.2969	SSTG150-1313
1 21/64	1.3281	1.3125	SSTG150-1328
1 11/32	1.3438	1.3281	SSTG150-1344
1 23/64	1.3594	1.3438	SSTG150-1359
1 3/8	1.3750	1.3594	SSTG150-1375
1 25/64	1.3906	1.3750	SSTG150-1391
1 13/32	1.4063	1.3906	SSTG150-1406
1 27/64	1.4219	1.4063	SSTG150-1422
1 7/16	1.4375	1.4219	SSTG150-1438
1 29/64	1.4531	1.4375	SSTG150-1453
1 15/32	1.4688	1.4531	SSTG150-1469
1 31/64	1.4844	1.4688	SSTG150-1484
1 1/2	1.5000	1.4844	SSTG150-1500



**DA Inch Collets**

Features:

- Collapse Range: .020
- Fits all standard DA collet chucks in the industry today.

**DA 300 Inch Collets**

Nominal Tool	Tool Max	Tool Min	DA 300
3/64	0.0469	0.0313	DA300-0047
1/16	0.0625	0.0469	DA300-0063
5/64	0.0781	0.0625	DA300-0078
3/32	0.0938	0.0781	DA300-0094
7/64	0.1094	0.0938	DA300-0109
1/8	0.1250	0.1094	DA300-0125
9/64	0.1406	0.1250	DA300-0141
5/32	0.1563	0.1406	DA300-0156
11/64	0.1719	0.1563	DA300-0172
3/16	0.1875	0.1719	DA300-0188
13/64	0.2031	0.1875	DA300-0203
7/32	0.2188	0.2031	DA300-0219
15/64	0.2344	0.2188	DA300-0234
1/4	0.2500	0.2344	DA300-0250

**DA 200 Inch Collets**

Nominal Tool	Tool Max	Tool Min	DA 200
3/64	0.0469	0.0313	DA200-0049
1/16	0.0625	0.0469	DA200-0063
5/64	0.0781	0.0625	DA200-0078
3/32	0.0938	0.0781	DA200-0094
7/64	0.1094	0.0938	DA200-0109
1/8	0.1250	0.1094	DA200-0125
9/64	0.1406	0.1250	DA200-0141
5/32	0.1563	0.1406	DA200-0156
11/64	0.1719	0.1563	DA200-0172
3/16	0.1875	0.1719	DA200-0188
13/64	0.2031	0.1875	DA200-0203
7/32	0.2188	0.2031	DA200-0219
15/64	0.2344	0.2188	DA200-0234
1/4	0.2500	0.2344	DA200-0250
17/64	0.2656	0.2500	DA200-0266
9/32	0.2813	0.2656	DA200-0281
19/64	0.2969	0.2813	DA200-0297
5/16	0.3125	0.2969	DA200-0313
21/64	0.3281	0.3125	DA200-0328
11/32	0.3438	0.3281	DA200-0344
23/64	0.3594	0.3438	DA200-0359
3/8	0.3750	0.3594	DA200-0375

**Collet Sets**

Part Number	Collet Size	Pieces	Range	Incr.
DA180-SET9	DA180	9	1/4-3/4	1/16
DA180-SET17	DA180	17	1/4-3/4	1/32
DA180-SET21	DA180	21	1/8-3/4	1/32
DA180-SET33	DA180	33	1/4-3/4	1/64
DA180-SET41	DA180	41	1/8-3/4	1/64
DA100-SET8	DA100	8	1/8-9/16	1/16
DA100-SET15	DA100	15	1/8-9/16	1/32
DA100-SET21	DA100	21	1/4-9/16	1/64
DA100-SET29	DA100	29	1/8-9/16	1/64
DA100-SET33	DA100	33	1/16-9/16	1/64
DA200-SET9	DA200	9	1/8-3/8	1/32
DA200-SET17	DA200	17	1/8-3/8	1/64
DA200-SET21	DA200	21	1/16-3/8	1/64
DA300-SET7	DA300	7	1/16-1/4	1/32
DA300-SET14	DA300	14	3/64-1/4	1/64



HPI - PIONEER

### DA Inch Collets

Features:

- Collapse Range: .020
- Fits all standard DA collet chucks in the industry today.



#### DA 100 Inch Collets

Nominal Tool	Tool Max	Tool Min	DA 100
1/16	0.0625	0.0469	DA100-0063
5/64	0.0781	0.0625	DA100-0078
3/32	0.0938	0.0781	DA100-0094
7/64	0.1094	0.0938	DA100-0109
1/8	0.1250	0.1094	DA100-0125
9/64	0.1406	0.1250	DA100-0141
5/32	0.1563	0.1406	DA100-0156
11/64	0.1719	0.1563	DA100-0172
3/16	0.1875	0.1719	DA100-0188
13/64	0.2031	0.1875	DA100-0203
7/32	0.2188	0.2031	DA100-0219
15/64	0.2344	0.2188	DA100-0234
1/4	0.2500	0.2344	DA100-0250
17/64	0.2656	0.2500	DA100-0266
9/32	0.2813	0.2656	DA100-0281
19/64	0.2969	0.2813	DA100-0297
5/16	0.3125	0.2969	DA100-0313
21/64	0.3281	0.3125	DA100-0328
11/32	0.3438	0.3281	DA100-0344
23/64	0.3594	0.3438	DA100-0359
3/8	0.3750	0.3594	DA100-0375
25/64	0.3906	0.3750	DA100-0391
13/32	0.4063	0.3906	DA100-0406
27/64	0.4219	0.4063	DA100-0422
7/16	0.4375	0.4219	DA100-0438
29/64	0.4531	0.4375	DA100-0453
15/32	0.4688	0.4531	DA100-0469
31/64	0.4844	0.4688	DA100-0484
1/2	0.5000	0.4844	DA100-0500
33/64	0.5156	0.5000	DA100-0516
17/32	0.5313	0.5156	DA100-0531
35/64	0.5469	0.5313	DA100-0547
9/16	0.5625	0.5469	DA100-0563

#### DA 180 Inch Collets

Nominal Tool	Tool Max	Tool Min	DA 180
1/16	0.0625	0.0469	DA180-0063
5/64	0.0781	0.0625	DA180-0078
3/32	0.0938	0.0781	DA180-0094
7/64	0.1094	0.0938	DA180-0109
1/8	0.1250	0.1094	DA180-0125
9/64	0.1406	0.1250	DA180-0141
5/32	0.1563	0.1406	DA180-0156
11/64	0.1719	0.1563	DA180-0172
3/16	0.1875	0.1719	DA180-0188
13/64	0.2031	0.1875	DA180-0203
7/32	0.2188	0.2031	DA180-0219
15/64	0.2344	0.2188	DA180-0234
1/4	0.2500	0.2344	DA180-0250
17/64	0.2656	0.2500	DA180-0266
9/32	0.2813	0.2656	DA180-0281
19/64	0.2969	0.2813	DA180-0297
5/16	0.3125	0.2969	DA180-0313
21/64	0.3281	0.3125	DA180-0328
11/32	0.3438	0.3281	DA180-0344
23/64	0.3594	0.3438	DA180-0359
3/8	0.3750	0.3594	DA180-0375
25/64	0.3906	0.3750	DA180-0391
13/32	0.4063	0.3906	DA180-0406
27/64	0.4219	0.4063	DA180-0422
7/16	0.4375	0.4219	DA180-0438
29/64	0.4531	0.4375	DA180-0453
15/32	0.4688	0.4531	DA180-0469
31/64	0.4844	0.4688	DA180-0484
1/2	0.5000	0.4844	DA180-0500
33/64	0.5156	0.5000	DA180-0516
17/32	0.5313	0.5156	DA180-0531
35/64	0.5469	0.5313	DA180-0547
9/16	0.5625	0.5469	DA180-0563
37/64	0.5781	0.5625	DA180-0578
19/32	0.5938	0.5781	DA180-0594
39/64	0.6094	0.5938	DA180-0609
5/8	0.6250	0.6094	DA180-0625
41/64	0.6406	0.6250	DA180-0641
21/32	0.6563	0.6406	DA180-0656
43/64	0.6719	0.6563	DA180-0672
11/16	0.6875	0.6719	DA180-0688
45/64	0.7031	0.6875	DA180-0703
23/32	0.7188	0.7031	DA180-0719
47/64	0.7344	0.7188	DA180-0734
3/4	0.7500	0.7344	DA180-0750

**RA - Rigid QC**  
**ANSI**  
Tang / Lug Drive



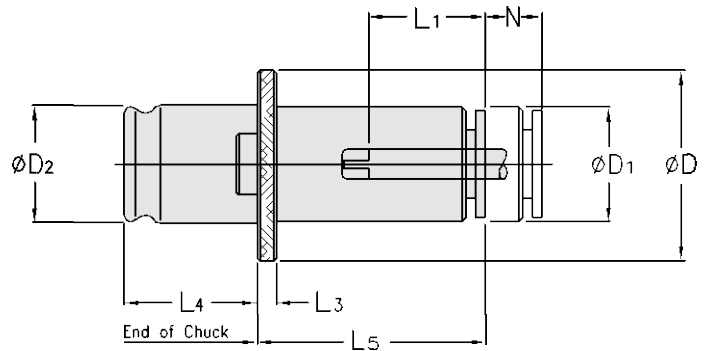
Features:

- Direct Drive for Rigid Tapping
- Bilz Quick Change Compatible
- Push to load / release system for quick tool change
- DIN / ISO / JIS Available - Please provide tap shank and square when ordering
- Ball Drive available - Non-Stock

ANSI Tap Size	Metric	Shank"	Shank MM	Square"	Square MM	SIZE 0	SIZE 1	SIZE 2	SIZE 3
#0 - #6	M1.6	0.141	3.58	0.110	2.79	RA0U-0141	RA1U-0141		
#8	M4	0.168	4.27	0.131	3.33	RA0U-0168	RA1U-0168		
#10	M4.5, M5	0.194	4.93	0.152	3.86	RA0U-0194	RA1U-0194		
#12		0.220	5.59	0.165	4.19	RA0U-0220	RA1U-0220		
	M6, M8		6.00		4.90	RA0D-M060X049	RA1D-M060X049		
1/4	M6, M6.3	0.255	6.48	0.191	4.85	RA0U-0255	RA1U-0255		
	M7, M9, M10		7.00		5.50		RA1D-M070X055		
	M11		8.00		6.00		RA1J-M080X060		
	M8, M11		8.00		6.20		RA1D-M080X062		
5/16	M7, M8	0.318	8.08	0.238	6.05		RA1U-0318	RA2U-0318	
3/8	M10	0.381	9.68	0.286	7.26		RA1U-0381	RA2U-0381	
7/16		0.323	8.20	0.242	6.15		RA1U-0323	RA2U-0323	
	M9, M12		9.00		7.00		RA1D-M090X070		
1/2	M12, M12.5	0.367	9.32	0.275	6.99		RA1U-0367	RA2U-0367	
9/16	M14	0.429	10.90	0.322	8.18		RA1U-0429	RA2U-0429	RA3U-0429
	M16		12.00		9.00			RA2D-M120X090	
5/8	M16	0.480	12.19	0.360	9.14			RA2U-0480	RA3U-0480
11/16	M18	0.542	13.77	0.406	10.31			RA2U-0542	RA3U-0542
3/4		0.590	14.99	0.442	11.23			RA2U-0590	RA3U-0590
13/16	M20	0.652	16.56	0.489	12.42			RA2U-0652	RA3U-0652
7/8	M22	0.697	17.70	0.523	13.28			RA2U-0697	RA3U-0697
15/16	M24	0.760	19.30	0.570	14.48				RA3U-0760
1"	M25	0.800	20.32	0.600	15.24				RA3U-0800
1-1/16 - 1-1/8	M27	0.896	22.76	0.672	17.07				RA3U-0896
1-3/16 - 1-1/4	M30	1.021	25.93	0.766	19.46				RA3U-1021
1-5/16 - 1-3/8	M33	1.108	28.14	0.831	21.11				RA3U-1108
<b>PIPE TAP</b>									
1/8 PIPE SS		0.313	7.95	0.234	5.94		RA1U-0313		
1/8 PIPE LS		0.438	11.13	0.328	8.33		RA1U-0438		
1/4 PIPE		0.563	14.30	0.421	10.69			RA2U-0563	
3/8 PIPE		0.700	17.78	0.531	13.49			RA2U-0700	RA3U-0700
1/2 PIPE		0.688	17.48	0.515	13.08			RA2U-0688	RA3U-0688
3/4 PIPE		0.906	23.01	0.679	17.25				RA3U-0906
1" PIPE		1.125	28.58	0.843	21.41				RA3U-1125

**RAN - Rigid QC Length Adjustable**  
Tang / Lug Drive

- Length Adjustable available - add "N" after the RA  
Example: RAN1U-0381
- Ball Drive available - Non-Stock





**TC - Torque Control QC  
ANSI  
Tang / Lug Drive**

**HPI - PIONEER**



**Features:**

- Direct Drive for Rigid Tapping
- Bilz Quick Change Compatible
- Push to load / release system for quick tool change
- DIN / ISO / JIS Available - Please provide tap shank and square when ordering
- Ball Drive available - Non-Stock

ANSI Tap Size	ANSI Metric	Shank"	Shank MM	Square"	Square MM	SIZE 0	SIZE 1	SIZE 2	SIZE 3
#0 - #6	M1.6	0.141	3.58	0.110	2.79	TC0U-0141	TC1U-0141		
#8	M4	0.168	4.27	0.131	3.33	TC0U-0168	TC1U-0168		
#10	M4.5, M5	0.194	4.93	0.152	3.86	TC0U-0194	TC1U-0194		
#12		0.220	5.59	0.165	4.19	TC0U-0220	TC1U-0220		
1/4	M6, M6.3	0.255	6.48	0.191	4.85	TC0U-0255	TC1U-0255		
5/16	M7, M8	0.318	8.08	0.238	6.05		TC1U-0318	TC2U-0318	
3/8	M10	0.381	9.68	0.286	7.26		TC1U-0381	TC2U-0381	
7/16		0.323	8.20	0.242	6.15		TC1U-0323	TC2U-0323	
1/2	M12, M12.5	0.367	9.32	0.275	6.99		TC1U-0367	TC2U-0367	
9/16	M14	0.429	10.90	0.322	8.18		TC1U-0429	TC2U-0429	TC3U-0429
5/8	M16	0.480	12.19	0.360	9.14			TC2U-0480	TC3U-0480
11/16	M18	0.542	13.77	0.406	10.31			TC2U-0542	TC3U-0542
3/4		0.590	14.99	0.442	11.23			TC2U-0590	TC3U-0590
13/16	M20	0.652	16.56	0.489	12.42			TC2U-0652	TC3U-0652
7/8	M22	0.697	17.70	0.523	13.28			TC2U-0697	TC3U-0697
15/16	M24	0.760	19.30	0.570	14.48				TC3U-0760
1"	M25	0.800	20.32	0.600	15.24				TC3U-0800
1-1/16 - 1-1/8	M27	0.896	22.76	0.672	17.07				TC3U-0896
1-3/16 - 1-1/4	M30	1.021	25.93	0.766	19.46				TC3U-1021
1-5/16 - 1-3/8	M33	1.108	28.14	0.831	21.11				TC3U-1108
<b>PIPE TAP</b>									
1/8 PIPE SS		0.313	7.95	0.234	5.94		TC1U-0313		
1/8 PIPE LS		0.438	11.13	0.328	8.33		TC1U-0438		
1/4 PIPE		0.563	14.30	0.421	10.69			TC2U-0563	
3/8 PIPE		0.700	17.78	0.531	13.49			TC2U-0700	TC3U-0700
1/2 PIPE		0.688	17.48	0.515	13.08			TC2U-0688	TC3U-0688
3/4 PIPE		0.906	23.01	0.679	17.25				TC3U-0906
1" PIPE		1.125	28.58	0.843	21.41				TC3U-1125



## Collet Nuts

Nut Part Number	Description	Wrench Part Number	Thread	Max. Torque
ERN-11H	ER 11 Coated Nut -Hex	ERW-11H	M14 x 0.75	15-20 ft/lbs
ERN-16H	ER 16 Coated Nut -Hex	ERW-16H	M22 x 1.5	45-50 ft/lbs
ERN-20H	ER 20 Coated Nut -Hex	ERW-20H	M25 x 1.5	70-75 ft/lbs
ERN-16	ER 16 Coated Nut - E Type	ERW-16	M22 x 1.5	45-50 ft/lbs
ERN-20	ER 20 Coated Nut - E Type	ERW-20	M25 x 1.5	70-75 ft/lbs
ERN-25	ER 25 Coated Nut - E Type	ERW-25	M32 x 1.5	90-95 ft/lbs
ERN-32	ER 32 Coated Nut - E Type	ERW-32	M40 x 1.5	120-125 ft/lbs
ERN-40	ER 40 Coated Nut - E Type	ERW-40	M50 x 1.5	130-140 ft/lbs
ERN-50	ER 50 Coated Nut - E Type	ERW-50	M64 x 2.0	150-160 ft/lbs
ERN-32B	ER 32 Bearing Nut - E Type	ERW-32	M40 x 1.5	120-125 ft/lbs
ERN-40B	ER 40 Bearing Nut - E Type	ERW-40	M50 x 1.5	130-140 ft/lbs
ERN-8M	ER 8 Mini Nut	ERW-8M	M10 x 0.75	5-7 ft/lbs
ERN-11M	ER 11 Mini Nut	ERW-11M	M13 x 0.75	12-14 ft/lbs
ERN-16M	ER 16 Mini Nut	ERW-16M	M19 x 1.0	20-22 ft/lbs
ERN-20M	ER 20 Mini Nut	ERW-20M	M24 x 1.0	20-25 ft/lbs
ERN-25M	ER 25 Mini Nut	ERW-25M	M30 x 1.0	25-29 ft/lbs
TGN-075	TG75 Spanner Bearing Nut	TGW-075	1 1/2-12 Acme	55-60 ft/lbs
TGN-100	TG100 Spanner Bearing Nut	TGW-100	1 7/8-12 Acme	75-80 ft/lbs
TGN-150	TG150 Spanner Bearing Nut	TGW-150	2 5/8-12 Acme	75/80 ft/lbs
DAN-300	DA300 Close Center Nut	DAW-300	7/16-32	18-20 ft/lbs
DAN-200	DA200 Close Center Nut	DAW-200	3/4-16	25-30 ft/lbs
DAN-100	DA100 Close Center Nut	DAW-100	15/16-20	30-35 ft/lbs
DAN-180	DA180 Close Center Nut	DAW-180	1 1/4-12	34-40 ft/lbs
SXN-06	SX06 Hex Nut	SXW-06	M15.5 x 1.0	22-28 ft/lbs
SXN-10	SX10 Hex Nut	SXW-10	M21.5 x 1.0	33-43 ft/lbs
SXN-16	SX16 Hex Nut	SXW-16	M32 x 1.5	73-83 ft/lbs
SXN-25	SX25 Spanner Nut	SXW-25	M45 x 1.5	88-97 ft/lbs



## ER Coolant Disk Collet Nuts

- For coolant pressures up to 1,500 PSI.
- Fits most standard ER collet chucks.
- Coolant Disk on following page.



Nut Part Number	Description	Coolant Disc	Wrench Part Number	Thread	Max. Torque
ERCN-16	ER 16 Coated Nut - E Type	CD16	ERW-16	M22 x 1.5	45-50 ft/lbs
ERCN-20	ER 20 Coated Nut - E Type	CD20	ERW-20	M25 x 1.5	70-75 ft/lbs
ERCN-25	ER 25 Coated Nut - E Type	CD25	ERW-25	M32 x 1.5	90-95 ft/lbs
ERCN-32	ER 32 Coated Nut - E Type	CD32	ERW-32	M40 x 1.5	120-125 ft/lbs
ERCN-40	ER 40 Coated Nut - E Type	CD40	ERW-40	M50 x 1.5	130-140 ft/lbs
ERCN-32B	ER 32 Bearing Nut - E Type	CD32	ERW-32	M40 x 1.5	120-125 ft/lbs
ERCN-40B	ER 40 Bearing Nut - E Type	CD40	ERW-40	M50 x 1.5	130-140 ft/lbs
ERCN-16M	ER 16 Mini Nut	CD16	ERW-16M	M19 x 1.0	20-22 ft/lbs
ERCN-20M	ER 20 Mini Nut	CD20	ERW-20M	M24 x 1.0	20-25 ft/lbs
ERCN-25M	ER 25 Mini Nut	CD25	ERW-25M	M30 x 1.0	25-29 ft/lbs
TGCN-100	TG100 Spanner Bearing Nut	CD32	TGW-100	1 7/8-12 Acme	75-80 ft/lbs





### Coolant Disk Seals

- Rated for 1,500 PSI Coolant Pressure.
- For use with standard coolant disk nuts from several manufacturers.

**HPI - PIONEER**



Range	Inch Shank	ER 16	ER 20	ER 25	ER 32	ER 40
3.5 - 3.0mm	1/8"	CD16 - 03.5	CD20 - 03.5	CD25 - 03.5	CD32 - 03.5	CD40 - 03.5
4.0 - 3.5mm	5/32"	CD16 - 04.0	CD20 - 04.0	CD25 - 04.0	CD32 - 04.0	CD40 - 04.0
4.5 - 4.0mm	11/64"	CD16 - 04.5	CD20 - 04.5	CD25 - 04.5	CD32 - 04.5	CD40 - 04.5
5.0 - 4.5mm	3/16"	CD16 - 05.0	CD20 - 05.0	CD25 - 05.0	CD32 - 05.0	CD40 - 05.0
5.5 - 5.0mm	13/64"	CD16 - 05.5	CD20 - 05.5	CD25 - 05.5	CD32 - 05.5	CD40 - 05.5
6.0 - 5.5mm	7/32"	CD16 - 06.0	CD20 - 06.0	CD25 - 06.0	CD32 - 06.0	CD40 - 06.0
6.5 - 6.0mm	1/4"	CD16 - 06.5	CD20 - 06.5	CD25 - 06.5	CD32 - 06.5	CD40 - 06.5
7.0 - 6.5mm	17/64"	CD16 - 07.0	CD20 - 07.0	CD25 - 07.0	CD32 - 07.0	CD40 - 07.0
7.5 - 7.0mm	9/32"	CD16 - 07.5	CD20 - 07.5	CD25 - 07.5	CD32 - 07.5	CD40 - 07.5
8.0 - 7.5mm	5/16"	CD16 - 08.0	CD20 - 08.0	CD25 - 08.0	CD32 - 08.0	CD40 - 08.0
8.5 - 8.0mm	21/64"	CD16 - 08.5	CD20 - 08.5	CD25 - 08.5	CD32 - 08.5	CD40 - 08.5
9.0 - 8.5mm	11/32"	CD16 - 09.0	CD20 - 09.0	CD25 - 09.0	CD32 - 09.0	CD40 - 09.0
9.5 - 9.0mm	3/8"	CD16 - 09.5	CD20 - 09.5	CD25 - 09.5	CD32 - 09.5	CD40 - 09.5
10.0 - 9.5mm	25/64"	CD16 - 10.0	CD20 - 10.0	CD25 - 10.0	CD32 - 10.0	CD40 - 10.0
10.5 - 10.0mm	13/32"		CD20 - 10.5	CD25 - 10.5	CD32 - 10.5	CD40 - 10.5
11.0 - 10.5mm	27/64"		CD20 - 11.0	CD25 - 11.0	CD32 - 11.0	CD40 - 11.0
11.5 - 11.0mm	7/16"		CD20 - 11.5	CD25 - 11.5	CD32 - 11.5	CD40 - 11.5
12.0 - 11.5mm	15/32"		CD20 - 12.0	CD25 - 12.0	CD32 - 12.0	CD40 - 12.0
12.5 - 12.0mm	31/64"		CD20 - 12.5	CD25 - 12.5	CD32 - 12.5	CD40 - 12.5
13.0 - 12.5mm	1/2"		CD20 - 13.0	CD25 - 13.0	CD32 - 13.0	CD40 - 13.0
13.5 - 13.0mm	17/32"			CD25 - 13.5	CD32 - 13.5	CD40 - 13.5
14.0 - 13.5mm	35/64"			CD25 - 14.0	CD32 - 14.0	CD40 - 14.0
14.5 - 14.0mm	9/16"			CD25 - 14.5	CD32 - 14.5	CD40 - 14.5
15.0 - 14.5mm	37/64"			CD25 - 15.0	CD32 - 15.0	CD40 - 15.0
15.5 - 15.0mm	19/32"			CD25 - 15.5	CD32 - 15.5	CD40 - 15.5
16.0 - 15.5mm	5/8"			CD25 - 16.0	CD32 - 16.0	CD40 - 16.0
16.5 - 16.0mm	41/64"				CD32 - 16.5	CD40 - 16.5
17.0 - 16.5mm	21/32"				CD32 - 17.0	CD40 - 17.0
17.5 - 17.0mm	11/16"				CD32 - 17.5	CD40 - 17.5
18.0 - 17.5mm	45/64"				CD32 - 18.0	CD40 - 18.0
18.5 - 18.0mm	23/32"				CD32 - 18.5	CD40 - 18.5
19.0 - 18.5mm	3/4"				CD32 - 19.0	CD40 - 19.0
19.5 - 19.0mm	49/64"				CD32 - 19.5	CD40 - 19.5
20.0 - 19.5mm	25/32"				CD32 - 20.0	CD40 - 20.0
20.5 - 20.0mm	51/64"					CD40 - 20.5
21.0 - 20.5mm	13/16"					CD40 - 21.0
21.5 - 21.0mm	27/32"					CD40 - 21.5
22.0 - 21.5mm	55/64"					CD40 - 22.0
22.5 - 22.0mm	7/8"					CD40 - 22.5
23.0 - 22.5mm	29/32"					CD40 - 23.0
23.5 - 23.0mm	59/64"					CD40 - 23.5
24.0 - 23.5mm	15/16"					CD40 - 24.0
24.5 - 24.0mm	61/64"					CD40 - 24.5
25.0 - 24.5mm	31/32"					CD40 - 25.0
25.5 - 25.0mm	1"					CD40 - 25.5
26.0 - 25.5mm						CD40 - 26.0





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## Wrenches

Notes:

- Both open end and spanner style available.
- Verify nut design prior to ordering.



Wrench Part Number	Description	Wrench Type	Max. Torque
ERW-11H	ER 11 Coated Nut -Hex	Hex	15-20 ft/lbs
ERW-16H	ER 16 Coated Nut -Hex	Hex	45-50 ft/lbs
ERW-20H	ER 20 Coated Nut -Hex	Hex	70-75 ft/lbs
ERW-16	ER 16 Coated Nut - E Type	E Type	45-50 ft/lbs
ERW-20	ER 20 Coated Nut - E Type	E Type	70-75 ft/lbs
ERW-25	ER 25 Coated Nut - E Type	E Type	90-95 ft/lbs
ERW-32	ER 32 Coated Nut - E Type	E Type	120-125 ft/lbs
ERW-40	ER 40 Coated Nut - E Type	E Type	130-140 ft/lbs
ERW-50	ER 50 Coated Nut - E Type	E Type	150-160 ft/lbs
ERW-32	ER 32 Bearing Nut - E Type	E Type	120-125 ft/lbs
ERW-40	ER 40 Bearing Nut - E Type	E Type	130-140 ft/lbs
ERW-8M	ER 8 Mini Nut	Mini E Type	5-7 ft/lbs
ERW-11M	ER 11 Mini Nut	Mini E Type	12-14 ft/lbs
ERW-16M	ER 16 Mini Nut	Mini E Type	20-22 ft/lbs
ERW-20M	ER 20 Mini Nut	Mini E Type	20-25 ft/lbs
ERW-25M	ER 25 Mini Nut	Mini E Type	25-29 ft/lbs
TGW-075	TG75 Spanner Bearing Nut	Hook Spanner	55-60 ft/lbs
TGW-100	TG100 Spanner Bearing Nut	Hook Spanner	75-80 ft/lbs
TGW-150	TG150 Spanner Bearing Nut	Hook Spanner	75/80 ft/lbs
DAW-300	DA300 Close Center Nut	Hex	18-20 ft/lbs
DAW-200	DA200 Close Center Nut	Hex	25-30 ft/lbs
DAW-100	DA100 Close Center Nut	Hex	30-35 ft/lbs
DAW-180	DA180 Close Center Nut	Hex	34-40 ft/lbs
SXW-06H	SX06 Hex Nut	Hex	22-28 ft/lbs
SXW-10H	SX10 Hex Nut	Hex	33-43 ft/lbs
SXW-16S	SX16 Spanner Nut	Spanner	73-83 ft/lbs
SXW-25S	SX25 Spanner Nut	Spanner	88-97 ft/lbs
MXW-04	BT30 GMX	T Handle	25-30 ft/lbs
MXW-05	MX and GMX	T Handle	35-40 ft/lbs
HSK- 63A	HSK 63A Coolant Tube Wrench	T Handle	
HSK-100A	HSK 100A Coolant Tube Wrench	T Handle	

## HSK Coolant Tubes

- Fits HSK Form A Shanks
- Double Seal Design



Part Number	Description
TUBE-063A	HSK 63A Coolant Tube
TUBE-100A	HSK 100A Coolant Tube



## Torque Wrenches

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The proper torque is a necessity in machining:

- Quality: Proper torque assures maximum cutting accuracy.
- Cost Savings: Proper torque extends the life of collets, tools, and holders.
- Safety: Proper torque reduces the possibility of tools loosening up and coming out of the holder.

Part Number	Description	Torque Range	Length	Weight	Spigot
TW-200	Torque Wrench	30-150 ft/lbs	16.5"	1.75 lbs.	16mm round
TW-300	Torque Wrench	45-228 ft/lbs	21.5"	2.5 lbs.	16mm round

## Torque Wrench Heads

- Fits Wrenches above.
- Specials available upon request.



Wrench Head Part Number	Description	Wrench Type	Max. Torque
TWH-ER16H	ER 16 Coated Nut -Hex	Hex	45-50 ft/lbs
TWH-ER20H	ER 20 Coated Nut -Hex	Hex	70-75 ft/lbs
TWH-ER16	ER 16 Coated Nut - E Type	E Type	45-50 ft/lbs
TWH-ER20	ER 20 Coated Nut - E Type	E Type	70-75 ft/lbs
TWH-ER25	ER 25 Coated Nut - E Type	E Type	90-95 ft/lbs
TWH-ER32	ER 32 Coated Nut - E Type	E Type	120-125 ft/lbs
TWH-ER40	ER 40 Coated Nut - E Type	E Type	130-140 ft/lbs
TWH-ER50	ER 50 Coated Nut - E Type	E Type	150-160 ft/lbs
TWH-TG075	TG75 Spanner Bearing Nut	Hook Spanner	55-60 ft/lbs
TWH-TG100	TG100 Spanner Bearing Nut	Hook Spanner	75-80 ft/lbs
TWH-TG150	TG150 Spanner Bearing Nut	Hook Spanner	75/80 ft/lbs
TWH-SX16	SX16 Hex Nut	Hex	73-83 ft/lbs
TWH-SX25	SX25 Spanner Nut	Spanner	88-97 ft/lbs

**Power Clamp****Mini**

The way in to inductive shrink fit technology:  
Simple, inexpensive, quick

**Feature**

- For solid carbide tools 3 – 16 mm Diameter
- Can be used anywhere due to one phase power supply:  
Electricity supply: 230 V, 50 – 60 Hz
- Power: 3 kW
- Simple handling

**Includes:**

- Coil
- 3 stop discs
- Tool tray
- 1 chuck support
- Protective Gloves

**Accessories:**

Chuck support:

- SK/BT/CAT30, 40, 50
- HSK 25, 32, 40, 50, 63, 80, 100

Note : Please specify taper shank when ordering.

**Power Clamp****Basic**

The way in to inductive shrink fit technology:  
Simple, inexpensive, quick

**Feature**

- Power: approx. 10 kW
- Mains voltage: 3x360-500 V, 16 A
- Tools: solid carbide and HSS from Ø 3-32 mm
- Simple handling

**Includes:**

- One chuck support station
- Coil for 3mm – 32mm (1/8" – 1-1/4")
- 1 piece of a Holding fixture (single station "spider") for chuck support station for holding a maximum of 1 tool (Please specify taper)
- 5 stop disks to cover clamping range from 3 – 32 mm (1/8" – 1 1/4")
- Protective Gloves

**Accessories:**

Chuck support:

- SK/BT/CAT30, 40, 50
- HSK 25, 32, 40, 50, 63, 80, 100

Note : Please specify taper shank when ordering.





## Power Clamp Comfort NG

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- With intelligent NG coil
- Rotary table with 3 stations
- With integrated contact cooling
- Power: 13 kW
- Mains voltage: 3x360-500 V, 16 A
- Tools: solid carbide and HSS from Ø 3-32 mm

### Includes

- "Intelligent" Adjustable Heating coil for 1/8" – 1-1/4" (3mm-32mm) tool shanks
- 3-Station rotary table
- 3-Station chuck support (spider) – Please specify taper
- Speed cooler with rear wall and 5 cooling adapters
- Tool storage tray
- Retractable storage tray for accessories
- 1 set of Kevlar gloves
- 110v speed cooling system
- Cooling Manager to automatically turn on/off cooler

**Cart is not included**



### Intelligent Coil

The coil adjust itself to the chuck in length and diameter. This innovative coil system eliminates the need for coil change, improving total operation time.

## Power Clamp Economy NG

- With intelligent NG coil
- Single chuck version, Without cooling
- Power: 13 kW
- Mains voltage: 3x360-500 V, 16 A
- Tools: solid carbide and HSS from Ø 3-32 mm

### Includes

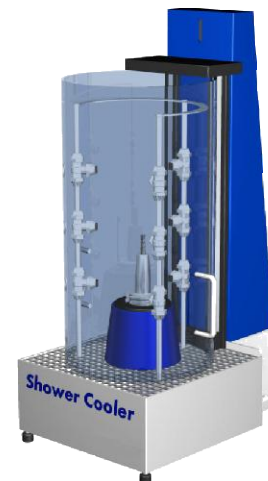
- "Intelligent" Adjustable Heating coil for 1/8" – 1-1/4" (3mm-32mm) tool shanks
- Single station chuck support
- Single chuck support adapter – Please specify taper
- Tool storage tray
- 1 set of Kevlar gloves



## Shower Cooler

### Features

- For all shrink machines
- For all diameters and length
- For all shanks
- Cooling down a holder within 1 min.



## Balancing Machine - TD1002

### Features:

- At reasonable price (no PC)
- Table and complementary machine
- Ideal for mold makers
- For small batch lots, single application and standard chucks
- Adapter with automatic clamping system



Tool Dynamic	TD 1002
Dimensions wxhxd [mm]	500x680x820
Weight [kg]	150
Spindle speed [rpm]	300-1100
Measuring accuracy [gmm]	< 1
Power requirements [V/Hz]	230/50-60
Power usage [kW]	0.4
Compressed air [bar]	6
Max. tool length [mm]	360
Max. tool diameter [mm]	340
Max. tool weight [kg]	30
Order Number	80.250.00

## Balancing Machine - TD2002

Works very precisely and with an adapter system which can be used for all kinds of tool holders. Measurement in one plane (static).

Particularly very sensible for short tool-holders, because of the couple unbalance being very low. Easy handling with integrated keyboard and screen.



Tool Dynamic 2002	Economic
Dimensions bxhxt [mm]	500x1500x820
Weight [kg]	450
Spindle speed [rpm]	300-1100
Measuring accuracy [gmm]	< 0,5
Power requirements [V/Hz]	230/50-60
Power usage [kW]	0.4
Compressed air [bar]	6
Max. tool length [mm]	400
optional	700
Max. tool diameter [mm]	350/380 1)
optional	400/425
Max. tool weight [kg]	30
Order number	80.220.00
Calibration tool	80.230.00

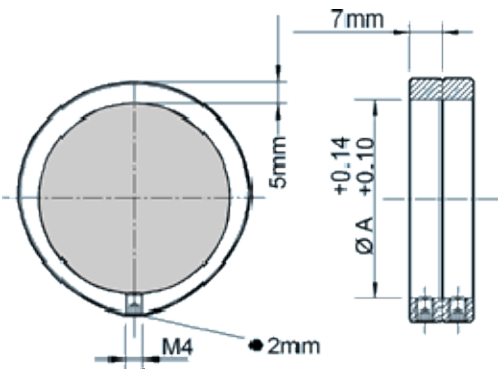
## Balancing Rings

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Make your standard tool holder a balanceable tool holder quick and easily

- Included in delivery: 2 balancing index rings with screws
- 2mm hex wrench not included



Part Number	Ø A [mm]	Ø A [inch]	ca. unbalance
BR-15	15	0.59"	9 g·mm
BR-17	17	0.67"	12 g·mm
BR-19	19	0.75"	16 g·mm
BR-20	20	0.79"	17 g·mm
BR-22	22	0.87"	20 g·mm
BR-24	24	0.94"	27 g·mm
BR-25	25	0.98"	32 g·mm
BR-26	26	1.02"	33 g·mm
BR-27	27	1.06"	33 g·mm
BR-28	28	1.10"	40 g·mm
BR-30	30	1.18"	45 g·mm
BR-32	32	1.26"	36 g·mm
BR-34	34	1.34"	40 g·mm
BR-35	35	1.38"	48 g·mm
BR-36	36	1.42"	47 g·mm
BR-38	38	1.50"	53 g·mm
BR-40	40	1.57"	57 g·mm
BR-42	42	1.65"	65 g·mm
BR-43	43	1.69"	65 g·mm
BR-43.45	43.45	1.71"	68 g·mm
BR-44	44	1.73"	68 g·mm
BR-46	46	1.81"	75 g·mm
BR-48	48	1.89"	81 g·mm
BR-50	50	1.97"	87 g·mm
BR-52	52	2.05"	94 g·mm
BR-53	53	2.09"	86 g·mm
BR-54	54	2.13"	91 g·mm
BR-55	55	2.17"	94 g·mm
BR-56	56	2.20"	100 g·mm
BR-58	58	2.28"	106 g·mm
BR-60	60	2.36"	110 g·mm
BR-62	62	2.44"	120 g·mm
BR-63	63	2.48"	123 g·mm
BR-64	64	2.52"	126 g·mm
BR-65	65	2.56"	129 g·mm
BR-66	66	2.60"	120 g·mm
BR-68	68	2.68"	135 g·mm
BR-70	70	2.76"	145 g·mm
BR-72	72	2.83"	152 g·mm
BR-74	74	2.91"	160 g·mm
BR-76	76	2.99"	168 g·mm
BR-78	78	3.07"	178 g·mm
BR-80	80	3.15"	186 g·mm
BR-82	82	3.23"	199 g·mm
BR-84	84	3.31"	215 g·mm
BR-86	86	3.39"	224 g·mm
BR-87	87	3.43"	225 g·mm
BR-88	88	3.46"	226 g·mm
BR-90	90	3.54"	237 g·mm
BR-92	92	3.62"	247 g·mm
BR-94	94	3.70"	253 g·mm
BR-96	96	3.78"	267 g·mm
BR-98	98	3.86"	277 g·mm
BR-100	100	3.94"	285 g·mm

### Balancing Screw Kit #80-203-00



For fine-balancing of all tool holders with balancing threads M6 (HPI Shrink Fit Holders)

The screws have different weights in a fine graduation. They are screwed into the balancing threads of the tool holder so that their weight compensates the unbalance of the tool holder.

- Set consisting of screws of 11 different sizes and weights
- Screws are screwed to the ground of the thread and tightened.
- No additional fixing of screws necessary.
- Balancing quickly and precisely
- No damage of tool holders
- Can be repeated as often as necessary
- Suitable for tool holders of all brands
- The balancing machine calculates the necessary weight of the screws
- Included in delivery: Case with 11 x 10 balancing screws, Screw driver





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## Flash Setter

Fast, easy and precision axis setter

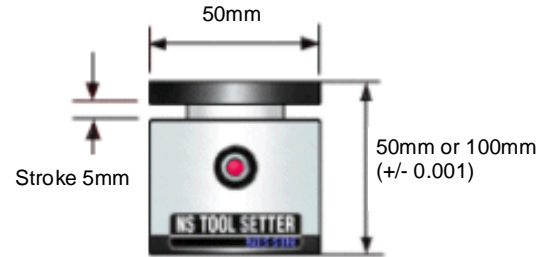
### Feature

- Repeatable within 1 micron.
- Responsive LED light.
- Measures tool length and the origin of work piece.
- Sets X, Y and Z axis for all ferrous metal.
- Sub-zero treatment is done for long lasting durability and reliable performance.
- Precision ground finish ensures within 5 micron parallelism.
- Optional magnetic cable enables Flash Setter for use on plastics, woods and other non-ferrous materials.
- Approx. 1 year battery life

### Magnet Cable (option)

Optional magnet cable enables Flash Setter to work with non-ferrous materials such as plastic, ceramic, graphite etc.

Note : Magnet cable is not included in standard Flash Setter. Please order separately.



Part Number	Setting Height	Stroke
M-50	50MM	5MM
M-100	100MM	5MM

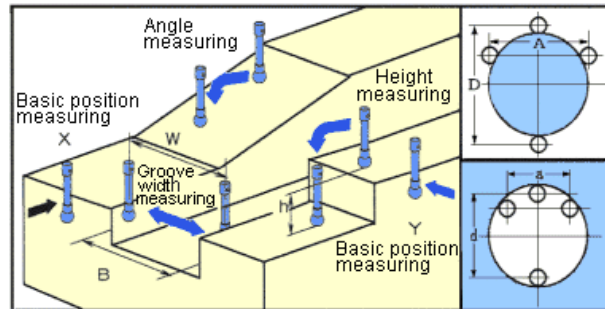
## 3D-FINDER

Non-Magnetize Stylus

The all new HPI edge finder has improved light source for low visibility, with a 500 times more sensitive built-in electronic circuit than conventional edge finders. This is the best edge finder you can get in the market today.

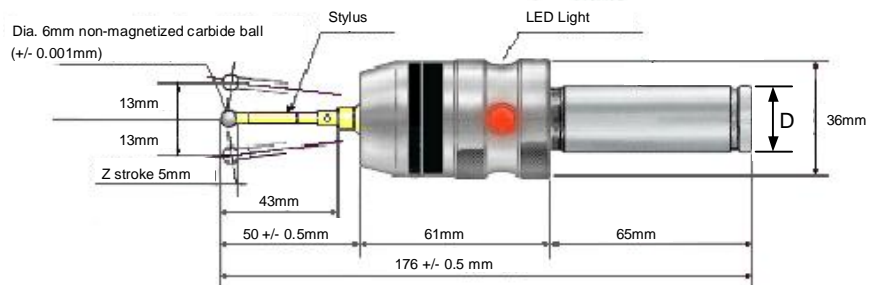
### Non-Magnetized Stylus

- No measuring error caused by magnetized stylus and work piece.
- No measurement error caused by magnetism.
- Chip will not stick to the stylus.
- No need for demagnetization and replacement of stylus.
- Tungsten carbide ball has nearly 70% less resistance than conventional steel ball, improving light visibility.



### Feature

- 3D measuring with accuracy  $\pm 0.5$  micron.
- Advanced electric circuit improves sensitivity by 500 times compared to conventional edge finders.
- Inside and outside diameter, starting point, centering, angle groove width and height etc, can be measured by this one unit.
- LED emits light in the four directions.
- Battery life is approx. one year.
- Screw type stylus for easy replacement.
- Can be used for all metals (an electric conduction spray or gold leaf must be used for non-ferrous materials).



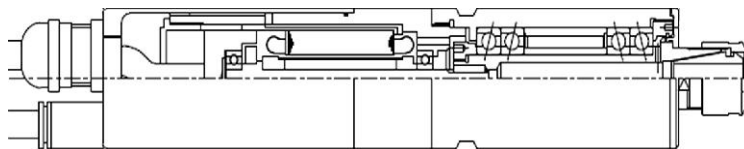
Part Number	Shank Size D	Battery
PTN-20	20MM	Manganese, UM-5 (2) pcs.



## Lexus Electric Speeder System

### Features

- Micro processing possible @ 10,000 - 60,000 RPM.
- Spindle runout : 1 micron or better
- High Torque Motor: Torque: 5.88 N \* cm
- Compact power supply unit: W220xD220xH42 (mm).
- Power : AC110V (input frequency 50/60Hz).
- Cooling air (0.3 - 0.5mPa)
- CAT/BT, HSK, and straight shanks available. Please contact HPI for the proper retention knob.



### Maximum RPM: 60,000

With the adoption of the ceramic bearings with air cooling system, high speed machining at 60,000 RPM can be performed, allowing for unsurpassed surface finish even with end mill 1mm dia. or smaller.

### Exceptional Precision Spindle

Ultra high precision spindle provides 1 micron or better TIR. Recommended with HPI ultra precision ER11 collet (0.5 - 6.0mm).

### High power 370W

Built-in motor generates 370W power, 1.7 times stronger than competitor. Thus AEGIS provides flat and reliable torque at entire rpm range of 10,000 - 60,000 RPM.

### Stationary Machine Spindle

Designed to operate with a stationary machine spindle which improves accuracy and reduces heat.

### Minimal heat generation and vibration

Built-in brushless motor eliminates the need for gear system. AEGIS generates less vibration and heat than conventional gear driven spindle speeders.

### Sealed for Coolant applications

### Safety Protection System

When temperature or RPM exceeds allowable condition, the system will automatically shut down the spindle.



### Examples of Applications

- Polishing (grinding)
- End mill: The high-speed cutting work with the small diameter end mill (the work material: Such as aluminum, copper, graphite, steel)  
**Finishing Applications Only!**
- Drilling
- Finish processing of die material





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## Height Gage Fixtures

- Bolts to Workbench
- Uses standard Height Stand

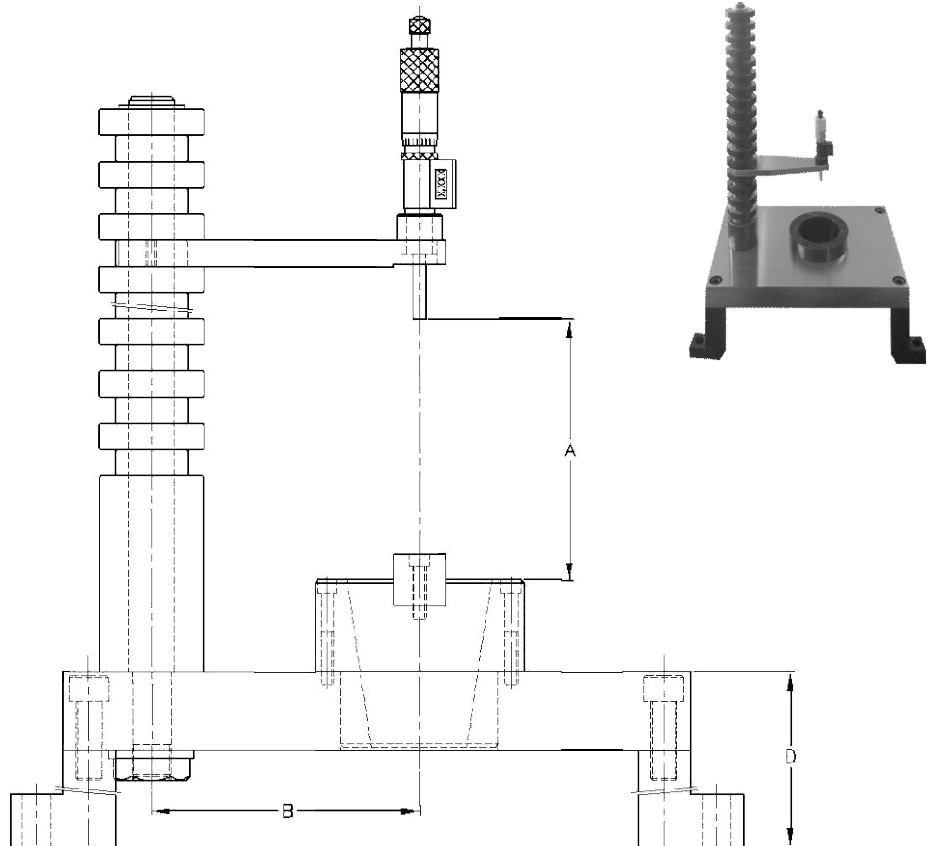
This low cost height stand uses any standard height stand, analog or digital to provide simple accurate height preset. Legs provide height so the pull stud does not hit the table. The legs can be mounted to the table top.



Part Number	Shank Size
HG-BT30	BT30, SK30
HG-CAT40	BT40, CAT40, SK40
HG-CAT50	BT50, CAT50, SK50
HG-HSK32A	HSK32A/E
HG-HSK40A	HSK40A/E HSK50F
HG-HSK50A	HSK50A/E HSK63F
HG-HSK63A	HSK63A HSK80F
HG-HSK80A	HSK80A
HG-HSK100A	HSK100A

## Height Gage Fixtures with Dedicated Post

- Maximum Height 20" +/- 0.003"
- Maximum Diameter 8"
- Elevated 4" Legs
- Micrometer with Analog Readout
- Bolts to Workbench



Part Number	Tool Shank	A	B	D
HG-20-30BT	BT30			
HG-20-40CT	CAT40, BT40, SK40,			
HG-20-50CT	CAT50, BT50, SK50,	20.000 +/- 0.003	5.12	5.50
HG-20-H63A	HSK 63A, 63C, 50F			
HG-20-H100A	HSK 100A, 100C			



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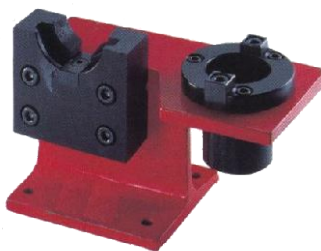
### Locking Fixtures

- Bolts to Workbench
- Easy Access to Retention Knob



#### Single Station

Part Number	Tool Shank
TL-BT30	BT30
TL-BT40	BT40
TL-CAT40	Cat40
TL-CAT50	Cat50



#### Dual Station

Part Number	Tool Shank
TLD-BT30	BT30
TLD-BT40	BT40
TLD-CAT40	Cat40
TLD-CAT50	Cat50

### Tool Boy Locking Fixture

#### Features

- Bolts to Workbench
- 4 x 90 degree positions
- Optimum position for all manipulations on tooling
- Prevents tools from injuring hands
- No spine torsion thanks to horizontal tool position
- Safe tool handling - even of heavy tools - thanks to automatic locking in desired working position
- Optimum protection of toolholder thanks to brass taper sleeve
- Improved tool clamping ensures longer tool life and protects machine spindle
- No wear as major elements such as clamping dog and locking disc are hard anodized.
- Available for Cat, BT, NMTB, ISO7388, DIN2080, DIN69871, HSK, KM, VDI and Capto.



Part Number	Description
TB-BASE	Single Rotating Base

Part Number	Shank Size
TB-30 HEAD	BT30, ISO30
TB-40 HEAD	BT40, CAT40, ISO40
TB-45 HEAD	CAT45
TB-50 HEAD	BT50, CAT50, ISO50
TB-HSK32A HEAD	HSK32A
TB-HSK40A HEAD	HSK40A
TB-HSK40E HEAD	HSK40E
TB-HSK50A HEAD	HSK50A
TB-HSK63A HEAD	HSK63A
TB-HSK63F HEAD	HSK63F
TB-HSK80A HEAD	HSK80A
TB-HSK100A HEAD	HSK100A
TB-KM32 HEAD	KM32
TB-KM40 HEAD	KM40
TB-KM50 HEAD	KM50
TB-KM63 HEAD	KM63
TB-Capto C3 HEAD	CAPTO C3
TB-Capto C4 HEAD	CAPTO C4
TB-Capto C5 HEAD	CAPTO C5
TB-Capto C6 HEAD	CAPTO C6
TB-Capto C8 HEAD	CAPTO C8

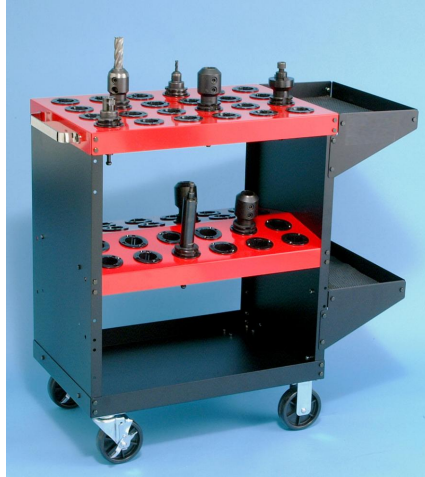


## Tool Carts



### Tool Storage Carts

Solid, Sturdy and Dependable



**Standard Carts Include:**

- Upper and Lower Tool Shelf
- Tapered Nylon Inserts
- Bottom Shelf angled for easy access
- (2) End Trays
- Heavy Duty 5"x1-1/4 Casters
- Ecolo-Clad Coating

Dimensions:  
18" W x 35-1/4" L x 35" H

Shipping Weight:  
75 lbs.

Assembly Required

**Ordering Instructions:**

If TS-40 is ordered you will receive the cart as shown with (2) end shelves, middle tool shelf, casters and handle. Additions shown below must be ordered with one of the standard tool carts.

Example: TS-40 + TS-FTS will give you a Tool Cart with a Flat Top and 24 Cat40 Middle Tool Shelf.

Standard Carts	Tools	Part Number
BT30 / Cat30	48	TSC-30
BT40 / Cat40	48	TSC-40
BT50 / Cat50	36	TSC-50
HSK-63A/C/E HSK-80F	48	TSC-63A
HSK-100A/C/E	36	TSC-100A
Additions		
Flat Top		TSC-FTS
Flat Middle Shelf		TSC-FMS
End Tray		TSC-ET

### Economy Tool Carts

Less Standard Options  
Same Quality, 15" Width



Shown with Additional Tool Shelf (Purchase separately)

**Standard Carts Include:**

- Upper Tool Shelf
- Tapered Nylon Inserts
- Heavy Duty 4"x1-1/2 Casters
- Infrared-Baked Epoxy Finish with Phosphate Pretreatment

Dimensions:  
15" W x 35-1/4" L x 35" H

Shipping Weight:  
52 lbs.

Assembly Required

**Ordering Instructions:**

If TSE-40 is ordered you will receive the cart, casters and handle. Additions shown below must be ordered with one of the standard tool carts. Example: TSE-40 + TSE-AD40 will give you a Cat40 Tool Cart for 24 tools and 24 tool Cat40 Middle Tool Shelf.

Economy Carts	Tools	Part Number
BT40 / Cat40	24	TSE-40
BT50 / Cat50	15	TSE-50
HSK-63A/C/E HSK-80F	24	TSE-63A
HSK-100A/C/E	15	TSE-100A
Additions		
BT40 / Cat40	24	TSE-AD40
BT50 / Cat50	15	TSE-AD50
HSK-63A/C/E HSK-80F	24	TSE-AD63
HSK-100A/C/E	15	TSE-AD100
Flat Middle Shelf		TSE-FMS
Locking Tool Drawer (Requires (1) TSE-FMS Above)		TSE-LTD



# Rotary Wiper

The HPI - Pioneer Rotary Wiper makes it possible to view the production/machining process clearly within the machine enclosure while the cutting is going with coolants.



**Applications:**

- Trial Runs
- Production of Single Part
- Set-Up Work
- Viewing the conditions of cutting
- Central Video Monitoring of the Entire production process

**Useful with:**

- CNC Machining Centers
- CNC Lathes
- Grinding Machines
- Parts Cleaning Machines
- Any application with water or coolant spray is obstructing vision

Type		
RW-V1-25	2.5M Air Line	Bolt Fitting
RW-V1-50	5.0M Air Line	Bolt Fitting
RW-V1-T25	2.5M Air Line	Tape Fitting
RW-V1-T50	5.0M Air Line	Tape Fitting

Specifications	
Thickness	1.26" [32mm] (1.57" [40mm] at center)
Size	9.84" [250mm]
Weight	3.3 lbs [1.5 kg]
Spin Disc	Chemically Tempered Glass
Air Piping	Conduit Cable 10mm O.D. Touch Tube 6mm O.D. 4mm I.D.

**HIGH PRECISION AIR CHUCK**

Over 15,000 sets have been sold in the past 20 years. Based on years of experience and know-how, we offer you the Air Chuck which have the highest accuracy, performance and reliability in the market. Now a day, the demand for the accuracy and performance required from the production people are getting higher and higher. We, as a solution provider, are ready to propose the unique and adequate ideas in order to meet with the various applications.

**Rotating Air Chucks**

Air chucks are ideal for High Precision turning, cylindrical grinding and similar applications that require very close tolerances in concentricity, squareness, and parallelism. Adjustable clamping force enables clamping of thin-walled and other fragile parts to minimize distortion. All models feature a coolant / air thru the center of the chuck.

**Chuck Accuracy**

- 1 - 2 Micron - 0.00004 - 0.00008" TIR is standard

**Available Options**

- Precision located top jaw system
- 3" to 10" chucks available
- 3 & 4 Jaw standard, other configurations available
- Higher accuracy available - See diaphragm chucks for up to 0.2 Microns, 0.0000078"
- Operating pressure as low as 0.1 MPa (14.5 PSI) for thin wall parts
- Coolant / Air Thru the center of air tube



**See *PIONEER Chuck Catalog* for additional Information**

Rotating



Rotating - 4 Jaw



Rotating Sealed



Rotating High Speed



Stationary



Material Handling



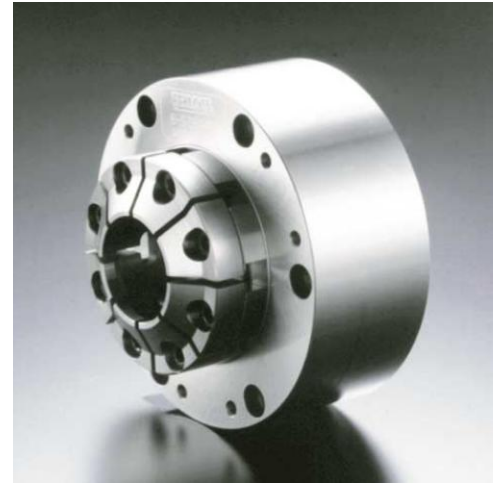




## SUPER HIGH PRECISION DIAPHRAGM CHUCK

HPI - PIONEER

PIONEER Diaphragm Chuck is basically to clamp the work piece "Soft" and Evenly to avoid the distortion by utilizing the tensile strength of special material used for Diaphragm. It is also designed not to be affected by the centrifugal force at high speed, and can be used up to 10,000min- or over. It ensures "Super High Precision" and "Stable Performance" in the turning.



Custom Jaw Examples

Diaphragm chucks use a 1 piece jaw system for improved accuracy and easy tool change. Custom jaws are designed and built to meet your unique work piece for either ID or OD holding. 4 layer AFT and nozzle supplied with air ports are available so the chuck will not close unless the work piece is seated properly on the nozzle.

<b>Repeatability</b>	Within <b>0.2 Micron</b> , 0.0002mm or 0.0000078"
<b>Maintenance Free</b>	No Lubrication Necessary. Chuck is completely sealed.
<b>Flex. Clamping Power</b>	For both OD & ID clamping, fine adjustment of clamping power is possible.
<b>Excellent High Speed Capability</b>	On any type of chucks, super performance can be obtained at high RPM.
<b>High Durability</b>	Long life of rigidity and accuracy is insured due to unique diaphragm material.
<b>Flex. Application</b>	Both OD & ID clamping is possible with one chuck, and very flexible arrangement of work piece mounting stop is possible.

**See PIONEER Chuck Catalog for additional Information**

## AIR FEED TUBE ASSEMBLY

### Models Available:

**JHP3** For Diaphragm Chuck & Air Chuck up to 8,000 RPM

**JHP2** For w/movable AFT Air Chuck up to 8,000 RPM

**4L3** For Diaphragm Chuck and For Air Chuck (4 Layer Type)  
Not only opening & closing jaws, air blow and/or coolant teed through the center bore of chuck, checking and confirming work piece seated properly or not, is possible.





**Yukiwa Rotary**

**Sealed and Designed to Survive!**

HPI has the best of the best in Rotary and Indexer tables with Sealed tables, patented Air Purge system to pressurize the units, 20% larger brakes and bearings, a 24 month standard warrantee and we have an unbeatable combination.

Add that we have over 20 years experience in service and support, we are your one stop support and sales center for 4th and 5th axis applications.

Out of the box you can submerge any of our tables, add nickel plating, isolated bearings for wire EDM and you will find an unbeatable price and quality.

Available standard from 140mm to 250mm and specials to any size.

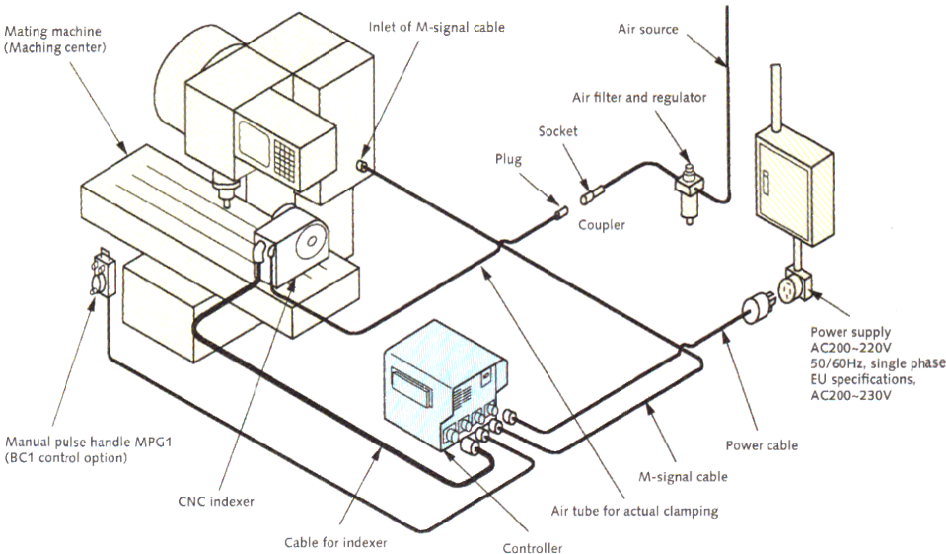


**Which connections is best for you?**

There are 2 basic connections for a Rotary Table, Indexer with secondary Controller and Integrated which utilizes the machine control.

Integrated requires the Machine Control to be designed to accept additional Axis controllers. If the machine has 1 open slot, 4th axis is available, 2 slots, 4th or 5th axis. Integrated allows full contour milling, the table is another axis in your programming and functions as a synchronized part of the machine.

Glass Scales can be added for additional accuracy and guaranteed movement.



Indexer (shown to the right) requires a separate controller to drive the table. This programming can be done on the controller or if the machine is capable thru the controls Macro  $\beta$  function and has an open Serial connector. Indexers are great at positioning but are not synchronized with the machine so indexers cannot do complex machine moves like contour milling.



**HPI - PIONEER**

**Yukiwa Rotary**



**JNC**

- Available in 140mm, 170mm, 200mm & 250mm
- Strong Clamping: 1.7X over competitive models
- Accurate Indexing
- High Durability
- Sealed for Submersed Applications
- Auto-Air Purging System (PAT.)
- Special Available



**JNC-EDM**

- Available in 140mm, 170mm, 200mm & 250mm
- Accurate Indexing
- High Durability
- Sealed for Submersed Applications
- Auto-Air Purging System (PAT.)
- Isolated Bearings & Ground Stainless Steel Face Plate for Wire EDM
- Optional Nickel Plating



**YNC**

- Available in 170mm, 200mm & 250mm
- 20% Larger Bearings & Breaks than JNC Model
- Accurate Indexing
- High Durability
- Sealed for Submersed Applications
- Auto-Air Purging System (PAT.)
- Specials Available



**TNT**

- Available in 130mm & 180mm
- Accurate Indexing
- High Durability
- Sealed for Submersed Applications
- Auto-Air Purging System (PAT.)
- Specials Available

**AC3 Indexer Control**



- Compact Design
- Simple programming, 10,000 block memory
- 0.001 Degree Accuracy
- RS232C Ready
- G Code Ready
- LED Diagnostics for easy trouble shooting



**Tap Shank Standards**

**HPI - PIONEER**

Shank Diameter		Square Size		ANSI		ISO		JIS	DIN 352	DIN 371	DIN 374	DIN 376	DIN 2182	DIN 2183	Reference
MM	Inch	MM	Inch	Inch	Metric	Full	Relieved								
2.50	0.098	2.10	0.083						M1	M1	M3.5	M3.5	1/16"		RA0D-M025X021
2.80	0.110	2.10	0.083						M2	M2	M4	M4	3/32"	5/32"	RA0D-M028X021
2.80	0.110	2.24	0.088			M2.5									
3.00	0.118	2.50	0.098					M1 - M2.6							RA0J-M030X025
3.15	0.124	2.50	0.098			M3	M4								
3.50	0.138	2.70	0.106						M3	M3	M4.5 - 5	M4.5 - 5	1/8"		RA0D-M035X027
3.55	0.140	2.80	0.110			M3.5	M4.5								
3.58	0.141	2.79	0.110	#0 - #6	M1.6 - M3.5										RA1U-0141
4.00	0.157	3.00	0.118						M3.5	M3.5			7/32"		RA1D-M040X030
4.00	0.157	3.15	0.124			M4	M5 - M5.5								
4.00	0.157	3.20	0.126					M3 - 3.5							RA1J-M040X032
4.27	0.168	3.33	0.131	#8	M4										RA1U-0168
4.50	0.177	3.40	0.134						M4	M4	M6	M6	5/32"	1/4"	RA1D-M045X034
4.50	0.177	3.55	0.140			M4.5	M6								
4.93	0.194	3.86	0.152	#10	M4.5 - M5										RA1U-0194
5.00	0.197	4.00	0.157			M5		M4 - M4.5							RA1J-M050X040
5.50	0.217	4.30	0.169								M7	M7			
5.50	0.217	4.50	0.177					M5 - 5.5							RA1J-M055X045
5.59	0.220	4.19	0.165	#12											RA1U-0220
5.60	0.220	4.50	0.177			M5.5	M7								
6.00	0.236	4.50	0.177					M6							RA1J-M060X045
6.00	0.236	4.90	0.193						M4.5 - M6	M5 & M6	M8	M8			RA1D-M060X049
6.10	0.240	5.00	0.197												
6.20	0.244	5.00	0.197					M7 - M8							RA1J-M062X050
6.30	0.248	5.00	0.197			M6	M8								
6.48	0.255	4.85	0.191	#14 & 1/4"	M6 - M6.3										RA1U-0255
7.00	0.276	5.50	0.217					M9 - M10	M7		M9 - M10	M9 - M10	1/4"	3/8"	RA1D-M070X050
7.10	0.280	5.60	0.220			M7	M9								
7.95	0.313	5.94	0.234	1/16"P & 1/8"P-LS											RA1U-0313P
8.00	0.315	6.00	0.236					M11							RA1J-M080X060
8.00	0.315	6.20	0.244							M8	M11	M11	5/16"	7/16"	RA1D-M080X062
8.00	0.315	6.30	0.248			M8	M10 - M11								
8.08	0.318	6.05	0.238	5/16"	M7 - M8										RA1U-0318
8.20	0.323	6.15	0.242	7/16"											RA1U-0323
8.50	0.335	6.50	0.256					M12							RA1J-M085X065
9.00	0.354	7.00	0.276						M12	M9	M12	M12	3/8"	1/2"	RA1D-M090X070
9.00	0.354	7.10	0.280			M9	M12								
9.32	0.367	6.99	0.275	1/2"	M12 - M12.5										RA1U-0367
9.50	0.374	7.00	0.276					M13							
9.68	0.381	7.26	0.286	3/8"	M10										RA1U-0381
10.00	0.394	8.00	0.315			M10				M10					RA1D-M100X080
10.50	0.413	8.00	0.315					M14 - M15							
10.90	0.429	8.18	0.322	9/16"	M14										RA1U-0429
11.00	0.433	9.00	0.354						M14		M14	M14	9/16"		
11.13	0.438	8.33	0.328	1/8" P-LS											RA1U-0438P
11.20	0.441	9.00	0.354				M14-M15								
12.00	0.472	9.00	0.354						M16		M16	M16	5/8"		RA2D-M120X090
12.19	0.480	9.14	0.360	5/8"	M16										RA2U-0480
12.50	0.492	10.00	0.394				M16-M17	M16							
13.00	0.512	10.00	0.394					M17							
13.77	0.542	10.31	0.406	11/16"	M18										RA2U-0542
14.00	0.551	11.00	0.433					M18	M18		M18	M18	11/16"		



# Tap Shank Standards

HPI - PIONEER

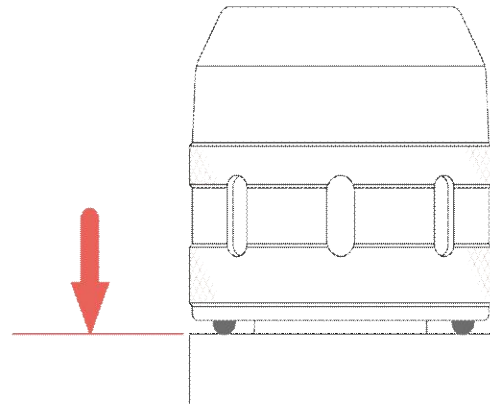
Shank Diameter		Square Size		ANSI		ISO Relieved	JIS	DIN 352	DIN 374	DIN 376	DIN 2183	Reference
MM	Inch	MM	Inch	Inch	Metric	UNC/UNF						
14.00	0.551	11.20	0.441			M18 - M20						
14.30	0.563	10.69	0.421	1/4" P								RA2U-0563P
14.99	0.590	11.23	0.442	3/4"								RA2U-0590
15.00	0.591	12.00	0.472				M20					
16.00	0.630	12.00	0.472					M20	M20	M20	13/16"	
16.00	0.630	12.50	0.492			M22						
16.56	0.652	12.42	0.489	13/16"	M20							RA2U-0652
17.00	0.669	13.00	0.512				M22					
17.48	0.688	13.08	0.515	1/2" P								RA2U-0688P
17.70	0.697	13.28	0.523	7/8"	M22							RA2U-0697
17.78	0.700	13.49	0.531	3/8" P								RA2U-0700P
18.00	0.709	14.00	0.551			M24 - M25						
18.00	0.709	14.50	0.571					M22 & M24	M22 & M24	M22 & M24	7/8" & 15/16"	
19.00	0.748	15.00	0.591				M24 - M25					
19.30	0.760	14.48	0.570	15/16"	M24							RA3U-0760
20.00	0.787	15.00	0.591				M26 - M27					
20.00	0.787	16.00	0.630			M27 - M30		M27	M27	M27	1"	
20.32	0.800	15.24	0.600	1"	M25							RA3U-0800
21.00	0.827	17.00	0.669				M28					
22.00	0.866	17.00	0.669									
22.00	0.866	18.00	0.709					M30	M30	M30	1-1/8"	
22.40	0.882	18.00	0.709			M32 - M33						
22.76	0.896	17.07	0.672	1-1/16" & 1-1/8"	M27							RA3U-0896
23.00	0.906	17.00	0.669				M30					
23.01	0.906	17.25	0.679	3/4" P								RA3U-0906
24.00	0.945	19.00	0.748				M32					
25.00	0.984	19.00	0.748				M33					
25.00	0.984	20.00	0.787			M35 - M36		M33	M33	M33	1-1/4"	
25.93	1.021	19.46	0.766	1-3/16" & 1-1/4"	M30							RA3U-1021
26.00	1.024	21.00	0.827				M34 - M35					
28.00	1.102	21.00	0.827				M36 - M38					
28.00	1.102	22.00	0.866					M36	M36	M36	1-3/8"	
28.00	1.102	22.40	0.882			M39 - M42						
28.14	1.108	21.11	0.831	1-5/16" & 1-3/8"	M33							RA3U-1108
28.58	1.125	21.41	0.843	1" P								RA3U-1125
30.00	1.181	23.00	0.906				M39 - M40					
31.32	1.233	23.50	0.925	1-7/16" & 1-1/2"	M36							RA4U-1233
31.50	1.240	25.00	0.984			M45 - M50						
32.00	1.260	24.00	0.945					M39 & M42	M39 & M42	M39 & M42	1-1/2"	
32.00	1.260	26.00	1.024				M42					
33.15	1.305	24.87	0.979	1-5/8"	M39							RA4U-1305
33.35	1.313	24.99	0.984	1-1/4" P								RA4U-1313P
35.00	1.378	26.00	1.024				M45					
35.50	1.398	28.00	1.102			M52 - M56						
36.00	1.417	29.00	1.142					M45 & M48	M45 & M48	M45 & M48	1-3/4"	
36.32	1.430	27.23	1.072	1-3/4"	M42							RA4U-1430
38.00	1.496	29.01	1.142				M48					
38.10	1.500	28.58	1.125	1-1/2" P								RA4U-1500P
38.58	1.519	28.93	1.139	1-7/8"								RA4U-1519
40.01	1.575	31.50	1.240			M60 & M64						
40.01	1.575	32.00	1.260				M50	M52	M52	M52	2"	
41.76	1.644	31.32	1.233	2"	M48							RA4U-1644



**Technical**

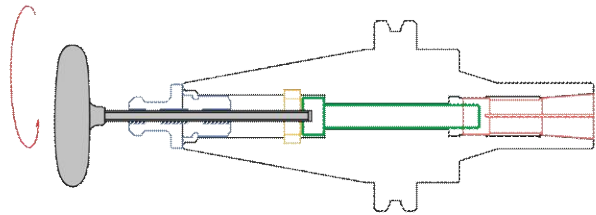
**How to use MC - Milling Chucks**

1. Clean the ID of the Chuck, ID and OD of the Collet and the OD of the tool shank
2. Insert the collet or cutter shank into the ID of the MC Chuck
3. Tighten the nut using MCW wrench. Tighten the nut all the way down until the o-ring located at the bottom of the nut touches the flange of the body.
4. Back off 1/4 turn for finishing applications
5. DO NOT tighten past the o-ring touching the body.



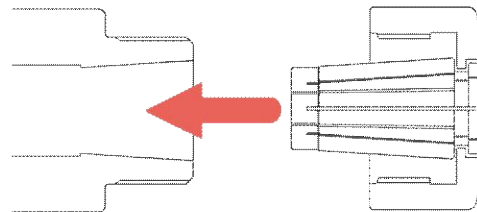
**How to use MX Chucks**

1. Clean the taper bore of the Chuck, ID and OD of the Collet and the OD of the tool shank
2. Insert the wrench from the back of the chuck or through the coolant hole in the retention knob. Pull the collet into the chuck by rotating the collet clockwise.
3. Tighten to 29-43 ft. lbs.



**How to use SX**

1. Clean the taper bore of the Chuck, ID and OD of the Collet and the OD of the tool shank
2. Insert the collet into the nut using the collet squeezer
3. Insert the collet and nut into the bore of the chuck
4. Insert the cutter into the collet
5. Tighten the nut to recommended tightening torque



• SX6	22-28 ft lbs	29-39 Nm
• SX10	33-43 ft lbs	44-58 Nm
• SX16	54-61 ft lbs	73-83 Nm
• SX25	64-71 ft lbs	88-97 Nm





## Technical

### HPI - PIONEER

#### How to use ER

1. Clean the taper bore of the Chuck, ID and OD of the Collet and the OD of the tool shank
2. Insert the collet into the nut
3. Insert the collet and nut into the bore of the chuck
4. Insert the cutter into the collet
5. Tighten the nut to recommended tightening torque

#### Standard and Coolant Disk Nut

- ER11 15-20 ft lbs
- ER16 45-50 ft lbs
- ER20 70-75 ft lbs
- ER25 90-95 ft lbs
- ER32 120-125 ft lbs
- ER40 135-140 ft lbs

#### Mini Nut

- ER8 5-7 ft lbs
- ER11 12-14 ft lbs
- ER16 20-22 ft lbs
- ER20 20-25 ft lbs

#### How to use TG

1. Clean the taper bore of the Chuck, ID and OD of the Collet and the OD of the tool shank
2. Insert the collet into the nut by pressing on the nut until the collet snaps into the holding ring
3. Insert the collet and nut into the bore of the chuck
4. Insert the cutter into the collet
5. Tighten the nut to 55-60 ft lbs

#### How to use DA

1. Clean the taper bore of the Chuck, ID and OD of the Collet and the OD of the tool shank
2. Insert the collet and nut into the bore of the chuck
3. Insert the cutter into the collet
4. Tighten the nut to recommended tightening torque

#### Standard

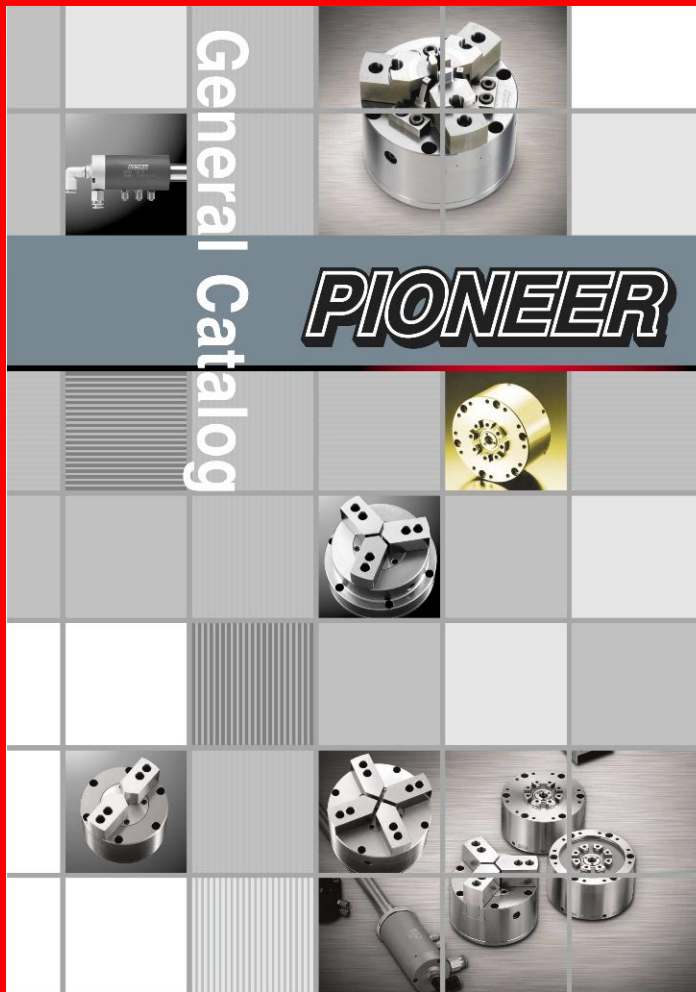
- DA30 18-20 ft lbs
- DA20 25-30 ft lbs
- DA10 30-35 ft lbs
- DA18 35-40 ft lbs

#### Mini Nut (HPI Standard)

- DA30 18-20 ft lbs
- DA20 25-30 ft lbs
- DA10 30-35 ft lbs
- DA18 35-40 ft lbs



# Air / Diaphragm Chucks and Rotary / Indexer Tables Available



# www.gohpi.com



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