

PIONEER

Premium Tool Holding Product Lineup



SD

Premium Shrink Fit *For Performance Milling*

Pluggable -X Jet-Blast

Our newly redesigned Shrink Holders are now equipped with pluggable angled coolant holes as the new standard. A factory-designed cross hole serves as a channel to facilitate coolant flow, ensuring efficient flow even when the cutter is bottomed out.

Pluggable -X Jet-Blast



Ultimate Performance

All Shrink Holders are ground to within 3 microns (0.0001") or less at the bore for ultimate precision performance. They are true dynamically balanced to G2.5 @ 25,000 RPM or less than 1gmm. Manufactured from ISO-40CrMoV5 (H13) material and heat treated for optimal performance.

Slim Nose Shrink

Slim Nose Shrink Holders are currently available in CAT40, HSK040E, and straight shanks. The Slim Nose design features a 3-degree nose angle and reduced nose wall thickness. The compact profile makes them ideal for precision 5-axis machining applications.



SX

Super Chuck *Drilling and Milling Super Tool*

Outstanding Grip Force

The SX system's 8-degree collet transfers torque more efficiently compared to other competitive 16-degree systems and requires less tightening to reach high locking torque. SX is ideal for light milling applications. Non-Pull Out collets are available for more aggressive applications.

Amazing Repeatability

SX uses a ground flat-headed collet to ensure that the locking nut doesn't impact the TIR of the chuck during tightening. This ensures a consistent and precise result with every tool change.

Coolant Thru

Sealed SX06, SX10, and SX16 collets are available and rated for pressures up to 1,500 psi. Additionally, a Coolant Cap system is available for all series and sizes, and can be modified with Jet-Blast for coolant thru applications.

Ultra Precision Collets

SX Collets are ground to a TIR specification within:

Standard: 5 Microns (0.0002") or less @ 4D

Precision: 3 Microns (0.0001") or less @ 4D



Standard



Sealed with Jet-Blast



Ultimate Collet Chuck

Best Finish & Tool Life

Ultimate Finish

VX's unique rear pull collet design provides less than a 3 micron (0.0001") deviation from tool change to tool change. The mechanism pulls straight back, which eliminates any twisting on the collet. VX delivers up to 5x the grip force compared to competing systems and provides the best finish and tool life of its class.

Compact Design

The VX system's compact design offers remarkable nose clearance while accommodating large collet capacities. This compact design makes them ideal for 5 axis applications.

Coolant Thru

VX is sealed by design and rated for coolant pressures up to 1,500 psi. Collets can be modified with Jet-Blast for efficient coolant flow around solid cutting tools.

Ultra Precision Collets

VX Holders use MX collets which offer an industry leading TIR specification. Ground to within:

3 Microns (0.0001") or less @ 4D



Pictured with Jet-Blast

MX

Mini Chuck *Milling & Finishing Star*

Ultimate Precision

The MX system has a TIR of 3 microns (0.0001") or less at 4x tool diameter, ensuring ultimate precision performance. MX chucks are dynamically balanced to G2.5 at 25,000 RPM or less, with vibration levels less than 1gm. This, combined with their reduced nose diameter and slim body profile, makes MX ideal for 5 axis finish milling applications.

Rear Draw Locking System

MX features a straightforward, maintenance-free Rear Draw Locking System. The cost of ownership is the lowest in its class, making them cost-competitive and easy to operate.

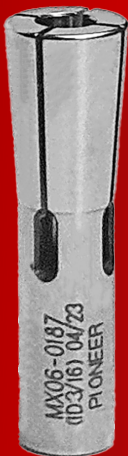
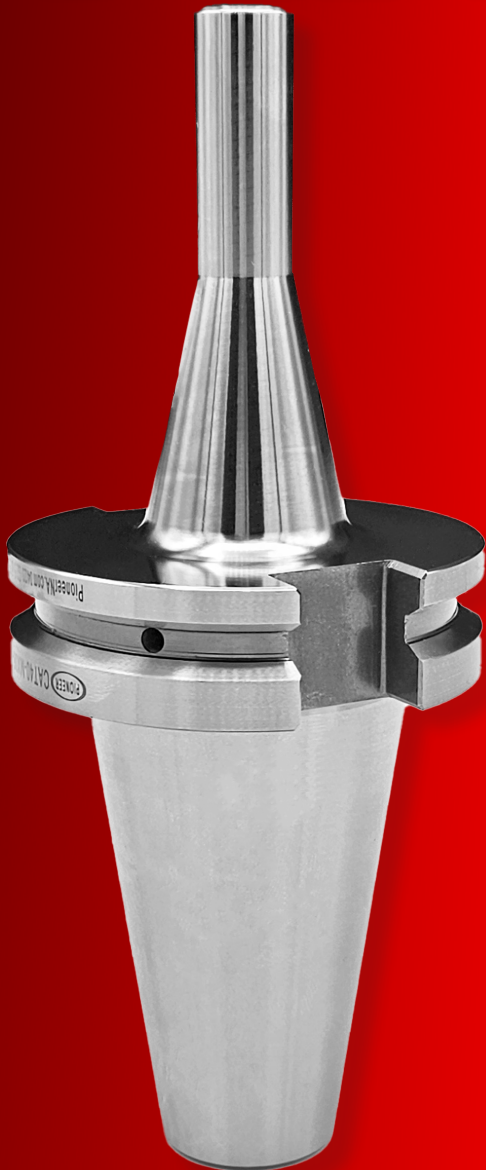
Coolant Thru

MX is coolant thru the center for optimal coolant flow. The sealed design enables them to withstand pressures of up to 1,500 psi.

Ultra Precision Collets

MX Collets offer an industry leading TIR specification. Ground to within:

3 Microns (0.0001") or less @ 4D



MC

Milling Chuck *Best in Class*

Performance Milling

MC is guaranteed at 5 Microns (0.0002") TIR at 100mm (4") from the nose. With up to an impressive 600ft/lb of radial locking torque on 1.25" shanks and 5x the driving torque compared to ER, MC stands out as the top performer in its class.

Outstanding Grip Force

The patented X groove system delivers the highest grip force in its class, surpassing competitive systems by 20% or more.

Ultra-Low Temp. Treatment

MC undergoes a sub-zero temperature treatment at -100°C, which eliminates residual austenite to enhance durability and ensure long lasting performance.

Precision Sleeves

MC Sleeves are available in 3/4", 1.0", and 1.25" ODs. A coolant cap system is available for coolant thru applications with Jet-Blast feature upon request. MC Sleeves are ground to a TIR specification within:

3 Microns (0.0001") or less @ 4D



HC

Hydraulic Chuck ***Multi-Application Champion***

Premium Precision

HC features an industry leading guaranteed TIR of 3 Microns (0.0001") or less, ensuring top-notch performance in drilling and milling applications. HC is pre-balanced to G2.5 @ 25,000 RPM or less, with vibration levels below 1gmm.

Positive Locking System

HC has a positive locking system which eliminates the potential of over-torquing during tightening. This system can be used with sealed or standard sleeves and on size tooling.

Vibration Dampening

The superior vibration dampening of HC ensures a better finish and higher reliability, which leads to increased productivity.

Superior Sleeves

HC Sleeves are sealed for coolant thru applications and are interchangeable with most competitive systems. MC Sleeves are available for non-coolant applications. Both HC and MC Sleeves offer an impressive TIR specification. Ground to within:

3 microns (0.0001") or less @ 4D



ER

Performance ER System *The Best Performance*

High Performance

ER Holders are ground to better than AT3 and within 3 microns (0.0001") TIR or less, with a versatile clamping range from 0.020" to 1.000".

Extensive Variety Available

ER Holders are available in a wide variety of lengths and geometries for every application. CAT40 ER32 stub offers the shortest possible projection for ultimate rigidity in aggressive machining applications. ER Mini holders are designed to offer additional clearance for close-wall or 5 axis applications. They are offered in ER11M and ER16M for CAT40 and BT30, as well as in ER08M, ER11M, ER16M, and ER20M for Straight Shank Extensions.



Collets for Every Application

ER UP and UPP



Sealed ER (SSER)



ER Tap (TER)



ER Shrink
Pictured with Jet-Blast



* Rust Preventative Coating
* UP Ground & Inspected at 0.0002" TIR
* UPP Ground & Inspected at 0.00008" TIR

* Sealed
* Standard TIR of 0.0004"
* Coolant pressures up to 1,500psi

* Offered in ANSI & Din Configurations
* Sealed by design

* Heat treated for extended tool life
* 0.0001" Runout from Taper to Bore
* Jet-Blast feature available upon request

PT

Precision Sync Tapping ***A New Level of Rigid Tapping***



Improves Tap Life Up To 300%

The minimal length compensation in both tension and compression of PT compensates for small pitch differences between the spindle and tap, reducing friction on the tap flanks. By eliminating error and spindle pressure in cut tap applications, PT can increase tap life up to 300%.

ER Tap Collets

PT utilizes industry standard ER Tap Collets. Pioneer ER tap collets are now sealed by design for high pressure coolant. Available in ANSI, DIN, and JIS configurations. Jet-Blast feature available for improved chip evacuation.

High Speed

PT is designed for use in high speed tapping cycles up to 15,000 RPM.

Modular Shank Options

Modular Shank options available to fit a variety of machine spindles and applications.



CAT40-PT20-0443



Jet Blast Modification

Modified In-House

Customized Coolant Holes

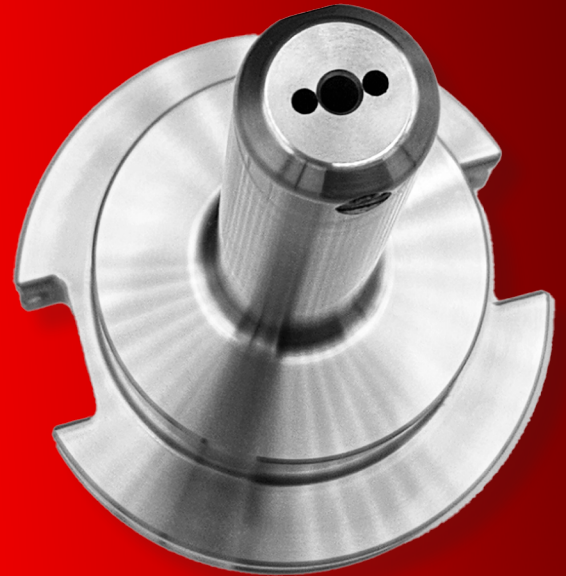
Jet-Blast is a modification performed at Pioneer which adds coolant ports for coolant thru applications. Pioneer Jet-Blast features a 2 port standard, with additional coolant ports available upon request depending on size and application.

Variety of Products

Jet-Blast can be applied to most tool holders 12" and shorter, all sealed collets, and coolant caps. Exceptions may apply for certain lengths and shanks.

Extended Tool Life

Jet-Blast has been proven over the last 10 years to extend tool life in many applications. By blasting the chips out of the cut, it allows the cutting tool to cut free which increases efficiency and tool life.



HS

HS-6K Heat Shrink ***Easy-to-Use Heat Shrink System***



High Spec, Low Cost Machine

Our CE Certified HS-6K Machine boasts a 1/8-3/4 (3-20mm) capacity and accommodates tools with up to a 12.5" projection. Operating on a 220V 24A Single Phase system, it features a cycle time of 10-20 seconds. The HS-6K is equipped with a user-friendly timer system for ease of use.

HS Cooling Unit

We offer a Cooling Unit (HS-WC) designed to complement the machine. HS-WC is a CE Certified 220V, 20A Single Phase Machine with a 30-40 Second Cycle Time. Cooling is performed separately, maximizing efficiency with water-based shop coolant.



HS-6K Packages

Customize your HS-6K with a variety of cost effective packages available to meet your needs. Each package includes an HS-6K shrink machine, shank adapters, and five standard projection shrink fit holders. Bundle with an HS-WC unit and accessories for even deeper savings.



Pioneer North America is a family owned business that has been providing customized solutions since 1974. Our advanced technology and cost effective solutions are designed to ensure that your applications exceed expectations. Our team of experienced Sales Staff and Customer Service Agents are ready and eager to help you create personalized solutions and provide dedicated support for all of your tooling needs.

Remember that not all tool holders are created the same.

Let us prove it to you.

Try Pioneer today.

**Pioneer North America
Tool & Work Holding Solutions**