

Milling Chuck Features

Nikken is the inventor of the original Milling Chuck (U.S. Patent 7018919). Since its introduction in 1963, Nikken has sold over 3,000,000 Milling Chucks worldwide and never stopped improving upon its original design. Featuring multi-roller bearings, spiral coolant slots, and a heavy-duty nut, the Milling Chuck is the most reliable and powerful toolholder available.



**STRONGEST
MECHANICALLY
GRIPPING HOLDER
IN THE WORLD!**



Construction and Design



Forged Nickel Chrome Molybdenum 4340 ground on taper and base.



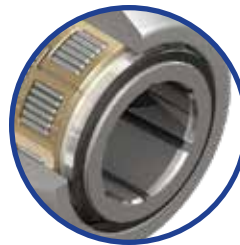
Staggered, coated steel cage packs 140% more needle rollers than competitors. This provides more gripping power. The retainer is NOT made of phosphor bronze, but rather of special steel which will never break.



Thick nut exerts immense gripping strength by collapsing tight taper on the mill chuck body.



Solid 1-piece base and thick wall provides rigidity for heavy machining.



Inner bore coolant slots project coolant at 2 degrees, assuring high pressure and volume of coolant during high RPM operations.



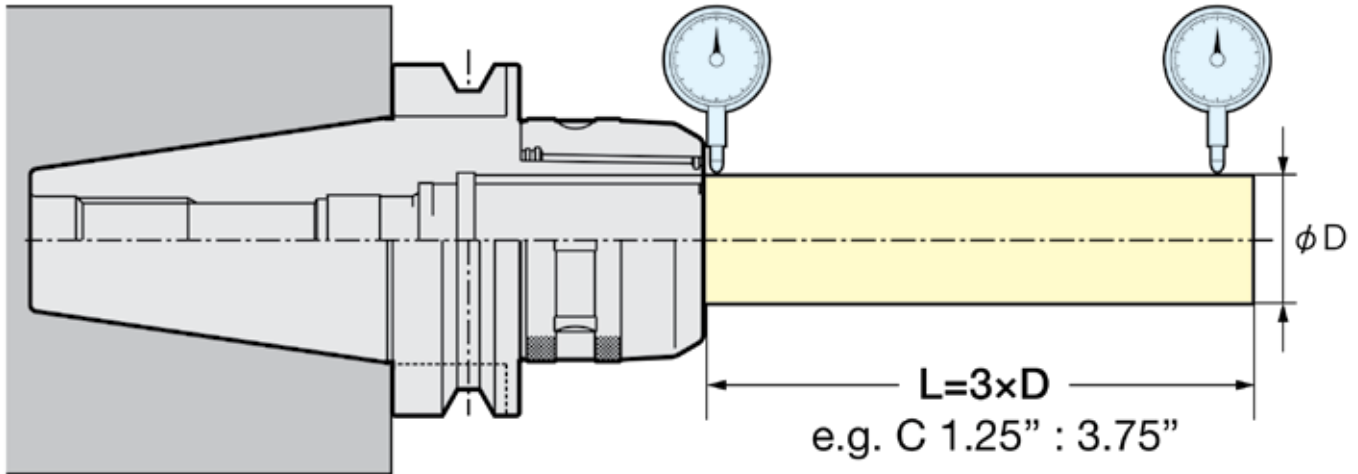
All milling chucks are cryogenically treated after heat treatment to stabilize concentrations of carbon. This prevents deformation and cracking when under stress for the life of the toolholder.



Milling Chuck Features

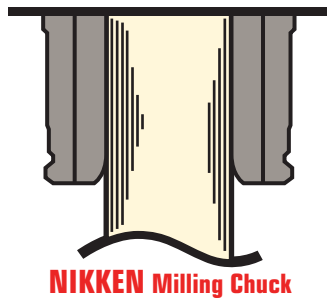
Superior Run Out Accuracy

Within 0.0002"

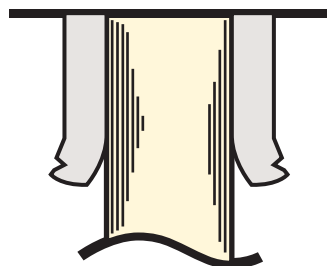


- Flange and taper grinding allow smooth and precise chucking of tool, resulting in minimal T.I.R.
- 0.0002 at 3.75" from the nose—guaranteed

STRONGEST Grip in the World UP TO 3,500 ft-lbs.!



NIKKEN Milling Chuck

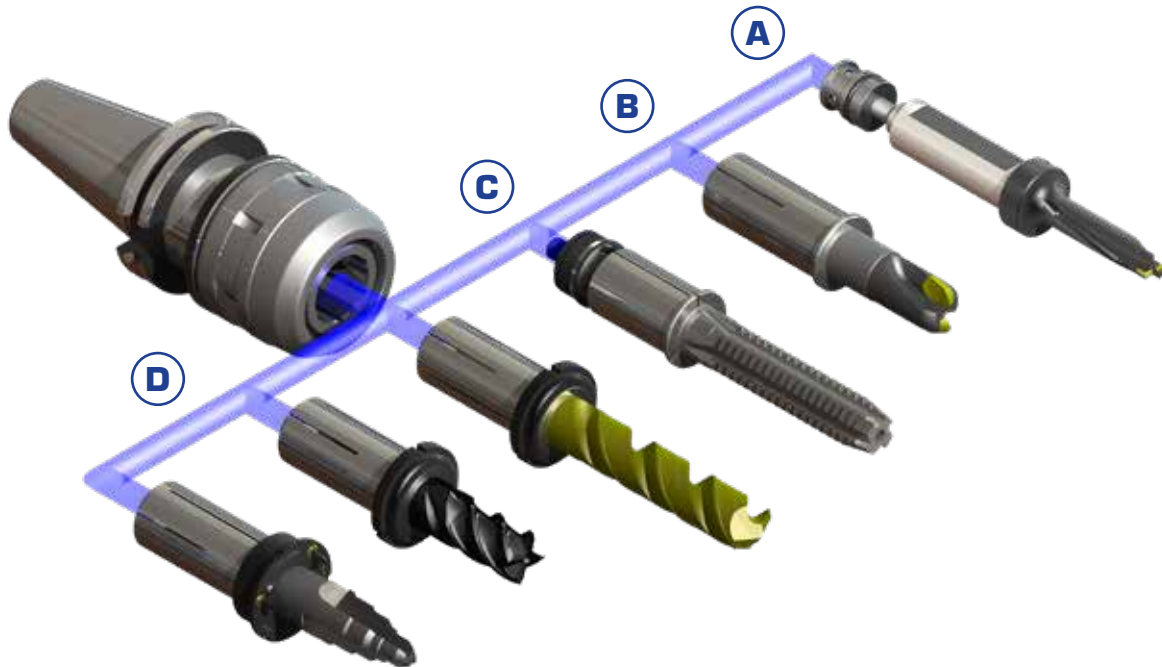


OTHER Milling Chuck

Nikken's patented Milling Chuck design allows clamping force to be dispersed evenly around the entire cutting tool shank. Gripping force up to 3,500 ft-lbs. can be applied ensuring optimal cutting performance and rigidity.

Milling Chuck Collet System

Nikken Milling Chuck Collets are designed to ensure uniform fit around the cutting tool shank. This provides maximum gripping power as well as concentric positioning of the cutting tool. All Milling Chuck Collets will surpass the precision and rigidity of traditional collet chuck systems if the cutting tool shank tolerance is guaranteed to be h6 or better.



A



Direct Coolant Plug (thru-tool)

- By combining a backup screw and coolant plug in one, the inner diameter of the milling chuck can be used with or without coolant
- Coolant through cutter ports can easily be sealed by an o-ring located at the face of the coolant plug
- 1200 PSI capable
- Excellent for high torque deep drilling
- Available for inch and metric shanks

B



KM Collet

- High Precision KM reduction collets extend the chucking flexibility of the milling chuck. All inch and metric standard sizes can be held by the same toolholder.
- Can be used in conjunction with a coolant back up screw for high pressure (1200 PSI) applications.

C



NK Collet

- High precision inch and metric NK reduction collets extend the chucking flexibility of the milling chuck and offer a built in back up screw for repeatability when replacing cutters.
- Easy set up since the NK fits directly into the inner diameter of the milling chuck.



Milling Chuck Coolant Collet System

D



CCK Collet: Coolant-Thru

- High Pressure coolant application through existing slots
- CCK reduction collets offers flexibility to hold both metric and inch standard shanks
- Straight collet design eliminates taper tolerance variation between mating surfaces
- Many options available to configure how coolant is expelled
- CCK collets are designed with an internal coolant groove that helps channel high pressure coolant to the periphery of your cutter without any reduction of gripping strength and T.I.R. accuracy



Coolant-Thru Nut: CKFN-C

When paired with the Nikken Milling Chuck Coolant Collet (CCK), the Coolant-Thru Nut forms a complete seal around the cutting tool. This forms an ideal combination for Coolant-Thru cutting tools.

- Internal durable O-ring seals for high pressure (750 PSI)
- Prevents swarf and chips from packing on the collet face
- Available for inch and metric shanks

Both the Coolant Collet and the Coolant-Thru Nut must be ordered on size for each cutting tool (see pages 115-116 for sizes and part numbers).



Slotted Nut: CKFN

When paired with the Nikken Milling Chuck Coolant Collet (CCK), the Slotted Nut allows coolant to travel down the shank of the cutting tool to the cutting edge. This combination is ideal for non Coolant-Thru cutting tools.

- 3 angled slots keeps high pressure coolant (up to 1200 PSI) aimed toward the periphery of the cutter, even at high RPM
- Helps remove chips during deep pocketing applications
- Available for inch and metric shanks

Both the Coolant Collet and the Slotted Nut must be ordered on size for each cutting tool (see pages 115-116 for sizes and part numbers).



Slotted Nut: CKFN-MN

- 3 adjustable nozzles help channel high pressure coolant to different cutter points (up to 750 PSI)
- Excellent for tools with multiple cutter points
- Available for inch and metric shanks

Why Upgrade to the Nikken Milling Chuck?

The Nikken Milling Chuck is a renowned universal toolholder that has proven its efficiency for years all over the world. Featuring a revolutionary design and collet system, the Nikken Milling Chuck allows for high-speed applications up to 20,000 RPM and offers incredible benefits compared to standard End Mill Holders such as higher accuracy and higher rigidity.

See below to find out what makes our Nikken Milling Chuck the best choice for any milling application.

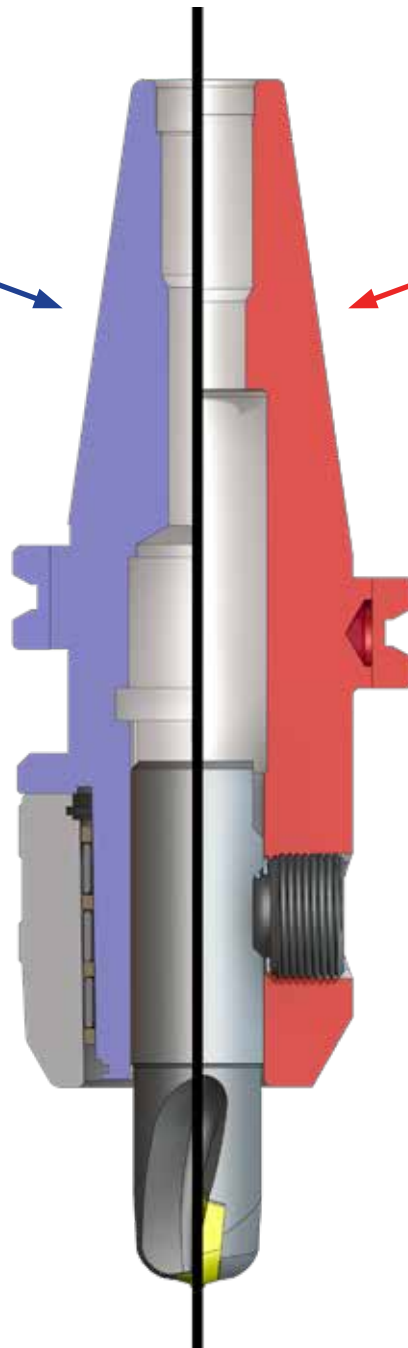
**Lyndex-Nikken
Milling Chuck**

End Mill Holder

AT3 or better taper tolerance

AT4 taper tolerance

- Most powerful collet chuck in the world
- Symmetrical design—pre-balanced body and nut allow the milling chuck to operate beyond 20,000 RPM
- Outside bearing nut mechanically induces tight taper of the milling chuck to evenly collapse onto the cutting shank for high precision T.I.R.
- 6 angled coolant slots are standard, providing high pressure and high volume of coolant directed toward the periphery of the cutting tool



- 120 year-old concept for holding tools
- Non-symmetrical design creates imbalance
- Requires tools with Weldon flats which create further imbalance
- Set screw shifts cutter off center which creates unacceptable run-out for precision milling
- Coolant slots are optional and are not large enough to create high volume of cutting fluid under high pressure applications