

LYNDEX-NIKKEN | **OTHER**

Ground surface allows perpendicular contact of retention stud, ensuring better alignment

AT3 or better taper contact: .0028 degree tolerance variation 80 millionths to 126 millionths. Traverse ground taper ensures 80% or better taper contact

Drive keys milled to same depth for symmetrical body design, resulting in better high speed balance

Body of Collet Chuck equal in diameter to the nut diameter. Thicker diameter and wall thickness results in stronger rigidity

Reduced gap size to prevent birds nests and other stringy chips from packing in or wrapping about

Smooth nut prevents coolant flare and provides better balance

Nickel Chrome Molybdenum Alloy



Lyndex-Nikken toolholders are heat treated "in house" to a hardness between 55 to 58 Rc under the highest quality standard, ensuring a homogeneous martensite (needle-shaped) crystalline structure. The additional heat treatment process allows for a better ground surface finish and stress stability of the toolholder.

OTHER

Turned rough surface causes the retention stud centerline to deviate

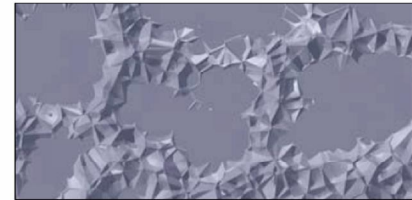
AT4 or better taper contact: .0028 degree tolerance variation 80 millionths to 126 millionths. Plunge ground taper creates inconsistency, ensuring only 60% or better taper contact

Drive keys milled to different depths, per standard of 70 years ago

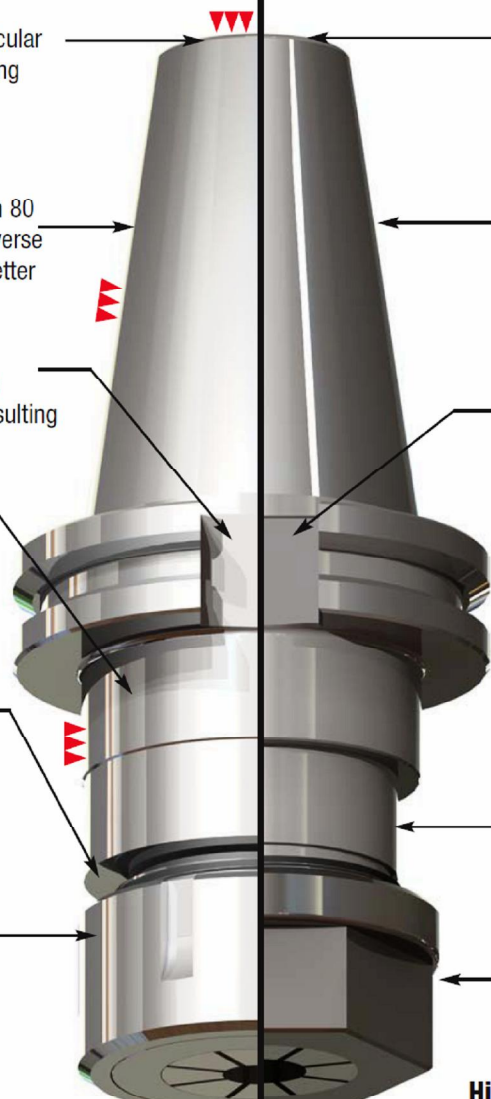
Recessed collet chuck body diameter weakens rigidity of holder

Large hex nut body design flares coolant away from toolholder

High Carbon Steel



Other toolholders are commonly not heat treated thoroughly to reduce costs, resulting in austenite deposits. Surface finish and material integrity are compromised commonly masked by chrome plating or polishing.



LYNDEX-NIKKEN NUT



Bearing Nut



Bearing nuts come as standard on all of our ER Collet Chucks:

- Reduce twisting of the collet and increase Collet Chucks:
- Improve chucking consistency to 6 times compare to non bearing style nut!

OTHER NUT

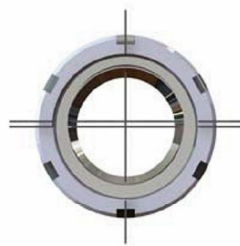


Standard Nut - No Bearing



Non bearing style nuts only provide the ability to retain the collet, and do not carry a functional advantage to improve the TIR or chucking consistency.

Maximum Accuracy



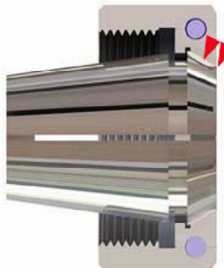
Because we manufacture all of our products and control all of our processes, Lyndex-Nikken maintains the accuracy assembly tolerance between the nut, collet and holder.

Our ground eccentric bearing race makes set up extremely easy, and ensures the accurate concentric placement of the collet.



Other manufacturers use a commercial snap ring as a retainer for the collet. This can contribute to minor misalignment between the nut, collet and holder.

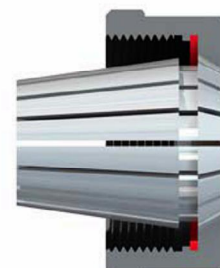
Ground Eccentric Nut



Our ground eccentric bearing race increases clamping power by 40% compared to standard nuts!

It also prevents galling and twisting between the collet angle contact surface and the nut to minimize runout, and greatly assist in alignment of the collet to the holder.

No Ground Surface



ER Collet without ground contact locations cannot ensure ultra precision due to surface abnormality.