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

**ER Nut**
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.

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.
ER Collet Features

We offer the largest ER Collet product range in the industry.

**Quality Standard:** Made to DIN 6499 Specification

**Material:** High Tensile Chromium Molybdenum Alloy provides greater hardness and less material deformation compared to traditional spring steel collets

**Tolerance:** Guaranteed to be within .0001” or better run out at the collet nose

**Accuracy:** Less than .0004” at 4 X Dia.

**Inspection:** 100% collet inspection, checked 3 times for concentricity

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### ER Collet

- **Flexibility and Durability:**
  - We offer the ultimate trifecta: wide clamping range, ultra precision, and super high pressure. Our 1300 PSI capable collets have a wide .031” collapse range and the ability to maintain less than .0001 run out at the collet nose.

### ER Counter-Bored Type Collet

- **Ultra Precision for MicroCutters:**
  - Our High Precision “On Size” Collets have 25% longer collet bore lengths than competitors, resulting in stronger gripping power at higher RPM’s.

### High Precision ER Tap Collet

- **Extreme rigidity, high pressure performance:**
  - Our Tap Collets are designed for all ANSI, DIN, ISO, JIS Specification Taps.
  - 1300 PSI capable Coolant Tap Collets increase tool life by dissipating heat and preventing chip build-up.

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### Dimensional Data

<table>
<thead>
<tr>
<th>Style</th>
<th>D</th>
<th>D1</th>
<th>L</th>
<th>Collet Range</th>
<th>Coolant Collet Size Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>ER16</td>
<td>17.2mm</td>
<td>11.3mm</td>
<td>27.0mm</td>
<td>0.5 - 10.0mm</td>
<td>4.0 - 10.0mm (3/16” - 17/64”)</td>
</tr>
<tr>
<td>ER20</td>
<td>21.2mm</td>
<td>14.5mm</td>
<td>31.0mm</td>
<td>1.0 - 13.0mm</td>
<td>5.0 - 13.0mm (5/32” - 1/2”)</td>
</tr>
<tr>
<td>ER25</td>
<td>26.2mm</td>
<td>18.5mm</td>
<td>35.0mm</td>
<td>1.0 - 16.0mm</td>
<td>6.0 - 16.0mm (7/32” - 5/8”)</td>
</tr>
<tr>
<td>ER32</td>
<td>33.2mm</td>
<td>24.4mm</td>
<td>40.0mm</td>
<td>2.0 - 20.0mm</td>
<td>10.0 - 20.0mm (1/4” - 25/32”)</td>
</tr>
<tr>
<td>ER40</td>
<td>41.2mm</td>
<td>31.2mm</td>
<td>46.0mm</td>
<td>3.0mm - 26.0mm</td>
<td>10.0 - 26.0mm</td>
</tr>
</tbody>
</table>
### Bearing Nut

Bearing nuts come as a standard on all of our ER Collet Chucks:
- Reduce twisting of the collet and increase the TIR accuracy
- Improve chucking consistency by 6 times compared to non bearing style nut!

### Maximum Accuracy

We control all of our manufacturing processes, thereby maintaining the accuracy assembly tolerances 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.

### 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.

### 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.

### Other Nut

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

We control all of our manufacturing processes, thereby maintaining the accuracy assembly tolerances 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.

### 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.