

BEARING PREFORMS

Ready-to-Machine Preforms for Performance Bearings

Hybrid CNC Parts' precision-engineered preforms are a practical route to high-performance bearings—without the added production complexity, supply chain risk, or capital investment.

Made to your specifications and with your choice of material(s), including superalloys, our preforms eliminate the barriers to working with advanced alloys.

Preforms are produced using hybrid manufacturing which avoids the downfalls of casting, providing consistent quality, reliable material properties, and geometry designed for efficient finishing on your shop floor.

Preform Features

- Custom near-net ring and roller preforms.
- Multi-alloy and functionally-graded options.
- Superalloys engineered for corrosion, heat, and wear resistance.
- Solid-body, void-free structures optimized for downstream machining.

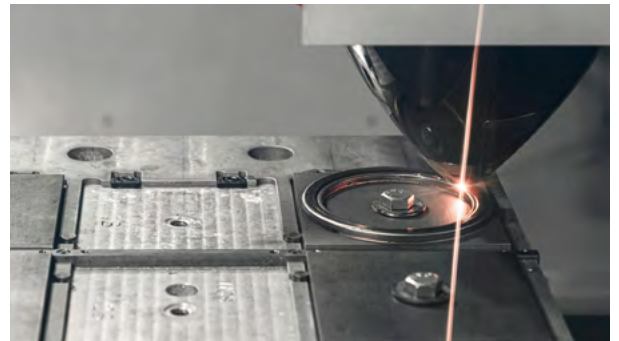
Why It Matters

- Access advanced materials without changing your manufacturing workflow.
- Shorten lead times and simplify procurement.
- Reduce waste compared to traditional manufacturing.
- Expand your product lines with higher-value options.

Request a Quote

Quotes can be provided per piece or per pound.

- +1 (508) 461-9412 (M–F, 8am–5pm ET)
- quote@hybridcncparts.com



Preform Specifications

Dimensions	
Ring Diameter	Less than 1 to 20+ inches
Ring Thickness	Less than 1 to 12+ inches
Ring Width	Made to specifications
Rollers	Made to specifications

Properties	
Ring Types	Inner, Outer
Raceway Types	Flat, Single, Double, Deep Groove, Angular Contact
Roller Types	Cylindrical, Needle
Materials	Single or Multi-Alloy
Coating	None
Traceability	Material lot certifications provided
Marking	Laser engraving/markings available
Tolerance*	Typically ± 0.005 inches

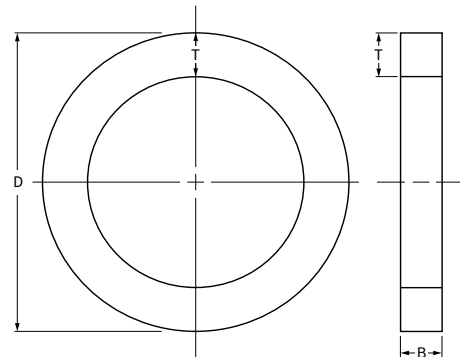
*Tighter tolerances available by request. Unfinished surfaces are provided with additional stock material to prevent work hardening prior to finishing operations. The amount of stock is material-dependent and can be adjusted to meet customer needs.

Materials

Materials subject to availability/specifications.
Need something different? Ask us about additional material options.

Alloy	Example Brands & Grades
Nickel	Inconel®, Hastelloy®, Monel®, Techalloy® Nickel 625, 718, X-750, C-276
Cobalt	Stellite®, Haynes®, Ultimet®, Polymet® Cobalt 6, 20
Titanium	5, 6
Stainless Steel	304, 316 L, 316 H, 440C, 17-4 PH
Carbon Steel	1045, 1080, A36
Tool Steel	H11, H13, M2, M50, T1, D2

Boundary Dimensions: Inner or Outer Ring



Ring Diameter (D)
Ring Thickness (T)
Ring Width (B)

Support

Our engineering and technical sales teams are available to offer expert guidance on selecting the dimensions and materials best suited for your application and requirements.

- support@hybridcncparts.com
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Quality & Compliance

- ISO 9001 & AS9100
- NIST SP 800-171
- DFARS 252.204-7012
- CMMC L2