

Precision Bearings & Slewing Rings

CAPABILITY SHEET · FORGED · HARDENED · GROUND · GEARED · ENGINEERED TO ORDER

THE ONE IDEA

PRINCIPLE	Hardening does not finish the raceway. It moves it. Grinding after hardening is what makes the ring round again, and it is the step a rushed process is most tempted to shortcut.
WHY A RING	A slewing ring carries axial, radial and tilting load together, in one component, and is often the gear a pinion drives to turn the whole assembly.

THE MANUFACTURING ROUTE

FORGING	A seamless rolled ring blank, not a casting or a ring cut from plate, so the grain flows around the circumference rather than across it.
HARDEN & GRIND	The raceway is induction-hardened to a controlled depth, tempered at once to relieve quench stress, then ground again afterward to correct the distortion hardening caused.
GEAR & CERTIFY	Gear teeth, where fitted, are cut true to the finished raceway. The ring is then assembled with its rolling elements and seals, and issued with material, hardness and dimensional records.

TWO ROUTES TO THE RING

TO DRAWING	Made to the customer's own drawing and technical conditions.
REVERSE-ENGINEERED	Where no drawing survives, the worn ring is measured, its material verified, a drawing rebuilt, and a first article qualified before a batch is made.

STANDARDS & SCOPE

STANDARDS	ISO 76, the public standard for static load ratings of rolling bearings, is the reference for how a ring's combined load capacity is expressed. NABL-accredited testing verifies material and dimensions.
SCOPE BOUNDARY	This is the ring itself - forging, hardening, grinding, gear machining - not hydraulic or electro-mechanical legacy assemblies, and not a bearing test rig.
STATUS	Neometrix engineers precision bearings and slewing rings to order, from a forged blank through raceway hardening, grinding and gear machining to final inspection, and no delivered precision bearing or slewing ring is claimed.

DEFENCE PROGRAMMES DESK

sales@neometrixgroup.com · +91 7777 876 876 · neometrixgroup.com

Neometrix Defence Limited · E-148, Sector 63, Noida, Uttar Pradesh, India

Figures describe the component class Neometrix engineers to order and are not a quotation. Size, load rating, gear form and quantity are established against the customer's drawing or sample at design review. ISO 9001 / ISO 14001. © Neometrix Defence Limited.