

Cylindrical Rollers

A cylindrical roller is a rolling seeds that makes line contact with the track, reducing friction and being suitable for high-speed rotation. Its shape evenly distributes the load, allowing it to handle large radial loads. It is commonly used in high-load and shock-load applications, such as automotive and railway axles.



Size

Outer Diameter(mm) : $\varnothing 20 \sim \varnothing 100$

Length(mm) : 20~130

(Sizes beyond the range require discussion.)

Precision

Outer Diameter Tolerance(mm) : ± 0.05

Diameter Roundness(mm) : 0.05~0.06

Radius Roundness(mm) : 0.03

Surface Roughness S(mm) : 15~25

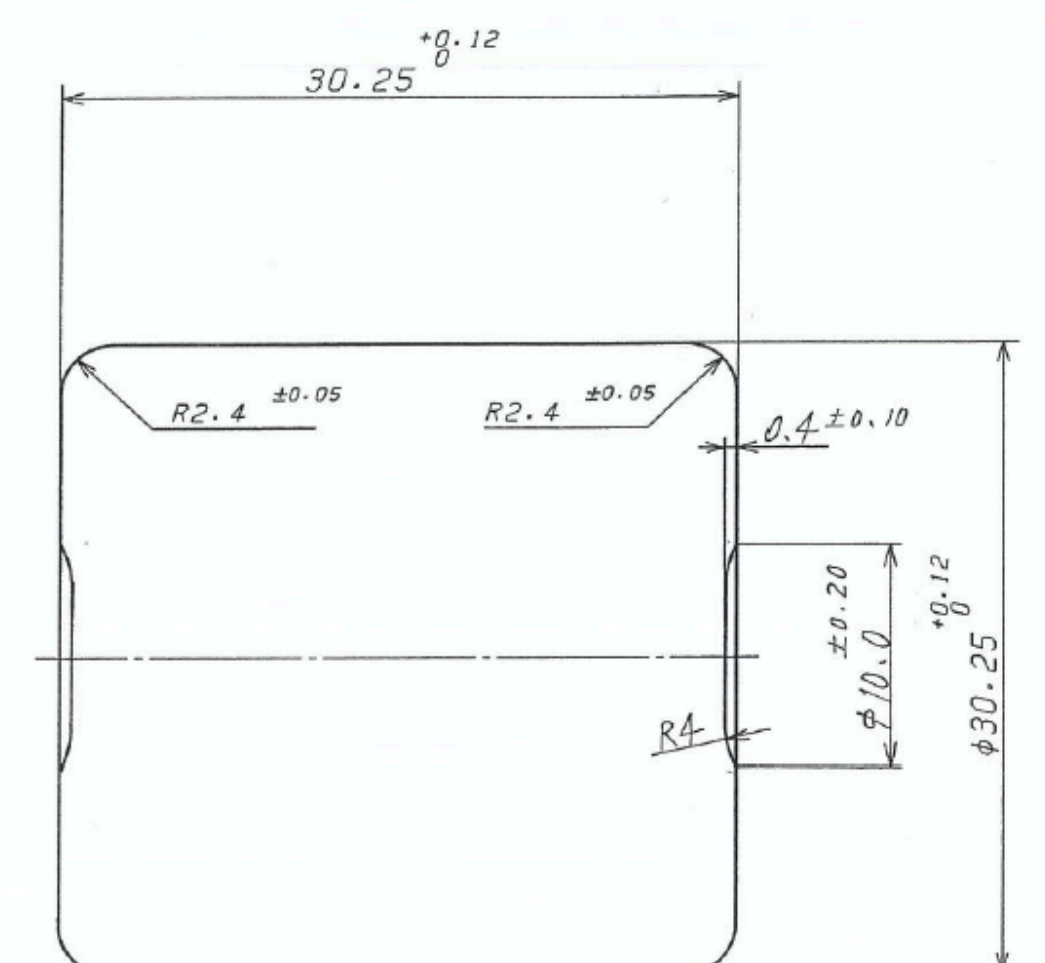
Materials & Process

Materials : SUJ-2•3, Carburizing

Process : Cold Forging, Milling

Production: 1 million/month

Certification: ISO 9001 Certified



Manufacturing Process — Cold Forging

MATERIAL MANAGEMENT

Organize and manage materials per each spec to ensure sufficient supply.



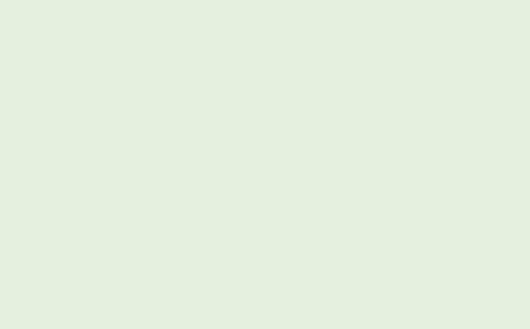
BAR CUTTING

Cut metal bars to required lengths with clean, even surfaces.



OUTER DIAMETER GRINDING

Grind and measure the bar's 3D diameters to ensure precision and roundness.



TUMBLING

Remove surface burrs and clean with kerosene for mirror surfaces.



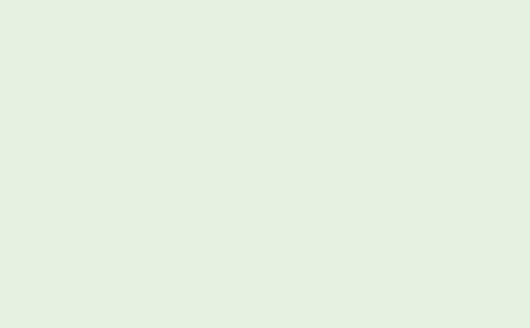
STAMPING PROCESS

Forge materials into desired shapes; this unique process can be implemented at Kyoei and is more efficient than traditional methods.



CIRCLE GRINDING

Grinding molded cylindrical rollers to meet the very specific outer diameter and surface roundness.



APPEARANCE INSPECTION

Perform a visual check for defects and package products appropriately.



SHIPPING INSPECTION

Conduct final checks and prepare products for shipment.



Manufacturing Process — Milling

MATERIAL MANAGEMENT

Organize and manage materials per each spec to ensure sufficient supply.



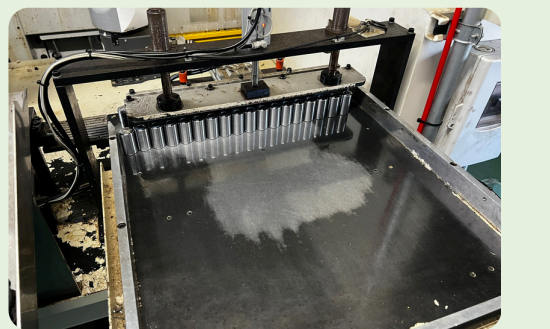
BAR CUTTING

Cut metal bars to required lengths with clean, even surfaces.



NC MILLING

Cut and shape materials into spheres, cylinders, or cones using an automatic milling machine, ensuring dimensions meet specifications.



APPEARANCE INSPECTION

Perform a visual check for defects and package products appropriately.



SHIPPING INSPECTION

Conduct final checks and prepare products for shipment.

