

IDEAL BEARING / Quality Control For IB05 Products

Working Step 1: Casting Material

Equipment: Casting Stove

Checking Tools: Hardness Testing Instrument & Hydraulic Universal Testing Instrument & Metallograph Instrument & Vernier Caliper

Checking Points: Mechanical Properties & Chemical Composition & Size & Out Looking

Details: 1. Check the material hardness.

2. Check the material mechanical properties.

3. Check the material Chemical Composition.

4. Check the raw material size.

5. Keep good appearance, no crack, no sand hole, no burr.

Working Step 2: Pre-Drilling Graphite Holes

Equipment: Drilling Machine

Checking Tools: Ocular Estimate & Vernier Caliper

Checking Points: Holes Quantity & Holes Positions

Details: 1. Check the holes quantity.

2. Check the holes positions.

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Working Step 3: Drilling Graphite Holes

Equipment: Drilling Machine

Checking Tools: Plug Gauge & Vernier Caliper

Checking Points: Holes Diameter & Holes Positions

Details: 1. Check the holes diameter.

2. Check the holes positions.

Working Step 4: Inlaid Graphite

Equipment: People

Checking Tools: Ocular Estimate

Checking Points: Graphite Length Over Holes Depth

Details: 1. Control the graphite length 0.5mm over holes depth.

Working Step 5: Drying

Equipment: Dryer

Checking Tools: Temperature Controlling Instrument

Checking Points: Temperature & Time

Details: 1. Control the temperature between 80°C to 100°C for half an hour.

Working Step 6: Machining Outside Diameter

Equipment: Lathe Machine

Checking Tools: Vernier Caliper

Checking Points: Outer Diameter After Being Machined

Details: 1. Machining 0.05 to 0.10mm of outer diameter.

Working Step 7: Machining to Sizes.

Equipment: Digital Controlled Lathe Machine

Checking Tools: Outside Micrometer for Outer Diameter; Inside Caliper for Inner Diameter;
Micrometer for Wall Thickness

Checking Points: Outer Diameter, Inner Diameter and Wall Thickness

Details: 1. Machining the outer diameter to size.

2. Machining the inner diameter to size.

Working Step 8: Chamfering

Equipment: Digital Controlled Lathe Machine

Checking Tools: Vernier Caliper & Universal Angle Gauge

Checking Points: Inner Chamfering, Outer Chamfering and Length

Details: 1. Machining the outer chamfering to size.

2. Machining the inner chamfering to size.

3. Machining the length to size.

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Working Step 9: Absorbing Oil

Equipment: Absorbing Oil Machine

Checking Tools: Thermometer & Manometer

Checking Points: Oil Temperature & Pressure

Details: 1. Control the oil temperature from 75°C to 82°C.

2. Control the pressure from -0.095MPa to -0.075MPa

Working Step 10: Packing

Equipment: People

Checking Tools: Ocular Estimate

Checking Points: Appearance

Details: 1. Reject the bad appearance products.

2. Reject the bad chamfer products.