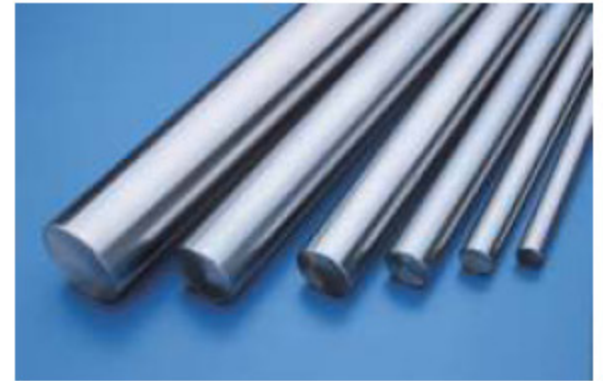


INDUCTION HARDENED AND GROUND

Available as:

- Solid shafts
- Tubular shafts
- Stainless steel
- Metric and imperial sizes



WE CUT AND MACHINE TO YOUR REQUIREMENTS

Induction hardened and precision-ground shafts provide the inner race for Ball Bushing bearings. All shafts are manufactured to extremely close tolerances for surface finish, roundness, hardness and straightness to provide long service life with reduced maintenance.

Hardness

Shafts are made from high quality carbon steel and induction hardened to HRC 60-64. Heat treatment on specialized equipment assures uniformity of hardness. The minimum depth of hardness is carefully controlled to provide the high load carrying capability of Ball Bushing bearings.

Diameter Accuracy

Shafts are precision-ground to the extremely close diameter tolerance of h6. Diametral accuracy is an important factor when using Ball Bushing bearings. It assures dependable diametral fit-up when minimum clearance is required.

SPECIFICATIONS

Hardness: HRC 60-64

Surface Finish:

Standard (Ra) 0.32um except on machined or annealed surfaces.

Length Tolerance:

Standard length tolerance on cut-to-length shafts is ± 0.5 mm. Special length tolerances are available upon request.

Chamfer:

Standard chamfer on shaft diameters is 1.0mm x 45°. Other chamfers can be supplied upon request.

Tolerances for metric-size steel shafts

Shaft	h6 (um)
5	0 -8
8	0 -9
10	0 -11
12	0 -11
16	0 -11
20	0 -13
25	0 -13
30	0 -13
40	0 -16
50	0 -16
60	0 -19
80	0 -19

Tolerances for inch-size steel shafts

Shaft Ø d (Inch)	(mm)	Class "L (Inch)
¼	6.35	-0.0005 -0.0010
⅜	9.525	-0.0005 -0.0010
½	12.70	-0.0005 -0.0010
⅝	15.875	-0.0005 -0.0010
¾	19.05	-0.0005 -0.0010
1	25.40	-0.0005 -0.0010
1¼	31.75	-0.0005 -0.0010
1½	38.1	-0.0006 -0.0011
2	50.8	-0.0006 -0.0013
3	76.2	-0.0008 -0.0017

