

BEARING TECHNOLOGY

I. Bearing material

High carbon chromium bearing steel GCr15 is the standard material for precision bearing rings and balls. The material has uniform specification as AISI 52100(America),DIN100 Cr6(German),JISSUJ2(Japan)

Steel No.	Chemical composition %									
	C	Si	Mn	P	S	Cr	Mo	Cu	Ni	
GCr15	0.95—1.05	0.15—0.35	0.25—0.45	≤0.025	≤0.025	1.40—1.65	-	≤0.25	≤0.30	

II. Bearing accuracy

The following is a comparison table of different standards :

Standard allowable tolerance grades					
GB/T307.1	P0	P6	P5	P4	P2
ISO 492	Normal Class	Class6	Class5	Class4	Class2
JIS B 1514	JIS 0 Grade	JIS 6 Grade	JIS 5 Grade	JIS 4 Grade	JIS 2 Grade
AFIPMA STD.20	ABEC 1	ABEC 3	ABEC 5	ABEC7	ABEC9

III. Lubrication

NSAR bearings include open type ,single or double shielded(Z,ZZ) and single or double sealed (RS,2RS). Before the shipment, we fill into the qualified oil or grease strictly .if you have any special request about the lubrication ,please feel free to show us and we can fill the corresponding oil or grease with the accurate rate as per your special request .

IV. Vibration and noise

The vibration and noise of bearings are classified as four classes as Z1,Z2,Z3 and Z4. It is measured by the instrument of S0910-1.For special requirement, it is measured by BVT-1 and classified as V1,V2,V3 and V4.

V. Clearance

Clearance is gap amid bearing inner ring ,outer ring , ball package. Bearing has radial clearance and axial clearance .