

Grade Specification and its Application

S.No.	Grade	Steel Type	Chemical properties and mechanical properties of raw material													Mechanical Properties Finish product in wire			B/Bar	Applications	
			%C	%Mn	%Si	%P	%S	%Cr	%V	%Ni	%Mo	%Ti	%B	%Al	%Pb	UTS(N/mm2)	UTS(N/mm2)	Hardness			
1	EN 31	Ball Bearing steel	0.90-1.20	0.30-0.75	0.10-0.35	0.06max	0.06max	1.00-1.60	0.05 max	0.2 max	0.08 max	-	-	-	0.01-0.02	0.002	1100-1400	-	-	20 Rc Max	Bearings
2	SAE52100		0.98-1.20	0.25-0.45	0.15-0.35	0.04max	0.05max	1.30-1.60	-	-	-	-	-	-	0.02-0.05	-	-	-	-	30 Rc Max	