

## 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	SAE12L14	Free Cutting Steel	0.07-0.15	0.90-1.20	0.10 max	0.06max	0.20-0.30	-	-	-	-	-	-	-	0.20-0.35	450max	-	-	85 Rb Min	Machined parts like Engine shaft, connecting Rod, Spindles, Gear, Fasteners, Hydralulic Hose End Fitting Etc.
2	EN 1A		0.07-0.15	1.20	0.10 max	0.06max	0.20-0.30	-	-	-	-	-	-	0.010 max	-	450 Max	-	-	85 Rb Min	
3	EN 8M		0.35-0.45	1.30	0.25 Max	0.06max	0.12-0.20	-	-	-	-	-	-	0.010 max	-	650-750	-	-	15-25 Rc	
4	EN 15AM		0.36-0.45	1.30-1.70	0.25 max	0.06max	0.08-0.15	-	-	-	-	-	-	-	-	600-750	-	-	-	