This page is mainly introduced the SAE AM350 Datasheet, including chemical information,mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of SAE AM350,such as it is commonly used in bars, sheet,plates, steel coils, steel pipes,forged and other materials application.

Datasheet for Steel Grades Specialsteel SAE AM350

SAE AM350 Standard Number:		
ITEM	Standard Number	Descriptions
1	SAE AMS 5745F (2008)	Steel, Corrosion and Heat-Resistant, Bars and Forgings 16.5Cr - 4.5Ni - 2.9Mo - 0.10N Equalized and Over-Tempered
2	SAE AMS 5554F (2011)	Steel, Corrosion and Heat-Resistant, Seamless Tubing 16.5Cr - 4.5Ni - 2.9Mo - 0.10N Annealed
3	SAE AMS 5548P (2007)	Steel, Corrosion and Heat-Resistant, Sheet and Strip 16.5Cr - 4.5Ni - 2.9Mo - 0.10N 1850 to 1975°F (1010 to 1079°C) Annealed
4	SAE AMS 5546D (1990)	Steel Sheet and Strip, Corrosion and Moderate Heat Resistant 16.5Cr - 4.5Ni - 2.9Mo - 0.10N Cold Rolled, Tempered
5	SAE AMS S 8840A (1999)	Steel Sheet and Strip, Corrosion-Resistant, Precipitation Hardening (AM350 and AM355), Premium Quality Composition AM350, Annealed Composition AM355, CRT 150/180/120
6	SAE J 467B (1968)	Special Purpose Alloys

SAE AM350 Chemical composition(mass fraction)(wt.%)		
Chemical	Min.(%)	Max.(%)
C	0.0700	0.1100
Mn	0.5000	1.2500
P		0.0400
S		0.0300
Si		0.5000
Ni	4.0000	5.0000
Cr	16.0000	17.0000
Mo	2.5000	3.2500
N	0.0700	0.1300

C	Si	Mn	P	S	Cr	Ni	Mo	V	Ta
W	N	Cu	Co	Pb	B	Nb	Al	Ti	Other

Steel, Corrosion and Heat-Resistant, Bars and Forgings 16.5Cr - 4.5Ni - 2.9Mo - 0.10N Equalized and Over-Tempered

SAE AM350 Physical Properties

Tensile strength	115-234	σb/MPa
Yield Strength	23	σ 0.2 ≥/MPa
Elongation	65	δ5≥ (%)
ψ	-	ψ≥ (%)
Akv	-	Akv≥/J
HBS	123-321	-
HRC	30	-

SAE AM350 Mechanical Properties

Tensile strength	231-231	σb/MPa
Yield Strength	154	σ 0.2 ≥/MPa
Elongation	56	δ5≥(%)
ψ	-	ψ≥(%)
Akv	-	Akv≥/J
HBS	235-268	-
HRC	30	-

SAE AM350 Heat Treatment Regime

Annealing	Quenching	Tempering	Normalizing	Q & T
√	√	√	√	√

SAE AM350 Range of products

Product type	Products	Dimension	Processes	Deliver Status
Plates / Sheets	Plates / Sheets	0.08-200mm(T)*W*L	Forging, hot rolling and cold rolling	Annealed, Solution and Aging, Q+T, ACID-WASHED, Shot Blasting
Steel Bar	Round Bar, Flat Bar, Square Bar	Φ8-1200mm*L	Forging, hot rolling and cold rolling, Cast	Black, Rough Turning, Shot Blasting,

Coil / Strip	Steel Coil /Steel Strip	0.03-16.0x1200mm	Cold-Rolled & Hot-Rolled	Annealed, Solution and Aging, Q+T, ACID-WASHED, Shot Blasting
Pipes / Tubes	Seamless Pipes/Tubes, Welded Pipes/Tubes	OD:6-219mm x WT:0.5-20.0mm	Hot extrusion, Cold Drawn, Welded	Annealed, Solution and Aging, Q+T, ACID-WASHED

We can produce Specialsteel the specifications follows: