This page is mainly introduced the 1.4913 Datasheet, including chemical information,mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of 1.4913,such as it is commonly used in bars, sheet,plates, steel coils, steel pipes,forged and other materials application.

Datasheet for Steel Grades Specialsteel 1.4913

1.4913 Standard Number:		
ITEM	Standard Number	Descriptions
1	DIN 17240 (1976)	Heat Resisting and Highly Heat Resisting Materials for Bolts and Nuts; Quality Specifications
2	DIN EN 10088-1	Stainless steels - Part 1: list of stainless steels
3	DIN EN 10269	Steels and nickel alloys for fasteners with specified elevated and/or low temperature properties
4	DIN EN 10302 (2002)	Creep resisting steels, nickel and cobalt alloys

1.4913 Chemical composition(mass fraction)(wt.%)		
Chemical	Min.(%)	Max.(%)
C	0.1700	0.2300
Mn	0.4000	0.9000
P		0.0250
S		0.0150
Si		0.5000
Ni	0.2000	0.6000
Cr	10.0000	11.5000
Mo	0.5000	0.8000
V	0.1000	0.3000
B		0.0015
Al		0.0200
N	0.0500	0.1000
Nb	0.2500	0.5500

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

Heat Resisting and Highly Heat Resisting Materials for Bolts and Nuts; Quality Specifications

1.4913 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	-

1.4913 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	-

1.4913 Heat Treatment Regime				
Annealing	**Quenching**	**Tempering**	**Normalizing**	**Q & T**
√	√	√	√	√

1.4913 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: