

This page is mainly introduced the AF 1410 Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of AF 1410, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

Datasheet for Steel Grades Specialsteel AF 1410

AF 1410 Standard Number:

ITEM	Standard Number	Descriptions
1	SAE AMS 6527E (2013)	Steel, Bars and Forgings 2.0Cr - 10Ni - 14Co - 1.0Mo (0.15 - 0.19C) Vacuum Melted, Normalized and Overaged

AF 1410 Chemical composition (mass fraction) (wt.%)

Chemical	Min.(%)	Max.(%)							
C	0.13	0.17							
Si		0.10							
Mn		0.10							
P		0.008							
S		0.005							
Ni	9.50	10.50							
Cr	1.80	2.20							
Al		0.015							
Cu									
Ti		0.015							
Fe									
N		0.0015							
Mo	0.90	1.10							
W									
O		0.0015							
Co	13.50	14.50							
C	Si	Mn	P	S	Cr	Ni	Mo	V	Ta
W	N	Cu	Co	Pb	B	Nb	Al	Ti	Other

Steel, Bars and Forgings 2.0Cr - 10Ni - 14Co - 1.0Mo (0.15 - 0.19C) Vacuum Melted, Normalized

and Overaged

AF 1410 Physical Properties

Tensile strength	115-234	σ_b /MPa
Yield Strength	23	$\sigma_{0.2} \geq$ /MPa
Elongation	65	$\delta_5 \geq$ (%)
ψ	-	$\psi \geq$ (%)
Akv	-	Akv \geq /J
HBS	123-321	-
HRC	30	-

AF 1410 Mechanical Properties

Tensile strength	231-231	σ_b /MPa
Yield Strength	154	$\sigma_{0.2} \geq$ /MPa
Elongation	56	$\delta_5 \geq$ (%)
ψ	-	$\psi \geq$ (%)
Akv	-	Akv \geq /J
HBS	235-268	-
HRC	30	-

AF 1410 Heat Treatment Regime

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

AF 1410 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: