

This page is mainly introduced the 30CrNiMo8 Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of 30CrNiMo8, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

Datasheet for Steel Grades Specialsteel 30CrNiMo8

30CrNiMo8 Standard Number:		
ITEM	Standard Number	Descriptions
1	NF EN 10083-1	Steels for quenching and tempering - Part 1: General technical delivery conditions
2	NF EN 10083-3	Steels for quenching and tempering - Part 3: Technical delivery conditions for alloy steels
3	NF EN 10250-3	Open die steel forgings for general engineering purposes - Part 3: Alloy special steels
4	NF EN 10269	Steels and nickel alloys for fasteners with specified elevated and/or low temperature properties
5	NF EN 10297-1	Seamless circular steel tubes for mechanical and general engineering purposes - Technical delivery conditions - Part 1: Non-alloy and alloy steel tubes

30CrNiMo8 Chemical composition(mass fraction)(wt.%)									
Chemical		Min.(%)			Max.(%)				
C		0.26			0.34				
Si					0.40				
Mn		0.30			0.60				
P					0.035				
S					0.035				
Cr		1.80			2.20				
Ni		1.80			2.20				
Mo		0.30			0.50				
C	Si	Mn	P	S	Cr	Ni	Mo	V	Ta
W	N	Cu	Co	Pb	B	Nb	Al	Ti	Other

Seamless circular steel tubes for mechanical and general engineering

purposes - Technical delivery conditions - Part 1: Non-alloy and alloy steel tubes

30CrNiMo8 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	-

30CrNiMo8 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	-

30CrNiMo8 Heat Treatment Regime				
Annealing	Quenching	Tempering	Normalizing	Q & T
√	√	√	√	√

30CrNiMo8 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
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We can produce Specialsteel the specifications follows: