

This page is mainly introduced the PSL2 Grade X56Q Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of PSL2 Grade X56Q, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

Datasheet for Steel Grades Superalloys PSL2 Grade X56Q

PSL2 Grade X56Q Standard Number:

ITEM	Standard Number	Descriptions
1	NF EN ISO 3183	Petroleum and natural gas industries-Steel pipe for pipeline transportation systems(ISO 3183:2012)

PSL2 Grade X56Q Chemical composition(mass fraction)(wt.%)

Chemical		Min.(%)					Max.(%)			
CE Pcm							0.2500			
C							0.1800			
Mn							1.5000			
P							0.0250			
S							0.0150			
Si							0.4500			
Ni							0.3000			
Cr							0.3000			
Mo							0.1500			
Cu							0.50			
V							0.0700			
Ti							0.0400			
Nb							0.0500			
Nb+Ti+V							0.1500			
CEV							0.43			
C	Si	Mn	P	S	Cr	Ni	Mo	V	Ta	
W	N	Cu	Co	Pb	B	Nb	Al	Ti	Other	

Petroleum and natural gas industries-Steel pipe for pipeline transportation systems(ISO 3183:[2012](#))

PSL2 Grade X56Q 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	-

PSL2 Grade X56Q 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	-

PSL2 Grade X56Q Heat Treatment Regime

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

PSL2 Grade X56Q 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 Superalloys the specifications follows: