

This page is mainly introduced the 00Cr19Ni10 Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of 00Cr19Ni10, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

Datasheet for Steel Grades Special Steel 00Cr19Ni10

00Cr19Ni10 Standard Number:

ITEM	Standard Number	Descriptions
1	GB 13296 (2007)	Seamless stainless steel tubes for boiler and heat exchanger
2	GB/T 1220 (1992)	Stainless steel bars
3	GB/T 12770 (2002)	Welded stainless steel tubes for machine structures
4	GB/T 12771 (2000)	Welded stainless steel pipes for liquid delivery
5	GB/T 14975 (2002)	Stainless steel seamless tubes for structures
6	GB/T 14976 (2002)	Stainless steel seamless tubes for fluid transport
7	GB/T 3090 (2000)	Stainless steel small diameter seamless steel tubes
8	GB/T 3280 (2007)	Cold rolled stainless steel sheets and plates
9	GB/T 4237 (1992)	Hot rolled stainless steel sheets and plates
10	GB/T 4239 (1991)	Cold rolled stainless steel and heat resisting steel strips
11	GB/T 4356 (2002)	Stainless steel wire rods
12	JB 4728 (2000)	Stainless Steel Forgings for Pressure Vessels

00Cr19Ni10 Chemical composition (mass fraction) (wt.%)

Chemical			Min.(%)				Max.(%)		
C							0.030		
Si							1.00		
Mn							2.00		
P							0.035		
S							0.030		
Ni			8.00				12.00		
Cr			18.00				20.00		
C	Si	Mn	P	S	Cr	Ni	Mo	V	Ta

W	N	Cu	Co	Pb	B	Nb	Al	Ti	Other

00Cr19Ni10 Stainless and heat resisting steels.

GB 13296 (2007) Seamless stainless steel tubes for boiler and heat exchanger

Austenitic steel; Allowable stress data source: GB 150.2:2011.

00Cr19Ni10 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	-

00Cr19Ni10 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	-

00Cr19Ni10 Heat Treatment Regime				
Annealing	Quenching	Tempering	Normalizing	Q & T
√	√	√	√	√

00Cr19Ni10 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: