

This page is mainly introduced the Z6CNT18-10 chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of Z6CNT18-10, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

## Data Table for Grades Stainless Steels Z6CNT18-10

Z6CNT18-10 Standard Number:		
ITEM	Standard Number	Descriptions
1	NF A 35-578	Iron and steel. Stainless steel for high temperature application
2	NF A 35-573	Stainless steels for general purposes. Plates, wide strips and strips
3	NF A 36-607	Austenitic stainless steel parts obtained by flat die forging or drop forging for boilers and pressure vessels. Grade and types
4	NF A 35-559	Iron and steel. Heat treatable special steels and stainless steels for externally threaded fasteners for use at low temperatures
5	NF A 35-574	Iron and steel. Stainless steel for general purposes. Semi-finished products, bars and wire rod
6	NF A 36-209	Iron and steel. Austenitic and austenitic-ferritic stainless steels plates for boilers and pressure vessels
7	NF E 29-043	Non alloy and alloy steel bolting for pressure equipment - Specifications

Z6CNT18-10 Chemical composition(mass fraction)(wt.%)		
Chemical	Min.(%)	Max.(%)
C		0.060
Si		0.75
Mn		2.00
P		0.040
S		0.015
Cr	17.00	19.00
Mo		
Ni	9.00	12.00
Ti	5(C+N)	0.70

Z6CNT18-10 Physical Properties		
Tensile strength	115-234	$\sigma_b$ /MPa
Yield Strength	23	$\sigma_{0.2} \geq$ /MPa

Elongation	65	$\delta 5 \geq (\%)$
$\psi$	-	$\psi \geq (\%)$
Akv	-	$Akv \geq /J$
HBS	123-321	-
HRC	30	-

### Z6CNT18-10 Mechanical Properties

Tensile strength	231-231	$\sigma b / MPa$
Yield Strength	154	$\sigma 0.2 \geq / MPa$
Elongation	56	$\delta 5 \geq (\%)$
$\psi$	-	$\psi \geq (\%)$
Akv	-	$Akv \geq /J$
HBS	235-268	-
HRC	30	-

### Z6CNT18-10 Heat Treatment Regime

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

### Z6CNT18-10 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	$\Phi 8$ -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 Stainless Steels the specifications follows:**