This page is mainly introduced the X6CrNiTi18-10 Datasheet, including chemical information,mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of X6CrNiTi18-10,such as it is commonly used in bars, sheet,plates, steel coils, steel pipes,forged and other materials application.

Datasheet for Steel Grades Specialsteel X6CrNiTi18-10

X6CrNiTi18-10 Standard Number:

ITEM	Standard Number	Descriptions
1	ISO 15510 (2010)	Stainless steels -- Chemical composition
2	ISO 16143-1 (2004)	Stainless steels for general purposes -- Part 1: Flat products
3	ISO 16143-2 (2004)	Stainless steels for general purposes -- Part 2: Semi-finished products, bars, rods and sections
4	ISO 16143-3 (2005)	Stainless steels for general purposes -- Part 3: Wire
5	ISO 9327-5 (1999)	Steel forgings and rolled or forged bars for pressure purposes - Technical delivery conditions - Part 5: Stainless steels
6	ISO 9328-5	Steel plates and strips for pressure purposes - Technical delivery conditions - Part 5: Weldable fine grain steels, thermomechanically rolled
7	ISO 9328-7 (2011)	Steel flat products for pressure purposes - Technical delivery conditions - Part 7: Stainless steels
8	ISO 9329-4 (1997)	Seamless steel tubes for pressure purposes - Technical delivery conditions - Part 4: Austenitic stainless steels
9	ISO 9330-6 (1997)	Welded steel tubes for pressure purposes - Technical delivery conditions - Part 6: Longitudinally welded austenitic stainless steel tubes
10	ISO/TS 15510 (2003)	Welded steel tubes for pressure purposes - Technical delivery conditions - Part 6: Longitudinally welded austenitic stainless steel tubes

X6CrNiTi18-10 Chemical composition(mass fraction)(wt.%)

Chemical	Min.(%)	Max.(%)
C		0.08
Si		1.00
Mn		2.00
P		0.040
S		0.030
Cr	17.00	19.00
Mo	9.00	12.00

Ni									
C	Si	Mn	P	S	Cr	Ni	Mo	V	Ta
W	N	Cu	Co	Pb	B	Nb	Al	Ti	Other

Welded steel tubes for pressure purposes - Technical delivery conditions - Part 6: Longitudinally

welded austenitic stainless steel tubes

X6CrNiTi18-10 Physical Properties		
Tensile strength	115-234	σb/MPa
Yield Strength	23	σ 0.2 ≥/MPa
Elongation	65	δ5≥ (%)
ψ	-	ψ≥ (%)
Akv	-	Akv≥/J
HBS	123-321	-
HRC	30	-

X6CrNiTi18-10 Mechanical Properties		
Tensile strength	231-231	σb/MPa
Yield Strength	154	σ 0.2 ≥/MPa
Elongation	56	δ5≥(%)
ψ	-	ψ≥(%)
Akv	-	Akv≥/J

HBS	235-268	-
HRC	30	-

X6CrNiTi18-10 Heat Treatment Regime

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

X6CrNiTi18-10 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	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: