

Seamless circular steel tubes for mechanical and general engineering purposes - Technical delivery conditions - Part 2: Stainless steel X6CrNiMoTi17-12-2 Mechanical properties, Physical properties, Mechanical properties, Heat treatment, X6CrNiMoTi17-12-2 Supplier

Seamless circular steel tubes for mechanical and general engineering purposes - Technical delivery conditions - Part 2: Stainless steel X6CrNiMoTi17-12-2 steel chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, We can produce round bars, forged rings, forged cakes, flat bars, tubes, sheets, plates, steel wires, steel strips, steel coils, etc. The size can be customized, the maximum order quantity is 100Kg. It also contains the use of **X6CrNiMoTi17-12-2**, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

Data Table for Materials Stainless Steels & Special Steels Seamless circular steel tubes for mechanical and general engineering purposes - Technical delivery conditions - Part 2: Stainless steel <u>X6CrNiMoTi17-12-2</u>

X6CrNiMoTi17-12-2 Standard Number				
ITEM	Standard Number	Descriptions		
1	BS EN 10028-7	Flat products made of steels for pressure purposes - Part 7: Stainless steels		
2	BS EN 10088-1	Stainless steels - Part 1: List of stainless steels		
3	BS EN 10088-2	Stainless steels - Part 2: Technical delivery conditions for sheet/plate and strip of corrosion resisting steels for general purposes		
4	BS EN 10088-3	Stainless steels - Part 3: Technical delivery conditions for semi- finished products, bars, rods, wire, sections and bright products of corrosion resisting steels for general purposes		
5	BS EN 10088-4	Stainless steels - Part 4: Technical delivery conditions for sheet/plate and strip of corrosion resisting steels for construction purposes		
6	BS EN 10088-5	Stainless steels - Part 5: Technical delivery conditions for bars, rods, wire, sections and bright products of corrosion resisting steels for construction purposes		
7	BS EN 10216-5 (2004)	Seamless steel tubes for pressure purposes - Technical delivery conditions - Part 5: Stainless steel tubes		
8	BS EN 10217-7	Welded steel tubes for pressure purposes - Technical delivery conditions - Part 7: Stainless steel tubes		
9	BS EN 10222-5	Steel forgings for pressure purposes - Part 5: Martensitic, austenitic and austenitic-ferritic stainless steels		



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10	BS EN 10250-4	Open die steel forgings for general engineering purposes - Part 4: Stainless steels
11	BS EN 10253-3	Butt-welding pipe fittings - Part 3: Wrought austenitic and austenitic-ferritic (duplex) stainless steels without specific inspection requirements
12	BS EN 10253-4	Butt-welding pipe fittings - Part 4: Wrought austenitic and austenitic-ferritic (duplex) stainless steels with specific inspection requirements
13	BS EN 10263-5	Steel rod, bars and steel wire for cold heading and cold extrusion - Part 5: Technical delivery conditions for stainless steels
14	BS EN 10272	Stainless steel bars for pressure purposes
15	BS EN 10296-2 (2005)	Welded circular steel tubes for mechanical and general engineering purposes - Technical delivery conditions - Part 2: Stainless steel
16	BS EN 10297-2 (2005)	Seamless circular steel tubes for mechanical and general engineering purposes - Technical delivery conditions - Part 2: Stainless steel

X6CrNiMoTi17-12-2 Chemical composition(mass fraction)(wt.%)									
Chemical				Min.(%)			Max.(%)		
С							0.08		
Si							1.00		
Mn							2.00		
Р								0.045	
S							0.015		
Cr				16.50			18.50		
Ni				10.50				13.50	
Мо				2.00			2.50		
Ti			5×C			0.70			
С	Si	Mn	Р	S	Cr	Ni	Мо	V	Та
W	Ν	Cu	Со	Pb	В	Nb	Al	Ti	Other

#### X6CrNiMoTi17-12-2 Physical Properties

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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	

X6CrNiMoTi17-12-2 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	-			

X6CrNiMoTi17-12-2 Heat Treatment Regime						
Annealing Quenching Tempering Normalizing Q & T						
$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		

X6CrNiMoTi17-12-2 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,		



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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 & Special Steels the specifications follows:

Note:

(1) listed in the table apex diameter (d), to steel thickness (a) multiples said.

(2) in the ASTM A6 standard specified scope can meet any additional conditions.

(3) from the standard for 50 mm (2 in).

Mechanical properties

Mechanische Eigenschaften

Caracteristiques mecaniques

ReH Minimum yield strength / Mindestwert der oberen Streckgrenze / Limite d'elasticite minimale Rm Tensile strength / Zugfestigkeit / Resistance a la traction

A Minimum elongation / Mindestwert der Bruchdehnung / Allongement minimal

J Notch impact test / Kerbschlagbiegeversuch / Essai de flexion par choc

Round bar: Diameter: 1mm-2000mm Square bar: Size: 50mm \* 50mm-600mm \*600mm Plate steel/flat bar: Size: Thickness: 0.1mm-800mm Width: 10mm to 1500mm Tube/pipe: Size: OD: 6-219mm WT: 1-35 mm. Cold-rolled sheet: Thickness: 2-5mm Width:1000mm Length: 2000mm Hot-rolled sheet: Thickness:6-80mm Width: 210-610mm Length: We can supply any length based on the customer's requirement. Forging/hot rolling/ extrusion of steel. Forging: Shafts with flanks/pipes/tubes/slugs/donuts/cubes/other shapes Finished goods condition: hot forging/hot rolling + annealing/normalizing + tempering/guenching + tempering/any conditions based on the customer's requirement Surface conditions: scaled (hot working finish)/ground/rough machining/fine machining/based on the customer's requirement

Furnaces for metallurgical processing: electrode arc + LF/VD/VOD/ESR/Vacuum consumable electrode.



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Ultrasonic inspection: 100% ultrasonic inspection for any inperfections or based on the customer's requirement.

UTS according to SEP 1921 C/c,D/d,E/e;A388 or GB/T 6402

Excellent service for all kinds of industries, with advantages of technologies, equipment and price. We serve you with our honesty, integrity, and professionality.