

Stainless steels - Technical delivery conditions for drawn wire 1.4301 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 **1.4301**, 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 Stainless steels - Technical delivery conditions for drawn wire <u>1.4301</u>

1.4301 Standard Number					
ITEM	Standard Number	Descriptions			
1	DIN 17440 (2001)	Stainless steels - Technical delivery conditions for drawn wire			
2	DIN 17441 (1997)	Stainless steels - Technical delivery conditions for cold rolled strips and slit coils strip and sheets cut from such strips for pressure purposes			
3	DIN 17455 (1985)	Welded circular tubes of stainless steels for general requirements; technical delivery conditions			
4	DIN 17456 (1985)	Seamless circular tubes of stainless steels for general requirements; technical delivery conditions			
5	DIN 17457 (1985)	Welded circular tubes of austenitic stainless steels for special requirements; technical delivery conditions			
6	DIN 17458 (1985)	Seamless circular tubes of austenitic stainless steels for special requirements; technical delivery conditions			
7	DIN 5512-3	Materials for rail vehicles - Steels - Part 3: Stainless steel flat products; Selected standard			
8	DIN EN 10028-7	Flat products made of steels for pressure purposes - Part 7: Stainless steels			
9	DIN EN 10088-1	Stainless steels - Part 1: List of stainless steels			
10	DIN EN 10088-2	Stainless steels - Part 2: Technical delivery conditions for sheet/plate and strip of corrosion resisting steels for general purposes			
11	DIN 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			
12	DIN EN 10088-4	Stainless steels - Part 4: Technical delivery conditions for sheet/plate and strip of corrosion resisting steels for construction purposes			



Stainless steels - Technical delivery conditions for drawn wire 1.4301 Mechanical properties, Physical properties, Mechanical properties, Heat treatment, 1.4301 Supplier

13	DIN 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
14	DIN EN 10151	Stainless steel strip for springs - Technical delivery conditions
15	DIN EN 10216-5 (2004)	Seamless steel tubes for pressure purposes - Technical delivery conditions - Part 5: Stainless steel tubes
16	DIN EN 10217-7	Welded steel tubes for pressure purposes - Technical delivery conditions - Part 7: Stainless steel tubes
17	DIN EN 10222-5	Steel forgings for pressure purposes - Part 5: Martensitic, austenitic and austenitic-ferritic stainless steels
18	DIN EN 10250-4	Open die steel forgings for general engineering purposes - Part 4: Stainless steels
19	DIN EN 10253-3	Butt-welding pipe fittings - Part 3: Wrought austenitic and austenitic-ferritic (duplex) stainless steels without specific inspection requirements
20	DIN EN 10253-4	Butt-welding pipe fittings - Part 4: Wrought austenitic and austenitic-ferritic (duplex) stainless steels with specific inspection requirements
21	DIN EN 10263-5	Steel rod, bars and steel wire for cold heading and cold extrusion - Part 5: Technical delivery conditions for stainless steels
22	DIN EN 10264-4 (2002)	Steel wire and wire products - Steel wire for ropes - Part 4: Stainless steel wire
23	DIN EN 10269	Steels and nickel alloys for fasteners with specified elevated and/or low temperature properties
24	DIN EN 10272	Stainless steel bars for pressure purposes
25	DIN EN 10296-2 (2005)	Welded circular steel tubes for mechanical and general engineering purposes - Technical delivery conditions - Part 2: Stainless steel
26	DIN EN 10297-2 (2005)	Seamless circular steel tubes for mechanical and general engineering purposes - Technical delivery conditions - Part 2: Stainless steel

1.4301 Chemical composition(mass fraction)(wt.%)						
Chemical Min.(%) Max.(%)						
С		0.07				
Si		1.00				
Mn		2.00				
Р		0.045				

+86-1388-0247-006 Email: sales@ccttc.com https://ccttc.com/ Page 2 / 5



Stainless steels - Technical delivery conditions for drawn wire 1.4301 Mechanical properties, Physical properties, Mechanical properties, Heat treatment, 1.4301 Supplier

	S							0.015	
	Cr			17	.0			19.0	
	Ni			8.0	00			10.5	
	Ν							0.11	
С	Si	Mn	Р	S	Cr	Ni	Мо	V	Та
W	Ν	Cu	Со	Pb	В	Nb	Al	Ti	Other

1.4301 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	-				

1.4301 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	-			

1.4301 Heat Treatment Regime



Stainless steels - Technical delivery conditions for drawn wire 1.4301 Mechanical properties, Physical properties, Mechanical properties, Heat treatment, 1.4301 Supplier

Annealing	Quenching	Tempering	Normalizing	Q & T
\checkmark	\checkmark	\checkmark	\checkmark	\checkmark

1.4301 Range of products						
Product type	Product type Products		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 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:



Stainless steels - Technical delivery conditions for drawn wire 1.4301 Mechanical properties, Physical properties, Mechanical properties, Heat treatment, 1.4301 Supplier

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/quenching + 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.

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.