

Steels for quenching and tempering for construction purposes -Technical delivery conditions C35E Mechanical properties, Physical properties, Mechanical properties, Heat treatment, C35E Supplier

Steels for quenching and tempering for construction purposes - Technical delivery conditions C35E 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 C35E, 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 Steels for quenching and tempering for construction purposes - Technical delivery conditions C35E

C35E Standard Number					
ITEM	Standard Number	Descriptions			
1	NF EN 10083-1	Steels for quenching and tempering - Part 1: General technical delivery conditions			
2	NF EN 10083-2	Steels for quenching and tempering - Part 2: Technical delivery conditions for non alloy steels			
3	NF EN 10132-3	Cold rolled narrow steel strip for heat treatment - Technical delivery conditions - Part 3: Steels for quenching and tempering			
4	NF EN 10250-2	Open die steel forgings for general engineering purposes - Part 2: Non-alloy quality and special steels			
5	NF EN 10269	Steels and nickel alloys for fasteners with specified elevated and/or low temperature properties			
6	NF EN 10277-5	Bright steel products - Technical delivery conditions - Part 5: Steels for quenching and tempering			
7	NF EN 10297-1	Seamless circular steel tubes for mechanical and general engineering purposes - Technical delivery conditions - Part 1: Non-alloy and alloy steel tubes			
8	NF EN 10305-1	Steel tubes for precision applications - Technical delivery conditions - Part 1: Seamless cold drawn tubes			
9	NF EN 10343	Steels for quenching and tempering for construction purposes - Technical delivery conditions			

C35E Chemical composition(mass fraction)(wt.%)					
Chemical	Min.(%)	Max.(%)			



Steels for quenching and tempering for construction purposes - Technical delivery conditions C35E Mechanical properties, Physical properties, Mechanical properties, Heat treatment, C35E Supplier

С				0.32			0.39		
Si							0.40		
Mn				0.50			0.80		
Р							0.035		
S							0.035		
Cr							0.40		
Ni							0.40		
Mo								0.10	
Cr+Ni+Mo							0.63		
С	Si	Mn	Р	S	Cr	Ni	Мо	V	Ta
W	N	Cu	Co	Pb	В	Nb	Al	Ti	Other

C35E 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	-			

C35E Mechanical Properties						
Tensile strength	231-231	σb/MPa				
Yield Strength	154	σ 0.2 ≥/MPa				
Elongation	56	δ5≥(%)				
Ψ	-	ψ≥(%)				
Akv	-	Akv≥/J				



Steels for quenching and tempering for construction purposes -Technical delivery conditions C35E Mechanical properties, Physical properties, Mechanical properties, Heat treatment, C35E Supplier

HBS	235-268	-
HRC	30	-

C35E Heat Treatment Regime						
Annealing Quenching Tempering Normalizing Q & T						
\checkmark	\checkmark	\checkmark	\checkmark	$\sqrt{}$		

C35E 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 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



Steels for quenching and tempering for construction purposes - Technical delivery conditions C35E Mechanical properties, Physical properties, Mechanical properties, Heat treatment, C35E Supplier

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/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.