OTA10NbMoNiCrl70 Chemical information, Mechanical prop

Physical properties, Mechanical properties, Heat treatment, and Micro structure

This page is mainly introduced the OTA10NbMoNiCrl70 chemical information,mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of OTA10NbMoNiCrl70,such as it is commonly used in bars, sheet,plates, steel coils, steel pipes,forged and other materials application.

Data Table for Grades Special Alloy OTA10NbMoNiCrl70

	OTA10NbMoNiCrl70 Standard Number:				
ITEM	Standard Number	Descriptions			

OTA10NbMoNiCrl70 Chemical composition(mass fraction)(wt.%)			
Chemical	Min.(%)	Max.(%)	

OTA10NbMoNiCrl70 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	-	

OTA10NbMoNiCrl70 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	-	

OTA10NbMoNiCrl70 Heat Treatment Regime



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

OTA10NbMoNiCrl70 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 Special Alloy 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/quenching + tempering/any

conditions based on the customer's requirement



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 $Surface\ conditions:\ scaled\ (hot\ working\ finish)/ground/rough\ machining/fine\ machining/based\ on\ the\ customer's\ requirement$

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

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.

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