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

This page is mainly introduced the Forging and Heat Treatment of 403CB Stainless Steel Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of Forging and Heat Treatment of 403CB Stainless Steel, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

Datasheet for Steel Grades Steels of blade for steam turbine Forging and Heat Treatment of 403CB Stainless Steel

Forging and Heat Treatment of 403CB Stainless Steel Standard Number:				
ITEM	Standard Number	Descriptions		

Forging and Heat Treatment of 403CB Stainless Steel Chemical composition(mass fraction)(wt.%)									
Chemical				Min.(%)			Max.(%)		
С	Si	Mn	Р	S	Cr	Ni	Мо	V	Ta
W	N	Cu	Co	Pb	В	Nb	Al	Ti	Other

The effects of forging and normalizing temperature on microstructure and mechanical properties of 403CB stainless steel were studied. The results show that: the influence of forging and normalizing temperature on strength and toughness is more significant than plasticity. Forging at 1130°C and normalizing at 1030°C is a better process, which obtains high strength and toughness

Forging and Heat Treatment of 403CB Stainless Steel Physical Properties				
Tensile strength	115-234	σb/MPa		
Yield Strength	23	σ 0.2 ≥/MPa		



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Elongation	65	δ5≥ (%)
Ψ	-	ψ≥ (%)
Akv	-	Akv≥/J
HBS	123-321	-
HRC	30	-

Forging and Heat Treatment of 403CB Stainless Steel 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	-		

Forging and Heat Treatment of 403CB Stainless Steel Heat **Treatment Regime Annealing** Quenching **Tempering Normalizing** Q & T $\sqrt{}$

Forging and Heat Treatment of 403CB Stainless Steel 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 Steels of blade for steam turbine the specifications follows: