G20CrNiMo Chemical information, Mechanical properties

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

This page is mainly introduced the G20CrNiMo chemical information,mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of G20CrNiMo, 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 G20CrNiMo

G20CrNiMo Standard Number:				
ITEM	Standard Number	Descriptions		

G20CrNiMo Chemical composition(mass fraction)(wt.%)			
Chemical	Min.(%)	Max.(%)	

G20CrNiMo 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	-		

G20CrNiMo 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	-	

G20CrNiMo Heat Treatment Regime				
Annealing	Quenching	Tempering	Normalizing	Q & T
\checkmark	√	√	√	√

G20CrNiMo Chemical information, Mechanical properties

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

G20CrNiMo 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	Ф8-1200mm*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: