

This page is mainly introduced the NiCr20Ti Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of NiCr20Ti, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

Datasheet for Steel Grades Specialsteel NiCr20Ti

NiCr20Ti Standard Number:		
ITEM	Standard Number	Descriptions
1	ISO 6207 (1992)	Seamless nickel and nickel alloy tube
2	ISO 6208 (1992)	Nickel and nickel alloy plate, sheet and strip
3	ISO 9722 (1992)	Nickel and nickel alloys - Composition and forms of wrought products
4	ISO 9723 (1992)	Nickel and nickel alloy bars
5	ISO 9724 (1992)	Nickel and nickel alloy wire and drawing stock
6	ISO 9725 (1992)	Nickel and nickel alloy forgings

NiCr20Ti Chemical composition (mass fraction) (wt.%)									
Chemical		Min.(%)			Max.(%)				
C		0.08			0.15				
Si					1.00				
Mn					1.00				
P									
S					0.020				
Cr		18.00			21.00				
Ni		remaining							
Co					5.00				
Fe					5.00				
Ti		0.20			0.60				
Cu					0.50				
C	Si	Mn	P	S	Cr	Ni	Mo	V	Ta
W	N	Cu	Co	Pb	B	Nb	Al	Ti	Other

Nickel and nickel alloy forgings

NiCr20Ti Physical Properties

Tensile strength	115-234	σ_b /MPa
Yield Strength	23	$\sigma_{0.2} \geq$ /MPa
Elongation	65	$\delta_5 \geq$ (%)
ψ	-	$\psi \geq$ (%)
Akv	-	$Akv \geq$ /J
HBS	123-321	-
HRC	30	-

NiCr20Ti Mechanical Properties

Tensile strength	231-231	σ_b /MPa
Yield Strength	154	$\sigma_{0.2} \geq$ /MPa
Elongation	56	$\delta_5 \geq$ (%)
ψ	-	$\psi \geq$ (%)
Akv	-	$Akv \geq$ /J
HBS	235-268	-
HRC	30	-

NiCr20Ti Heat Treatment Regime

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

NiCr20Ti 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,	Φ8-1200mm*L	Forging, hot rolling and	Black, Rough Turning,

	Square Bar		cold rolling, Cast	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 Specialsteel the specifications follows: