

This page is mainly introduced the 2.4668 Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of 2.4668, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

Datasheet for Steel Grades Superalloys 2.4668

2.4668 Standard Number:		
ITEM	Standard Number	Descriptions
1	DIN 17744 (2002)	Wrought nickel alloys with molybdenum and chromium - Chemical composition
2	DIN 17750 (2002)	Plates, strips and sheets of wrought nickel and nickel alloys - Properties
3	DIN 17752 (2002)	Rods and bars of wrought and nickel alloys - Properties
4	DIN 17753 (2002)	Wires of wrought nickel and nickel alloys - Properties
5	DIN EN 10088-1	Stainless steels - Part 1: List of stainless steels
6	DIN EN 10302 (2002)	Creep resisting steels, nickel and cobalt alloys

2.4668 Chemical composition (mass fraction) (wt.%)									
Chemical		Min.(%)			Max.(%)				
C					0.03				
Cr		17.0			21.0				
Mo		2.80			3.30				
Ni		50.0			55.0				
Al		0.20			0.60				
Nb		4.75			5.50				
Fe					Bal				
Si					0.35				
Mn					0.35				
P					0.015				
S					0.015				
B					0.006				
C	Si	Mn	P	S	Cr	Ni	Mo	V	Ta
W	N	Cu	Co	Pb	B	Nb	Al	Ti	Other

NiCr19Fe19Nb5Mo3; NiCr19Fe19Nb5Mn3

2.4668 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	-

2.4668 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	-

2.4668 Heat Treatment Regime

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

2.4668 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
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We can produce Superalloys the specifications follows: