This page is mainly introduced the 0Cr19Ni9N Datasheet, including chemical information,mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of 0Cr19Ni9N,such as it is commonly used in bars, sheet,plates, steel coils, steel pipes,forged and other materials application.

Datasheet for Steel Grades Specialsteel 0Cr19Ni9N

0Cr19Ni9N Standard Number:

ITEM	Standard Number	Descriptions
1	GB 13296 (2007)	Seamless stainless steel tubes for boiler and heat exchanger
2	GB/T 1220 (1992)	Stainless steel bars
3	GB/T 14975 (2002)	Stainless steel seamless tubes for structures
4	GB/T 14976 (2002)	Stainless steel seamless tubes for fluid transport
5	GB/T 3280 (2007)	Cold rolled stainless steel sheets and plates
6	GB/T 4237 (1992)	Hot rolled stainless steel sheets and plates
7	GB/T 4239 (1991)	Cold rolled stainless steel and heat resisting steel strips
8	GB/T 4240 (1993)	Stainless steel wires

0Cr19Ni9N Chemical composition(mass fraction)(wt.%)

Chemical	Min.(%)	Max.(%)
C		0.08
Si		1.00
Mn		2.00
P		0.035
S		0.030
Ni	7.00	10.50
Cr	18.00	20.00
N	0.10	0.25

C	Si	Mn	P	S	Cr	Ni	Mo	V	Ta
W	N	Cu	Co	Pb	B	Nb	Al	Ti	Other

Stainless and heat resisting steels
GB 13296 (2007) Seamless stainless steel tubes for boiler and heat exchanger

0Cr19Ni9N 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	-

0Cr19Ni9N 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	-

0Cr19Ni9N Heat Treatment Regime

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

0Cr19Ni9N 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 Specialsteel the specifications follows: