

This page is mainly introduced the Y1Cr18Ni9Se Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of Y1Cr18Ni9Se, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

## Datasheet for Steel Grades Specialsteel Y1Cr18Ni9Se

### Y1Cr18Ni9Se Standard Number:

ITEM	Standard Number	Descriptions
1	GB/T 1220 (1992)	Stainless steel bars
2	GB/T 4226 (2004)	Cold finished stainless steel bars
3	GB/T 4240 (1993)	Stainless steel wires
4	GB/T 4356 (1984)	Stainless steel wire rods

### Y1Cr18Ni9Se Chemical composition (mass fraction) (wt.%)

Chemical		Min.(%)					Max.(%)			
C							0.15			
Si							1.00			
Mn							2.00			
P							0.200			
S							0.060			
Ni		8.00					10.00			
Cr		17.00					19.00			
Se							0.15			
C	Si	Mn	P	S	Cr	Ni	Mo	V	Ta	
W	N	Cu	Co	Pb	B	Nb	Al	Ti	Other	

Y1Cr18Ni9Se Stainless and heat resisting steels

Austenitic stainless steel. Grade Y1Cr18Ni9Se was replaced by new designation Y12Cr18Ni9Se according to GB/T 20878 (2007)

### Y1Cr18Ni9Se Physical Properties

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

### Y1Cr18Ni9Se Mechanical Properties

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

### Y1Cr18Ni9Se Heat Treatment Regime

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

### Y1Cr18Ni9Se 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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