

This page is mainly introduced the DZ125L chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of DZ125L, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

Data Table for Grades Superalloys DZ125L

DZ125L Standard Number:

ITEM	Standard Number	Descriptions
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DZ125L Chemical composition(mass fraction)(wt.%)

Chemical	Min.(%)	Max.(%)
C	0.06	0.14
Cr	8.20	9.80
Co	9.20	10.80
W	6.20	10.80
Ni		Bal
Mo	1.50	2.50
Al	4.30	5.30
Ti	2.00	2.80
Fe		0.20
Ta	3.30	4.00
B	0.005	0.015
Zr		0.05
Si		0.15
Mn		0.15
P		0.001
S		0.010
Pb		0.0005
Sb		0.001
Sn		0.001
Bi		0.00005
Ag		0.0005

DZ125L Physical Properties

Tensile strength	115-234	σ_b /MPa
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Yield Strength	23	$\sigma_{0.2} \geq \text{MPa}$
Elongation	65	$\delta 5 \geq (\%)$
ψ	-	$\psi \geq (\%)$
Akv	-	$Akv \geq \text{J}$
HBS	123-321	-
HRC	30	-

DZ125L Mechanical Properties

Tensile strength	231-231	σ_b / MPa
Yield Strength	154	$\sigma_{0.2} \geq \text{MPa}$
Elongation	56	$\delta 5 \geq (\%)$
ψ	-	$\psi \geq (\%)$
Akv	-	$Akv \geq \text{J}$
HBS	235-268	-
HRC	30	-

DZ125L Heat Treatment Regime

Annealing	Quenching	Tempering	Normalizing	Q & T
✓	✓	✓	✓	✓

DZ125L 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	$\Phi 8$ -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 Superalloys the specifications follows: