

Manufactory profile



My company has smelting, forging, heat treatment, machining etc workshop. Heat treatment equipment, heat treatment capacity of 20000 tons, 15 meters long, 4 m diameter workpiece; Special steel smelting with ED + LF + VD and electricity remelting of smelting slag ability.

The main production of special steel categories include: [Stainless Steel](#), [Tool steel](#), [Carbon steel](#), [Alloy steel](#), [Mould steel](#), [Ti Alloy](#), [High alloy](#), the whole steel, high temperature alloy, [nickel-based alloy](#), [cobalt-based alloy](#), [Hastelloy alloy](#) etc.

Production specifications including: [Round bar](#), [Tube/Pipe](#), [Steel plate](#), [Sheet](#), [Coil](#), [Flat bar](#), [Cold rolling](#), [Steel wire](#), [Steel strip](#) etc.

Characteristics for grade 120WV4

Grade:	120WV4
Standard:	Germany DIN
Classification:	Cold working alloy tool steel

Chemical composition % of the ladle analysis of grade 120WV4

C	Si	Mn	P	S	Cr	Ni	Mo	V
1.15-1.25	0.15-0.30	0.20-0.35	Max 0.035	Max 0.035	0.15-0.25			0.07-0.12
W	N	Cu	Co	Pb	B	Nb	Al	Other
0.90-1.10								
Ti	Ta							

Mechanical properties of grade 120WV4

Annealing hardness HBS	Cold pull hardness HBS	Preheating temperature °C	Quenching temperature °C		Holding time min	Hardening medium	Temper temperature °C	After tempering hardness ≥HRC
			salt-bath furnace	controlled atmosphere furnace				
235	262	788	1191	1204	5~15	air cooling	522	60

Physical Properties

Assortment	Dimension	Direct.	s _B	s _T	d ₅	y	KCU	Heat treatment
-	mm	-	MPa	MPa	%	%	kJ / m ²	-
casted			11-13		30-40			
deformed			15		60-70			

Technological properties of grade 120WV4

Melting temperature:	327.3 °C
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We can produce 120WV4, the specifications follows:

Note:

- (1) listed in the table apex diameter (d), to steel thickness (a) multiples said.
- (2) in the ASTM A6 standard specified scope can meet any additional conditions.
- (3) from the standard for 50 mm (2 in).

Mechanical properties

Mechanische Eigenschaften

Caracteristiques mecaniques

ReH Minimum yield strength / Mindestwert der oberen Streckgrenze / Limite d'elasticite minimale

Rm Tensile strength / Zugfestigkeit / Resistance a la traction

A Minimum elongation / Mindestwert der Bruchdehnung / Allongement minimal

J Notch impact test / Kerbschlagbiegeversuch / Essai de flexion par choc

Round bar:

Diameter : 1mm-2000mm

Square bar:

Size: 50mm * 50mm-600mm *600mm

Plate steel/flat bar:

Size: Thickness: 0.1mm-800mm Width: 10mm to 1500mm

Tube/pipe:

Size: OD: 6-219mm WT: 1-35 mm.

Cold-rolled sheet: Thickness: 2-5mm Width:1000mm Length: 2000mm

Hot-rolled sheet: Thickness:6-80mm Width: 210-610mm

Length: We can supply any length based on the customer's requirement.

Forging/hot rolling/ extrusion of steel.

Forging: Shafts with flanks/pipes/tubes/slugs/donuts/cubes/other shapes

Finished goods condition: hot forging/hot rolling + annealing/normalizing + tempering/quenching + tempering/any conditions based on the customer's requirement

Surface conditions: scaled (hot working finish)/ground/rough machining/fine machining/based on the customer's requirement

Furnaces for metallurgical processing: electrode arc + LF/VD/VOD/ESR/Vacuum consumable electrode.

Ultrasonic inspection: 100% ultrasonic inspection for any imperfections or based on the customer's requirement.

UTS according to SEP 1921 C/c,D/d,E/e;A388 or GB/T 6402

Excellent service for all kinds of industries, with advantages of technologies, equipment and price.

We serve you with our honesty, integrity, and professionalism.

Product pictures

DIN 120WV4 Steel Physical Properties

by Longhai special steel - China steel suppliers E-mail: sales@steel-grades.com

www.steel-grades.com Chemical composition physical Properties standard download

Round bar, Tube/Pipe, Steel plate, Sheet, Coil, Flat bar, Cold rolling, Steel wire, Steel strip



Web address: [/Steel-Grades/Tool-Steel-Hard-Alloy/120WV4.html](http://Steel-Grades/Tool-Steel-Hard-Alloy/120WV4.html)