
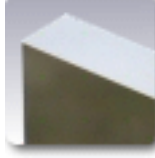
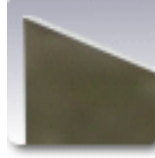
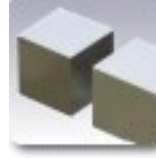


O2 Tool Steel | 1.2842 | 9Mn2V | 90MnCrV8 | 90MnV8 |

Oil-Hardening Cold Work Steel

O2 Tool steel is a cold work steel belong to ASTM A681-1999 Steel Grade standard. O2 Special Steel China Supplier and factory Otai Special Steel Supply O2 Cold Work Tool steel in Round bar, Plate, Flat bar, Square, Forging Ring and others any shape. And provide cutting, sawing, milled, machining processing.

Supply Form of O2 Steel -ASTM A681 Alloy Cold Work Tool Steel

			
Round	Plate	Sheet	Square

Supply Range of aisi O2 Tool Steel

O2 Steel Round Bar: diameter 5mm – 400mm

O2 Steel Plate: thickness 10 –500mm x width 200– 1400mm

O2 Steel Block: 210mm x 500-810mm

Chemical Composition of O2 Tool Steel Material

ASTM A681	C	Si	Mn	P	S	Cr	Mo	V
O2/T31502	0.85~ 0.95	≤0.50	1.40~ 1.80	0.030 Max	0.030 Max	≤0.50	≤0.30	≤0.30
DIN 17350	C	Si	Mn	P	S	Cr	Mo	V
1.2842/90MnCrV8	0.85~ 0.95	0.10~ 0.40	1.90~ 2.10	0.035 Max	0.035 Max	0.20~ 0.50	--	0.05~ 0.15

GB/T 1299	C	Si	Mn	P	S	Cr	Mo	V
9Mn2V	0.85~ 0.95	≤0.40	1.70~ 2.00	0.030 Max	0.030 Max	≤0.25	~	≤0.20
JIS G4404	C	Si	Mn	P	S	Cr	Mo	V

O2 tool Steel Equivalent and Related Speciation

USA	German	Japan	China	ISO
ASTM A681	DIN 17350	JIS G4404	GB/T 1299	ISO 4957
O2	1.2842		9Mn2V	90MnV2

ASTM AISI O2 Tool Steel Material Mechanical Properties

Hardness, Rockwell C: 62 HRC, Density: 7.85kg/m³

Izod impact unnotched: .

Melting point:

Thermal expansion: 11.2 x 10⁻⁶/ °C (20-100 °C)

Elastic modulus: 27557-30458 ksi (at 25 °C).

Forged of Cold Work O2 Steel material metal

Forged O2 tool steel at 980-1050 °C. no forging when below 960 °C.

Heat Treatment of SAE/AISI O2 Steel

● O2 Steel Annealing

Slowly heat to 740~770 °C, keep enough time, ensure heat thoroughly. then cooling in furnace at 4-5 °C per hour. After annealing, the hardness 183~212 HBS Max.

● O2 tool Steel Hardening & Quenching

/ °C quenching temperature: 760~800

Quenching medium: oil

● Tempering Of O2 Steel

/ °C tempering temperature: 150 ~ 260

After tempering hardness HRC: 62-57

Application of Sae AISI O2 tool Steel

O2 tool steel used for cold work tool products. As below:

- 1) For the thickness of <6mm stamping die, paper cutter appliances.
- 2) This steel is used for plastic molds, when used to heat treatment, the use of hardness 58 ~ 60HRC

Quality Assured of Sae O2 Steel

Quality assured by Our ISO 9001:2008 quality management system. Our all O2 tool steel all had by SEP 1921-84 ultrasonic inspection (UT Test). Quality Grade: E/e, D/d, C/c.

If you have any O2 steel inquiry and question for Price, Application, hot treatment, please don't hesitate contact us.

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