

OTAI SPECIAL STEEL is STD4 steel stockholders and suppliers from china. more 16 years experience in JIS STD4 tool steel round bar, flat bar and plate supply.

JIS STD4 Steel is a high quality Hot work tool steel, It belong to the high quality high carbon alloy tool steel. Oil Quenched & Tempered Hardenss is 28-34 HRc. JIS STD4 steel Annealing delivery hardenss less than 250HB.

Related Specifications ASTM A29/A29M DIN EN 10083/3 JIS G4404 GB/T 3077

Form of Supply

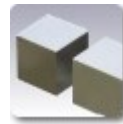
JIS STD4 tool steel, we can supply the round bar, steel flat bar, plate, steel sheet, hexagonal steel bar and steel square block. JIS STD4 steel Round bar can be sawn to your required lengths as one offs or multiple cut pieces. STD4 steel Rectangular pieces can be sawn from flat bar or plate to your specific sizes. Ground tool steel bar can be supplied, providing a quality precision finished bar to tight tolerances.



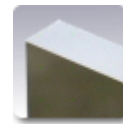
Round



sheet



Square



Plate

Chemical composition

C(%)	0.90~ 1.00	Si(%)	≤0.35	Mn(%)	0.90~ 1.20	P(%)	≤0.030
S(%)	≤0.030	Cr(%)	0.50~1.00	V(%)	--	W(%)	0.50~ 1.00

STD4 steel Heat treatment Related

- **Forging Of STD4 steel-hot work alloy tool steel**

Heat to 900-1100 ° C(1652-2012°F), forged temperature not below 843°(1550°F)

- **Annealing of STD4 Tool steel**

Slowly heated to 788 °C (1450° F) and allow enough times, let the steel to be

thoroughly heated, Then cool slowly at Maximum of 4°C (40° F) per hours. The STD4 tool steel will get MAX 250 HB (Brinell hardness) .

- **Hardening of STD4 tool steel**

STD4 steels should be heated uniformly to 1050-1100°C (1922-2012°F) until completely heated through. If needed, the steels can be preheated at 300-500°C (572-932°F). About 30 min/per 25 mm of ruling section is to be provided and then the steels should be immediately quenched in air.

- **Tempering of STD4 tool steel**

Tempering of STD4 steels is performed at 600-650°C (212-662°F), Soak well at the selected temperature and soak for at least one hour per 25mm of total thickness. Get Rockwell C hardness of 50 MAX..

Mechanical Properties

The mechanical properties of STD4 tool steels are outlined in the following table.

Elastic modulus (@399°C/750°F, hardened to 62 HRC)	Elastic modulus (hardened to 62 HRC)	Yield (0.2%, hardened to 55 HRC)	Yield (0.2%, hardened to 60 HRC)	Yield (0.2%, hardened to 62 HRC)	Yield (0.2%, hardened to 50 HRC)
GPa	GPa	Mpa	Mpa	Mpa	MPa
172	193	1800	2150	2200	1350

Applications

STD4 Hot work steels are Suitable for the manufacture of complex shapes, impact load, the working temperature is not too high, side length > 400mm medium-sized forging die and trimming die for producing simple shapes general manufacturing process smelting steel vacuum refining process to ensure purity;. Using a large professional heat treatment of steel the best pre-hardening effect, uniform distribution of hardness ..

STD4 tool steel Regular size and Tolerance

hot rolled STD4 steel bar: Ø5mm-200mm

Forging STD4 steel bar: Ø140mm-3000mm

Hot rolled STD4 steel plate: Thickness 10mm-200mm x width 100-2300mm

Forged STD4 material steel plate: Thickness 150-1500mm x Width 100 x 3000mm

Others STD4 have not specified size, pls [contact](#) our experienced sales team.

Processing

JIS STD4 tool steel round bar and flat sections can be cut to your required sizes. STD4 tool steel ground bar can also be supplied, providing a high quality tool steel precision ground tool steel bar to your required tolerances. JIS STD4 steel is also available as Ground Flat Stock / Gauge Plate, in standard and nonstandard sizes.

Contact our experienced sales team to help you with your STD4 tool steel questions and enquiry by [Email](#) or Telephone. The questions will be reply in 24 hours.

OTAI SPECIAL STEEL CO., LTD

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