

5160 steel stockholders and suppliers from china. Otai Special Steel have more 16 years experience in AISI 5160 Spring Steel round bar, flat bar., rod bar, wire and plate supply.

AISI 5160 Steel is a high quality Cold work Spring Steel, It belong to the high quality high carbon alloy Spring Steel. Oil Quenched & Tempered Hardness is 28-34 HRC. 5160 steel Annealing delivery hardenss less than 250HB.

Related Specifications ASTM A29/A29M DIN EN 10083/3 AISI G4053 GB GB/T 3077

Form of Supply

AISI 5160 Spring Steel China Supplier and Stocker, Otai Special Steel can supply the round bar, steel flat bar, plate, hexagonal steel bar and steel square block. AISI 5160 steel Round bar can be sawn to your required lengths as one offs or multiple cut pieces. 5160 steel Rectangular pieces can be sawn from flat bar or plate to your specific sizes. Ground Spring Steel bar can be supplied, providing a quality precision finished bar to tight tolerances.



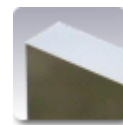
Round



sheet



Square



Plate

Chemical composition

| | | | | | | | |
|------|-----------|-------|-----------|-------|-----------|-------|--------|
| C(%) | 0.56-0.64 | Si(%) | 0.15-0.35 | Mn(%) | 0.75-1.00 | P(%) | ≤0.030 |
| S(%) | ≤0.035 | Cr(%) | 0.70-0.90 | Ni(%) | 0.25 | Cu(%) | 0.35 |

Equivalent Of 5160 alloy Spring Steel

| | | | | | | | | | | | |
|---------------|----------|-------|-------|--------|---------|-------|-------|-----|---------|--------|-------|
| USA | Germany | China | Japan | France | England | Italy | Korea | ISO | Austria | Sweden | Spain |
| ASTM/AISI/SAE | DIN, WNr | GB | JIS | AFNOR | BS | UNI | KS | ISO | ONORM | SS | UNE |

| | | | | | | | | | | | |
|---------------|-------------------|---------|-------|--|--------|-------|--|--|--|--|--|
| 5160 / G51600 | 55Cr3 / 1.7176 | 60CrMnA | SUP9A | | 527A60 | SPS5A | | | | | |
| | | | | | | | | | | | |

Heat treatment Related

① Annealing of 5160 Spring Steel

Slowly heated to 740–770 °C and allow enough times, let the steel to be thoroughly heated, Then cool slowly in the furnace. The 5160 tool steel will get MAX 250 HB (Brinell hardness) .

② Hardening of 5160 Spring Steel

5160 steels should be heated uniformly to 830–860° C (1526–1580° F) until completely heated through. About 30 min per 25 mm of ruling section is to be provided and then the steels should be immediately quenched in oil.

③ Tempering of 5160 Spring Steel

Tempering of 5160 steels is performed at 460–510° C, Soak well at the selected temperature and soak for at least one hour per 25mm of total thickness.

Mechanical Properties

The mechanical properties of 5160 Spring Steels are outlined in the following table.

| Tensile strength | Conditions to yield strength | Elongation | Reduction of area | Hardness (Hot Rolled) | Hardness (Cold Drawn) |
|---------------------------------|--------------------------------------|--------------------|--------------------|-----------------------|-----------------------|
| σ_b (MPa): ≥1225(125) | $\sigma_{0.2}$ (MPa): ≥ 1080(110) | δ_5 (%): ≥9 | ψ (%): ≥20 | ≤321HB; | |

Applications

5160 steels, Highlight the advantage is good hardenability, another hot working performance, comprehensive mechanical properties,

Decarburization resistance is also good big cross section of various important spring, such as automobile, locomotive, large plate spring, spring, etc. 5160 Spring main used for heavy vehicles, tractors, industrial production load, stress and the diameter of the larger plate spring and helical spring

Regular size and Tolerance

Steel round bar: Diameter Ø 5mm - 3000mm

Steel plate: Thickness 5mm - 3000mm x Width 100mm - 3500mm

Steel Hexagonal bar: Hex 5mm - 105mm

Others 5160 have not specified size, pls [contact](#) our experienced sales team.

Processing

AISI 5160 Spring Steel round bar and flat sections can be cut to your required sizes. 5160 Spring Steel ground bar can also be supplied, providing a high quality Spring Steel precision ground Spring Steel bar to your required tolerances. AISI 5160 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 5160 Spring Steel questions and enquiry by [Email](#) or Telephone. The questions will be reply in 24 hours.

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