



EN10083-3 42CrMo4 steel work/ steel structures/ steel machining parts

EN10083-3 42CrMo4 steel is a kind of material used in industrial area.

Compared with 35CrMo steel, 42CrMo4 steel has better property. It can be used in the manufacture of forging which requires higher strength, bigger fracture surface. It can be made to big gear in locomotive traction, supercharger drive gear, rear axle, connecting rod and a spring clip, etc. 42CrMo4 steel can be also used as oil drill pipe joint in 2000m deep well and salvage tool, etc.

Equivalent grades: 42CrMo steel in Chinese standard; SCM445 steel in Japanese standard; 4140/4142 steel in American standard.

Characteristics: 42CrMo4 steel has high strength, high harden-ability with good toughness. It has little deformation in quenching. It has high creep strength and endurance in high temperature. 42CrMo4 steel is the updated material of AISI 4140. This steel has good process-ability, it is easy to be polished, to be textured and be electroplated.

Heat treatment: quenching 850℃; oil cooling; tempering 560 ℃; furnace cooling to 400℃ and then air cooling

Delivery condition: heat treatment (positive fire, annealing or high temperature tempering); without heat treatment. (Delivery status should be indicated in the contract)

Chemical composition:

C : 0.38~0.45

Si: ≤0.40

Mn: 0.60~0.90

S : ≤0.035

P : ≤0.025

Cr: 0.90~1.20

Mo: 0.15~0.30

Mechanical properties after quenching and tempering:

(Diameter ≤16mm; Thickness ≤ 8mm)

Tensile strength σ_b (MPa): 1100-1300

Yield strength σ_s (MPa): ≥900

Elongation δ_5 (%): ≥10

(16mm<Diameter ≤40mm; 8mm<Thickness ≤ 20mm)

Tensile strength σ_b (MPa): 1000-1200

Yield strength σ_s (MPa): ≥750

Elongation δ_5 (%): ≥11

(40mm<Diameter ≤100mm; 20mm<Thickness ≤ 60mm)

Tensile strength σ_b (MPa): 900-1100

Yield strength σ_s (MPa): ≥650

Elongation δ_5 (%): ≥12

Based on positive and pragmatic attitude, efficient management system, and perfect after-sale service, Shanghai Katalor guarantees to provide you with the best 42CrMo4 steel plates, 42CrMo4 steel pipe, 42CrMo4 steel rod. We have our own processing center and can produce the 42CrMo4 steel works, 42CrMo4 steel structure and 42CrMo4 steel machining parts. If you have any needs, please feel free to contact us. We will offer you best products and service to you as soon as we get your inquiry.



Shanghai Katalor Enterprises
ONCE BELIEVE, TRUST FOREVER!

Email: info@katalor.com

Tel: 0086-21-61182423



Shanghai Katalor Enterprises Co., Ltd located in shanghai of china, is specialized in manufacturing and exporting steel and casting product. Based on the domestic rich product resources and professional research on international market, Katalor's service has already spread many countries in Europe, America, Southeast Asia, Middle East, South America, Africa, and so on.

Contact US:

Phone: 0086-18317160019

TEL: 0086-21-61182423

Fax: 0086-21-61182425

E-mail: info@katalor.com

Skype: shanghai.katalor

Address : Room 301, Unit 6, lane 2500, xiupu Road, Kangqiao Industrial Area, Pudong New District, Shanghai