



### **EN10083-3 34CrMo4 steel work/ steel structures/ steel machining parts**

EN10083-3 34CrMo4 (1.7220) steel has high static strength, high impact toughness and high fatigue limit. Compared with 40Cr steel, 34CrMo4 steel has higher harden-ability. 34CrMo4 steel has high creep strength in high temperature, and it can work in 500°C temperature. Its plasticity is ordinary in cold deformation, and its weld-ability is not very well.

Heat treatment: quenching 850°C; oil cooling; tempering 550 °C; water cooling and oil cooling.

Delivery condition: heat treatment (positive fire, annealing or high temperature tempering); without heat treatment

Chemical composition:

C : 0.30~0.37

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  $\sigma_b$  (MPa): 1000-1200

Yield strength  $\sigma_s$  (MPa): ≥800

Elongation  $\delta_5$  (%): ≥11

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

Tensile strength  $\sigma_b$  (MPa): 900-1100

Yield strength  $\sigma_s$  (MPa): ≥650

Elongation  $\delta_5$  (%): ≥12

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

Tensile strength  $\sigma_b$  (MPa): 800-950

Yield strength  $\sigma_s$  (MPa): ≥550

Elongation  $\delta_5$  (%): ≥14

The raw material of 34CrMo4 steel includes 34CrMo4 steel plate, 34CrMo4 steel pipe, 34CrMo4 steel round bar. With our deep processing, we can provide the 34CrMo4 steel work, 34CrMo4 steel structures and 34CrMo4 steel machining parts: they are usually used as structural component with

high load work, such as transmission parts in vehicle and engine, the rotor, spindle, transmission shaft with heavy load.

Shanghai Katalor is located in Pudong district of Shanghai city. It is only 30 minutes from Pudong International airport to our company. If you have chance to China, we sincerely invite you to visit us. We have five big steel processing centers located in Shanghai City, Tianjin City, Qingdao City, Wuhan City and Nanyang City. Every processing center can process steel material 200,000 tons annually, So we have the capacity to offer the processing like cutting, drilling, wedding, milling, turning, bending, etc. We have the ability to produce every kinds of steel structural parts. If you need 34CrMo4 steel work/ steel structures/ steel machining parts, please be free to contact us.



Shanghai Katalor Enterprises

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

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