



**JIS G4051 S50C steel works/steel structures/steel machining parts**

(1) S50C is a kind of mechanical structure carbon steel and is often manufactured into steel works/steel structures/steel machining parts.

(2) The properties of JIS G4051 S50C steel works/steel structures/steel machining parts: good mechanical processing and cutting. The more information is following:

The chemical composition of JIS G 4051 S50C steel

Grade	the chemical composition							
	C	Si	Mn	Pmax	Smax	Cu max	Ni max	Cr max
S50C	0.47-0.53	0.15-0.35	0.60-0.90	0.030	0.035	0.30	0.20	0.20

The mechanical property of JIS G4051 S45C steel

(3) General use

Grade	Availability hardness	Tensile strength min	Yield strength min	Elongation % min(δ5)	impact strength	hardness
S50C	143~187HBS 179~235HBS 212~277HBS	630MPa	375MPa	14%	≥ 39(4)	≤ 241HB (without heat treatment) ≤ 207HB (Annealed Steel)

The S50C steel sheets, S50C steel round bars, S50C steel tubes are usually used to manufacture mechanical and spring pieces with high abrasion resistance and low dynamic load and impact, such as forging gears, pull rods, rollers, shaft, friction disc, agricultural plowshares, heavy loading spindle, etc.

And S50C machining parts are applied in many aspects which include plastic plates and mechanical parts for mould making, the pads for all kinds of cold working moulds, die retaining plates, standard mould materials, etc.

(4) Heat treatment

Heat treatment specification: normalizing, 830°C; quenching, 830°C; tempering, 600°C

(5) Metallographic structure

Pearlite + Ferrite

(6) Processing machines: automatic submerged arc welding machine, bending machine, radial drill, argon arc welding machine, edge milling machine, CNC vertical lathe.

(7) Shanghai Katalor enterprises keeps more than 5000 tons of JIS G4051 S50C steel plates and round bar in our warehouse. We can process them to S50C steel works/steel structures/steel machining parts with precise specifications (as your drawings). With a large quantity of steel stock and deep-processing capacity, we can supply you annual 60,000 tons of JIS G4051 S50C steel works/steel structures/steel machining parts. If you need help, please contact us!



Shanghai Katalor Enterprises

ONCE BELIEVE, TRUST FOREVER!

Email: info@katalor.com

Tel: 0086-21-61182423

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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.

### **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

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**Office Address:** Room 301, Unit 6, Lane 2500, Xiupu Road, Kangqiao Industrial Area, Pudong New District, Shanghai