AiSi, ASTM, bs, DIN, GB, JIS Steel Plate Abrasion Resistant

Basic Information

Place of Origin: China
Brand Name: Zhengshen
Certification: ISO, GOST,CE

Minimum Order Quantity: 1 T

Price: Negotiable
Delivery Time: 5-15 days
Payment Terms: T/T, LC

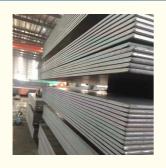


Product Specification

Highlight: q235 steel plate, q235 steel plate, carbon steel sheet



More Images







Product Description

AiSi, ASTM, bs, DIN, GB, JIS Steel Plate Abrasion Resistant

Feature:

Carbon steel is used in buildings, bridges, ships, vehicles, and other structures.

It must have a certain strength, and if necessary, require carbon steel with impact performance and welding performance.

Specification:

Туре	Steel Plate	Length	1-12m or as required
Standard	AiSi, ASTM, bs, DIN, GB, JIS	Tolerance	+- 1% 10% 15%
Material	4340 4140 4130	Processing Service	Bending, Welding, Decoiling, Cutting, Punching
Technique	hot rolled, cold rolled	Delivery Time	14 Days
Surface Treatment	galvanized, black painted	Certificate	BV,TUV,etc
Application	Ship Plate	Surface	PE coated, black painted, galvanized.
Special Use	High-strength Steel Plate	MOQ	1 ton
Width	200-2500mm, 1000mm,1220mm,1500mm, or as required		

Definition of medium and thick steel plates:

A thick steel plate is a general term for steel plates with a thickness of 4 mm or more. In practical work, the steel plate with a thickness of less than 20mm is often called a medium plate, and the steel plate with a thickness of >20mm to 60mm is called a thick plate. Steel plates with a thickness of more than 60mm need to be rolled on a special extra-heavy plate rolling mill, so it is called an extra-heavy plate. The width of a thick steel plate is from 0.6mm-3.0mm.

Thick plates are divided into shipbuilding steel plates, bridge steel plates, boiler steel plates, high-pressure vessel steel plates, checkered steel plates, automobile steel plates, armored steel plates, and composite steel plates according to their uses.

What are the classifications of medium and heavy steel plates?

Plain carbon steel boiling steel plate is a steel plate made by hot rolling of boiling steel of ordinary carbon structural steel. Boiling steel is a kind of steel with incomplete deoxidation, and molten steel has a high oxygen content. When the molten steel is injected into the ingot mold, a large amount of gas is generated by the reaction of carbon and oxygen, which causes the molten steel to be in a boiling state.

Boiling steel has low carbon content, and because ferrosilicon is not deoxidized, the silicon content in steel is often less than 0.07%. The outer layer of boiling steel is crystallized in the boiling state, so the surface layer is pure and dense, with good surface quality and good processing performance. Boiling steel does not have large concentrated shrinkage cavities, uses less deoxidizer, and lowers the cost of steel.

There are many impurities in the core of boiling steel, serious segregation, uneven mechanical properties, high gas content in steel, low toughness, high cold brittleness, aging sensitivity, and poor welding performance. Therefore, it is not suitable for the manufacture of welded structural parts and other important structural parts that are subjected to impact load and work at low temperatures.

Main use

Boiling steel sheets are widely used in the manufacture of various stamping parts, architectural and engineering structures, and some less important machine structures and parts.

2. Plain carbon steel killed steel plate

Ordinary carbon killed steel plate is a steel plate made by hot rolling of ordinary carbon structural steel killed billet. Killed steel is fully deoxidized steel, and the molten steel is fully deoxidized with ferromanganese, ferrosilicon, and aluminum before ingot casting. The molten steel is relatively calm in the ingot mold and does not produce a boiling state, so it is named as killed steel.

Advantages of Killed Steel

The advantage of killed steel is that the chemical composition is uniform, so the mechanical properties of each part are also uniform, the welding performance and plasticity are good, and the corrosion resistance is strong.

Disadvantages of Killed Steel

However, the surface quality is poor, there are concentrated shrinkage cavities, and the cost is also high.

Main use

Ordinary killed steel plates are mainly used to produce components that are impacted at low temperatures, welded structures and other structural parts that require higher strength.

Low-alloy structural steel plates are hot-rolled from low-alloy structural steel. Low alloy steel plates are killed steel and semi-killed steel plates. Its advantages are higher strength, better performance, saving a lot of steel, and reducing structural weight.

The main purpose

Low-alloy structural steel plates are more and more widely used in machinery manufacturing and metal structural parts.

Main use

Mainly used for general structures such as buildings, bridges, vehicles, etc.

Weathering steel is atmospheric corrosion resistant steel. Weathering steel for welded structure is a small amount of alloying elements such as steel, chromium, nickel, molybdenum, niobium, titanium, zirconium, and vanadium added to the steel to form a protective layer on the surface of the metal matrix. In order to improve the weather resistance of steel, as well as good welding performance.

Mainly used for bridges, buildings, and other structures.

6. High weather resistance structural steel plate

Weathering steel is resistant to atmospheric corrosion. A small amount of alloying elements are added to the steel, such as steel, phosphorus, chromium, nickel, molybdenum niobium, titanium, zirconium, and vanadium. To form a protective layer on the surface of the metal substrate to improve the weather resistance of the steel.

Mainly used in buildings, vehicles, towers, and other structural parts.

The checkered steel plate is a steel plate with diamond-shaped or lentil-shaped ribs on its surface. Its specifications are expressed by its own thickness (the thickness of the rib is not counted).

The checkered plate has the anti-slip effect and is often used as the floor, workshop escalator, work frame pedal, ship deck, and automobile bottom plate.

A Bridge steel plate is a steel plate specially used for building railway or highway bridges. It is required to have high strength, toughness, and withstand the load and impact of rolling stock, and to have good fatigue resistance, certain low-temperature toughness, and atmospheric corrosion resistance.

Mainly used for structural parts of railway bridges and highway bridges whose spans are between 46-160mm.

The steel plate for the hull structure is referred to as the marine plate. Due to the harsh working environment of the ship, the hull of the ship is subject to chemical corrosion, electrochemical corrosion of seawater, and corrosion of marine organisms and microorganisms, the hull is subjected to large wind and wave shocks and alternating loads, and the shape of the ship makes its processing methods complicated. Therefore, there are strict requirements for the steel used in the hull structure. First of all, good toughness is the most critical requirement. In addition, high strength, good corrosion resistance, welding performance, formability, and surface quality are required. In order to maintain the quality and ensure sufficient toughness, the Mn/C of the chemical composition is required to be above 2.5, and the carbon equivalent is also strictly required, and it is produced by a steel mill approved by the ship inspection department.

Structural steel for hulls is divided into two types: general thickness and high-strength steel. General-strength steel is divided into four grades A, B, C, and D according to quality. High-strength steel is further divided into two strength levels and three quality levels. AH32, DH32, EH32, AH36, DH36, EH36.

Steel plates for the manufacture of hulls, decks, etc. of ocean-going, coastal, and inland shipping vessels.

According to the use, the boilers are divided into two categories: industrial boilers and power station boilers. Industrial boilers are usually used for heating by industrial enterprises, and they are small boilers. The steels used are ordinary carbon structural steel and low-alloy structural steel. Power station boilers are large and medium-sized boilers, which have special requirements for steel quality. Generally, alloy steel with excellent comprehensive properties is required to be manufactured.

Mainly used to make fixed boilers, hull boilers, and other important boiler accessories.

Because the manufactured containers have to withstand different pressures and strengths, the normal pressure is generally 31.4MPa or higher, and the working temperature is often between -20°C and 450°C, and sometimes lower than -20°C. According to the working conditions and processing technology of the container, it is required that the steel plate for the container must have good cold bending and welding properties, good plasticity and toughness, and high-temperature short-term strength or long-term strength performance. In order to enable the container to withstand higher pressure and reduce the weight of the structure itself, in addition to high-quality carbon steel, low-alloy structural steel is currently used as the material for the steel plate used for the container.

The main purpose

The pressure vessel steel plate is a special plate, mainly used for the manufacture of petroleum, chemical, gas separation, and storage and transportation containers or other similar equipment, such as various tower vessels, heat exchangers, storage tanks, and tankers.

The steel plates for welded gas cylinders are made of high-quality carbon structural steel and low-alloy structural steel. Since the welding gas is used under certain pressure, the control of chemical composition and mechanical properties is also strict. The grade of welded gas cylinder steel is followed by "HP" (Hanyu Pinyin abbreviation for welding cylinder) to distinguish it.

Steel plates for welded gas cylinders are mainly used to produce gas cylinders with low air pressure, such as petroleum gas cylinders.

In order to save the amount of stainless acid-resistant and heat-resistant steel, some containers and structural parts are made

of composite steel plates. The composite steel plate is a bimetallic plate with ordinary carbon structural steel, high-quality carbon structural steel, and low-alloy steel as the matrix (base layer), and on its surface, stainless acid-resistant and heatresistant steel can be used as the surface layer (clad layer).

It is mainly used to manufacture structural parts and containers that are resistant to acid and alkali, atmosphere, and corrosive media.

Automobile steel plates are mainly used to manufacture structural parts such as automobile beams (longitudinal and cross beams) and frames.

The car frame not only has to withstand a large static load, but also has to withstand a certain amount of shock and vibration. Therefore, the steel plate is required to have a certain strength and fatigue resistance, and it is required to have good stamping performance and cold bending performance to meet the requirements of cold stamping processing.

Mainly used in the manufacture of structural parts such as automobile beams and frames.

Hot rolled three-layer steel plate for plow walls is used to manufacture plow walls for machine-drawn or animal-drawn style plows. It is required to have high wear resistance, a smooth surface and sufficient toughness. The material of the hard outer layer is 65 steel or 70-85 steel, and the material of the soft middle layer is Q235 or B2 steel.



Chongqing Zhengshen Stainless Steel Products Co.,Ltd.



+86 189 9647 2857



cqzhengshen@hotmail.com



pipesteels.com

Chenjiawan Industrial Park, Jieshi Town, Banan District, Chongqing, China