

JIS G3101 SS41

JIS G3101 SS41 is a type of hot-rolled carbon steel plate that is used to make general structures, boilers, pressure vessels, and pipes. It is also known as JIS G3101 SS41 hot rolled mild carbon steel.

Chemical Composition:

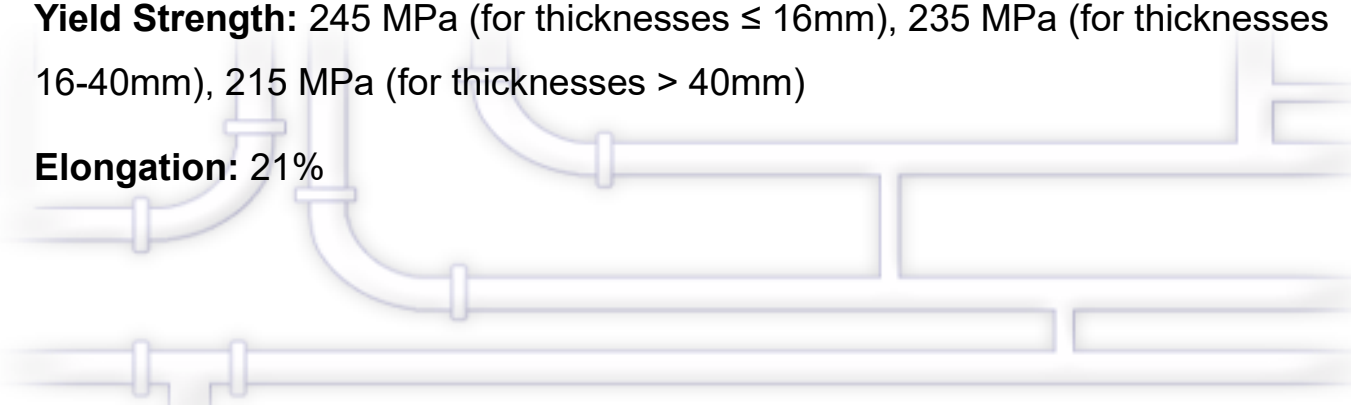
The chemical composition of SS41 steel typically includes:

- **Carbon (C):** $\leq 0.05\%$
- **Silicon (Si):** $\leq 0.05\%$
- **Phosphorus (P):** $\leq 0.05\%$
- **Sulfur (S):** $\leq 0.05\%$

Mechanical Properties:

- **Tensile Strength:** 400-510 MPa
- **Yield Strength:** 245 MPa (for thicknesses $\leq 16\text{mm}$), 235 MPa (for thicknesses 16-40mm), 215 MPa (for thicknesses $> 40\text{mm}$)
- **Elongation:** 21%

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G3101 SS41 Carbon steel plate is widely used in household goods, cabinets, indoor pipeline, water heater, boiler, bath crock, auto parts, medical instruments, building materials, chemical, food industry, agriculture, parts of the ship.

G3101 SS41 equivalent material

China	America	Germany
GB700-88	ASTM	DIN17100x
A3FAY3F	A36	USt37-2

SS41 steel has relatively low corrosion resistance and is susceptible to oxidation and rust. Protective measures, such as coatings or galvanization, are often applied to enhance its durability in corrosive environments.

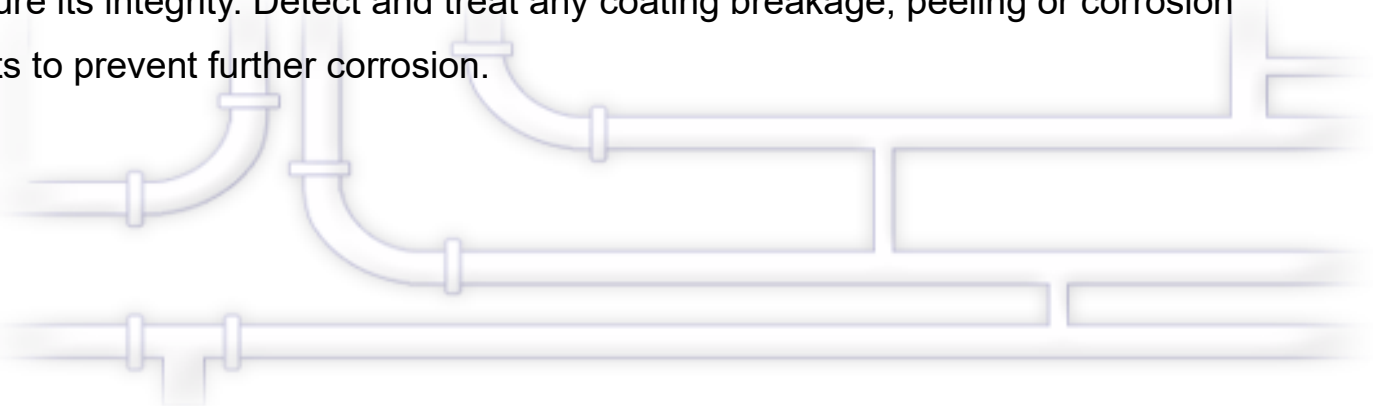
SS41 steel plate corrosion resistance and protective measures

SS41 steel plate is a carbon structural steel, which makes it strong and durable. While it is relatively resistant to corrosion, it is vulnerable to oxidation, rust and other forms of corrosion when exposed to wet, corrosive environments.

Luckily, there are some great ways to improve the corrosion resistance of SS41 steel plate and provide effective protection!

1. Coating protection: The most effective way to protect SS41 steel plate from corrosion is to apply a suitable anti-corrosion coating, such as an organic or inorganic coating, or even anti-rust oil. This method creates a physical and chemical protective layer that effectively isolates the steel plate from the environment.

2. Anti-corrosion coating maintenance: regularly check and repair the coating to ensure its integrity. Detect and treat any coating breakage, peeling or corrosion spots to prevent further corrosion.



3. And here's where anti-corrosion alloy additives come in - by adding special alloying elements or compounds, you can boost the corrosion resistance of SS41 steel plate. For example, corrosion-resistant alloying elements such as chromium, nickel and copper are added to the steel during the manufacturing process. Now, let's talk about selecting the right anti-corrosion coating for your needs. This could be anything from organic coatings (like paints and polymer coatings) to inorganic coatings (such as hot-dip galvanizing and thermal spraying), or even other specialty coatings (such as chemically resistant coatings).

5. Environmental control: The key here is to control the environmental conditions around the SS41 steel plate to avoid exposure to corrosive environments such as strong acid, strong alkali or high humidity.

