

5182 Aluminum Plate For Tanker - Haomei

In an effort to realize reduction in weight of the fuel tanker to create room for more fuel to be carried on board, aluminum alloy plate is one of the basic materials that have been used.

Aluminum fuel tankers offers a longer term service than steel counterparts because aluminum does not corrode easily as steel would. This is an added advantage on top of the ability to enhance the carrying capacity of fuel. Aluminum is lighter in weight compared to any other material used in the construction of fuel tankers.

Specification of 5182 Aluminum Plate For Tanker:

| Product Type | | Thickness (mm) | Width(mm) | Length(mm) |
|--------------|----------------|----------------|-----------|------------|
| Plate | Wide Plate | 4-8 | 2200-2600 | 2000-12000 |
| | Standard Plate | 4-8 | 1500-2200 | 2000-12000 |
| Coil | Wide Plate | 4-8 | 2200-2600 | - |
| | Standard Plate | 4-8 | 1500-2200 | - |

Chemical Composition of 5182 Aluminium Plate For Tanker:

| Alloy series | Si | Fe | Cu | Mn | Mg | Cr | Zn | Ti |
|--------------|------|------|------|------|------|-----|-----|------|
| 5182 | Min. | - | - | - | 0.20 | 4.0 | - | - |
| | Max. | 0.20 | 0.35 | 0.15 | 0.50 | 5.0 | 0.1 | 0.25 |

Mechanical Properties of 5182 Aluminum For Tanker:

| Alloy | Temper | Yield Strength | Tensile Strength | Elongation | 180°Min. Bend Radius | Standard |
|-------|--------|----------------|------------------|------------|----------------------|----------|
| 5182 | O/H111 | ≥125 | 280-350 | ≥26 | t | EN14286 |

Advantages of 5182 Aluminium For Tanker:

1. The light weight

more economical and practical, low density, high strength. It is more than 4 tons lighter than similar steel tank truck and 20% lighter more than steel tank truck. Because of the light weight of aluminum plate tank car, the fuel consumption and tire wear are both reduced during the transportation process, and reducing the daily operating expenses and maintenance costs.

2. High Corrosion resistance

The aluminum plate is with acetone, benzene, gasoline and diesel, kerosene, glacial acetic acid and other food in most chemical medium and has good compatibility, there is no need to do the anti-corrosion surface metal



treatment, the car body will not rust, the appearance is durable, easy to clean.15-20 years is the typical life of aluminum plate tank car.

3. Good Ductility

Improve safety eliminate hidden trouble, the tank body use aluminum plate, the ductility is good, the strength is high. Oil is an inflammable and explosive dangerous goods, it is easy to be heat-expansion and cold-contraction when on the condition of extremely cold or extremely hot. The common oil tanker is with low ductility in such an environment prone to explode, the aluminum oil tanks, greatly improving the security.

4. High Recovery rate

The aluminum material has very high collection value, saves the operation cost of the enterprise.

5. Good electrical conductivity

The good electrical conductivity of aluminum plate reduces the accumulation of static electricity in the tank. When there is a collision or tilting, it will be no sparks to eliminate the hidden danger of fire or explosion.

Application of 5182 Aluminum Sheet For Tanker:

5182 is a tanker use aluminum alloy for transportation and storage of dangerous goods, so it is usually used for the construction of tankers, such as road tanker, fuel tanker, oil tanker, chemical gas and liquid tanker etc.

