

Aluminum For Oil Tanker | Haomei Aluminum Plate Sheet

The alloy of aluminum sheet plate for oil tanker making are mainly 5000 series, which element is Mg, The alloy number is including 5083, 5454, 5754 and 5182.

Specification of Aluminum For Oil Tanker:

Alloy No.		Thickness (mm)	Width (mm)	Length (mm)
5083	Min.	4	1000	2000
	Max.	8	2800	12600
5182	Min.	4	1000	2000
	Max.	8	2800	12600
5454	Min.	4	1000	2000
	Max.	8	2800	12600

Chemical Composition of Aluminum Plate For Oil Tanker:

Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Standard
5083	0.40	0.40	0.10	0.40-1.0	4.0-4.9	0.05-0.25	0.25	0.15	EN573
5182	0.20	0.35	0.15	0.20-0.50	4.0-5.0	0.10	0.25	0.10	
5454	0.25	0.40	0.10	0.50-1.0	2.4-3.0	0.05-0.20	0.25	0.20	

Mechanical Properties of Aluminium Plate For Oil Tanker:

Alloy	Temper	Yield Strength	Tensile Strength	Elongation	180°Min. Bend Radius	Standard
5083	O/H111	≥145	290-370	≥17	1.5t	EN14286
5083	H32	≥215	305-385	≥12	--	ASTM B209
5182	O/H111	≥125	280-350	≥26	t	EN14286
5454	O/H111	≥85	215-285	≥19	t	EN14286
5454	H32	≥180	250-305	≥12	--	ASTM B209

Advantages of Aluminum Sheet For Oil Tank:

1. The aluminum alloy material has small density and light weight, can reduce the weight of the truck itself, but also reduce fuel consumption and exhaust emissions, and protect the environment.
2. Good corrosion resistance, long-term exposure to air is not easy to rust, it can also reduce the internal corrosion of the fuel tank and easy to clean.
3. Excellent weldability, the oil tank is welded with aluminum plate, which is not easy to leak oil.
4. The safety is high, when the heavy impact is encountered, the oil tank of aluminum alloy is not easy to crack, so it greatly reduces the probability of oil leakage and explosion, and plays a certain role in driving safety.

Application of Aluminium Sheet For Oil Tank:

- 1) Oil tanker
- 2) Fuel tanker
- 3) LNG storage tank

