

SPECIFICATION SHEET

Aluminum Plate For Oil Tanker

Shanghai Metal Corporation is a professional manufacturer and supplier of aluminum plate for oil tanker with high quality and reasonable price.

No	Alloy	Thickness	width
1	5083, 5182, 5454	0.5-500mm	20-2650mm

Chemical composition (%)

Standard: GB/T 3190-2008

Grade	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Al
5083	0.40	0.40	0.10	0.40-1.0	4.0-4.9	0.05-0.25	-	0.25	-	Rest
5182	0.20	0.35	0.15	0.20-0.50	4.0-5.0	0.10	-	0.25	0.10	Rest
5454	0.25	0.40	0.10	0.50-1.0	2.4-3.0	0.05-0.20	-	0.25	0.20	Rest

*1 Coil samples bending 90°, t – thickness of coil

Mechanical Properties

Alloy	Alclad classify	Temper	Sample Temper	Thickness /mm	Tensile strength R _m /MPa	Yield strength R _{p0.2} /MPa	Elongation/%	
							A	A ₅₀
5083	-	F	O H111	ALL	270	110	12	10
		H112	H112	ALL	270	125	12	10
5182	-	O H111	O H111	>0.20-0.50	255-315	110	11	-
				>0.50-1.50			12	-
				>1.50-3.00			13	-
		H19	H19	>0.20-0.50	380	320	1	-
				> 0.50-1.50			1	-
Hollow profile T6	Hollow profile T6	≤5 5<t≤25	Min.290 Min.310	Min.250 Min.260	8 10	6 8		

Physical Properties

Property	Value	Unit
Density(20°C)	2.72	g/cm ³
Melting Point	620-650	°C
Thermal Expansion	23.5	(10-6K-1)(20/100°C)
Specific heat capacity	899	J/(Kg.K)(0/100°C)
Modulus of Elasticity	70	GPa
Thermal Conductivity	205	W/(m. K) 20°C
Resistivity	32	nΩ .m

Formability
Very Good

Weldability
Good

Machinability
Very Good

Corrosion Resistance
Very Good

Applications

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

Products



Packing

Shanghai Metal Products are packed and labeled according to the regulations and customer's requests. Great care is taken to avoid any damage which might be caused during storage or transportation. In addition, clear labels are tagged on the outside of the packages for easy identification of the product I. D. and quality information.

- 1) Shanghai Metal Standard
- 2) Customization

