

SMT-5183(H)

Type : MIG/TIG

Conformances

AWS A5.10/ ASME SFA5.10 ER5183
EN ISO 18273 S Al 5183 (AlMg4.5Mn0.7(A))
LR WC/I-1S
BV WC
DNV-GL 5183

Applications

- Railroad cars and transportation equipment, pressure vessels

Features

- ER5183 is a about 5% Magnesium and 0.6% Manganese Aluminum filler metal which has high strength, high corrosion resistance, and matches the color well with the parent metal after anodizing.
- SMT-5183H is used for shipbuilding, automobile, railway parts industry, etc. because it has excellent feedability by controlling impurities

Welding Position

Current

GMAW: DC+(Pulse)
GTAW: DC-

Shielding Gas

Ar, Ar+He

Diameter / Packaging

Diameter	MIG	TIG
mm (in)	12.5kg (27.6lbs)	5kg (11lbs)
1.0 (0.039)	✓	
1.2 (0.045)	✓	
1.6 (1/16)	✓	✓
2.0 (5/64)		✓
2.4 (3/32)		✓
3.2 (1/8)		✓

Typical Chemical Composition of the Wire (%)

	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Al
SMT-5183(H)	0.06	0.09	0.02	0.65	4.96	0.08	0.03	0.02	Rem

Typical Mechanical Properties of All-Weld Metal

YS Mpa(lbs/in ²)	TS Mpa(lbs/in ²)	EL (%)	Temp °C(°F)	CVN-Impact Value J (ft.-lbs)
-	≥275 (≥39,700)	≥17		