MIGWELD AlMg4,5Mn

MIG/MAG Wires [GMAW]

Aluminium alloys

CLASSIFICATION:	APPROVALS:	APPLICATION:
EN ISO 18273-A : S Al5183 DIN 1732 : SG-AlMg4,5Mn AWS A-5.10 : ER 5183 W.Nr. : 3.3548		Shipbuilding&Offshore Automobile

- The material is designed for welding high-strength aluminum alloys, including those used in lowtemperature applications.
- Welding wire for aluminum alloys with the addition of manganese and a maximum magnesium content of up to 5%.
- Excellent weldability, the weld is free of pores.
- Good strength combined with resistance to corrosion caused by seawater.
- Not recommended for operation at elevated temperatures (stress corrosion cracking).

Base material

DIN 1725-1/2	W.Nr.	Int.Reg./Cast. Nr
AlMgSi1		
AlMg5	3.3555	6082
AlMg4,5Mn	3.3547	5083
AlMg3	3.3535	5754
G-AlMg5Si	3.3261	
G-AlMg5	3.3561	B535.0
G-AlMg3Si	3.3241	512.0
G-AlMg3	3.3541	
AlMg2Mn0,8	3.3527	5049
AlZnMg1		
AlZnMgCu0,5	3.4345	7022
AlMgSi0,5	3.3206	6063
G-AlMg10		
G-AlMg5Si		
AlMg4	3.3545	5086
AlMgSi07	3.3210	6005
AlSi1MgMn	3.2315	6082
AlMg1SiCu	3.2311	6061
AlZn4,5Mg1	3.4335	7020
5086, 5019, 6060, 6005, 6082, 6061, 7020, EN AC 51300, EN AC51400		

Typical chemical composition %

Mn	Cr	Fe	Al	Inne
0,62	0,11	0,18	rest	Mg 4,96

Typical mechanical properties

Yield strength Re [N/mm2]	125
Tensile strength Rm [N/mm2]	275
Elongation A5 [%]	17

Hardness	45-75[HB] /
Wire/rod type	solid
Heat treatment	Thicker elements should be heated to 150 [ºC]
Welding current	
Welding positions	
Additional description	Melting point 565-638 [ºC]
Shielding gases acc. to EN ISO 14175	I1 - Ar / I3 - Ar + >0-95% He /
Remarks	Shielding gas flow 8-15[l/min]

Welding parameters and packing

ø	**Welding current [A]**
1,2	140-260

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