

CATEGORY	GMAW-GTAW Solid wires	
TYPE	Mig aluminium welding wire with high corrosion resistance	
APPLICATIONS	Filler metal for Magnesium and Manganese alloyed Aluminium with a maximum Magnesium content of 5%. This alloy shows very good mechanical properties that make it ideal for applications in shipyards, in car and railway industry and constructions of reservoirs and tanks.	
PROPERTIES	Excellent weldability and good mechanical strength combined with good corrosion resistance against seawater are typical for this alloy. The weld deposit is free from porosity due to the special shaving process and cleaning method during production. AlMg4,5Mn is one of the highest grades within the range of aluminum alloys and covers a weight range of alloys. Thicker sections should be preheated (150°C) prior to welding. Qualified by Lloyds for manual and (semi)automatic welding.	
CLASSIFICATION	AWS	A 5.10: ER5183
	EN ISO	18273: S Al 5183 (AlMg4,5Mn0,7(A))
	F-nr	22

SUITABLE FOR	Aluminium alloys: AlMg4,5Mn, AlMg5, AlMg2Mn0,8, AlZnMg1, AlZnMgCu0,5, AlMgSi0,5, AlMgSi1,AlMgSi0,5, G-AlMg10, G-AlMg5, G-AlMg3Si, G-AlMg5Si, 3.2315, 3.3545, 3.3547, 3.3535, 3.3555, 3.3206, 3.3210, 3.2315, 3.3211, 3.4335, EN AW 5086, EN AW 5083, EN AW 5019, EN AW 5019, EN AW 6060, EN AW 6005A, EN AW 6082, EN AW 6061, EN AW 7020, EN AC 51300, EN AC 51400, EN AW-6082
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APPROVALS	CE Lloyds (MATS/NTH-1043/7/1)
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TYPICAL WELD DEPOSIT WEIGHT %

Mn	Cr	Mg
0.7	0.1	4.5

ALL WELD MECHANICAL PROPERTIES

Heat Treatment	R <sub>p0,2</sub> (MPa)	R <sub>m</sub> (MPa)	A5 (%)	Impact Energy (J) ISO-V RT
As Welded /	140	300	18	30

WELDING PARAMETERS / PACKING

WELDING PARAMETERS	WELDING PARAMETERS	WELDING PARAMETERS	PACKING	PACKING	PACKING
D (MM)	VOLTAGE (V)	CURRENT (A)	SPOOL TYPE	KG / SPOOL / DRUM	KG / PALLET
0.8	14-23	60-160	D-200 / KD-300 / DRUM	2 / 7 / 80	400 / 504 / 320
1.0	15-26	90-210	D-200 / KD-300 / DRUM	2 / 7 / 80	400 / 504 / 320
1.2	20-29	140-260	D-200 / KD-300 / DRUM	2 / 7 / 80	400 / 504 / 320
1.6	25-30	190-350	KD-300 / DRUM	7 / 80	504 / 320

REDRYING TEMPERATURE	Not required
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GAS ACCORDING EN 14175	I1, I3
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