

AlMg 5

CATEGORY GMAW-GTAW Solid wires

TYPE Mig filler metal for welding Aluminium Magnesium alloys.

APPLICATIONS Filler metal for welding Aluminium alloys with maximum 5% Magnesium. This Magnesium alloyed Aluminium wire, thanks to its excellent corrosion resistance and its high mechanical properties is mainly used in ship yards, car and railway industry. Thicker sections should be preheated (150°C) prior to welding.

PROPERTIES Excellent weldability and good mechanical strength combined with good corrosion resistance are typical for this alloy. The weld deposit is free from porosity due to the special shaving process and cleaning method during production. AlMg5 is one of the most popular types within the range of aluminum alloys and covers a weight range of alloys.

CLASSIFICATION

AWS	A 5.10: ER 5356
EN ISO	18273: S Al5356-AlMg5Cr A
DIN: W.Nr.	3.3556
DIN	1732: SG-AlMg5

SUITABLE FOR Aluminium alloys: AlMg3, AlMg4, AlMg5, AlMgMn, AlZnMg1, G-AlMg3Si, G-AlMg5Si, G-AlMg10, AlMg1SiCu, AlMgSi0,7, AlZn4,5Mg1, AlSi1MgMn, AlSiMg(A), 3.3545, 3.3206, 3.3210, 3.2315, 3.3211, 3.4335, EN AW 5086, EN AW 6060, EN AW 6005A, EN AW , EN AW 6061, EN AW 7020, EN AC 51400, EN AC 51300, EN AC 51100, EN AW 5454

APPROVALS CE approved

WELDING POSITIONS:



CHEMICAL COMPOSITION %

Be	Mn	Si	Cr	Fe	Cu	Al	Mg	Zn	Ti	other
0.0008	0.05-2	0.2	0.05-0.2	0.4	0.1	rest	4.5-5.5	0.1	0.06-0.12	0.15

MECHANICAL PROPERTIES

Heat Treatment	R _{p0,2} (N/mm ²)	R _m (N/mm ²)	A ₅ (%)	Impact Energy (J) ISO-V			T (°C)
				-20°C	-40°C	-60°C	
AW	115-140	275-315	25-35				562-633

AW: as welded

WELDING PARAMETERS / PACKING

Welding Parameters			Packing		
D (mm)	Voltage (V)	Current (A) DC+	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

GAS ACC. EN ISO 14175: I1, I3