

## AlMg 5 Tig

**CATEGORY** GMAW-GTAW Solid wires

**TYPE** Tig 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.

**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. Thicker sections should be preheated (150°C) prior to welding.

**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
<0.0005	0.6-1.0	<0.25	0.05-0.2	<0.4	<0.1	rest	5.0-5.5	<0.2	0.05-0.20	<0.15

**MECHANICAL PROPERTIES**

Heat Treatment	R <sub>p0,2</sub> (N/mm <sup>2</sup> )	R <sub>m</sub> (N/mm <sup>2</sup> )	A <sub>5</sub> (%)	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**

D (mm)	Welding Parameters Current (A) AC	Packing (kg)	
		single	master
1.6 x 1000	25-50	5	20
2.0 x 1000	40-75	5	20
2.4 x 1000	90-130	5	20
3.2 x 1000	160-240	5	20
4.0 x 1000	290-340	5	20
5.0 x 1000		5	20

**REDRYING TEMPERATURE** not required

**GAS ACC. EN ISO 14175:** I1