Union AlMg 5

Solid wire, Aluminium

Classifications	
EN ISO 18273	AWS A5.10
S Al 5356 (AlMg5Cr(A))	ER5356

Characteristics and typical fields of application

Solid wire for GMAW of AlMg alloys containing up to 5% Mg. Seawater resistant weld metal. Susceptible to stress corrosion cracking if exposed to service temperatures >65°C. Good colour matching with base metal after anodizing. Thorough cleaning of the workpiece bevels is necessary prior to welding.

Base materials

EN AW-5019 [AlMg5]	AlMg5	3.3555
EN AW-5754 [AlMg3]	AlMg3	3.3535
EN AW-5086 [AlMg4]	AlMg4Mn	3.3545
EN AW-6060 [AlMgSi]	AlMgSi0,5	3.3206
EN AW-6005A [AlSiMg(A)]	AlMgSi0,7	3.3210
EN AW-6082 [AlSi1MgMn]	AlMgSi1	3.2315
EN AW-6061 [AlMg1SiCu]	AlMg1SiCu	3.3211
EN AW-7020 [AlZn4,5Mg1]	AlZn4,5Mg	3.4335
EN AC-51300	G-AlMg5	3.3561

and similar.

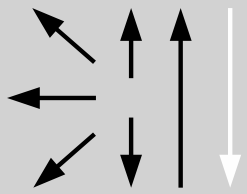
Typical analysis of solid wire (wt.-%)

Al	Fe	Mn	Mg	Cr	Zn	Ti
Bal.	< 0.4	0.05 – 0.20	4.5 – 5.5	0.05 – 0.20	< 0.10	0.06 – 0.20

Mechanical properties of all-weld metal

Yield strength $R_{p0.2}$	Tensile strength R_m	Elongation A (L_0=5d_0)
MPa	MPa	%
110	240	17

Operating data



Polarity:	Shielding gases:	ø mm
DC (+)	(EN ISO 14175)	0.8
	I1, I3	1.0
		1.2
		1.6

Approvals

TÜV (02197.04), DB (61.132.01), BV, LR, DNV GL, ABS, CE