

Classifications

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

Characteristics and typical fields of application

TIG welding rod for AlMg alloys containing up to 5 % Mg. Seawater resistant weld metal. Good colour matching with base metal after anodizing. Thorough cleaning of the workpiece bevels is necessary. Thicker plate materials require preheating to 150 °C (302 °F).

Base materials

AlMg 5	3.3555	EN AW-5019 [AlMg 5]
AlMg 3	3.3535	EN AW-5754 [AlMg 3]
AlMg 4 Mn	3.3545	EN AW-5086 [AlMg 4]
AlMgSi 0.5	3.3206	EN AW-6060 [AlMgSi]
AlMgSi 0.7	3.3210	EN AW-6005A [AlSiMg(A)]
AlMgSi 1	3.2315	EN AW-6082 [AlSi 1 MgMn]
AlMg 1 SiCu	3.3211	EN AW-6061 [AlMg 1 SiCu]
AlZn 4.5 Mg 1	3.4335	EN AW-7020 [AlZn 4.5 Mg 1]
AlMg 2.7 Mn	3.3537	EN AW-5454 [AlMg 3 Mn]
G-AlMg 5	3.3561	EN AC-51300
G-AlMg 5 Si	3.3261	EN AC-51400
G-AlMg 3	3.3541	EN AC-51100
G-AlMg 3 Si	3.3241	-

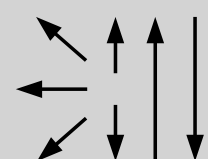
Typical analysis of welding rod (wt.-%)

	Al	Mn	Cr	Mg	Ti	Fe	Si	Zn	Cu
wt.-%	bal.	0.05 – 0.2	0.05 – 0.2	4.5 – 5.5	0.06 – 0.2	< 0.4	< 0.25	< 0.1	< 0.1

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: DC (+)	Shielding gas: (EN ISO 14175) I1 Base material should be cleaned near the seam. Pre-heating 150 °C for plates > 15 mm	ø (mm)
			1.6
			2.0
			2.4
			3.2
4.0			
5.0			

Approvals

TÜV (2198.), DB (61.132.01)