

Classifications

EN ISO 18273-A	AWS A5.10
S Al 5087 (AlMg4,5MnZr)	ER5183(mod.)

Characteristics and typical fields of application

Zirconium micro-alloyed aluminium TIG rod. The weld metal is uncritical in terms of hot cracks. Suitable especially for complicated welding constructions with critical tensions. Base material should be cleaned near the seam. Pre-heating 150 °C for plates > 15 mm

Base materials

EN AW-5083 [AlMg4,5Mn0,7]	AlMg4,5Mn	3.3547
EN AW-5086 [AlMg4]	AlMg4Mn	3.3545
EN AW-5019 [AlMg5]	AlMg5	3.3555
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 [AlZn4,5Mg 1]	AlZn4,5Mg 1	3.4335
EN AC-51300	G-AlMg5	3.3561
EN AC-51400	G-AlMg5Si	3.3261

Typical analysis of TIG-rod (wt.-%)

	Al	Mg	Mn	Cr	Zr	Ti
wt.-%	Rest	4.5 – 5.2	0.75 – 1.0	0.05 – 0.25	0.1 – 0.2	< 0.15

Mechanical properties of all-weld metal

Yield strength R _{p0.2}	Tensile strength R _m	Elongation A (L ₀ =5d ₀)
MPa	MPa	%
125	275	16

Operating data

	Polarity: AC	Shielding gases: (EN ISO 14175) I1	Marks: ‡ 3.3546 / AlMg4,5MnZr	ø mm
				1.6
				2.0
				2.4
				3.2
4.0				

Approvals

DB (61.132.04), CE