BÖHLER S-Al Mg 5

Solid wire, Aluminium

Classifications

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

Characteristics and typical fields of application

Sold wire for welding of AlMg alloys up to 5 % Mg. The weld metal is resistant against sea water. Base material should be cleaned near the seam. Pre-heating 150 °C for plates > 15 mm

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 solid wire (wt.-%)

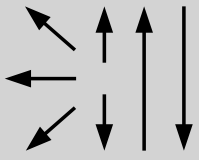
	Al	Mn	Cr	Mg	Ti
wt.-%	bal.	0.05 – 0.2	0.05 – 0.2	4.5 – 5.5	0.06 – 0.2

Mechanical properties of all-weld metal

Condition	Yield strength $R_{p0.2}$	Tensile strength R_m	Elongation A (L_0=5d_0)
	MPa	MPa	%
u	≥ 120	≥ 250	≥ 18

u untreated, as welded

Operating data



Polarity:	Shielding gases:	ø (mm)
DC (+)	(EN ISO 14175) I1, I3 Base material should be cleaned near the seam. Pre-heating 150 °C for plates > 15 mm	1.0 1.2 1.6

Approvals

TÜV (02322.), DB (61.014.03), CE