BÖHLER S-Al Mg 3

Solid wire, Aluminium

Classifications

EN ISO 18273	AWS A5.10
S Al 5754 (AlMg3)	ER5754

Characteristics and typical fields of application

Aluminium-alloyed wire for welding of aluminium alloys up to 3 % Mg. The weld metal is seawater-resistant. Welding joints on anodic oxidable base materials.

Base materials

AlMg 3	3.3535	EN AW-5754 [AlMg 3]
AlMg 2 Mn 0.3	3.3525	EN AW-5251 [AlMg 2]
AlMg	3.3315	EN AW-500SA [AlMg 1(C)]
AlMgSi 0.5	3.3206	EN AW-6060 [AlMgSi]
AlMg 2.7 Mn	3.3537	EN AW-5454 [AlMg 3 Mn]
G-AlMg 3	3.3541	EN AC-51100
GAlMg 3 Si	3.3241	-

Typical analysis of solid wire (wt.-%)

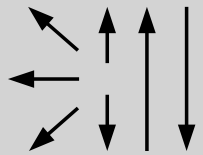
	Al	Mn	Cr	Mg	Ti
wt.-%	bal.	0.1 – 0.6	< 0.3	2.6 – 3.6	< 0.15

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	**80**	≥ 190	≥ 20

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	1.2

Approvals

DB (61.014.02), CE