BÖHLER S-Al Mg 4.5 Mn

TIG rod, Aluminium

Classifications

EN ISO 18273	AWS A5.10
S Al 5183 (AlMg4.5Mn0.7(A))	ER5183

Characteristics and typical fields of application

Aluminium TIG rod for welding of AlMg alloys. 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 4.5 Mn	3.3547	EN AW-5083 [AlMg 4.5 Mn 0.7]
AlMg 4 Mn	3.3545	EN AW-5086 [AlMg 4]
AlMg 5	3.3555	EN AW-5019 [AlMg 5]
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	3.4335	EN AW-7020 [AlZn 4.5 Mg 1]
G-AlMg 5	3.3561	EN AC-51300
G-AlMg 5 Si	3.3261	EN AC-51400

Typical analysis of solid wire (wt.-%)

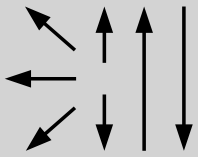
	Al	Mn	Cr	Mg	Ti
wt.-%	bal.	0.5 – 1.0	0.05 – 0.25	4.3 – 5.2	< 0.15

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	≥ 130	≥ 275	≥ 18

u untreated, as welded

Operating data



Polarity:	Shielding gases:	ø (mm)
AC	(EN ISO 14175) I1 Base material should be cleaned near the seam. Pre-heating 150 °C for plates > 15 mm	1.6 2.0 2.4 3.0

Approvals

TÜV (02319.), DB (61.014.05/09), CE