

Classifications

EN ISO 18273	AWS A5.10
S Al 3103 (AlMn1)	ER3103

Characteristics and typical fields of application

Aluminium GMAW wire with 1.5% Mn for joining of aluminium-manganese alloys and aluminium-magnesium alloys with a Mg content of approx. 3% according to EN ISO 18273.

Base materials

AlMn0.6	3.0506
AlMn 1	3.0515
AlMn 1 Mg0.5	3.0525
AlMn 1 Mg 1	3.0526
AlMg3	3.3535

Typical analysis of solid wire (wt.-%)

	Al	Mn	Mg	Cr	Fe	Si
wt.-%	bal.	0.9 – 1.5	< 0.3	< 0.1	< 0.7	< 0.5

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	≥ 35	≥ 90	≥ 24
u	untreated, as welded		

Operating data

	Polarity: DC (+)	Shielding gases: Argon Argon + Helium	ø (mm) 1.2
---	----------------------------	--	----------------------

Welding recommendation:

For wall thickness above 6 mm preheating up to 100 – 250 °C is necessary to get a good fusion to the base material. Superelevated seams indicates too less preheating.

Approvals

-