

Classifications

AWS A5.10 / ASME SFA-5.10	EN ISO 18273
ER5183	S Al 5183 (AlMg4,5Mn0,7(Al))

Characteristics and typical fields of application

Solid rod for GTAW of AlMg, AlMgSi or AlZn alloys. Higher tensile and yield strength compared to Union AlMg 5. Seawater resistant weld metal. Good color match with base metal after anodizing.

Base materials

AlMg, AlMgSi or AlZn alloys like i.e. EN AW-5083 (AlMg4,5Mn0,7), EN AW-5086 (AlMg4), EN AW-5019 (AlMg5), EN AW-6060 (AlMgSi), EN AW-6005A (AlSiMg(A)), EN AW-6082 (AlSi1MgMn), EN AW-7020 (AlZn4,5Mg1), 3.4335 EN AW-7020 (AlZn4,5Mg1) and similar.

Typical analysis

	Si	Mn	Cr	Ti	Fe	Cu	Mg	Zn
wt.-%	< 0.40	0.60 - 1.0	0.05 - 0.25	< 0.15	< 0.40	< 0.10	4.3 - 5.2	< 0.25

Mechanical properties of all-weld metal - typical values (min. values)

Yield strength $R_{p0.2}$	Tensile strength R_m	Elongation A ($L_0=5d_0$)
ksi	ksi	%
18	40	17

Operating data

	Polarity	AC	Dimension
	Shielding gas	I1, I3	1/16" × 39"
	AWS A5.32 (ISO 14175)		5/64" × 39"
			3/32" × 39"
			1/8" × 39"
			5/32" × 39"

Approvals

TÜV (02196), DB (61.132.03), CE