

Classifications

EN ISO 14343-A	AWS A5.9 / SFA-5.9
G 23 12 2 L	ER309LMo(mod.)

Characteristics and typical fields of application

Solid wire of type 309L Mo / 23 12 2 L for welding dissimilar joints of un-alloyed and stainless steels and for intermediate layers when welding clad materials. The all-weld-metal ensures a high resistance against cracking and is also suitable for welding of high strength steels. When used for surfacing the composition is more or less equal to that of ASTM 316 from the first run.

Base materials

Dissimilar joints of un- or low-alloyed steels with stainless steels. Cladding on low-alloyed steels.

Typical analysis

	C	Si	Mn	Cr	Ni	Mo	FN
wt.-%	0.02	0.35	1.50	21.50	15.0	2.70	8 (WRC 92)

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

Condition	Yield strength $R_{p0.2}$	Tensile strength R_m	Elongation A ($L_0=5d_0$)	Impact energy ISO-V KV J		Hardness
	MPa	MPa	%	20°C	-40°C	Brinell
u	390	610	31	75	60	210

u - untreated, Shielding gas Ar + 2 % O₂

Operating data

Polarity	DC (+)	Dimension mm
Shielding gas (EN ISO 14175)	Ar + 2 % O ₂ or Ar + 2 – 3 % CO ₂	1.0
		1.2

Approvals

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