

Classifications

EN ISO 14343-A
AWS A5.9 / SFA-5.9

W 23 12 2 L

ER309LMo(mod.)

Characteristics and typical fields of application

TIG rod 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	Ferrit
wt.-%	0.02	0.35	1.50	21.50	15.00	2.70	-

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

Condition	Yield strength	Tensile strength	Elongation A	Impact energy ISO-V KV J		Hardness
	R _{p0.2}	R _m	(L ₀ =5d ₀)	20°C	- 40°C	
	MPa	MPa	%			Brinell
u	470	640	30	140	90	210

u untreated, as welded, shielding gas 100% Ar

Operating data

	Polarity	DC -	Dimension mm
	Shielding gas (EN ISO 14175)	I 1 (100% Ar)	1.6 × 1000
			2.0 × 1000
			2.4 × 1000

Approvals

TÜV (19688), CE