

Classifications

EN ISO 3581-A	AWS A5.4
E 23 12 2 L R	E309LMo-17

Characteristics and typical fields of application

Avesta P5 is a high-alloy low carbon electrode designed for welding dissimilar joints between stainless and mild or low-alloy steels. It can also be used for overlay welding on mild steel, providing an 18 Cr 8 Ni 2 Mo deposit from the very first layer.

Superior to 316L. When used for overlay welding on mild steel a corrosion resistance equivalent to that of 1.4401/ASTM 316 is obtained already in the first layer.

Base materials

High-alloy low carbon electrode for surfacing unalloyed steel, joint welding molybdenum alloyed stainless steel to unalloyed steel and for welding clad material.

Typical analysis of all-weld metal

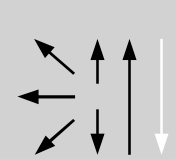
	C	Si	Mn	Cr	Ni	Mo
wt-%	0.025	0.8	0.8	22.5	13.5	2.5

Mechanical properties of all-weld metal

Heat-treatment	Yield strength R _e N/mm ²	Tensile strength R _m N/mm ²	Elongation (L ₀ =5d ₀)	Impact work ISO-V KV J		Hardness
	MPa	MPa	%	+20 °C	-10°C	
u	490	640	30	40	35	220

u untreated, as-welded

Operating data

	Polarity: DC (+) AC	Electrode identification: 309LMo-17/P5	ø mm	L mm	Amps A
			2.0	300	30 – 60
			2.5	300	45 – 80
			3.2	350	70 – 120
			4.0	450	90 – 160
			5.0	450	150 – 220

Approvals

TÜV (02426.), DB(30.014.21), DNV GL, Certified by CWB acc. to CSA W48: E309LMo-17