

Avesta P5

TIG rod

Classifications

high-alloyed

EN ISO 14343-A:

AWS A5.9:

W 23 12 2 L

(ER309LMo)*

*Cr lower and Ni higher than standard.

Characteristics and field of use

Avesta P5 is a high-alloy low carbon wire of the 309LMo type, primarily designed for surfacing low-alloy steels and for welding dissimilar joints between stainless and mild or low-alloy steels. It is also suitable for welding steels like durostat® and alform®. When used for surfacing, a composition equivalent to that of 1.4401/ASTM 316 is obtained already in the first layer.

Corrosion resistance:

Superior to type 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

For welding steels such as

Outokumpu	EN	ASTM	BS	NF	SS
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Avesta P5 is primarily used when surfacing unalloyed or low-alloy steels and when joining molybdenum-alloyed stainless and carbon steels.

Typical composition of welding rod (Wt-%)

C	Si	Mn	Cr	Ni	Mo		
0.02	0.35	1.5	21.5	15.0	2.7		

Ferrite 8 FN; WRC-92

Mechanical properties of all-weld metal

Heat Treatment	Yield strength 0.2%	Tensile strength	Elongation ($L_0=5d_0$)	Impact values in J CVN	
	MPa	MPa	%	+20°C:	-40°C:
untreated	470	640	30	110	90

Operating data



Polarity = -

Shielding gas:

Ar (99.95%) or Ar with an addition of 20 – 30% helium (He) or 1 – 5% hydrogen (H₂). The addition of helium (He) will increase the energy of the arc. Gas flow rate 4 – 8 l/min.

Dimensions (mm)

1.2	1.6	2.0	2.4	3.2
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