

# Avesta P5

Solid Wire

## Classifications

high-alloyed

EN ISO 14343-A:

G 23 12 2 L

## 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 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
Avesta P5 is primarily used when surfacing unalloyed or low-alloy steels and when joining molybdenum-alloyed stainless and carbon steels.					

## Typical composition of solid wire (Wt-%)


C	Si	Mn	Cr	Ni	Mo
0.015	0.35	1.4	21.5	15.0	2.6

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	390	610	31	75	60

## Operating data

	Polarity = +	Shielding gas: Ar + 2 % O <sub>2</sub> or 2–3 % CO <sub>2</sub> , Gas flow rate 12–16 l/min.
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## Dimensions (mm)

0.8	1.0	1.2	1.6
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