

## Avesta 307-Si

Solid Wire

### Classifications

high-alloyed

EN ISO 14343-A:

AWS A5.9:

G 18 8 Mn

ER307 (mod.)

### Characteristics and field of use

Avesta 307-Si is a high-alloy, fully austenitic wire designed for welding dissimilar joints between stainless and mild or low-alloy steels, as well as Mn-steels. It can also be used for welding steels like alform®. Avesta 307-Si offers a crack resistant weld with good mechanical properties.

Corrosion resistance:

Primarily intended for stainless to mild steel connections but with the same corrosion resistance as 1.4301/ASTM 304.

### Base materials

For welding steels such as

Outokumpu

EN

ASTM

BS

NF

SS

Avesta 307-Si is primarily used in dissimilar welding between stainless and mild steel or low-alloy steels.

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

C	Si	Mn	Cr	Ni	Mo
0.08	0.8	6.8	19.0	8.0	0.1

Ferrite 0 FN

### 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	410	630	38	120	110

### 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.

### Dimensions (mm)

0.8	1.0	1.2	1.6
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