

# Avesta 308L-Si/MVR-Si

Solid Wire

## Classifications

high-alloyed

EN ISO 14343-A:	AWS A5.9:	
G 19 9 L Si	ER308LSi	

## Characteristics and field of use

Avesta 308L-Si/MVR-Si is designed for welding 1.4301/ASTM 304 type stainless steels. It can also be used for welding steels that are stabilised with titanium or niobium, such as 1.4541/ASTM 321 and 1.4550/ASTM 347 in cases where the construction will be operating at temperatures below 400°C. For higher temperatures a niobium stabilized consumable such as Avesta 347-Si/MVNb-Si is required.

### Corrosion resistance

Very good under fairly severe conditions, e.g. in oxidising acids and cold or dilute reducing acids.

## Base materials

For welding steels such as					
Outokumpu	EN	ASTM	BS	NF	SS
4301	1.4301	304	304S31	Z7 CN 18-09	2333
4307	1.4307	304L	304S11	Z3 CN 18-10	2352
4311	1.4311	304LN	304S61	Z3 CN 18-10 Az	2371
4541	1.4541	321	321S31	Z6 CNT 18-10	2337

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


C	Si	Mn	Cr	Ni
0.02	0.85	1.8	20.0	10.5

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:	-196°C:
untreated	410	590	36	110	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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