

Avesta 308L-Si/MVR-Si

TIG rod

Classifications

high-alloyed

EN ISO 14343-A:

AWS A5.9:

W 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.

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 welding rod (Wt-%)

C	Si	Mn	Cr	Ni
0.02	0.85	1.8	20.0	10.5

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	470	640	34	140	80

Operating data

Shielding gas:

Ar (99.95%) or Ar with an addition of 20 - 30% helium (He) or 1 - 5% hydrogen (H_2). The addition of helium (He) and hydrogen (H_2) will increase the energy of the arc. Gas flow rate 4 - 8l/min.

Dimensions (mm)

1.0	1.2	1.6	2.0	2.4	3.2	4.0
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TIG rod

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