

Classifications

high-alloyed

EN ISO 3581-A:

AWS A5.4:

E 19 9 Nb R

E347-17

Characteristics and field of use

Avesta 347/MVNb is a Nb-stabilised Cr-Ni electrode for welding steels that are stabilised with titanium or niobium, such as 1.4541/ASTM 321. A stabilised weldment has improved high temperature properties, e.g. creep resistance, compared to low-carbon non-stabilised grades. Avesta 347/MVNb can also be used for the second layer (first layer 309 type) when cladding mild steel.

Base materials

For welding steels such as					
Outokumpu	EN	ASTM	BS	NF	SS
4541	1.4541	321	321S31	Z6 CNT 18-10	2337
-	1.4550	347	347S31	Z6 CNNb 18-10	2338

Typical analysis of all-weld metal (Wt-%)

C	Si	Mn	Cr	Ni	Nb
0.02	0.8	0.8	19.5	10.3	>=10xC

FN 7 - 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	620	35	60	45

Operating data



Polarity = + / ~

Dimensions (mm)	Amperage A
2.0	35-60
2.5	45-70
3.25	55-120
4.0	90-150
5.0	150-200