

Avesta 347/MVNb

Basic stick electrode high-alloyed, chemical resistant

Classifications

EN ISO 3581-A	AWS A5.4
E 19 9 Nb R	E347-17

Characteristics and typical fields of application

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.

Corrosion resistance:

347/MVNb is primarily intended for high temperature service oder applications that should be heat treated. However, the corrosion resistance corresponds to that of 308H, i.e. good resistance to general corrosion.

Base materials						
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.-%)

	С	Si	Mn	Cr	Ni	Nb
wt-%	0.02	0.8	0.8	19.5	10.3	≥10xC

Mechanical properties of all-weld metal

Heat- treat- ment	Yield strength R _e N/mm ²	Tensile strength R _m N/mm ²	Elongation $(L_0=5d_0)$	Impact work ISO-V KV J		Hardness
	MPa	MPa	%	+20 °C	-40°C	HB
u	470	620	35	60	45	225

u untreated, as-welded

Operating data

	Polarity: DC(+)	Electrode identification:	ø (mm) 2.0 2.5 3.25 4.0 5.0	L mm	Amps A 35 - 60 45 - 70 55 - 120 90 - 150 150 - 200
Annrovals			0.0		100 200

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