Avesta 312-17

SMAW electrode, High-alloyed

Classification	
AWS A5.4	**EN ISO 3581-A**
E312-17	E 29 9 R

Characteristics and typical fields of application

- Highly alloyed Cr-Ni electrode with approx. 40% ferrite, offering high tensile strength and excellent resistance to cracking.
- The electrode is primarily intended for dissimilar welding, between stainless steel, high strength steel , tool steel, spring steel and 14% Mn-Steel as other difficult to weld combinations.

Base Materials

Specially designed for difficult to weld steels such as Mn-steels, tool steels and high temperature grades

Typical analysis of all weld metal (wt.-%)

C	Si	Mn	Cr	Ni
0.09	0.80	1.00	29.00	9.5

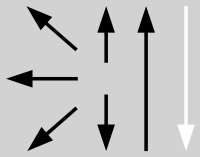
Ferrite Number ≈ 40 FN WRC92

Mechanical properties of all-weld metal

Heat treatment	Yield strength R_e N/mm²	Tensile strength R_m N/mm²	Elongation (L_0=5d_0)	Impact work ISO-V KV J
	MPa	MPa	%	+ 20 °C
Min. AWS A5.4	-	660	22	-
As Welded	610	815	20	27

Hardness Approx. 270 HB

Operating data



Polarity
DCEP / AC

Heat Input: Max. 2.0 kJ/mm
Interpass temperature: Max. 150°C
Scaling Temperature : Approx. 1000°C
Instruction for Re-drying: Re-dry for 3 h at 250-280°C before using

Approvals

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Size, Packaging and Electrical Operating Data

Size mm	Kg / Pack	Kg / Box	Amperage (A)
2.50 x 350	5.0	15.0	50 – 60
3.25 x 350	5.0	15.0	80 – 120
4.00 x 350	5.0	15.0	100 - 160