

Classification

AWS A5.4

E347-16

Characteristics and typical fields of application

The electrode is rutile type and intended for high temperature service or applications. For welding of Ti-stabilized steels such as ASTM 321 and 347 that exposed to service temperature exceeding 400°C. Also used for the second layer (first layer 309L type) when cladding mild steel.

Base Materials

Outokumpu 4541; EN 1.4541, 1.4540; ASTM 321, 347; BS 321S31, 347S31; NF Z6 CNT 18-10, Z6 CNNb 18-10; SS 2337, 2338.

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

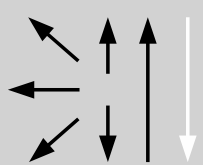
C	Si	Mn	Cr	Ni	Nb
0.03	0.8	0.5	19	10.0	0.25

Ferrite Number ≈ 7 FN WRC92

Mechanical properties of all-weld metal

Heat treatment	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	
	MPa	MPa	%	+ 20 °C	-40°C
Min. AWS A5.4	-	520	30	-	-
As Welded	431	598	46	55	45

Operating data


Polarity
 DCEP/AC

Heat Input: Max. 1.5 kJ/mm
 Interpass temperature: Max. 100°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 300	3.63	10.99	50-70
3.25 x 350	4.10	12.30	70-110
4.00 x 450	5.40	16.20	90-150
5.00 x 450	5.40	16.20	150-200