

Classification

AWS A5.4

E308H-16

Characteristics and field of use

Avesta 308H-16 is a high carbon Cr-Ni electrode primarily intended for welding ASTM 304 and 304H type stainless steel exposed to temperature up to 700°C.

Base Materials

Outokumpu 4301, 4541; EN 1.4301, 1.4541, 1.4550 ; ASTM 304, 321, 347 ; BS 304S31, 321S31, 347S31 ; NF Z7 CN 18-09, Z6 CNT 18-10, Z6 CNNb 18-10 ; SS 2333, 2337, 2338.

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

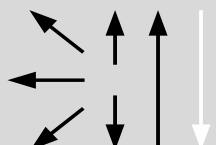
C	Si	Mn	Cr	Ni	Mo
0.07	0.8	0.6	20.5	9.7	0.09

Ferrite Number ≈ 3-8 FN WRC 92

Mechanical properties of the weld metal

Heat Treatment	Yield strength R _e N/mm ²	Tensile strength R _m N/mm ²	Elongation (L ₀ =4d ₀)	Impact work ISO-V KV J	
	MPa	MPa	%	+20°C	-40°C
As Welded	450	605	40	55	40

Operating Data

	Polarity DC (+) / AC	Heat Input: Max. 2.0 kJ/mm
		Interpass temperature: Max. 150°C
		Scaling Temperature : Approx. 850°C
		Instruction for Re-drying: Re-dry for 3 h at 250-280°C before using

Approval

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Size, Packing and Recommended welding parameters

Size (mm)	Kg / Pack	Kg / Box	Amperage (A)
2.50 x 300	3.63	10.89	50-80
3.25 x 350	4.10	12.30	80-120
4.00 x 350	4.10	12.30	100-160