

Classification

AWS A5.5	EN ISO 2560-A
E8018-C1H4R	E 46 8 2Ni B 42 H5

Characteristics and typical fields of application

Ni-alloy, basic coated stick electrode for unalloyed and Ni-alloy fine-grained structural steels. Tough, crack resistant weld metal. The weld metal is cryogenic down to -80°C. Ideal weldability in all position except for vertical down. Very low hydrogen content (under AWS condition HD ≤ 4mL/100g).

Base Materials

Cryogenic structural and Ni-alloy steels, special cryogenic shipbuilding steels. 10Ni14, 12Ni14, 13MnNi6-3, 15NiMn6, S275N-S460N, S275NL-S460NL, S275M-S460M, S275ML-S460ML, P275NL1-P460NL1, P275NL2-P460NL2 ASTM A 203 Gr.D, E; A 333 Gr. 3; A 350 Gr. LF1, LF2, LF3; A 420 Gr. WPL3, WPL6; A516 Gr.60, 65; AA 529 Gr. 50; A 572 Gr. 42, 65; A 633 Gr. A, D, E; A 622 Gr. A, B, C; A 707 Gr. L1, L2, L3; A 738 Gr. A; A 841 A, B, C.

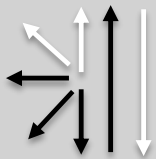
Typical analysis of all weld metal (wt.-%)

C	Si	Mn	Ni
0.05	0.3	0.8	2.4

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	- 60 °C	- 80 °C
As Welded	500	580	32	-	110	80
PWHT 620°C/1hr	490	570	32	-	120	100

Operating data



Polarity
DC (+)

Re-drying: 300 – 350°C min for 2h
Electrode Identification : Fox S 2.5 Ni/E8018-C1H4R

Approval

ABS

Size, Packaging and Electrical Operating Data

Size mm	Kg / Pack	Kg / Box	Amperage (A)
2.50 x 350	5.0	20.0	70 – 100
3.25 x 350	5.0	20.0	110 – 140
4.00 x 450	5.0	20.0	140 – 180
5.00 x 450	5.0	20.0	190 – 230