

Classification

AWS A5.5

E8016-C1

Characteristics and typical fields of application

Basic coated stick electrode for unalloyed and Ni-alloyed fine-grained structural steels. Tough, crack resistant weld metal. The weld metal give better impact properties down to -60°C. Ideal weldability in all position except for vertical down.

Base Materials

Low alloy Ni steels, special low temperature 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.

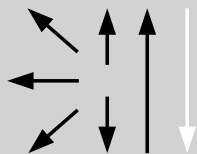
Typical analysis of all weld metal (wt.-%)

C	Si	Mn	Ni
0.07	0.36	0.86	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
As Welded	540	650	27	-	100
PWHT 620°C/4hr	530	640	30	-	120

Operating data



Polarity
DC (+)

Re-drying: 300 – 350°C min for 2h
Electrode Identification : E8016-C1

Approval

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	80 – 130
4.00 x 450	5.0	20.0	130 – 180
5.00 x 450	5.0	20.0	180 – 240