

NOUVE® 8018-B2

Designation

AWS/SFA-5.5: E8018-B2
UNS No. W52018

Welding Positions



Features

- ▶ Excellent arc characteristics
- ▶ Low moisture re-absorption
- ▶ Low spatter level
- ▶ Low smoke level
- ▶ Quick and easy slag removal
- ▶ Radiography quality

Applications

welding of 1.25% Cr - 0.5% Mo steel used for steam pipes of boilers, oil refining industries, casting and pressure vessels for high temperature service, high temperature synthetic chemical industries.

Type of Current

Direct Current Electrode Positive (DCEP)

Recommended Welding Techniques

- GENERAL : Electrode positive, work negative (DCEP)
 ARC LENGTH : Short arc
 PREHEAT : 150°C to 300°C for 1 hour
 STORAGE: : Re-dry electrodes to 250°C to 300°C for 1 hour before use.

Weld Metal Chemistry

WELD METAL ANALYSIS (%)	AWS SPEC	TYPICAL
Carbon (C)	0.05 - 0.12	0.068
Manganese (Mn)	0.90 max	0.714
Silicon (Si)	0.80 max	0.502
Phosphorous (P)	0.03 max	0.014
Sulphur (S)	0.03 max	0.012
Chromium (Cr)	1.0 - 1.50	1.412
Molybdenum (Mo)	0.40 - 0.65	0.574

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Mechanical Properties (as welded)

MECHANICAL TESTS	AWS SPEC		TYPICAL	
Tensile Strength	79,771 psi (550 MPa) Minimum		82,672 psi (570 MPa)	
Yield Strength	66,717 psi (460 MPa) Minimum		68,893 psi (475 Mpa)	
Elongation % in 2"	19% Minimum		Above 20%	
Impact Energy (min)	Single Value	–	Single Value	–
	Average Value	–	Average Value	–
PWHT	690°C (± 15) X 1 hour		690°C X 1 hour	

Dimension, Current Condition & Packing Data

DIAMETER (IN)	DIAMETER (MM)	PACKAGE		CURRENT CONDITION (DC+) Amps
3/32	2.5	2 Kg	5 Kg	60 - 90
1/8	3.15	2 Kg	5 Kg	80 - 110
5/32	4.0	2 Kg	5 Kg	110 - 150
3/16	5.0	2 Kg	5 Kg	150 - 180