

NOUVE[®] 7018-LH

Designation

AWS/SFA-5.1: E7018

UNS No. W07018

Welding Positions



Features

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

Applications

Typical application include heavy structures subjected to dynamic loading and impact, highly restraint joints, boilers and pressure vessels, atomic reactor shells, bridges, railway wagons and coaches, earth moving equipment etc.

Type of Current

Direct Current Electrode Positive (DCEP) and Alternate Current (AC)

Recommended Welding Techniques

ARC LENGTH : Short arc

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)	0.15 max	0.06
Manganese (Mn)	1.60 max	1.10
Silicon (Si)	0.75 max	0.45
Phosphorous (P)	0.035 max	0.015
Sulphur (S)	0.035 max	0.012
Nickel (Ni)	0.030 max	0.034
Chromium (Cr)	0.020 max	0.056
Molybdenum (Mo)	0.030 max	≤ 0.05
Vanadium (V)	0.08 max	≤ 0.02
Mn + N + Cr + Mo + V	1.75 max	1.569

NOUVE[®] 7018-LH

Mechanical Properties (as welded)

MECHANICAL TESTS	AWS SPEC		TYPICAL	
Tensile Strength	490 MPa Minimum		540 MPa	
Yield Strength	400 MPa Minimum		440 Mpa	
Elongation % in 2"	22% Minimum		Above 24%	
Impact Energy (min)	Average Value	27J at -30°C	Single Value	64J at -30°C
			Average Value	62J at -30°C

Dimension, Current Condition & Packing Data

DIAMETER (IN)	DIAMETER (MM)	PACKAGE		CURRENT CONDITION (DC+) Amps
		INNER	OUTER	
3/32	2.5	2.5 Kg	20 Kg	60 - 90
1/8	3.15	5 Kg	20 Kg	80 - 110
5/32	4.0	5 Kg	20 Kg	110 - 150
3/16	5.0	5 Kg	20 Kg	150 - 180