

SME 9018

Stick Electrodes (SMAW)

Mild Steel

Classifications:

AWS A/SFA 5.5 : E 9018

Characteristics:

SME 9018 is designed to weld equivalent 'type T91' T92 CrMo steels modified with small additions of niobium and Vanadium to give improved long term creep properties. These consumables are specifically intended for high integrity structural service at elevated temperature so the minor alloy additions responsible for its creep strength are kept above the minimum considered necessary to ensure satisfactory performance. In this case, weldments will be weakest in the softened (intercritical) HAZ region of parent material, as indicated by so-called 'type IV' failure in transverse weld creep tests.



Applications:

1. Headers, main steam piping and turbine casings, in fossil fuelled power generating plants.
2. Oil refineries and coal liquefaction and gasification plants.
3. Preheat and Interpas temperature 200°C - 300°C.

Weld Metal Chemistry (wt%):

C	Mn	Si	Cr	Ni	Mo	V	Nb
0.09	0.90	0.30	9.0	0.40	0.90	0.20	0.06

Mechanical Properties of All Weld Metals:

Condition	R _{p0.2} (N/mm ²)	R _m (N/mm ²)	A ₅ (%)	CVN Impact, J 20°C
As Welded	>520	620 - 850	>17	>50 J

Packing Details:

Size (Ø / Length) mm	2.5 x 350	3.2 x 350	4.0 x 350	5.0 x 350
Current (amps)	70 - 100	90 - 140	140 - 180	180 - 240

Options Available : SME 9018 B9 , SME 9018 G