

Product: **SPARK 7018**

Classification: AWS/ASME SFA-5.1 E 7018
 DIN 1913 E 51 55 B 10
 EN499 E 42 6 B 42 H10

Application/Properties: Electrode for producing crack-free welded joints with good toughness properties even on steels having carbon content up to 0.4%. Weld metal recovery is approx. 120%. Good operating characteristics also in positional welding. Weld metal exhibits good toughness properties down to -40 °C. Electrode is suitable for depositing buffer layers on steels having higher carbon content.

Suitable for:

Unalloyed structural steel: St33 to St52-3, St50-2 to St60-2.

Boiler Plates: HI, HII, 17Mn4

Pipe Steels: to St52.4, St35.8 to 17Mn4, StE210.7 to StE360.7 including corresponding TM-grades.

Fine Grain Structural Steels: StE255 to StE355, WStE255 to WStE355, TStE255 to TStE355.

Shipbuilding Steels: A, B, D, E.

Cast Steel: GS-38 to GS-52.

Rebaking required at 250 – 350°C for two hours.

Sizes and Currents

AC or DC+:

Diameter	Length	Current (A)
2.6mm	350mm	70 - 100
3.2mm	450mm	90 - 140
4.0mm	450mm	140 - 190
5.0mm	450mm	190 - 250

Weld metal analysis:

Typical Values

C	Si	Mn
0.08	0.5	1.1

Mechanical properties of all weld metal:

Typical Values

Yield Strength	>420 N/mm ²
Tensile Strength	500 - 640 N/mm ²
Elongation L.=5D.	>22%
Impact Strength	200 J at +20°C 50 J at -60°C

Packaging:

2.6mm	8x2.5kg.packet/carton
3.2, 4.0 & 5.0mm	4x5kg. packet/carton
	1 MT/pallet