

# SM-718

SMAW ELECTRODE - MILD STEEL, LOW HYDROGEN

## CLASSIFICATIONS :

AWS A5.1 E7018

ASME SFA A5.1 E7018

JIS Z 3211 E4918

BS EN ISO 2560-A E 42 3 B 3 2

## DESCRIPTION

SM -718 is an iron powder low hydrogen electrode for the welding of 50kgf/mm<sup>2</sup> grade high tensile steel. The welding can be done with high deposition rate, good X-ray soundness and mechanical properties.

## FEATURES

Smoother arc transfer, Easier slag removal, Less Spatter.

Excellent usability in all positions welding including vertical down.

Suitable for butt and fillet welding of thin plates/sheets.

Smooth and bright weld seams, Smoother with a finer ripple bead surface.

Stable arc on AC and DC.

## APPLICATIONS

It is especially suitable for nuclear power stations, petroleum chemical plants, and heavy steel plates.

Maintenance or repair welding.

## CHEMICAL COMPOSITION

	%C	%Mn	%Si	%P	%S
Requirements	0.15 max	1.60 max	0.75 max	0.035 max	0.035 max
Typical Results	0.04	0.66	0.18	0.01	0.01
	%Ni	%Cr	%Mo	%V	Comb. Limit
Requirements	0.30 max	0.20 max	0.30 max	0.08 max	1.75 max
Typical Results	0.02	0.03	0.003	-	0.09

## MECHANICAL PROPERTIES

	Tensile Strength, Mpa	Yield Strength, Mpa	Elongation, %
Requirements	490 min	400 min	22 min
Typical Results	604	518	28

## OPERATING PROCEDURES

Polarity	Current (Amps)				
	Ø2.0 mm	Ø2.6 mm	Ø3.2 mm	Ø4.0 mm	Ø5.0 mm
AC	50 - 80	75 - 115	110 - 140	160 - 200	205 - 260
DC ±	45 - 75	70 - 105	100 - 135	145 - 180	185 - 235

## WELDING POSITION



## NOTE

Electrodes that have become damp should be re-dried at 300-350 °C for 1 hour before welding, do not dry twice to avoid detachment of covering.

**SPECIAL METAL KOREA CO., LTD.**

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