

Ratna E 7018

CLASSIFICATION

- AWS/SFA A5.1 E 7018
- BS 639 E5144B12024(H)
- IS-814 EB 5426 H3JX
- DIN 1913 E 5144B1026

APPLICATIONS

- Blast furnace, offshore drilling rigs and flat forms.
- Penstocks heavy structures subjected to dynamic loading and impact.
- Rail wagons, coaches.
- Industrial & mining machinery, bridges, boiler fabrication.
- Steels subjected to service at -30°C down sub-zero temperature.
- Machinery for earth moving and road equipment.
- Atomic reactor shell and pipe work.
- Frigates & submarines.

DESCRIPTION

- A heavy coated, hydrogen controlled, basic coated, iron powder type electrode specially designed for restrained joints subjected to dynamic loading and to achieve minimum 110% metal recovery, possess, excellent mechanical properties, weld deposits are highly ductile, crack resistant and of radiographic quality.

TYPICAL WELD METAL CHEMICAL PROPERTIES (ELEMENT %)				
CARBON (C)	MAGNESIUM (MN)	SILICON (SI)	SULFUR (S)	PHOSPHORUS (P)
0.055 MAX	1.15	0.45 MAX	0.008 MAX	0.015 MAX

CURRENT POLARITY	WELDING POSITION
DC(+), AC	FLAT, HORIZONTAL, VERTICAL, OVERHEAD

TYPICAL WELD METAL MECHANICAL PROPERTIES (ELEMENT %)			
YIELD STRENGTH (N/MM ²) KSI	ULTIMATE TENSILE STRENGTH (N/MM ²) KSI	ELONGATION (%)	CVN IMPACT AT °C JOULES
450 (65)	560 (81)	29	-30°C : 65 J

SIZE AND CURRENT RECOMMENDATIONS		
SIZE D X L (MM)	SIZE D X L (IN)	CURRENT (AMPS) DC+, AC
2.5mm x 350mm	3/32" x 14"	70-100
3.2mm x 350mm	1/8" x 14"	100-130
4.0mm x 350mm	5/32" x 14"	140-180

RE-DRY CONDITIONS

- Re-dry the electrode at 250°C-300°C for one hour.

NOTE:
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