

## DM7018 Premium Electrode

**Classification: E7018**

AWS A 5.1 / ASME SFA 5.1

**DuraMax DM7018 is a HYDROGEN CONTROLLED BASIC COATED IRON POWDER TYPE ELECTRODE FOR WELDING LOW AND HIGH TENSILE STEELS**

### Characteristics

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 Applications on Usage

- 1) Blast furnace, Offers Drilling rigs and flat forms.
- 2) Penstocks heavy structures subjected to dynamic loading and impact.
- 3) Rail wagons, coaches.
- 4) Industrial & mining machinery, bridges, boiler fabrication.
- 5) Steels subjected to service at -30°C down sub-zero temperature.
- 6) Machinery for Earth moving and road equipment.
- 7) Atomic reactor shell and pipe work.
- 8) Frigates & submarines.

**RE-DRY CONDITIONS:** Re-Dry the electrode at 250°C-300°C for one hour before use.

### All Weld Chemical Composition (%)

C	Mn	Si	S	P	Ni	Cr	Mo	V
0.10 max	0.80 - 1.60	0.75 max	0.030 max	0.030 max	0.30 max	0.20 max	0.30 max	0.08 max

### Typical Mechanical Properties as Welded

Tensile Strength (n/mm <sup>2</sup> )	Yield Strength (n/mm <sup>2</sup> )	Elongation (%) 1=4d	Hardness	Ferrite WRC (FN)	CVN Impacts (J)
					@ -30 °C
510 - 620	450 - 520	22 - 32	-----	-----	60-100 J

### Sizes available and recommended currents (DC +)

SIZE	3/32	1/8	5/32
AMPS	70 ~ 100	100 ~ 130	140 ~ 180