

# PRODUCT DATA SHEET

## Metal Cored Wire

Weld Process: Mig Welding Process Alloy: Mild Steel Class: E70C-6M

Conforms to Certification: AWS A5.18 / ASME SFA 5.18

Alloy: DM70C-6M

#### TYPICAL APPLICATION:

**Dura Max E70C-6M** is designed for welding of 490MPa high tensile steel with only Ar/CO<sub>2</sub> gas mixtures. It is especially suitable for welding and has a high tolerance to primer.

Typical applications include machineries, shipbuilding, offshore structures, bridges and general fabrications.

#### **CHARACTERISTICS ON USAGE:**

- Wire is a metal type of flux cored wire for flat and horizontal position welding
- Slag quality is almost the same as solid wire and multiple pass welding can be performed without removing slag.
- 20% higher productivity can be achieved when compared to solid wires and it features good penetration, high resistance to porosity, good wetting behavior as well as low hydrogen contents.
- E70C-6M is intended for semi-automatic, automatic, single and multiple pass welding.

**Typical Chemical Composition of all-weld metal (%)** 

|                      | С      | Si     | Mn     | Р      | S      |
|----------------------|--------|--------|--------|--------|--------|
| AWS                  | ≤ 0.12 | ≤ 0.90 | ≤ 1.75 | ≤ 0.03 | ≤ 0.03 |
| Typical Values (M21) | 0.04   | 0.80   | 1.50   | 0.014  | 0.013  |

All Weld Metal Mechanical properties (Typical)

|                      | YS<br>(Mpa) | UTS<br>(Mpa) | EL % | CHARPY "V" NOTCH<br>IMPACT AT (-30°C) |
|----------------------|-------------|--------------|------|---------------------------------------|
| AWS                  | ≥ 390       | 490 - 670    | ≥ 22 | ≥ 27                                  |
| Typical Values (M21) | 540         | 610          | 27   | 75                                    |

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

| Diameter |                 | 0.045     | 0.052     | 1/16      |
|----------|-----------------|-----------|-----------|-----------|
| Current  | Flat(PA/1G)     | 140 – 300 | 160 – 380 | 180 – 400 |
| (AMP)    | H-Fillet(PB/2F) | 160 – 300 | 180 – 360 | 220 – 380 |

Approvals

| Shielding Gas |
|---------------|
| M21           |