



## MAXFIL-71A1

Rutile Type Flux Cored Wire

**CODIFICATION:** AWS/SFA 5.29 EN ISO 17632-B  
E71T1-A1C/M T493T1-1CA 2M3

### CHARACTERISTICS AND APPLICATIONS:

Maxfil-71A1 is an all position low alloy steel flux cored wire designed for welding of 0.5% Molybdenum and 1% Chromium and 0.5% Molybdenum steels. The wire gives optimum performance under both 100% CO<sub>2</sub> and 80%Ar:20%CO<sub>2</sub> gas shielding with radiographic quality weld deposits. The wire produces full slag covering. Slag detachability is very good and is of fast freezing nature.

Maxfil-71A1 is designed for single and multi-pass welding of similar composition steels and equivalent grade steels like; Gr. F1 of SA-182 and SA-336, Gr. A of SA-204, Gr. T1/T1a/T1b of SA-209, Gr. WC1 of SA-217, Gr. A of SA-302, Gr. P1 of SA-335, Class 1 of A grade of SA-533, etc.

### CHEMICAL COMPOSITION OF ALL WELD METAL (%):

| Element                       | C     | Mn   | Si   | S     | P     | Mo        |
|-------------------------------|-------|------|------|-------|-------|-----------|
| Range                         | 0.12  | 1.25 | 0.80 | 0.030 | 0.030 | 0.40-0.65 |
| Typical (CO <sub>2</sub> )    | 0.060 | 1.18 | 0.45 | 0.012 | 0.018 | 0.52      |
| Typical (Ar+CO <sub>2</sub> ) | 0.060 | 1.22 | 0.50 | 0.012 | 0.016 | 0.51      |

### MECHANICAL PROPERTIES OF ALL WELD METAL:

| Property                           | UTS<br>(Mpa) | YS<br>(Mpa) | %EI<br>(L=4d) | CVN Impact (Joules)<br>at -30°C |
|------------------------------------|--------------|-------------|---------------|---------------------------------|
| Range                              | 490-620      | 400Min      | 20.0Min       | 27 Min                          |
| SR: 620°C/1Hr(CO <sub>2</sub> )    | 528          | 440         | 24.0          | 40                              |
| SR: 620°C/1Hr(Ar+CO <sub>2</sub> ) | 561          | 458         | 24.8          | 52                              |

**WELDING POSITIONS:** H, F, VU, OH

**WELDING PARAMETER:** DC (+)

| Diameter<br>(mm) | HORIZONTAL/FLAT |            | VERTICAL UP |            | OVER HEAD |            |
|------------------|-----------------|------------|-------------|------------|-----------|------------|
|                  | Volt, V         | Current, A | Volt, V     | Current, A | Volt, V   | Current, A |
| 1.20             | 24-28           | 160-260    | 20-26       | 100-180    | 22-28     | 100-180    |
| 1.60             | 24-28           | 180-300    | 20-26       | 110-200    | 22-28     | 110-220    |

**APPROVALS:** CE MARKING

**SHIELDING GAS :** Carbon Dioxide CO<sub>2</sub> (100%) / Argon + CO<sub>2</sub> (80:20%) at flow rate 12-15 litres per minute.

**PACKING :**

**Standard size :** 1.20 & 1.60mm. Other diameters may be available on request.

**Quantity :** Supplied approximately 15Kgs in a plastic spool. Each spool is sealed in an air tight polythene bag and then packed in a corrugated box.