

# GFC 81K2

## IDENTIFICATION

GFC 81K2, E81T1K2C

## CLASSIFICATION

AWS/SFA 5.29: E81T1-K2C,  
KS D7104 YFL-C506R, JIS Z3313 VFL-C506R

## DESCRIPTION

GFC 81K2 is designed for welding of 590 MPa high tensile steel with slow freezing slag system. Typical applications include machineries, shipbuilding, offshore structures, bridges and general fabrications. Tubular rutile flux-cored all position wire for single or multipass welding of carbon, carbon-manganese steels and similar types of steels, including fine grain ones, with CO<sub>2</sub> shielding gas. The good weldability in all positions, excellent bead appearance, less spatter, a fast freezing and easy to remove slag.

## WELD METAL ANALYSIS (RANGE) %

| C        | Mn       | Si       | S         | Cr       | P        | Ni        | Mo       |
|----------|----------|----------|-----------|----------|----------|-----------|----------|
| 0.15 max | 1.75 max | 0.39 max | 0.030 max | 0.15 max | 0.03 max | 1.0 - 2.0 | 0.35 max |

## MECHANICAL PROPERTIES (RANGE)

| PWHT      | UTS (MPa) | YS (MPa) | EL (%)<br>(L=4D) | CVN Impact Value |        |
|-----------|-----------|----------|------------------|------------------|--------|
|           |           |          |                  | Temp             | Joules |
| As welded | 600 min   | 530 min  | 19 min           | -30°C            | 60     |

## TYPICAL APPLICATIONS

- Ship building, railways wagons, general fabrication welding, pipe welding, bridges, automobile parts, tanks etc.
- Welding of high tensile steel offshore structure, etc.
- A537 Class 1 steel

**SHIELDING GAS :** CO<sub>2</sub>

**FLOW RATE :** 15 - 20 l/min

## PACKING PARAMETERS

| Size (mm) | Amps DC (+) | Voltage | Weight / Spool (kg) |
|-----------|-------------|---------|---------------------|
| 1.2       | 180 - 300   | 24 - 36 | 15                  |