

GFC 111K3

IDENTIFICATION

GFC 111K3, E 111T1 - K3C

CLASSIFICATION

AWS/SFA 5.29: E111T1-K3C,
JIS Z3313 T762T1-1MA-N3M2 H5

DESCRIPTION

- Wire is a Titania type of flux cored wire for all-position welding.
- It provides smooth arc, low spatter levels, good weldability and good bead appearance.
- It provides excellent impact values at low temperature.

WELD METAL ANALYSIS (RANGE) %

| C | Mn | Si | S | P | Ni | Mo |
|----------|----------|----------|-----------|-----------|-----------|----------|
| 0.15 max | 2.25 max | 0.36 max | 0.005 max | 0.011 max | 1.5 - 2.6 | 0.65 max |

MECHANICAL PROPERTIES (RANGE)

| TS (MPa) | YS (MPa) | EL (%) (L=4D) | CVN Impact Value | |
|----------|-----------|---------------|------------------|--------|
| | | | Temp | Joules |
| 802 min | 767 min | 20 min | -20°C | 114 |

TYPICAL APPLICATIONS

- GFC 111K3 is designed for welding of 760 MPa high tensile steel with outstanding mechanical properties.
- The typical applications include high tensile steels that will be used a low temperature environment.

DIFFUSIBLE HYDROGEN IN THE WELD METAL : max 5ml/100g of weld metal.

NOTES ON USAGE

- Proper preheating (50-150° C) and interpass temperature must be used in order to release diffusible hydrogen which may cause cracking in weld metal when electrodes are used for medium and heavy plates.
- Gas flow rate is proper 20-25 l/mm.
- Shielding gas should be used 100% CO2 or Ar + 20 - 25% CO2

PACKING PARAMETERS

| Size (mm) | Amps DC (+) | | | Weight / Spool (kg) |
|-----------|-------------|-----------|------------|---------------------|
| | F | HF | V - up, OH | |
| 1.2 | 150 - 340 | 150 - 340 | 120 - 260 | 12.5 |