

Ratna E 6013

CLASSIFICATION

- AWS/SFA 5.1 E 6013
- BS 639 E4322R21
- IS-814 ER 4222
- DIN 1913 E 4322R322

APPLICATIONS

- Suitable for tank & vessels.
- General fabrication.
- Ship building construction, light structural steel works.
- Railway wagons and machinery.
- Vehicles.
- Storage tanks etc.

DESCRIPTION

- The electrode is characterized by smooth and stable arc, low spatter, easy slag detachability, fine rippled bead appearance, weld deposit possesses good chemical and mechanical properties.

TYPICAL WELD METAL CHEMICAL PROPERTIES (ELEMENT %)

| CARBON (C) | MAGNESIUM (MN) | SILICON (SI) | SULFUR (S) | PHOSPHORUS (P) |
|------------|----------------|--------------|------------|----------------|
| 0.065 MAX | 0.040 | 0.24 MAX | 0.011 MAX | 0.021 MAX |

CURRENT POLARITY

DC(-), AC

WELDING POSITION

FLAT, HORIZONTAL, VERTICAL, OVERHEAD

TYPICAL WELD METAL MECHANICAL PROPERTIES (ELEMENT %)

| YIELD STRENGTH (N/MM ²) KSI | ULTIMATE TENSILE STRENGTH (N/MM ²) KSI | ELONGATION (%) | CVN IMPACT AT °C JOULES |
|--|--|----------------|----------------------------|
| 425 (62) | 490 (71) | 26 | 0°C : 62 J |

SIZE AND CURRENT RECOMMENDATIONS

| SIZE D X L (MM) | SIZE D X L (IN) | CURRENT (AMPS) DC-, AC |
|-----------------|-----------------|------------------------|
| 2.5mm x 350mm | 3/32" x 14" | 50-80 |
| 3.2mm x 350mm | 1/8" x 14" | 80-130 |
| 4.0mm x 350mm | 5/32" x 14" | 130-170 |

RE-DRY CONDITIONS

- Re-dry the electrode at 120°C for 30-60 minutes, for best results.

NOTE:
THE INFORMATION PROVIDED IN THIS ARTICLE OR OTHERWISE REFERRED TO HEREIN IS MERELY PROVIDED AS "TYPICAL" WITHOUT ANY ASSURANCE OR PROMISE. ACTUAL RESULTS WILL VARY BASED ON A NUMBER OF VARIABLES, INCLUDING, BUT NOT LIMITED TO, WELD PROCESS, PLATE CHEMISTRY AND TEMPERATURE, WELDMENT DESIGN, AND FABRICATION PROCEDURES. WASHINGTON CENTRAL CORPORATION EXPRESSLY DISCLAIMS ANY LIABILITY SUFFERED FROM ANY RELIANCE THEREON. IT IS ADVISED THAT BEFORE USING ANY WELDING CONSUMABLE OR PROCEDURE IN THE INTENDED APPLICATION, USERS CHECK THEIR COMPATIBILITY THROUGH QUALIFICATION TESTING OR OTHER SUITABLE METHODS.