

# Kryo® 1

## TOP FEATURES

- Excellent mechanical properties (impact down to -60°C)
- Good CTOD down to -10°C
- Extremely low hydrogen content
- 110 - 120% recovery
- Weldable on AC and DC

## CLASSIFICATION

AWS A5.5 E7018-G-H4R  
EN ISO 2560-A E 50 6 Mn1Ni B 32 H5

## CURRENT TYPE

AC / DC (+/-)

## WELDING POSITIONS

All position, except vertical down

## APPROVALS

| ABS | LR | BV | DNV/GL | TÜV | DB |
|-----|----|----|--------|-----|----|
| +   | +  | +  | +      | +   | +  |

## CHEMICAL COMPOSITION (WEIGHT %), TYPICAL, ALL WELD METAL

| C    | Mn  | Si  | P     | S     | Ni  | HDM        |
|------|-----|-----|-------|-------|-----|------------|
| 0.05 | 1.5 | 0.4 | 0.010 | 0.010 | 0.9 | 2 ml/100 g |

## MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

|                    | Condition*  | 0.2% Proof strength (MPa) | Tensile strength (MPa) | Elongation (%) | Impact ISO-V (J) |         |
|--------------------|-------------|---------------------------|------------------------|----------------|------------------|---------|
|                    |             |                           |                        |                | -20°C            | -60°C   |
| Required: AWS A5.5 |             | min. 390                  | min. 480               | min. 22        | not specified    |         |
| EN ISO             |             | min. 500                  | 560-720                | min. 18        |                  | min. 47 |
| Typical values     | AW          | 550                       | 640                    | 24             | 150              | 90      |
|                    | SR:580°C/15 | 460                       | 550                    | 24             |                  | 90      |

AW = As welded; SR = Stress relieved

## OUTPUT RANGE

| Diameter x Length (mm) | Current range (A) |
|------------------------|-------------------|
| 2.5x350                | 55-80             |
| 3.0x350                | 70-110            |
| 3.2x350                | 80-140            |
| 3.2x450                | 80-140            |
| 4.0x350                | 120-170           |
| 4.0x450                | 120-170           |
| 5.0x450                | 180-240           |

## PACKAGING AND AVAILABLE SIZES

| Diameter x Length (mm) | Packaging | Pieces / unit | Weight (kg) | Item number |
|------------------------|-----------|---------------|-------------|-------------|
| 2.5x350                | SRP       | 70            | 1.3         | 524383-1    |
| 3.2x350                | SRP       | 50            | 1.9         | 524390-1    |
| 3.2x450                | SRP       | 10            | 0.5         | 515725-1    |
|                        | SRP       | 50            | 2.4         | 524437-1    |
| 4.0x350                | SRP       | 28            | 1.5         | 524468-1    |
| 4.0x450                | SRP       | 28            | 2.0         | 524499-1    |
| 5.0x450                | SRP       | 22            | 2.4         | 524475-1    |

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### TEST RESULTS

Test results for mechanical properties, deposit or electrode composition and diffusible hydrogen levels were obtained from a weld produced and tested according to prescribed standards, and should not be assumed to be the expected results in a particular application or weldment. Actual results will vary depending on many factors, including, but not limited to, weld procedure, plate chemistry and temperature, weldment design and fabrication methods. Users are cautioned to confirm by qualification testing, or other appropriate means, the suitability of any welding consumable and procedure before use in the intended application

Safety Data Sheets (SDS) are available here:



Subject to Change – The information is accurate to the best of our knowledge at the time of printing.  
Please refer to [www.lincolnelectric.eu](http://www.lincolnelectric.eu) for any updated information.