

## 4015 HL-Kb

**CATEGORY** SMAW Stick Electrodes

**TYPE** High recovery, corrosion resistant stainless steel alloy without Nickel

**APPLICATIONS** Joining and cladding 17% Chromium alloys and cladding components where heat and corrosion resistance is required. The weld deposit can sustain working temperatures up to 450° C. and will offer scale resistance up to 950° C. Preheating is recommended at 250° C and stress relieving at 800° C in case it is allowed for the base metal

**PROPERTIES** High deposition rate and excellent weldability on DC+.

**CLASSIFICATION**

|            |                   |
|------------|-------------------|
| AWS        | A 5.1: E 430-15   |
| EN ISO     | 3581-A: E 17 R 52 |
| DIN: W.Nr. | 1.4015            |
| DIN        | E 4015 HL-Kb      |

**SUITABLE FOR** 1.4057, 1.4740, 1.4742, 1.4059, 1.4741, Steam valves, pumps etc

**APPROVALS** CE approved

**WELDING POSITIONS:**



**WELD DEPOSIT WEIGHT % (TYPICAL)**

| C     | Mn   | Si | Cr    | Ni   | Mo      |
|-------|------|----|-------|------|---------|
| <0.10 | <0.7 | -  | 16-18 | <0.5 | 0.8-1.2 |

**MECHANICAL PROPERTIES**

| Heat Treatment | R <sub>p0.2</sub><br>(N/mm <sup>2</sup> ) | R <sub>m</sub><br>(N/mm <sup>2</sup> ) | A <sub>5</sub><br>(%) | Impact Energy (J) ISO-V |       |       | Hardness<br>HB |
|----------------|-------------------------------------------|----------------------------------------|-----------------------|-------------------------|-------|-------|----------------|
|                |                                           |                                        |                       | -20°C                   | -40°C | -60°C |                |
| AW             | -                                         | -                                      | -                     | -                       | -     | -     | 240 HB 30      |
| SR             | 340                                       | 540                                    | 20                    | -                       | -     | -     | 150 HB 30      |

AW = As welded / SR = Stress relieved 800°C / 1 hr

**WELDING PARAMETERS PACKING**

| Welding Parameters |             |             | Packing  |            |           |
|--------------------|-------------|-------------|----------|------------|-----------|
| D (mm)             | Length (mm) | Current (A) | kg / can | kg / 6pack | kg / 1000 |
| 2.5                | 300         | 60-90       |          |            |           |
| 3.2                | 350         | 80-110      |          |            |           |
| 4.0                | 350         | 100-150     |          |            |           |

**REDRYING TEMPERATURE** 300°C/2hr

**RECOVERY** 150%