# Fleetweld® 5P

**Mild Steel, Cellulosic • AWS E6010**

## Key Features

- Deep arc penetration
- Light slag with minimal arc interference
- Excellent vertical and overhead capability

## Typical Applications

- Steel with moderate surface contaminants
- Cross country and in-plant pipe welding
- Square edge butt welds
- Welding on galvanized and specially coated steels

## Conformances

| | |
|---|---|
| AWS A5.1/A5.1M: 2004 | E6010 |
| ASME SFA-A5.1: | E6010 |
| ABS: | E6010 |
| Lloyd's Register: | 3M |
| CWB/CSA W48-06: | E4310 |
| TUV: | EN ISO 2560-A: E 42 3 C25 |

## Welding Positions

All

## DIAMETERS / PACKAGING

| Diameter in (mm) | Length in (mm) | 5 lb (2.3 kg) Plastic Tube 20 lb (9.1 kg) Master Carton | 10 lb (4.5 kg) Easy Open Can 30 lb (13.6 kg) Master Carton | 50 lb (22.7kg) Easy Open Can |
|---|---|---|---|---|
| 3/32 (2.4) | 12 (300) | ED032402 | ED032561 | ED010211 |
| 1/8 (3.2) | 14 (350) | ED032403 | ED032562 | ED010203 |
| 5/32 (4.0) | 14 (350) | | ED032563 | ED010216 |
| 3/16 (4.8) | 14 (350) | | | ED010207 |
| 7/32 (5.6) | 14 (350) | | | ED010219 |
| 1/4 (6.4) | 14 (350) | | | ED010200 |

## MECHANICAL PROPERTIES[1] – *As Required per AWS A5.1/A5.1M: 2004*

| | Yield Strength[2] MPa (ksi) | Tensile Strength MPa (ksi) | Elongation % | Charpy V-Notch J (ft•lbf) @-29°C (-20°F) |
|---|---|---|---|---|
| **Requirements -** AWS E6010 | 330 (48) min. | 430 (60) min. | 22 min. | 27 (20) min. |
| **Typical Results**[3] - As-Welded | 420-475 (61-69) | 515-570 (75-83) | 25-31 | 41-68 (30-50) |

## DEPOSIT COMPOSITION[1] – *As Required per AWS A5.1/A5.1M: 2004*

| | %C | %Mn | %Si | %P | %S |
|---|---|---|---|---|---|
| **Requirements -** AWS E6010 | 0.20 max. | 1.20 max. | 1.00 max. | Not Specified | Not Specified |
| **Typical Results**[3] - As-Welded | 0.09-0.17 | 0.40-0.63 | 0.09-0.43 | 0.005-0.017 | 0.005-0.014 |
| | **%Ni** | **%Cr** | **%Mo** | **%V** | |
| **Requirements -** AWS E6010 | 0.30 max. | 0.20 max. | 0.30 max. | 0.08 max. | |
| **Typical Results**[3] - As-Welded | 0.01-0.05 | 0.01-0.05 | ≤ 0.03 | ≤ 0.01 | |

## TYPICAL OPERATING PROCEDURES

| | Current (Amps) | | | | | |
|---|---|---|---|---|---|---|
| Polarity[4] | 3/32 in (2.4 mm) | 1/8 in (3.2 mm) | 5/32 in (4.0 mm) | 3/16 in (4.8 mm) | 7/32 in (5.6 mm) | 1/4 in (6.4 mm) |
| DC+ | 40-80 | 70-130 | 90-165 | 140-225 | 200-275 | 220-325 |
| DC- | 50-85 | 75-135 | 100-175 | – | – | – |

[1]Typical all weld metal. [2]Measured with 0.2% offset. [3]See test results disclaimer below. [4]Preferred polarity is listed first.

*Material Safety Data Sheets (MSDS) and Certificates of Conformance are available on our website at www.lincolnelectric.com*

## 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.

## CUSTOMER ASSISTANCE POLICY

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