

## SUPERCORE 347HP

FCAW

ALL-POSITIONAL RUTILE FLUX CORED WIRE FOR 321H/347H STAINLESS STEELS

## PRODUCT DESCRIPTION

Flux cored wire made with an austenitic stainless steel sheath and rutile flux system. Supercore 347HP is designed for all-positional welding from 1G/2G up to 5G/6G fixed pipework. Metal recovery is about 90% with respect to the wire.

## CLASSIFICATIONS

|             |                   |
|-------------|-------------------|
| AWS A5.22M  | E347HT1-1/4       |
| ISO 17633-A | T 19 9 Nb P C/M 2 |
| ISO 17633-B | TS347-FB1         |
| APPROVALS   | DNV               |

## ASME IX QUALIFICATION

|       |        |
|-------|--------|
| QW432 | F-No 6 |
| QW442 | A-No 8 |

## CHEMICAL COMPOSITION (WELD METAL WT %)

|         | C    | Mn  | Si  | S     | P     | Cr   | Ni   | Mo  | Nb  | Cu  | FN |
|---------|------|-----|-----|-------|-------|------|------|-----|-----|-----|----|
| Min.    | 0.04 | 0.5 | --  | --    | --    | 18.0 | 9.0  | --  | 8xC | --  | 4  |
| Max.    | 0.08 | 2.0 | 1.0 | 0.025 | 0.030 | 21.0 | 11.0 | 0.3 | 1.0 | 0.3 | 9  |
| Typical | 0.05 | 1.4 | 0.6 | 0.01  | 0.02  | 19.5 | 10.2 | 0.1 | 0.5 | 0.1 | 5  |

## ALL-WELD MECHANICAL PROPERTIES

| As welded                 | Room Temperature |         | High Temperature |
|---------------------------|------------------|---------|------------------|
|                           | Min.             | Typical | 732°C            |
| Tensile strength [MPa]    | 550              | 630     | 310              |
| 0.2% proof strength [MPa] | 350              | 470     | 265              |
| Elongation [%] 4d         | 30               | 43      | 24               |
| 5d                        | 25               | 40      | 22               |
| Reduction of area [%]     | --               | 46      | 43               |
| Impact ISO-V[J] +20°C     | --               | 70      | --               |

## OPERATING PARAMETERS

Shielding gas: 80%Ar-20%CO<sub>2</sub> at 20-25l/min. Proprietary gases may be used but argon should not exceed 85% argon.

Current: DC+ve ranges as below:

| Diameter (mm) | amp-volt range   | typical  | stickout |
|---------------|------------------|--|----------|
| 1.2           | 120-280A, 22-34V | 180A, 29V (downhand)<br>160A, 25V (positional) | 12-20mm  |

## PACKAGING DATA

| Diameter (mm) | Weight (kg) | Packaging | Item number |
|---------------|-------------|-----------|-------------|
| 1.2           | 15          | S300      | SC347HP-12  |

## FUME DATA (WT % TYPICAL)

| Fe | Mn | Ni | Cr <sup>3</sup> | Cr <sup>6</sup> | Cu | F | OES (mg/m <sup>3</sup> ) |
|----|----|----|-----------------|-----------------|----|---|--------------------------|
| 17 | 11 | 2  | 4               | 5               | <1 | 5 | 1                        |

All information in this data sheet is accurate to the best of our knowledge at the time of printing. Please refer to [www.specialalloys.eu](http://www.specialalloys.eu) for any updated information.