

Supercore™ 308 H

TOP FEATURES

- Designed for strength and resistance to corrosion
- Used for joining supermartensitic stainless steels
- High carbon electrode for high temperature applications

CLASSIFICATION

AWS A5.22 E308HT0-1/4
 EN ISO 17633-B TS308H-F C1/M21 0

CURRENT TYPE

DC+

SHIELDING GASES (ACC. EN ISO 14175)

M21 Mixed gas Ar+ 15-25% CO₂
 C1 Active gas 100%
 Flow rate 20-25 l/min

Proprietary gases may be used but argon should not exceed 85%.

CHEMICAL COMPOSITION (WEIGHT %), WELD METAL

| | C | Mn | Si | S | P | Cr | Ni | Mo | Cu | FN |
|---------|------|-----|-----|------|------|------|------|-----|-----|----|
| Min. | 0.04 | 1.0 | | | | 18.0 | 9.0 | | | 3 |
| Max. | 0.08 | 2.0 | 1.0 | 0.03 | 0.04 | 20.0 | 11.0 | 0.5 | 0.5 | 8 |
| Typical | 0.05 | 1.3 | 0.5 | 0.01 | 0.02 | 18.8 | 9.5 | 0.1 | 0.1 | 5 |

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

| As welded | Min. | Typical | High Temperature | | |
|---------------------------|------|---------|------------------|-------|-------|
| | | | 650°C | 732°C | 816°C |
| Tensile strength (MPa) | 550 | 620 | 287 | 222 | 163 |
| 0.2% Proof strength (MPa) | | 420 | 213 | 177 | 140 |
| Elongation (%) 4d | 30 | 40 | | | |
| | 5d | 30 | 36 | 30 | 46 |
| Reduction of area (%) | | 50 | 58 | 69 | 74 |
| Impact ISO-V (J) + 20°C | | 100 | | | |
| Aged at 730°C/1000h | | 90 | | | |

PACKAGING AND AVAILABLE SIZES

| Wire diameter (mm) | Packaging | Weight (kg) | Item number |
|--------------------|--------------|-------------|-------------|
| 1.6 | SPOOL (S300) | 15.0 | SC308H-16 |

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 for any updated information.