

# CARBOFIL CRMO2

## TOP FEATURES

- Deposit insensitive to cracking.
- Good radiographic quality.
- Also suitable for the welding of 1¼Cr½Mo steels where improved resistance to hydrogen attack or corrosion by sulphur is required.

## TYPICAL APPLICATIONS

- Oil & Gas
- Thermal Power
- Pressure vessels
- Chemical
- Boilers, plates, tubes steels

## CLASSIFICATION

|                |           |
|----------------|-----------|
| AWS A5.28      | ER90S-G   |
| EN ISO 21952-A | G CrMo2Si |

## SHIELDING GASES (ACC. EN ISO 14175)

|     |  |
|-----|--|
| M20 | Mixed gas Ar+ >5-15% CO <sub>2</sub>                           |
| M21 | Mixed gas Ar+ >15-25% CO <sub>2</sub>                          |
| M24 | Mixed gas Ar+ >5-15% CO <sub>2</sub> + >0,5-3% O <sub>2</sub>  |
| M26 | Mixed gas Ar+ >15-25% CO <sub>2</sub> + >0,5-3% O <sub>2</sub> |

## APPROVALS

| TÜV | CE |
|-----|----|
| +   | +  |

## CHEMICAL COMPOSITION (WEIGHT %), TYPICAL, WIRE

| C    | Mn  | Si  | P      | S      | Cr  | Mo  |
|------|-----|-----|--------|--------|-----|-----|
| 0.09 | 1.2 | 0.7 | ≤0.020 | ≤0.020 | 2,5 | 1.0 |

## MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

|                | Shielding gas | Condition*       | Yield strength (MPa) | Tensile strength (MPa) | Elongation (%) | Impact ISO-V (J) +20 °C |
|----------------|---------------|------------------|----------------------|------------------------|----------------|-------------------------|
| Typical values | M21           | PWHT 690 °C x 1h | ≥400                 | ≥620                   | ≥18            | ≥47                     |

\*PWHT = Post Welding Heat Treatment

## PACKAGING AND AVAILABLE SIZES

| Wire diameter (mm) | Packaging    | Weight (kg) | Item number |
|--------------------|--------------|-------------|-------------|
| 1.0                | SPOOL (B300) | 16.0        | W000282963  |

## 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.  
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