# CARBOFIL CRMO1

## **TOP FEATURES**

- Excellent mechanical characteristics.
- Can also be used to weld 0.9% Cr and 0.5% Mo steels.
- Also suitable where some resistance to hydrogen attack by sulphur bearing crude oil is required

#### **TYPICAL APPLICATIONS**

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

#### CLASSIFICATION

AWS A5.28 ER80S-G EN ISO 21952-A G CrMo1Si

# **SHIELDING GASES (ACC. EN ISO 14175)**

M20 Mixed gas Ar+ >5-15% CO₂ Mixed gas Ar+ >15-25% CO₂ M21

M24 Mixed gas Ar+ >5-15%  $CO_2$ + >0,5-3%

Mixed gas Ar+ >15-25%  $CO_2$ + >0,5-3% $O_2$ M26

#### **APPROVALS**

| ΤÜV | DB | CE |
|-----|----|----|
| +   | +  | +  |

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

| С    | Mn  | Si  | Р      | S      | Cr  | Мо  |
|------|-----|-----|--------|--------|-----|-----|
| 0.08 | 1.2 | 0.6 | ≤0.020 | ≤0.020 | 1.2 | 0.6 |

#### MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

|                | Shielding gas | Condition*      | Yield strength<br>(MPa) | Tensile strength<br>(MPa) | Elongation<br>(%) | Impact ISO-V (J)<br>+20°C |
|----------------|---------------|-----------------|-------------------------|---------------------------|-------------------|---------------------------|
| Typical values | M21           | PWHT 690°C x 1h | ≥355                    | ≥550                      | ≥20               | ≥80                       |

<sup>\*</sup>PWHT = Post Welding Heat Treatment

## **PACKAGING AND AVAILABLE SIZES**

| Wire diameter<br>(mm) | Packaging    | Weight<br>(kg) | Item number |
|-----------------------|--------------|----------------|-------------|
| 1.0                   | SPOOL (B300) | 16.0           | W000282958  |
| 1.2                   | SPOOL (B300) | 16.0           | W000282960  |

#### **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.

