

# diamondspark DCMV BC

Flux cored wire, seamless, creep resistant, basic type

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|-----|--|--|
|     |  |  |

| EN ISO 17634-A | EN ISO 17634-B    | AWS A5.29 / SFA-5.29 | AWS A5.36 / SFA-5.36 |
|----------------|-------------------|----------------------|----------------------|
| T Z B M21 3 H5 | T 62 T5-0M21-G-H5 | E90T5-GM-H4          | E90T5-M21PY-GH4      |

## Characteristics and typical fields of application

Seamless basic flux-cored wire for welding of Chromium-Molybdenum-Vanadium creep resistant steels with an application temperature up to 550°C with Ar-CO<sub>2</sub> shielding gas. This wire is especially suitable for welding steel G17CrMoV5-10 with post-welding heat treatment. Features include: excellent weldability in flat and horizontal positions, smooth and bright bead, low spatter losses, easy to remove slag, good mechanical properties and high deposition rates with very low contents of diffusible hydrogen in weld metal (< 3ml/100g).

#### **Base materials**

1.7706 G17CrMoV5-10

| Typical analysis |     |      |      |      |      |      |      |      |
|------------------|-----|------|------|------|------|------|------|------|
|                  | Gas | C    | Si   | Mn   | Cr   | Ni   | Мо   | V    |
| wt -%            | M21 | 0.10 | 0.50 | 1 10 | 1 20 | 0.40 | 0.90 | 0.20 |

## Mechanical properties of all-weld metal - typical values (min. values)

| Condition | Yield strength R <sub>p0.2</sub> | Tensile strength R <sub>m</sub> | Elongation A (L <sub>0</sub> =5d <sub>0</sub> ) | Impact energy ISO-V KV J |
|-----------|----------------------------------|---------------------------------|---|--------------------------|
|           | MPa                              | MPa                             | %   | 20°C                     |
| S         | 680 (≥ 540)                      | 750 (620–760)                   | 19  | 100 (≥ 47)               |
|           |                                  |                                 |   |                          |

s stress relieved 690°C / 6 h - shielding gas M21

### **Operating data**



| •                               |      |              |
|---------------------------------|------|--------------|
| Polarity                        | DC + | Dimension mm |
| Shielding gas<br>(EN ISO 14175) | M21  | 1.2          |

Preheat, interpass temperature and post weld heat treatment as required by the base metal.

#### **Approvals**

TÜV (0961), CE