



# CEWELD Nicro FM 53MD Tig

**TYPE** Nickel based filler metal against extreme temperature conditions.

**APPLICATIONS** CEWELD NiCro FM 53MD is used for the gas-tungsten-arc and gas-metal-arc welding of INCONEL alloy 693, and the overlaying of carbon steels and stainless steels to provide a nickel-chromium-aluminum alloy corrosion resistant surface.

**PROPERTIES** Excellent welding properties with high build-up capacity and low dilution rate. Excellent resistance against temperature cycling conditions exceeding 1200°C and carburized medias. Excellent fatigue strength and creep properties. The high chromium and aluminum levels provide excellent resistance to metal dusting in chemical and petrochemical applications. The product also provides excellent resistance to carburization, sulfidation, and other high temperature corrosion forms. Welding similar alloys that have to resist extreme high temperature and for cladding steels or stainless steels to obtain a high temperature resistant surface against oxidation.

**CLASSIFICATION**

|        |                                |
|--------|--------------------------------|
| AWS    | A 5.14: ERNiCrFeAl-1           |
| EN ISO | 18274: S Ni 6693(NiCr29Fe4Al3) |
| F-nr   | 43                             |
| FM     | 6                              |

**SUITABLE FOR** Cladding against high temperature, radiant heater tubes, furnace rolls, muffles in bright annealing furnaces (H2 atmosphere), rotary kilns, pipe hangers, waste gas components, hydrogen production, methanol and ammonia synthesis, Inconel alloy 693

**APPROVALS** CE

**WELDING POSITIONS**



**TYPICAL CHEMICAL ANALYSIS OF THE FILLER METAL (%)**

| C   | Si  | Mn  | Cr | Ni | Nb | Fe | Al  | Nb+Ta |
|-----|-----|-----|----|----|----|----|-----|-------|
| 0.1 | 0.4 | 0.8 | 30 | 60 | 2  | 4  | 3.5 | 2     |

**ALL WELD MECHANICAL PROPERTIES**

| Heat Treatment | R <sub>P0,2</sub><br>MPa | R <sub>m</sub><br>MPa | A <sub>5</sub><br>(%) |
|----------------|--------------------------|-----------------------|-----------------------|
| As Welded /    |                          | 760                   | 45                    |

**REDRYING TEMPERATURE** Not required

**GAS ACCORDING EN 14175** I1



# CEWELD Nicro FM 53MD Tig

NICRO FM 53MD TIG 2,4 X  
914MM

| Type | KG/unit | EANCode       |
|------|---------|---------------|
| Tube | 4,54    | 8720663418289 |