

# CEWELD DUR 25 Tig

**TYPE** Cobalt based Tig filler metal for CoCrWNi deposits.

**APPLICATIONS** Dur 25 combines properties which make it suitable for a number of component applications in the aerospace industry, including parts in established military and commercial gas turbine engines. In modern engines, it has largely been replaced by newer materials such as 188 alloy, and, most recently, 230® alloy, which possess improved properties. Another area of significant usage for Dur 25 is as a bearing material, for both balls and races.

**PROPERTIES** Dur 25 (UNS R30605) is a cobalt-nickel- chromium-tungsten alloy that combines excellent high-temperature strength with good resistance to oxidizing environments up to 1800°F (980°C) for prolonged exposures, and excellent resistance to sulfidation. It can be fabricated and formed by conventional techniques, and has been used for cast components. Other attractive features include excellent resistance to metal galling.

**CLASSIFICATION** EN ISO 14700: ~E Co1

**SUITABLE FOR** Wear problems at high temperatures in case high strength is required.

**APPROVALS** No Approvals Found

**WELDING POSITIONS**



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

| C   | Ni | Cr | W  | Mo  | Co   | Mn  | Si  | Fe  |
|-----|----|----|----|-----|------|-----|-----|-----|
| 0.1 | 10 | 20 | 15 | 0.5 | Rem. | 1.5 | 0.3 | 1.5 |

**ALL WELD MECHANICAL PROPERTIES**

| Heat Treatment | R <sub>P0,2</sub><br>MPa | R <sub>m</sub><br>MPa | A <sub>5</sub><br>(%) | Hardness<br>Rockwell C |
|----------------|--------------------------|-----------------------|-----------------------|------------------------|
| As Welded /    | 825                      | 925                   | 1.5                   | Avg. 35                |

**REDRYING TEMPERATURE** Not required

**GAS ACCORDING EN 14175** I1