



# CEWELD NiCrBSi 4 Tig (Colmonoy 4)

|                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                  |                            |                         |           |          |
|------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|----------------------------|-------------------------|-----------|----------|
| TYPE                                                 | Nickel based Tig filler metal for hardfacing and overlay applications.                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                  |                            |                         |           |          |
| APPLICATIONS                                         | NiCrBSi 4 TIG offers outstanding metallurgical and physical properties making them ideally suited to solving wear mechanisms such as abrasion, erosion, corrosion and high-temperatures encountered in service.                                                                                                                                                                                                                                                                                                        |                  |                            |                         |           |          |
| PROPRIÉTÉS                                           | This nickel based alloy offers superior wear protection, retaining its hardness up to 600°C (1000°F) with significant resistance to oxidation.                                                                                                                                                                                                                                                                                                                                                                         |                  |                            |                         |           |          |
| CLASSIFICATION                                       | AWS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | A 5.21: ERNiCr-A |                            |                         |           |          |
| CONVIENT POUR                                        | <b>UNS N99644, DELORO 40 Alloy, Colmonoy 4</b><br>Aircraft gas turbines, steam turbine powerplants, turbochargers and valves in reciprocating engines, prosthetic devices, heat treating equipment, pollution control equipment, coal gasification and liquefaction systems, and components in pulp and paper mills.                                                                                                                                                                                                   |                  |                            |                         |           |          |
| AGRÉMENTS                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                  |                            |                         |           |          |
| POSITIONS DE SOUDAGE                                 | <div>     </div> |                  |                            |                         |           |          |
| ANALYSE CHIMIQUE<br>TYPIQUE DU MÉTAL<br>D'APPORT (%) | C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Ni               | Cr                         | B                       | Si        | Fe       |
|                                                      | 0.4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Rem.             | 10                         | 2.4                     | 2.1       | 2.8      |
| PROPRIÉTÉS MÉCANIQUES                                | Heat Treatment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                  | R <sub>P0,2</sub><br>(MPa) | R <sub>m</sub><br>(MPa) | A5<br>(%) | Hardness |
|                                                      | As Welded                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                  |                            |                         |           | 40 HRc   |
| ETUVAGE                                              | Not required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |                            |                         |           |          |
| GAS ACC. EN ISO 14175                                | I1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                  |                            |                         |           |          |