



# CEWELD NiCrCo 5828

|                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                            |      |                            |                         |           |          |    |
|--------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|------|----------------------------|-------------------------|-----------|----------|----|
| TYPE                                                   | Welding wire for Waspaloy and similar precipitation hardening, high temperature Nickel based alloys.l                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                            |      |                            |                         |           |          |    |
| APPLICATIONS                                           | CEWELD NiCrCo 5828 is a high temperature alloy, which is used for welding nickel-chromium-cobalt-molybdenum alloys (UNS Number N07001). Main applications are Gas turbine engine parts, Aerospace components, springs and fasteners.                                                                                                                                                                                                                                                                                                                                                                  |                            |      |                            |                         |           |          |    |
| PROPRIÉTÉS                                             | Very high strength properties at elevated temperatures, Strength is generally comparable to that of Rene 41 and generally superior to Inconel 718. Age hardenable while maintaining excellent high-temperature strength and good corrosion resistance, notably to oxidation, at service temperatures ranging from 1200°F (650°C) up to 1600°F (870°C)                                                                                                                                                                                                                                                 |                            |      |                            |                         |           |          |    |
| CLASSIFICATION                                         | AWS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | A 5.14: ERNiCrCoMo-2 mod   |      |                            |                         |           |          |    |
|                                                        | EN ISO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 18274: S NiZCr20Co14Mo4Ti3 |      |                            |                         |           |          |    |
|                                                        | W.Nr.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 2.4654                     |      |                            |                         |           |          |    |
|                                                        | F-nr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 43                         |      |                            |                         |           |          |    |
|                                                        | FM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 6                          |      |                            |                         |           |          |    |
| CONVIENT POUR                                          | AMS 5708, 5709, 5706, 5707, 5704, 5544, 5586.<br>PWA 1005, 1007, 1016, 1027.<br>ASTM B637.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                            |      |                            |                         |           |          |    |
| AGRÉMENTS                                              | CE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                            |      |                            |                         |           |          |    |
| POSITIONS DE SOUDAGE                                   | <div> PA</div> <div> PB</div> <div> PC</div> <div> PD</div> <div> PE</div> <div> PF</div> |                            |      |                            |                         |           |          |    |
| ANALYSE CHIMIQUE<br>TYPIQUE DU MÉTAL DE<br>SOUDURE (%) | C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Si                         | Mn   | Cr                         | Ni                      | Mo        | Ti       | Co |
|                                                        | 0.06                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 0.05                       | 0.05 | 20                         | 58                      | 4         | 3        | 14 |
| PROPRIÉTÉS MÉCANIQUES                                  | Heat Treatment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                            |      | R <sub>P0,2</sub><br>(MPa) | R <sub>m</sub><br>(MPa) | A5<br>(%) | Hardness |    |
|                                                        | 760°C±15°C 10h                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                            |      | 1000                       | 1400                    | 14        | 40 HRc   |    |
| ETUVAGE                                                | Not required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                            |      |                            |                         |           |          |    |
| GAS ACC. EN ISO 14175                                  | I1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                            |      |                            |                         |           |          |    |