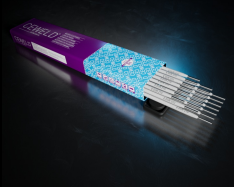




# CEWELD E DUR 21U

|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                        |                         |                      |     |                    |          |      |
|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------|----------------------|-----|--------------------|----------|------|
| TYPE                                        | Cobalt-based thermo shock resistant alloy for overlay applications.( Stellite 21, CoCr-E, E Co1)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                        |                         |                      |     |                    |          |      |
| APPLICATIONS                                | CEWELD® DUR 21U is a Stellite 21 alloy with excellent properties against abrasion, thermal shock and corrosion in conjunction with high temperatures. It produces a high-quality hardfacing on components that are exposed to multiple stresses from erosion, corrosion, cavitation, pressure, impact, abrasion and high temperatures up to 900 °C. For example: sealing surfaces on fittings, valve seats and cones for combustion engines, metal-to-metal sliding surfaces, highly stressed hot work tools without thermal shock, grinding, stirring and drilling tools..                                                                                                                                               |                        |                         |                      |     |                    |          |      |
| PROPERTIES                                  | <p>CEWELD® DUR 21U shows excellent welding properties and self-releasing slag. The weld metal can be machined with carbide tools and by grinding. The hardness of the weld metal decreases by about 20% at 600 °C. The weld metal is highly heat-resistant up to 900 °C. CEWELD® DUR 12U offers a low coefficient of friction and exceptional resistance to abrasion. Cavitation and erosion resistance is ten times that of 304 stainless steel. CEWELD® DUR 21U can be used to protect bearing surfaces in non-lubricated conditions due to its resistance to metal-to-metal wear.</p> <p>Hardness of the pure weld metal: 31 - 37 HRC<br/>work-hardened: approx. 45 HRC<br/>Hot hardness at 600 °C: approx. 240 HB</p> |                        |                         |                      |     |                    |          |      |
| CLASSIFICATION                              | AWS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | A 5.13: E CoCr-E       |                         |                      |     |                    |          |      |
|                                             | EN ISO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 14700: E Co1           |                         |                      |     |                    |          |      |
|                                             | DIN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 8555: E 20-UM-350- CTZ |                         |                      |     |                    |          |      |
|                                             | F-nr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 71                     |                         |                      |     |                    |          |      |
| SUITABLE FOR                                | Stellite 21 alloy for cladding Seats and Valves etc. low friction due to high cobalt content                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                        |                         |                      |     |                    |          |      |
| APPROVALS                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                        |                         |                      |     |                    |          |      |
| WELDING POSITIONS                           | <div>PAPBPC</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                |                        |                         |                      |     |                    |          |      |
| TYPICAL CHEMICAL ANALYSIS OF WELD METAL (%) | C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Si                     | Mn                      | Ni                   | Mo  | Fe                 | Cr       | Co   |
|                                             | 0.3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 0.9                    | 1                       | 3                    | 5.5 | 3                  | 28       | Rem. |
| MECHANICAL PROPERTIES                       | Heat Treatment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        | R <sub>p0,2</sub> (MPa) | R <sub>m</sub> (MPa) |     | A <sub>5</sub> (%) | Hardness |      |
|                                             | As Welded                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                        |                         |                      |     |                    | 35 HRc   |      |
| REDRYING                                    | Not required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                        |                         |                      |     |                    |          |      |
| GAS ACC. EN ISO 14175                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                        |                         |                      |     |                    |          |      |



# CEWELD E DUR 21U

E DUR 21U 2,4 X 350MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| Can       | 2,8     | 8720663402165 |

E DUR 21U 4,0 X 350MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| Can       | 2,8     | 8720663402189 |