



CEWELD OA WC2 Ni

TYPE Fluxcored hardfacing welding wire with Nickel-Boron-Silicon matrix up to 60% Tungsten carbides (FTC)

APPLICATIONS CEWELD® OA WC2 Ni can be applied to all types of steel except cast iron and Mn steel. The main areas of application are:
 Repair and hardfacing of ferritic and austenitic steel tools and machine parts (cast steel) It was specially developed for semi-automatic and fully automatic welding on tool joints and stabilizers in the petroleum industry.

PROPERTIES CEWELD® OA WC2 Ni is a cored wire with a NiCrBSi matrix alloy in which tungsten carbides are embedded. It was developed to protect surfaces from extreme abrasive wear in combination with corrosion attacks. The welding alloy consists of approximately 60% WC₂ and 35–40% Ni-Cr-B-Si matrix. The alloy has a low melting range between 900 and 1050 °C (1652–1922 °F) and is characterized by a self-flowing property that produces a smooth and clean surface. The matrix is highly resistant to acids, bases, alkalis, and other corrosive media.
 Matrix: 50-54 HRc
 Carbides: ~2360 HV0.1

CLASSIFICATION EN ISO 14700: T Ni20
 DIN 8555: MF 21-GF-55-CGTZ

SUITABLE FOR Rebuilding of stabilisers and other oilfield tools where maximum protection is required. Also for augers, impellers, mixer plates in the brick and clay industry and on decanter screws or hardfacing deep drilling equipment.

APPROVALS

WELDING POSITIONS



TYPICAL CHEMICAL ANALYSIS OF WELD METAL (%)

| C | Si | Ni | Cr | B | WSC |
|-----|-----|------|-----|-----|-----|
| 0.4 | 2.5 | Rem. | 2.7 | 1.7 | 55 |

MECHANICAL PROPERTIES

| Heat Treatment | R _{P0,2} (MPa) | R _m (MPa) | A ₅ (%) | Hardness |
|----------------|-------------------------|----------------------|--------------------|----------|
| As Welded | | | | 2360 HV |

REDRYING 140°C / 24 hr

HARDNESS / COMPOSITION Matrix: 50-54 HRc Carbides: ~2360 HV0.1

GAS ACC. EN ISO 14175 M21, M12, M13, M20



CEWELD OA WC2 Ni

OA WC2 NI 1,2MM

| Packaging | KG/unit | EanCode |
|-----------|---------|---------------|
| BS-300 | 15 | 8720663403865 |

OA WC2 NI 1,6MM

| Packaging | KG/unit | EanCode |
|-----------|---------|---------------|
| BS-300 | 15 | 8720663403889 |

OA WC2 NI 2,4MM

| Packaging | KG/unit | EanCode |
|-----------|---------|---------------|
| BS-300 | 15 | 8720663403902 |