CEWELD[®]

NiCro 52

| CATEGORY | GMAW-GTAW Solid wires | | | | | | |
|--------------------|--|--|--|--|--|--|--|
| TYPE | Solid nickel base welding wire for Mig (GMAW) welding. | | | | | | |
| APPLICATIONS | Nicro 52 filler metal is used for welding nickel-chromium-iron (Inconel 690) alloys to themselves, and for dissimilar welding between nickel-chromium-iron alloys and steels or stainless steels. The applications include surfacing as well as clad-side welding. Interpass temperature of 150°C should be respected, | | | | | | |
| PROPERTIES | Excellent resistance against oxidizing media combined with high mechanical strength at room temperature but also at extreme high temperatures combined with high ductility due to the high chromium content. Alloy 690 was developped to offer greater resistance to stress corrosion in the nuclear industry, pure water invironment | | | | | | |
| CLASSIFICATION | AWS A 5.14: ER NiCrFe-7 UNS: N06052 EN ISO 18274: SNi6052 (NiCr30Fe9) DIN: W.Nr. 2.4642 | | | | | | |
| SUITABLE FOR | Inconel 690, VDM Alloy 690, Nicrofer 6030 N, FM 52 | | | | | | |
| APPROVALS | CE approved | | | | | | |
| WELDING POSITIONS: | | | | | | | |

WELD METAL ANALYSIS %

| С | Mn | Si | Cr | S | Ν | Ti | Fe | Со | Cu | Al | Ni |
|--------|-------|-------|---------|---------|-------|------|------|--------|-------|-------|------|
| < 0.04 | < 1.0 | < 0.5 | 28-31.5 | < 0.015 | 0,014 | <1,0 | 7-11 | < 0.12 | < 0.3 | <1.10 | > 58 |

MECHANICAL PROPERTIES

| Heat | R _{P0,2} | Rm | A5 | Impact Energy (J) ISO-V | Hardness |
|-----------|----------------------|----------------------|-----|-------------------------|----------|
| Treatment | (N/mm ²) | (N/mm ²) | (%) | +20°C | HB |
| annealed | > 260 | > 580 | >30 | | 150-240 |
| as drawn | ~772 | ~872 | ~16 | | |

WELDING PARAMETERS / PACKING

| | Welding Para | Packing | Packing | |
|------------------|--------------|-------------------|------------|----------|
| D (mm) | Voltage (V) | Current (A) (DC+) | spool type | kg spool |
| 0.8 | 16-26 | 80-180 | KD-300 | 15 |
| 1.0 | 16-29 | 100-250 | KD-300 | 15 |
| 1.2 | 18-29 | 125-290 | KD-300 | 15 |
| | | | | |
| REDRYING TEMPERA | | | | |

GAS ACC. EN ISO 14175: I1, Ar/He (70-30)