Technical data sheet

Cored welding wire

HARDFACE CNV-O



050122MBA

CLASSIFICATION

EN 14700: T Fe16

DESCRIPTION

- Tubular wire for self-shielded metal arc hardfacing
- High chromium cast iron with alloying additions giving a high concentration of complex carbides
- Resists extreme conditions of abrasion and temperature up to 700°C

APPLICATIONS

HARDFACE CNV-O is designed to give a weld deposit of particularly high hardness and wear resistance on account of the dispersion of hard complex carbides it contains. This gives superior performance compared to standard chromium cast irons. Optimum properties are reached in three layers. Relief checking is normal.

Examples

Ore sintering, crushing, riddling, blast furnace hoppers and throats, extractor fans etc.

| TYPICAL ALL-WELD METAL ANALYSIS | | | | | | | |
|---------------------------------|-----|-----|----|----|-----|---|---|
| С | Mn | Si | Cr | Nb | Мо | W | V |
| 5.5 | 0.5 | 1.5 | 22 | 6 | 5.5 | 2 | 1 |

Structure: hexagonal primary and eutectic carbides, nodular niobium carbides and complex combined carbides in an austenitic matrix.

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Hardness: 3-layer deposit on mild steel: 65 HRc

| CONDITIONS OF USE | | | | | |
|-------------------|---------------|--|--|--|--|
| Current type | Protection | | | | |
| DC+ | Self-shielded | | | | |

| OPERATING CONDITIONS | | | | | | |
|----------------------|-------------|---------|-------------|---------|----------------|---------|
| Diameter | Current [A] | | Voltage [V] | | Stick-out [mm] | |
| [mm] | Range | Optimum | Range | Optimum | Range | Optimum |
| 1.2 | 100 - 300 | 160 | 24 - 30 | 28 | 25 - 50 | 25 |
| 1.6 | 150 - 350 | 250 | 24 - 30 | 28 | 25 - 50 | 25 |
| 2.0 | 200 - 400 | 300 | 26 - 30 | 28 | 25 - 50 | 35 |
| 2.4 | 250 - 450 | 350 | 26 - 30 | 28 | 25 - 50 | 40 |
| 2.8 | 250 - 450 | 400 | 28 - 32 | 30 | 25 - 50 | 40 |
| 3.2 | 250 - 500 | 450 | 28 - 32 | 30 | 25 - 50 | 40 |

Recovery: 90 %

WELDING POSITIONS

Flat, half up, half down

| PACKAGING | | | | | | |
|--------------------|--------------------------|-----------------|--------------|--|--|--|
| Diameter | ≤ 2.4 mm | ≥ 2.4 mm | | | | |
| Standard packaging | EN ISO 544: BS 300 spool | B 450 coil | Drum | | | |
| Weight | 15 kg | 25 kg | Up to 330 kg | | | |

Other packaging and other diameters: please consult us