# Selectarc B96

*Basic coated high strength Ni-base Electrode for AC*

## Classification

AWS A5.11 : ENiCrMo-6
UNS : W86620
ISO 14172 : E-Ni 6620 (NiCr14Mo7Fe)

## Description & Applications

Basic coated electrode with approx. 160% recovery. The electrode is especially designed to weld with alternating current to avoid magnetic arc blow.Mainly used for construction and repair welding of high strength cold-tough 3; 5 and 9% Ni-steels used for transportation and storage tanks of liquid natural gas.

**Base materials**

| UNS | Alloy | DIN | Material N° |
|---|---|---|---|
| K34718 | 3,5%Ni | 10Ni14 | 1.5638 |
| | 5%Ni | 12Ni19 | 1.5680 |
| K81340 | 9%Ni | X8Ni9 | 1.5662 |

## Typical Weld Metal Composition ( % )

| C | Si | Mn | Cr | Nb | Fe | Mo | W | Ni |
|---|---|---|---|---|---|---|---|---|
| <0.08 | 0.6 | 3.6 | 13.5 | 1.2 | 7.5 | 7.0 | 1.2 | Rem. |

## All Weld Metal Mechanical Properties

| $R_{p0,2}$ ( MPa ) | $R_m$ ( MPa ) | $A_5$ ( % ) | KV ( J ) |
|---|---|---|---|
| >420 | >690 | >35 | +20℃ >90<br>-196℃ >70 |

## Welding Current & Instructions

| Electrode | ØxL ( mm ) | 2,5x350 | 3,2x350 | 4,0x350 |
|---|---|---|---|---|
| Current | ( A ) | 70-100 | 100-130 | 120-160 |

Redrying 1 h at 250-300℃. Joints to weld must be c lean, exempt from grease, cracks . Guide electrodes with a slight declination, weld with a short arc and prevent a high heat input by applying the stringer bead technique ( weaving max. 2 times core wire diameter ).

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| = -, + | ~70V |
|---|---|