# Selectarc Inox 316B

*Basic type Stainless Steel Electrode*

## Classification

AWS A5.4 : E316L-15 EN 1600 : E 19 12 3 L B 4 2
ISO 3581-A : E 19 12 3 L B 4 2

## Description & Applications

Low carbon basic coated Mo- containing austenitic stainless steel electrode with approx. 8% ferrite. Stable arc, easy to watch weld pool, good slag removal, regular weld beads. Good behaviour in positional welding and on bad prepared joints. Excellent mechanical properties. For welding and cladding on austenitic Cr-Ni-Mo stainless steels and clad plates. Applied for service temperatures from -196°C up to +400°C in the chemical and petrochemical industries, in refineries and for ship building to weld pipes, tanks, heat exchangers...

**Base materials**

**Stainless steels for general use:**

| UNS | Alloy | EN 10088 | Mat. N° | UGINE |
|---|---|---|---|---|
| S31600 | 316 | X5CrNiMo17 12 2 | 1.4401 | UGINOX 17-10 M |
| S31603 | 316L | X2CrNiMo17 12 2 | 1.4404 | UGINOX 18-11 ML |
| S31651 | 316LN | X2CrNiMoN17 12 2 | 1.4406 | |
| J92900 | | G-X5CrNiMo19 11 2 | 1.4408 | |
| S31635 | 316Ti | X6CrNiMoTi1712 2 | 1.4571 | UGINOX 17-11 MT |
| S31635 | 316Ti | X10CrNiMoTi18 12 | 1.4573 | |
| S31640 | 316Cb | X6NiCrMoNb17 12 2 | 1.4580 | |
| | | G-X5CrNiMoNb19 11 2 | 1.4581 | |

## Typical Weld Metal Composition ( % )

| C | Si | Mn | Cr | Ni | Mo | Fe |
|---|---|---|---|---|---|---|
| <0.04 | 0.4 | 1.6 | 18.0 | 12.0 | 2.7 | Rem. |

## All Weld Metal Mechanical Properties

| $R_{p0.2}$ ( MPa ) | $R_m$ ( MPa ) | $A_5$ ( % ) | KV ( J ) |
|---|---|---|---|
| >380 | >560 | >35 | +20°C >80<br>-120°C >50 |

## Welding Current & Instructions

| Electrode | ØxL ( mm ) | 2,5x300 | 3,2x350 | 4,0x350 |
|---|---|---|---|---|
| Current | ( A ) | 70 | 90 | 120 |

Redrying at 250°C during 1 hour, if necessary. Interpass temperature : < 150°C.

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