Selectarc WELDING

# FCW 317L

## Flux Cored Wire

## Classification

AWS A5-22 : E317L T0 - 1/4
EN ISO 17633A : T19 13 4 N L R M3 / C3

Material N° : 1.4330

## Characteristics

Flux cored wire for welding - austenitic stainless steel with about 3.5% Mo. Used for welding and cladding on austenitic Cr-Ni-Mo stainless and clad plates. Compared to 316L types the higher Mo content provides better general corrosion resistance, especially to crevice and pitting corrosion in chloride containing solutions.

## Applications

Chemical and Petrochemical industries, Refineries,Food industry, Ship building, Pipes, Tanks...

**Base Materials**

| UNS | Alloy | EN | Material N° | UGINE |
|---|---|---|---|---|
| S 31603 | 316L | X2CrNiMo17-12-2 | 1.4404 | UGINOX 18-11 ML |
| S 31653 | 316LN | X2CrNiMoN17-13-3 | 1.4429 | UGINOX 17-10 M |
| S 31700 | 317 | X5CrNiMo17-13-3 | 1.4449 | |
| S 31703 | 316LMo | X2CrNiMo 18-14-3 | 1.4435 | UGINOX 18 - 13 MS |
| S 31703 | 317L | X2CrNiMo 18-15-4 | 1.4438 | |

## Typical Weld Metal Composition (%)

| C | Si | Mn | Cr | Ni | Mo | Cu | P | S | Fe |
|---|---|---|---|---|---|---|---|---|---|
| 0.030 | 0.80 | 1.40 | 19.50 | 13.00 | 3.50 | 0.10 | 0.020 | 0.010 | base |

## All Weld Metal Mechanical Properties (Typical)

| Conditions | UTS Rm (MPa ) | YS Re (MPa ) | % Elg $A_5$ | Impact (KV) Temp.°C | J |
|---|---|---|---|---|---|
| AW | 580 | 450 | 31 | - 60 | 32 |

## Welding Current & Instructions

| Welding Mode | Ø Wire ( mm ) | Welding Mode | | | Shieding Gas |
|---|---|---|---|---|---|
| | | Current (A) | Voltage (V) | Stick-out (mm) | ISO 14175 |
| FCAW = + | 1.2 | 120 - 240 | 23 - 30 | 15 - 20 | M21 (Ar+10-20 %$Co_2$) or $CO_2$ 18 - 20 l/min |

Welding Positions : 1G/PA ; 2G/PC ; 1F ; 2F/PB

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