# ESAB 118

ESAB 118 is a Cr-Ni-Mo alloyed low hydrogen electrode, for welding high strength low alloy steels including quenched and tempered steels. The electrode gives a tough weld metal without the risk of temper brittleness. The all position electrode has excellent arc and current carrying characteristics, with an easily removable slag and excellent bead finish contributing to its immense welder appeal. Used for components of penstock, earth moving equipment and other heavy steel fabrications made of high tensile strength steels.

| Specifications | |
|---|---|
| **Classifications** | SFA/AWS A5.5 : E11018M |

| | |
|---|---|
| **Welding Current** | AC, DC+ |
| **Diffusible Hydrogen** | < 5 ml/100g |
| **Alloy Type** | Cr-Ni-Mo alloyed |
| **Coating Type** | Basic |

| Typical Tensile Properties | | | |
|---|---|---|---|
| **Condition** | **Yield Strength** | **Tensile Strength** | **Elongation** |
| **AWS** | | | |
| As Welded | 690 MPa | 780 MPa | 25 % |

| Typical Charpy V-Notch Properties | | |
|---|---|---|
| **Condition** | **Testing Temperature** | **Impact Value** |
| **AWS** | | |
| As Welded | -50 °C | 50 J |

| Typical Weld Metal Analysis % | | | | | |
|---|---|---|---|---|---|
| **C** | **Mn** | **Si** | **Ni** | **Cr** | **Mo** |
| 0.05 | 1.40 | 0.40 | 2.20 | 0.15 | 0.40 |

| Deposition Data | |
|---|---|
| **Diameter** | **Current** |
| 2.5 x 350.0 mm | 75-110 A |
| 3.15 x 450.0 mm | 90-140 A |
| 4.0 x 450.0 mm | 140-190 A |
| 5.0 x 450.0 mm | 160-240 A |