# OK Flux 10.16

High basic, all mineral, agglomerated flux designed for welding nickel and nickel based alloys. The flux is particularly suitable for strip cladding with Ni-based strip. The silicon transfer from the flux to the weld metal is strongly reduced by the well balanced flux composition and thus minimizing the risk for hot cracking in welding Ni-based alloys.

| Specifications | |
|---|---|
| **Classifications** | EN ISO 14174 : S A FB 2 55 43 DC |
| **Approvals** | NAKS/HAKC : RD 03-613-03 |

Approvals are based on factory location. Please contact ESAB for more information.

| | |
|---|---|
| **Welding Current** | 900 A (60 x 0.5 mm strip) |
| **Slag Type** | Fluoride basic CaF2-Al2O3-(TiO2)-(MnO) |
| **Alloy Transfer** | Moderately manganese and silicon alloying |
| **Density** | nom: 1.2 kg/dm3 |
| **Basicity Index** | nom: 2.4 |

| Classifications | | |
|---|---|---|
| **Wire** | **SFA/AWS - EN ISO** | **AWS - As Welded** |
| OK Autrod NiCrMo-3 | A5.14:ERNiCrMo-3/ 18274:S Ni 6625 (NiCr22Mo9Nb) | A5.39: F100A32-ERNiCrMo-3/NiCrMo-3 |
| OK Band NiCrMo3 | A5.14:EQNiCrMo-3/ 18274:B Ni 6625 (NiCr22Mo9Nb) | - |

| Approvals |
|---|
| **Wire** |
| *Selected production units only. Please contact ESAB for more information. Visit esab.com to download specific flux/wire combination fact sheets for more details. |

| Typical Weld Metal Analysis % | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **C** | **Mn** | **Si** | **S** | **P** | **Ni** | **Cr** | **Mo** | **Cu** | **N** |
| **OK Autrod NiCrMo-3 DC+, 350A, 28V, 35cm/min** | | | | | | | | | |
| 0.01 | 0.6 | 0.3 | - | - | Bal. | 20.7 | 8.5 | - | - |
| **OK Autrod NiCrMo-3** | | | | | | | | | |
| - | - | - | 0.010 | 0.01 | - | - | - | 0.02 | - |
| **OK Band NiCrMo3** | | | | | | | | | |
| - | - | - | 0.01 | 0.01 | - | - | - | - | 0.025 |
| **OK Band NiCrMo3 DC+, 750A, 27V, 13cm/min** | | | | | | | | | |
| 0.02 | 1.0 | 0.2 | - | - | Bal | 19.0 | 7.4 | - | - |

| Typical Weld Metal Analysis % | |
|---|---|
| **Fe** | **Nb+Ta** |
| **OK Autrod NiCrMo-3 DC+, 350A, 28V, 35cm/min** | |
| 1.0 | 3.0 |
| **OK Band NiCrMo3** | |
| - | 2.8 |
| **OK Band NiCrMo3 DC+, 750A, 27V, 13cm/min** | |
| 12.8 | 2.6 |

| Typical Wire Composition % | | | | | | | |
|---|---|---|---|---|---|---|---|
| **C** | **Mn** | **Si** | **Ni** | **Cr** | **Mo** | **Fe** | **Nb+Ta** |
| **OK Autrod NiCrMo-3** | | | | | | | |
| 0.02 | 0.04 | 0.06 | Bal | 22.7 | 8.6 | 0.3 | 3.5 |

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| Typical Wire Composition % | | | | | | | |
|---|---|---|---|---|---|---|---|
| **C** | **Mn** | **Si** | **Ni** | **Cr** | **Mo** | **Fe** | **Nb+Ta** |
| **OK Band NiCrMo3** | | | | | | | |
| <0.1 | 0.3 | 0.1 | 58.0 | 22.0 | 9.0 | 2.0 | 4.0 |

| Typical Mechanical Properties | | | | | |
|---|---|---|---|---|---|
| **Wire** | **Condition** | **Yield Strength** | **Tensile Strength** | **Elongation** | **Charpy V-Notch** |
| OK Autrod NiCrMo-3 | As Welded HI ~1.0-1.7 kJ/mm DC+ | 450 MPa | 720 MPa | 50 % | 110 J @ -140 °C<br>100 J @ -196 °C |