

# OK 61.81



Nb-stabilized MMA-electrode for welding Nb- or Ti-stabilized stainless steel of the 19Cr10Ni-type. OK 61.81 has a better hot cracking resistance compared with OK 61.80.

Owing to the quite high ferrite content level, the working temperature should be limited to maximum 400°C.

<b>Classifications</b>	SFA/AWS A5.4 : E347-16 EN ISO 3581-A : E 19 9 Nb R 3 2 Werkstoffnummer : 1.4551
<b>Approvals</b>	CE EN 13479 DNV-GL VL 347 NAKS/HAKC 3.2 mm

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

<b>Welding Current</b>	DC+, AC
<b>Ferrite Content</b>	FN 6-12
<b>Alloy Type</b>	Austenitic CrNi
<b>Coating Type</b>	Rutile

## Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
<b>ISO</b>			
As Welded	550 MPa	700 MPa	-
<b>AWS</b>			
As Welded	560 MPa	700 MPa	31 %

## Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
<b>ISO</b>		
As Welded	-10 °C	71 J
<b>AWS</b>		
As Welded	20 °C	60 J

## Typical Weld Metal Analysis %

C	Mn	Si	Ni	Cr	N	Nb	Ferrite FN
0.06	1.7	0.7	9.7	20.2	0.08	0.72	7

## Deposition Data

Diameter	Current	Voltage	Number of electrodes/ kg weld metal	Fusion time per electrode at 90% I max	Deposition Efficiency %	Deposition Rate @ 90% I max
2.5 x 300.0 mm	50-80 A	29 V	82	36 sec	59 %	1.2 kg/h
3.2 x 350.0 mm	75-115 A	23 V	44	66 sec	60 %	1.2 kg/h
4.0 x 350.0 mm	80-160 A	24 V	32	66 sec	60 %	1.7 kg/h
5.0 x 350.0 mm	140-210 A	25 V	20	78 sec	60 %	2.3 kg/h