

OK 61.80

Nb-stabilized MMA-electrode for welding Nb- or Ti-stabilized stainless steel of the 19Cr10Ni-type. The hotcracking resistance is quite good. The ferrite in the weld metal may transform to brittle phases at elevated temperatures. To avoid excessive embrittlement of the welds the maximum working temperature is limited to 400° C.

Specifications	
Classifications	EN ISO 3581-A : E 19 9 Nb R 1 2 SFA/AWS A5.4 : E347-17
Approvals	CE : EN 13479 DNV-GL : VL 347 UKCA : EN 13479 VdTÜV : 00638

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

Welding Current	DC+, AC
Ferrite Content	FN 6-12
Alloy Type	Austenitic CrNi
Coating Type	Acid Rutile

Typical Tensile Properties			
Condition	Yield Strength	Tensile Strength	Elongation
ISO			
As Welded	480 MPa	620 MPa	40 %

Typical Charpy V-Notch Properties		
Condition	Testing Temperature	Impact Value
ISO		
As Welded	20 °C	60 J
As Welded	0 °C	58 J
As Welded	-60 °C	40 J

Typical Weld Metal Analysis %							
C	Mn	Si	Ni	Cr	N	Nb	FN WRC-92
0.03	0.6	0.7	10.0	19.5	0.09	0.29	7

Deposition Data					
Diameter	Current	Voltage	Efficiency (%)	Fusion time per electrode at 90% I max	Deposition Rate
2.5 x 300.0 mm	50-90 A	26 V	56 %	38 sec	1.0 kg/h
3.2 x 350.0 mm	70-130 A	28 V	56 %	53 sec	1.4 kg/h
4.0 x 350.0 mm	90-180 A	30 V	56 %	55 sec	2.0 kg/h
5.0 x 350.0 mm	140-250 A	31 V	56 %	60 sec	2.9 kg/h