

OK 61.85

Nb-stabilized basic coated electrode designed for welding of Nb- or Ti-stabilized stainless steels of the 19Cr10Ni-type. OK 61.85 provides the best hot cracking resistance of the products belonging to the 347 range. Due to the relatively high ferrite content level, the maximum working temperature should be limited to 400°C.

Specifications	
Classifications	EN ISO 3581-A : E 19 9 Nb B 2 2 SFA/AWS A5.4 : E347-15 Werkstoffnummer : 1.4551
Approvals	NAKS/HAKC : 2.5-5.0 mm Seproz : UNA 272580 VdTÜV : 05663

Welding Current	DC+
Ferrite Content	FN 6-12
Alloy Type	Austenitic CrNi
Coating Type	Basic

Typical Tensile Properties			
Condition	Yield Strength	Tensile Strength	Elongation
ISO			
As Welded	500 MPa	620 MPa	40 %
Stress Relieved 16 hour(s) 600 °C	500 MPa	640 MPa	40 %

Typical Charpy V-Notch Properties		
Condition	Testing Temperature	Impact Value
ISO		
Stress Relieved 16 hour(s) 600 °C	-60 °C	40 J
As Welded	-60 °C	70 J
As Welded	20 °C	100 J
Stress Relieved 16 hour(s) 600 °C	20 °C	80 J

Typical Weld Metal Analysis %							
C	Mn	Si	Ni	Cr	N	Nb	Ferrite FN
0.04	1.7	0.4	10.2	19.5	0.07	0.61	6

Deposition Data						
Diameter	Current	Voltage	Efficiency (%)	Number of electrodes/kg weld metal	Fusion time per electrode at 90% I max	Deposition Rate
2.5 x 300.0 mm	55-80 A	25 V	60 %	98	42 sec	0.9 kg/h
3.2 x 350.0 mm	75-110 A	23 V	62 %	49	64 sec	1.2 kg/h
4.0 x 350.0 mm	80-150 A	24 V	61 %	33	70 sec	1.6 kg/h
5.0 x 350.0 mm	150-200 A	23 V	61 %	21	76 sec	2.3 kg/h