

## Exaton 19.9.NbR

Exaton 19.9.NbR is a niobium-stabilized chromium-nickel covered electrode with rutile coating for welding of steels of ASTM 321 and 347 types as well as overalloys. It is used in structural applications at max 400°C (752°F). When a weld metal similar to the parent metal is not required, Exaton 19.9.NbR can be used for welding ferritic and martensitic steels. The electrode has excellent arc stability, low spatter and fast burn off rate with minimum stub loss. It is also characterised by improved moisture resistance, good slagdetachability, high resistance to porosity and easy post weld finishing. Exaton 19.9.NbR gives smooth uniform beads and works in any standard weld position.

Specifications	
Classifications	EN ISO 3581-A : E 19 9 Nb R 1 2 SFA/AWS A5.4 : E347-17 Werkstoffnummer : 1.4551
Approvals	CE

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

Welding Current	DC+, AC
Ferrite Content	FN 6-9
Alloy Type	Austenitic CrNi
Coating Type	Acid Rutile

Tensile_Properties						
Testing Condition	Yield Strength	Tensile Strength	Elongation			
ISO						
As Welded	490 MPa	620 MPa	35 %			

Charpy Testing					
Testing Condition	Testing Temp	Impact Value			
ISO					
As Welded	-20 °C	50 J			
As Welded	20 °C	55 J			
As Welded	-60 °C	35 J			

Typical Weld Metal Analysis %									
С	Mn	Si	S	Р	Ni	Cr	Мо	Cu	Nb
0.03	0.8	0.7	0.010	0.022	10	20	0.07	0.07	0.29

Typical Weld Metal Analysis %	
FN WRC-92	Nb+Ta
7	0.29

Deposition Data					
Diameter	Amps	Volts	Efficiency (Per)	Fusion time per electrode at 90Per I max	Deposition rate at 90Per
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