

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

Typical Tensile Properties

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

Typical Charpy V-Notch Properties

Condition	Testing Temperature	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 %

C	Mn	Si	S	P	Ni	Cr	Mo	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	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