OK 68.81



High alloy stainless electrode of unusual versatility, giving a ferritic-austenitic duplex weld metal with an approximate ferrite content of FN 40. The weld metal is resistant to stress corrosion attack and highly insensitive to dilution by melted parent metal. Applications: joining of HWT steels, dissimilar steels, surfacing rails, rolls, alforging dies, hot work tools, dies for plastics etc. Good scaling resistance up to 1150 °C.

Specifications	
Classifications	EN 14700 : E Fe11 EN ISO 3581-A : E 29 9 R 3 2 SFA/AWS A5.4 : E312-17 Werkstoffnummer : 1.4337
Approvals	CE : EN 13479 UKCA : EN 13479

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

Welding Current	DC+, AC
Ferrite Content	FN 30 - 50
Alloy Type	Stainless duplex
Coating Type	Acid Rutile
Min AC OCV	60

Typical Tensile Properties			
Condition	**Yield Strength**	**Tensile Strength**	**Elongation**
AWS			
As Welded	610 MPa (88 ksi)	790 MPa (115 ksi)	25 %

Typical Charpy V-Notch Properties		
Condition	**Testing Temperature**	**Impact Value**
AWS		
As Welded	20 °C (68 °F)	30 J (22 ft-lb)

Typical Weld Metal Analysis %							
C	**Mn**	**Si**	**Ni**	**Cr**	**Mo**	**N**	**FN WRC-92**
0.13	0.9	0.7	10.2	28.9	0.04	0.09	40

Deposition Data					
Diameter	**Current**	**Voltage**	**Deposition Efficiency (%)**	**Burn-off Time /Electrode**	**Deposition Rate @ 90% I max**
2.0 x 300 mm (5/64 x 11.8 in.)	40-60 A	22 V	64 %	41 sec	0.7 kg/h (1.5 lbs/h)
2.5 x 300 mm (0.098 x 11.8 in.)	50-85 A	24 V	64 %	48 sec	0.9 kg/h (2.0 lbs/h)
3.2 x 350 mm (1/8 x 13.8 in.)	60-125 A	25 V	62 %	65 sec	1.3 kg/h (2.9 lbs/h)
4.0 x 350 mm (5/32 x 13.8 in.)	80-175 A	26 V	62 %	66 sec	2.0 kg/h (4.4 lbs/h)
5.0 x 350 mm (0.197 x 13.8 in.)	150-240 A	28 V	65 %	68 sec	3.2 kg/h (7.1 lbs/h)