Nicrex E312

High alloy stainless electrode of unusual versatility, giving a ferritic-austenic duplex weld metal with an approximate ferrite content of FN 60. Resistant to stress corrosion attack and highly insensitive to dilution by melted parent metal. Good scaling resistance up to 1150 °C. Application: joining of HWT steels, surfacing rails, rolls, forging dies, hot work tools, dies for plastics, etc.

Specifications	
Classifications	EN ISO 3581-A : E 29 9 R 1 2 SFA/AWS A5.4 : (E312-17)

Welding Current	AC, DC+
Ferrite Content	FN 50 - 80
Alloy Type	Stainless duplex
Coating Type	Acid Rutile

Typical Tensile Properties			
Condition	**Yield Strength**	**Tensile Strength**	**Elongation**
AWS			
As Welded	500 MPa	750 MPa	25 %

Typical Charpy V-Notch Properties		
Condition	**Testing Temperature**	**Impact Value**
AWS		
As Welded	20 °C	40 J

Deposition Data					
Diameter	**Current**	**Voltage**	**Efficiency (%)**	**Fusion time per electrode at 90% I max**	**Deposition Rate**
2.5 x 300.0 mm	50-85 A	25 V	52 %	45 sec	1.0 kg/h
3.2 x 350.0 mm	55-120 A	26 V	52 %	57 sec	1.3 kg/h