

ES 312-17

Type Acid-rutile

SMAW

E312-17

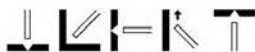
ESWECO
The Art of Welding

Description

ES 312-17 is a high-alloyed electrode which deposits a ferritic-austenitic duplex weld metal with approx. 40% ferrite. It is resistant to stress corrosion and is highly insensitive to dilution. Good scaling resistance up to 1150°C. ES 312-17 is used for joining dissimilar steels, steels with reduced weldability and buffer layers prior to hardfacing. Applications: rolls, forging dies, hot work tools, dies for plastics and so on.

Current

DC+, AC OCV 60 V



Classifications

EN 1600	E 29 9 R 3 2
SFA/AWS A5.4	E312-17
Werkstoff Nr.	1.4337

Typical all weld metal composition, %

C	Si	Mn	Cr	Ni	Mo	Cu
0.12	0.7	0.8	29.0	9.8	<0.5	<0.3

Typical mech. Properties all weld metal

Yield stress, MPa	610
Tensile strength, MPa	790
Elongation A5, %	22

Charpy V

Test temps, °C	Impact values, J
+20	30

Ferrite content FN 50-80

Welding parameters

Diameter, mm	Length, mm	Welding current, A	Arc voltage, V
2.5	300	50-85	24
3.2	350	80-125	25
4.0	350	110-175	26
5.0	350	150-240	28