ES MIG 312

GMAW

ER312

ESWECO
The Art of Welding

Description

ES MIG 312 a continuous, solid, corrosion-resistant, chromium-nickel wire for welding stainless steels of the 29% Cr, 9% Ni types.

ES MIG 312 has good oxidation resistance at high temperatures due to its high content of Cr.

The alloy is widely used for joining dissimilar steels, especially if one of the components is fully austenitic, and steels that are difficult to weld, i.e. machine components, tools and austenitic-manganese steels.

Current

DC+

Classifications

SFA/AWS A5.9	ER312
EN 12072	G 29 9

Typical all weld metal composition, %

C	Si	Mn	Cr	Ni	Mo	Cu
<0.15	0.5	1.8	30.5	9.5	<0.3	<0.3

Typical mech. Properties all weld metal

Yield stress, MPa	610
Tensile strength, MPa	770
Elongation, %	20

Charpy V

Test temps, °C	Impact values, J
+20	50

Welding parameters

Diameter,mm	Wire feed, m/min	Welding current, A	Arc voltage,V
0.8	3.4-11.0	50-140	16-22
1.0	2.9-8.4	80-190	16-24
1.2	4.9-8.5	180-280	20-28
1.6	3.2-5.5	230-350	24-28