

# ES MIG 310

GMAW  
ER310

**ESWECO**  
*The Art of Welding*

## Description

ES MIG 310 a continuous, solid, corrosion-resistant, chromium-nickel wire for welding heat-resistant austenitic steels of the 25% Cr, 20% Ni types.

ES MIG 310 has good general oxidation resistance, especially at high temperatures, due to its high Cr content. The alloy is fully austenitic and is therefore sensitive to hot cracking. Common applications include industrial furnaces and boiler parts, as well as heat exchangers.

## Current

DC+

## Classifications

SFA/AWS A5.9	ER310
EN 12072	G 25 20

## Typical all weld metal composition, %

C	Si	Mn	Cr	Ni	Mo	Cu
0.1	0.5	1.8	26.0	21.0	<0.3	<0.3

## Typical mech. Properties all weld metal

Yield stress, MPa	390
Tensile strength, MPa	590
Elongation, %	43

## Charpy V

Test temps, °C	Impact values, J
+20	175
-196	60

## 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