Description

A continuous, solid ,corrosion-resistant, chromium-nickel wire for welding heat-resistant austenitic steels of the 25% Cr, 20% Ni types. OK Autrod 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.

Welding current

DC(+)

Classifications

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

Typical chemical composition, aw (%)

С	Si	Mn	Cr	Ni	Мо	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	Deposition rate kg weld metal/hour
0.8	3.4-11.0	50-140	16-22	0.8-2.6
1.0	2.9-8.4	80-190	16-24	1.1-3.2
1.2	4.9-8.5	180-280	20-28	2.7-4.6
1.6	3.2-5.5	230-350	24-28	3.1-5.2