

Description

A continuous, solid, corrosion-resistant, chromium-nickel-manganese wire for welding austenitic stainless alloys of the 18% Cr, 8% Ni, 7% Mn types. OK Autrod 16.95 has general corrosion resistance similar to that of the corresponding parent metal. The higher silicon content improves the welding properties such as wetting. When used for joining dissimilar materials, the corrosion resistance is of secondary importance. The alloy is used in a wide range of applications across the industry, such as the joining of austenitic, manganese, work-hardenable steels, as well as armour plate and heat-resistant steels.

Welding current

DC(+)

Classifications

EN 12072 G 18 8 Mn
Werkstoffnummer ~1.4370

Typical chemical composition, aw (%)

C	Si	Mn	Cr	Ni
<0.2	<1.2	6.5	18.5	8.5

Typical mech. properties all weld metal

Yield stress, MPa 450
Tensile strength, MPa 640
Elongation, % 41

Charpy V

Test temps, °C Impact values, J
+20 130

Approvals

DB 43.039.10
UDT DIN 8556
Ü 43.039/1
VdTÜV

Welding parameters

Diameter, mm	Wire feed, m/min	Welding current, A	Arc voltage, V	Deposition rate kg weld metal/hour
0.8	4.0-17	55-160	15-24	1.0-4.1
0.9	3.5-18	65-220	15-28	1.1-5.4
1.0	4.0-16	80-240	15-28	1.5-6.0
1.2	3.0-14	100-300	15-29	1.6-7.5
1.6	5.5-9	230-375	23-31	5.2-8.6