Solid Wire Electrode for MIG/MAG Welding

BA-MIG 310

Classification: EN ISO 14343-A: **G 25 20**
SFA-5.9: **ER310**

Main Application:
BA-MIG 310 is a solid wire electrode for GMAW, suitable for joining heat resistant fully austenitic steels type 25Cr/20Ni. Service temperature up to 1100°C in air and up to 1050°C in oxidizing sulphurous atmospheres, reducing sulphurous atmospheres up to 650°C. Service temperature between +650 and +900 °C should be avoided due to the risk of embrittlement.

Typical analysis and chemical composition acc. to EN ISO 14343-A and AWS A5.9: (Weight Percent)

Wire electrode	C	Si	Mn	Mo	Ni	Cr	P	S	Cu total
Typical analysis BA-MIG 310	0.11	0.3	1.7	0.1	21.0	26.0	0.020	0.013	0.1
G 25 20 acc. to ISO 14343-A	0.08-0.15	2.0	1.0-2.5	0.3	18.0-22.0	24.0-27.0	0.03	0.02	0.3
ER310 acc. to AWS A5.9	0.08-0.15	0.30-0.65	1.0-2.5	0.75	20.0-22.5	25.0-28.0	0.03	0.03	0.75

All - Weld Metal Mechanical Properties / Welding Data:

Heat Treatment	As Welded
Yield Strength Re, N/mm² (ksi)	380 (55)
Tensile Strength Rm, N/mm² (ksi)	580 (84)
Elongation A5 [%]	>35
Impact Energy ISO-V, J (ft lbs)	+20°C: 120 (88)
Current/polarity	DC +
Shielding Gas	ISO 14175: M12/M13

Base Materials:
Austenitic steels:1.4841/ X 15 CrNiSi 25 20, 1.4845/ X 12 CrNi 25 21, 1.4828/ X 15 CrNiSi 20 12, 1.4840 /G-X 15 CrNi 25 20, 1.4846/ G-X 40 CrNi 25 21, 1.4826/ G-X 40 CrNiSi 22 9
Ferritic-perlitic steels:1.4713/ X 10 CrAl 7, 1.4724/ X 10 CrAl 13, 1.4742/ X 10 CrAl 18, 1.4762/ X 10 CrAl 25,1.4710/ G-X 30 CrSi 6, 1.4740/ G-X 40 CrSi 17, AISI 305, 310, 314; ASTM A297 HF; A297 HJ

Package Forms:
Spools BS300/15 kg, D200/5 kg, and drums as standard package forms for GMAW wire electrodes.

Diameter:
0,8 – 1,6 mm. Sizes and tolerances acc. to ISO 544 and AWS A5.9.

Wire Electrode Surface:
Smooth finish free from surface defects and foreign matter.