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IABCO SUPER-SG3 MIG

Un-Coppered MIG/GMAW wire for mild steel

Product name	IABCO SUPER-SG3
Classification EN ISO	14341-A: G 4Si1; G 46 4 M21/C1 4Si1
Classification AWS	A5.18: ER70S-6
Applications	MIG/GMAW wire for welding standard CMn structural steels. Typical applications would include shipbuilding, pressure vessels and construction. Un-coppered wire that benefits from an advance in the manufacturing
	and production process to produce an un-coppered wire with very good feedability and arc stability; in conjunction with improved bead appearance and reduction of spatter and silica islands. The advances in production have also reduced the fume emission rate during welding.
Base materials	For steels up to a yield strength of 460MPa (65ksi).
	A36, A106 grades A/B/C, A139, A210 grades A1/C, A216 grades WCA/WCB/WCC, A234 grade WPB, A334 grade 1, API 5L grades X42-X60.
	S185-E360, S235JR-S355JR, S235J0-S450J0, S235J2-S355J2, S275N-S460N, S275M-S460M, S460Q, S460QL, P235GH-P355GH, P275N-P460N, P275NL1-P460NL1, P355M-P460M, P355ML1-P460ML1, P355Q-P460Q, P355QL1-P460QL1.
Typical analysis of wire, weight %	C: 0.07 Si: 0.95 Mn: 1.70
Typical heat treatment (1)	Preheat and PWHT are generally not necessary but actual requirements will depend on the grade and thickness of material being welded and any design codes that apply.
Typical mechanical properties (2)	0.2% proof stress, Rp0.2%: 500MPa. Tensile strength, Rm: 590MPa. Elongation, 4d/5d: 26%. Impact ISO-V, -40°C: 80J.

Notes (1) Application codes and project specifications should always be referred to for specific requirements.

(2) Actual mechanical properties will be dependent on specific welding procedure (including shielding gas, flux, PWHT etc) and should always be confirmed by approval of an appropriate welding procedure.