OK Aristorod 12.50

OK Aristorod 12.50 is a bare Mn-Si-alloyed G3Si1/ER70S-6 solid wire for the GMAW of non-alloyed steels, as used in general construction, automotive components, pressure vessel fabrication and shipbuilding. OK Aristorod 12.50 is treated with ESAB's unique Advanced Surface Characteristics (ASC) technology, taking MAG welding operations to new levels of performance and all-round efficiency, especially in robotic and mechanised welding. Characteristic features include excellent start properties; trouble-free feeding at high wire speeds and lengthy feed distances; a very stable arc at high welding currents; extremely low levels of spatter; low fume emission; reduced contact tip wear and improved protection against corrosion of the wire.

Classifications Weld Metal	EN ISO 14341-A: G 38 3 C1 3Si1 EN ISO 14341-A: G 42 4 M20 3Si1 EN ISO 14341-A: G 42 4 M21 3Si1
Classifications Wire Electrode	EN ISO 14341-A: G 3Si1 SFA/AWS A5.18: ER70S-6 CSA W48: B-G 49A 3 C1 S6 JIS Z 3312: YGW 12 (C1)
Approvals	ABS 3Y SA CWB B-G 49A 3 C1 S6

Approvals are based on factory location. Please contact ESAB for more information.

Alloy Type	Carbon-manganese steel (Mn/Si-alloyed)

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
AWS CO2 (C1)			
As Welded	430 MPa	530 MPa	30 %
EN 80Ar/20CO2 (M21)			
As Welded	470 MPa	560 MPa	26 %
Stress Relieved 15hr 620°C	370 MPa	495 MPa	28 %
EN CO2 (C1)			
As Welded	440 MPa	540 MPa	25 %

Typical Weld Metal Analysis %

Ti+Zr
<0,01

Wire Composition

C	Mn	Si
0.08	1.46	0.85

Deposition Data

Diameter	Current	Voltage	Wire Feed Speed	Deposition Rate
0.8 mm	60-200 A	18-24 V	0.8-2.3 m/min	0.8-2.3 kg/h
0.9 mm	70-250 A	18-26 V	0.9-3.5 m/min	0.9-3.5 kg/h
1.0 mm	80-300 A	18-32 V	1.0-5.5 m/min	1.0-5.5 kg/h
1.14 mm	100-350 A	18-34 V	1.2-7.0 m/min	1.2-7.0 kg/h
1.2 mm	120-380 A	18-35 V	1.3-8.0 m/min	1.3-8.0 kg/h
1.32 mm	130-400 A	19-35 V	1.5-8.5 m/min	1.5-8.5 kg/h
1.4 mm	150-420 A	22-36 V	1.6-8.7 m/min	1.6-8.7 kg/h
1.6 mm	225-550 A	28-38 V	2.1-9.4 m/min	2.1-9.4 kg/h
2.0 mm	300-650 A	32-44 V	4.4-10.2 m/min	4.4-10.2 kg/h

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