OK Autrod 5183

OK Autrod 5183 was developed to provide the highest strengths possible in the as welded condition of alloy AA 5083 and other similar high magnesium alloys. The more common OK Autrod 5356 will typically fail to meet the as-welded tensile requirements of AA 5083. The alloy is typically utilised in marine and structural applications where high strengths, high fracture toughness for impact resistance and exposure to corrosive elements are important. The alloy is not recommended for elevated temperature applications due to its susceptibility to stress corrosion cracking. The alloy is non-heat treatable.

Classifications Wire Electrode:	SFA/AWS A5.10:ER5183, EN ISO 18273:S Al 5183 (AlMg4,5Mn0,7(A)), JIS Z 3232:A5183
Approvals:	CE EN 13479, JIS JIS Z 3232, BV WC, ClassNK KAl5RCG(I-1)(I-4), DB 61.039.03, DNV 5183, GL RAlMg4,5Mn, LR WC1/I-1, VdTÜV 04666, ABS ER 5183, CWB A5.10/A5.10M:2012 ER5183, RINA WC (*)

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

Alloy Type:	AlMgMn

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
As welded	20 °C	90 J

Typical Wire Composition %

Mn	Si	Cr	Al	Cu	Fe	Mg	Ti	Zn
0.65	0.04	0.08	94.200	0.01	0.13	4.9	0.100	0.01

Deposition Data

Diameter	Current	Voltage
0.8 mm	60-170 A	13-24 V
1.0 mm	90-210 A	15-26 V
1.2 mm	140-260 A	20-29 V
1.6 mm	190-350 A	25-30 V
2.4 mm	280-400 A	26-31 V