

OK Tigrod 5183

OK Tigrod 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 Tigrod 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:	EN ISO 18273:S Al 5183 (AlMg _{4,5} Mn _{0,7} (A)), JIS Z 3232:A5183, SFA/AWS A5.10:R5183
Approvals:	CE EN 13479, JIS JIS Z 3232, DB 61.039.04, VdTÜV 04667, CWB A5.10/A5.10M:2012 ER5183, ABS R 5183, NAKS/HAKC 3.2MM

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

Alloy Type:	AlMgMn
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Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
As welded	140 MPa	290 MPa	25 %

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

OK Tigrod 5356

OK Tigrod 5356 is the most widely used welding alloy and can be classified as a general purpose type filler alloy. OK Tigrod 5356 is typically chosen because of its relatively high shear strength. The 5XXX alloy base material, welded with OK Tigrod 5356, with a weld pool chemistry greater than 3 % Mg and service temperatures in excess of 65°C are susceptible to stress corrosion cracking. The alloy is non-heat treatable.

Classifications Wire Electrode:	EN ISO 18273:S Al 5356 (AlMg ₅ Cr(A)), SFA/AWS A5.10:R5356
Approvals:	CE EN 13479, JIS JIS Z 3232, DB 61.039.02, VdTÜV 04665, CWB A5.10/A5.10M:2012 ER5356, ABS R 5356

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

Alloy Type:	AlMg 5
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Typical Wire Composition %

Mn	Si	Cr	Al	Cu	Fe	Mg	Zn
0.13	0.05	0.12	94.560	0.01	0.13	4.9	0.01