

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.

Specifications

Classifications	SFA/AWS A5.10 : R5183 EN ISO 18273 : S Al 5183 (AlMg4,5Mn0,7(A))
Approvals	ABS : R 5183 CE : EN 13479 CWB : R5183 DB : 61.039.04 NAKS/HAKC : 3.2 - 4.0 MM VdTÜV : 04667

Alloy Type	AlMgMn
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Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
As Welded	140 MPa (20 ksi)	290 MPa (42 ksi)	25 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
As Welded	20 °C (68 °F)	90 J (67 ft-lb)

Typical Wire Composition %

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