OK Autrod 5183

GMAW

Alloy 5183 was developed to provide the highest strengths possible in the as-welded condition of alloy AA5083 and other similar high magnesium alloys. The more common filler alloy 5356, will typically fail to meet the as-welded tensile strength specification requirements of alloy AA5083. The alloy is typically used 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. Non-heat treatable.

Welding Current
DC (+)

PACKING/ORDERING INFORMATION			
Part Number	Dia (mm)	Carton Weight (kg)	Pallet Weight (kg)
181608245A	0.8	6.35	438.15
181609243A	0.9	7.26	500.94
181610243A	1.0	7.26	500.94
181612243A	1.2	7.26	500.94
181616243A	1.6	7.26	500.94
181620243A	2.0	7.26	500.94
181624243A	2.4	7.26	500.94

CLASSIFICATIONS	APPROVALS		TYPICAL ALL WELD METAL COMPOSITION (%)		TYPICAL MECH. PROPERTIES ALL WELD METAL
SFA/AWS A5.10-92	ABS	ER 5183	Si	0.2	Yield Stress, Mpa
ER 5183	BV	WC	Fe	0.2	140
EN ISO 18273	CWB	AWS A5.10	Cu	0.05	Tensile Strength, Mpa
SAI 5183 (AlMg4.5Mn0.7 (A))	DB	61.039.03	Mn	0.75	290
	DNV	5183 (WC)	Mg	4.75	Elongation, %
	VdTüV	04666	Cr	0.15	25
	LR	WC/1-1	Zn	0.125	
	ü	61.039	Ti	0.75	
			Other	0.075	
			Al	Bal	

WELDING PARAMETERS				
Diamater (mm)	Wire Feed m/min	Welding Current, A	Arc Voltage	Deposition Rate (kg weld metal/hour arc time)
0.8	8.9-20.0	90-140	21-23	0.6-0.9
0.9	8.9-16.0	100-170	21-23	0.9-1.5
1.2	3.8-10.2	110-220	22-25	1.0-2.1
1.6	5.1-8.1	200-300	23-28	1.5-2.6