

Aluminium Anode Alloys

Material Properties: Material Specification: Defender

AF-G3 AF Al-Zn-In-Si anode alloy Variants: G3, G3-N (DNV) or G3-CW (High grade)

Al-Zn-In Alloy Defender AF-G3

	Element	Al	Zn	Si	In	Cu	Fe	Others
Wt%	Min	Bal	2.8	0.08	0.010	0.000	0.00	
Wt%	Max	Bal	6.5	0.20	0.020	0.006	0.12	<0.02

The original general purpose Al based anode material for all applications

Al-Zn-In Alloy Defender AF-G3 (N)

to restricted Composition in **NORSOK-M503 & DNV RPB401**

	Element	Al	Zn	Si	In	Cu	Fe	Others
Wt%	Min	Bal	2.5	-	0.015	-	-	
Wt%	Max	Bal	5.75	0.10	0.040	0.003	0.09	<0.02

Modified to restricted Composition in Standard NORSOK-M503, DNV RPB401 & ISO 15589-2
all you will ever need.

Al-Zn-In Alloy Defender AF-G3 –CW (High Grade)

to restricted Composition with lower Fe content base alloy

	Element	Al	Zn	Si	In	Cu	Fe	Others
Wt%	Min	Bal	4.75	0.08	0.016	0.000	0.00	
Wt%	Max	Bal	5.75	0.12	0.020	0.003	0.06	<0.02

Modified to a more restricted Composition within the G3 Range with higher Purity base alloy

Typical Performance (all alloys)

Nominal closed circuit anode potential -1050 (mV relative to. Ag/AgCl/seawater),

Short term test Capacity Ampere hours <2500 Amp. Hr/ Kg

Density Nominally 2750kg/m³

* Defender AF-G3 alloy performance Data for long term test by DNV Certificate No S-5615 to DNV RP B401 Appx B

Nominal closed circuit anode potential -1090*. (mV relative to. Ag/AgCl/seawater) & Capacity 2542 Ampere Hrs / kg

Aberdeen Foundries: Sacrificial Anodes & Cathodic Protection

High Purity Aluminium & Zinc Based Certified Castings • ISO 9001:2008 Approved Company with
DNV Alloy Type Approval

Aluminium Rig & Offshore Anodes • Pipeline Bracelets • Zinc Hull Anodes & Engine Anodes • Tank Anodes • Magnesium Anodes
Harbour & Jetty Corrosion Protection Systems • Cathodic Protection Design & Calculations • Fabricated brackets, fixtures,
fittings and cables • CAD & Solidworks Drawing & Modelling • Coded Welding

AFDefender AF- G3, G3-(N) & G3- DW (high Grade)anode compositin DNV Type Approve