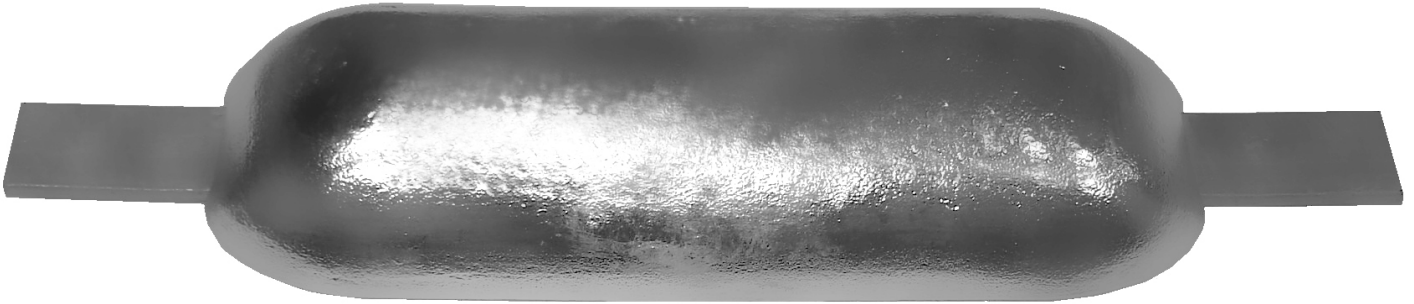


# ALUMINUM ALLOY SACRIFICIAL ANODE



A TYPICAL SHIP HULL ANODE FOR PROTECTION OF YOUR VESSEL

Sacrificial Aluminium Anodes are simple and economical that it could be performance under a variety of environmental conditions, after proper installation that Aluminium anodes will performance efficiently and continuously without any attention for CP systems.

The performance of Aluminum anode is affected by the chemical composition of the alloy.

Aluminum anode chemical composition type:

Al-Zn-In, Al-Zn-In-Cd, Al-Zn-In-Sn, Al-Zn-In-Si, Al-Zn-In-Sn-Mg, Al-Zn-In-Mg-Ti.

## CHEMICAL COMPOSITIONS OF ALUMINUM ANODE:

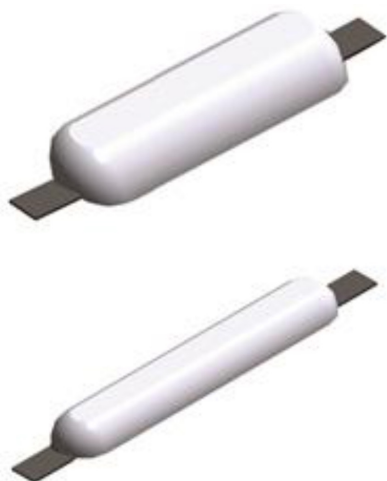
TYPE	ZN%	IN%	CD%	SN%	MG%	TI%	IMPURITIES (MAX)			AI
							SI%	FE%	CU%	
AI-ZN-LN	2.0-6.0	0.01-0.02	-	-	-	-	0.10	0.10	0.006	BALANCE
AI-ZN-IN-CD	2.5-4.5	0.018-0.050	0.005-0.020	-	-	-	0.10	0.15	0.01	BALANCE
AI-ZN-IN-SN	2.2-5.2	0.20-0.045	-	0.018-0.035	-	-	0.10	0.15	0.01	BALANCE
AI-ZN-IN-SI	5.5-7.0	0.025-0.035	-	-	-	-	0.10-0.15	0.15	0.01	BALANCE
AI-ZN-IN-SN-MG	2.5-4.0	0.020-0.050	-	0.025-0.075	0.50-1.00	-	0.10	0.15	0.01	BALANCE
AI-ZN-IN-MG-TI	4.0-7.0	0.020-0.050	-	-	0.50-1.50	0.01-0.08	0.10	0.15	0.01	BALANCE

## ELECTROCHEMICAL PROPERTIES OF ALUMINUM ANODE:

TYPE	OPEN VOLTAGE (-V)	CLOSED VOLTAGE (-V)	ACTUAL CAPACITANCE A.H/KG	EFFICIENCY %	SOLUTION APPARANCE
AA-I	1.05-1.18	1.05-1.12	2400 MIN	85 MIN	SOLUTE UNIFORMLY
AA-II	1.05-1.18	1.05-1.12	2600 MIN	92 MIN	SOLUTE UNIFORMLY
AA-III	1.45-1.50	1.40-1.45	2080 MIN	70 MIN	SOLUTE UNIFORMLY

\* SPECIAL CHEMICAL COMPOSITIONS ARE AVAILABLE UPON REQUEST.

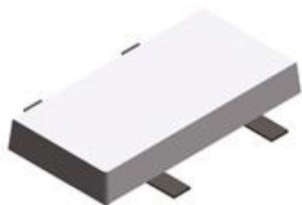
# ALUMINUM ALLOY SACRIFICIAL ANODE



## ALU. SHIP HULL ANODE: WELD-ON TYPE:

ITEM CODE	L x W x H (MM)	INSERT (MM)	NET (KG)	GROSS (KG)
BKW111	395X150X30	6X40	4.5 KG	5.2 KG
BKW114	550X127X50	6X40	8.6 KG	9.8 KG
BKW117	550X130X65	6X50	10.1 KG	11.6 KG
BKW119	550X130X75	6X50	12.6 KG	14.1 KG
BKW118	550X130X96	6X50	16.5 KG	18.0 KG
BKW124	915X130X50	6X50	12.3 KG	16.0 KG
BKW126	915X130X75	6X50	21.0 KG	24.0 KG
BKAH-1	800X140X60	6X40	15.4 KG	17.0 KG
BKAH-2	800X140X50	6X40	13.4 KG	15.0 KG
BKAH-3	800X140X40	6X40	10.5 KG	12.0 KG
BKAH-4	600X120X50	6X40	9.0 KG	10.0 KG
BKAH-6	500X100X40	4X30	4.6 KG	5.5 KG
BKAH-10	180X75X35	4X30	1.0 KG	1.2 KG

THE INSERT CAN BE OPTIONAL WITH FLAT STEEL, REBAR, ROUND STEEL



ITEM CODE	L x W x H (MM)	INSERT (MM)	NET (KG)	GROSS (KG)
BKS-6	300 X 150 X 20	6X40	2.3 KG	3.0 KG
BKS-8	300 X 150 X 25	6X40	2.8 KG	3.5 KG
BKS-9	300 X 150 X 30	6X40	3.7 KG	4.0 KG
BKS-9E	300 X 150 X 40	6X40	4.3 KG	5.0 KG
BKS-9F	300 X 150 X 50	6X40	5.3 KG	6.0 KG
BKS-18	800 X 75 X 50	6X40	6.8 KG	7.5 KG
BKS-19	400 X 100 X 55	4X30	5.8 KG	6.2 KG



## ALU. SHIP HULL ANODE: BOLT-ON TYPE:

ITEM CODE	L x W x H (MM)	PCD (MM)	NET (KG)	GROSS (KG)
BKB3	200 X 100 X 20	110	0.93 KG	1.1 KG
BKB4	200 X 100 X 30	110	1.31 KG	1.45 KG
BKB6	300 X 150 X 20	160	2.45 KG	2.65 KG
BKB9	300 X 150 X 30	160	3.11 KG	3.31 KG
BKB9E	300 X 150 X 40	160	4.4 KG	4.6 KG
BKB9F	300 X 150 X 50	160	5.5 KG	5.8 KG
BKB12	300 X 200 X 40	160	5.8 KG	6.0 KG
BKB12E	300 X 200 X 65	160	9.8 KG	10.0 KG

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# ALUMINUM ALLOY SACRIFICIAL ANODE



## ALU. BALLAST TANK ANODE:

ITEM CODE	L x W x H (MM)	INSERT (MM)	NET (KG)	GROSS (KG)
BKW156	305X(65+50)X75	Ø 13	3.3 KG	3.8 KG
BKW155	610X(65+50)X75	Ø 13	7.1 KG	8.1 KG
BKW154	765X(65+50)X75	Ø 13	8.7 KG	10.0 KG
BKW151	1525X(65+50)X75	Ø 13	17.3 KG	19.3 KG
BKW196	305X(70+90)X95	Ø 13	5.8 KG	6.3 KG
BKW195	600X(70+90)X95	Ø 13	12.2 KG	13.2 KG
BKW194	750X(70+90)X95	Ø 13	15.0 KG	16.3 KG
BKW110	765X(40+50)X50	Ø 13	4.1 KG	5.4 KG
BKW115	1525X(40+50)X50	Ø 13	8.3 KG	10.3 KG
BKAT-2	1500X(65+75)X70	Ø 12	19.8 KG	21.5 KG
BKAT-5	800X(56+74)X65	Ø 12	9.0 KG	10.0 KG
BKAT-6	1524X(48+54)X51	Ø 12	10.0 KG	11.5 KG
BKAT-7	250X(80+100)X85	Ø 10	4.8 KG	5.0 KG
BKAT-8	200X(70+90)X70	Ø 10	2.8 KG	3.0 KG
BKAT-9	1500X(58+64)X57	Ø 12	13.7 KG	15.1 KG
BKAT-10	1200X(50+70)X70	Ø 12	12.5 KG	13.6 KG
BKAT-11	1000X(70+80)X70	Ø 12	17.0 KG	18.0 KG
BKAT-12	1000X(65+75)X65	Ø 12	12.2 KG	13.2 KG
BKAT-13	1140X(69+51)X51	Ø 12	9.6 KG	10.7 KG

THE INSERT CAN BE OPTIONAL WITH FLAT STEEL, REBAR, ROUND STEEL



## ALU. HARBOR DOCKS PIERS & JETTIES ANODE:

ITEM CODE	L x W x H (MM)	INSERT (MM)	NET (KG)	GROSS (KG)
BKMT01	1200X(200+280)X160	Ø 10X80	125 KG	135 KG
BKMT02	1300X(210+240)X210	Ø 10X80	165 KG	181 KG
BKMT03	680X(250+275)X245	Ø 10X80	118 KG	130 KG
BKMT04	1620X(140+160)X150	Ø 10X40	96.7 KG	111.8 KG
BKMT05	1660X(140+160)X157	Ø 10X40	103.8 KG	119 KG
BKMT06	1240X(170+200)X180	Ø 12X70	114 KG	120 KG
BKMT07	850X(180+220)X180	Ø 28	80 KG	85 KG
BKMT08	556X(384+354)X570	Ø 80X12	209 KG	215 KG
BKMT09	800X(200+280)X150	Ø 28	76 KG	80 KG
BKMT10	520X(240+280)X270	Ø 28	104 KG	107 KG
BKMT11	700X(280+235)X255	Ø 28	125 KG	131.3 KG
BKMT12	830X(260+240)X250	Ø 28	145.4 KG	151.4 KG
BKMT13	1280X(220+260)X240	Ø 12X100	197.5 KG	221.3 KG
BKMT14	1000X(190+230)X200	Ø 12X100	118.4 KG	129.6 KG
BKMT15	1100X(180+210)X190	Ø 10X60	109.4 KG	115 KG

THE INSERT CAN BE OPTIONAL WITH FLAT STEEL, REBAR, ROUND STEEL

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# ALUMINUM ALLOY SACRIFICIAL ANODE



## ALU. OFFSHORE PLATFORM ANODE:

ITEM CODE	L x W x H (MM)	INSERT (MM)	NET (KG)	GROSS (KG)
BKOP-01	1500X(210+180)X200	Ø 50X6	145 KG	157 KG
BKOP-02	1600X(160+190)X185	Ø 50X6	125.4 KG	141 KG
BKOP-03	1600X(200+210)X220	Ø 90X6	183.5 KG	198 KG
BKOP-04	1500X(170+200)X180	Ø 50X6	128 KG	138 KG
BKOP-05	1400X(115+135)X130	Ø 50X6	58 KG	67 KG
BKOP-06	1500X(220+240)X230	Ø 114X8.5	205 KG	220 KG
BKOP-07	2300X(220+240)X230	Ø 114X8.5	294 KG	337 KG
BKOP-08	2600X(220+230)X235	Ø 114X8.5	270.63 KG	357.88 KG
BKOP-09	2800X(200+220)X230	Ø 114X8.5	291.4 KG	382.3 KG
BKOP-10	2600X(250+270)X230	Ø 114X8.5	352.82 KG	441.08 KG
BKOP-11	3300X(235+245)X270	Ø 114X8.5	492 KG	606.7 KG
BKOP-12	2800X(210+230)X230	Ø 114X8.5	309 KG	401.4 KG
BKOP-13	1400X(250+260)X250	Ø 114X8.5	204.77 KG	266.09 KG
BKOP-14	2000X(160+180)X170	Ø90X6	124 KG	168.3 KG
BKOP-15	700X(220+250)X240	Ø114X8	84.8 KG	92.8 KG

THE INSERT CAN BE OPTIONAL WITH PIPE, FLAT STEEL OR REBAR

## ALU. OIL STORAGE TANK ANODE:

ITEM CODE	L x W x H (MM)	INSERT (MM)	NET (KG)	GROSS (KG)
BKT56	1300X(110+130)X120	Ø 50X12	49.5 KG	56 KG
BKT56A	1250X(115+135)X130	Ø 28	49 KG	56 KG
BKT46	1000X(115+135)X130	Ø 6X50	42.5 KG	46 KG
BKT35	750X(115+135)X130	Ø 6X50	32 KG	35 KG
BKT23	500X(115+135)X130	Ø 6X50	21.2 KG	23 KG
BKT33	1000X(105+135)X100	Ø 6X50	30 KG	33 KG
BKT16	500X(105+135)X100	Ø 6X50	14.5 KG	16 KG
BKT20	500X(110+130)X120	Ø 6X40	18 KG	20 KG
BKT21	1200X(100+90)X62	Ø 4X40	19 KG	20.5 KG
BKT18	900X(100+80)X80	Ø 6X40	16.6 KG	18.4 KG

THE INSERT CAN BE OPTIONAL WITH PIPE, FLAT STEEL OR REBAR

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# ALUMINUM ALLOY SACRIFICIAL ANODE

## ALU. BRACELET ANODE:



ITEM CODE	DIA	THICKNESS	LENGHT	NET (KG)	GROSS (KG)
BKIMR-B2	1600 MM	72 MM	1600 MM	109 KG	133.5 KG
BKIMR-B21	1600 MM	91 MM	1180 MM	141 KG	165.5 KG
BKIMR-B31	1500 MM	101 MM	1180 MM	109 KG	132 KG
BKIMR-B3	1500 MM	73 MM	1200 MM	77 KG	100 KG
BKIMR-B41	2506 MM	101 MM	306 MM	108.4 KG	126.8 KG
BKIMR-B43	2506 MM	67 MM	306 MM	71 KG	90 KG
BKLW-A3	773 MM	48 MM	397 MM	59,8 KG	67.5 KG
BKLW-A4	773 MM	36 MM	618 MM	69,7 KG	77.85 KG
BKLW-B1	773 MM	55 MM	472 MM	109.3 KG	116.75 KG
BKKL-01	520 MM	65 MM	460 MM	65.1 KG	70.8 KG
BKKL-02	569 MM	70 MM	300 MM	49,6 KG	56 KG
BKKL-03	416 MM	40MM	400 MM	25.5 KG	30.3 KG
BKKL-04	430 MM	25 MM	600 MM	25 KG	30.2 KG
BKKL-05	463 MM	59 MM	550 MM	53 KG	58 KG
BKKL-06	569 MM	60 MM	300 MM	41.4 KG	47.8 KG
BKKL-07	467 MM	40 MM	400 MM	29 KG	33.8 KG
BKKL-08	569 MM	40 MM	400 MM	35.9 KG	40.9 KG
BKKL-09	293 MM	35 MM	500 MM	18.4 KG	22.4 KG
BKKL-10	334 MM	38 MM	400 MM	18.645 KG	22.745 KG
BKKL-11	334 MM	58 MM	400 MM	31.295 KG	35.295 KG
BKKL-12	570 MM	60 MM	700 MM	103.75 KG	108.35 KG
BKKL-13	386 MM	30 MM	400 MM	22 KG	26.8 KG
BKKL-14	332 MM	39 MM	500 MM	23.8 KG	28.45 KG
BKKL-15	465 MM	50 MM	300 MM	28 KG	32.05 KG
BKPY-A1	515 MM	50 MM	489 MM	49 KG	54.4 KG
BKPY-A2	515 MM	65 MM	249 MM	32.75 KG	36.75 KG
BKPY-A3	515 MM	60 MM	459 MM	57.1 KG	62.2 KG
BKPY-A4	515 MM	50 MM	260 MM	44.7 KG	48.7 KG
BKPY-A5	515 MM	40 MM	559 MM	44.85 KG	48.95 KG

We have more than 20 years experience and big advantage technique for manufacture of Bracelet Anodes.

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