

## Magnesium Hull / Tank Anodes

Most magnesium aqueous anodes are cast with AZ63 alloy or equivalent. If required HP Magnesium alloy anodes are also available upon request.

Magnesium Hull Anodes have a high driving voltage and can be rapidly polarized to protect metal structures efficiently.

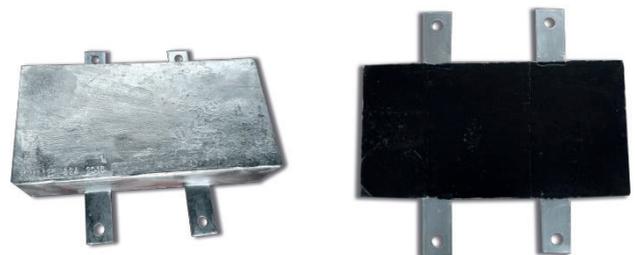


## Applications

- Ship Hulls
- Barges
- Tugs & boats,
- Ballast Tanks
- Bulkheads
- Tank Interiors
- Piers & Pilings

## Chemical Composition

Element	Grade ASTM B843 - AZ63 or equivalent
	Standard Potential (H-1B, 1.5V)
Aluminum	5.3 ~ 6.7%
Zinc	2.5 ~ 3.5%
Manganese	0.15 ~ 0.70%
Silicon	0.30%
Copper	0.05%
Nickel	0.003%
Iron	0.003%
Other Each	/
Others Total	0.30%
Magnesium	Remainder



## Electrochemical Properties

Alloy Standard	Open Circuit Potential (-V)	Close Circuit Potential (-V)	Current Capacity	Current Efficiency
Grade ASTM B843 - AZ63C	1.50 ~ 1.55	1.45 ~ 1.50	550A.h/lbs (1230A.h/kg)	55%

Open / Close Circuit Potential is with respect to a Saturated Calomel Reference Electrode.

## Specification

Anode Model	Anode Weight	Anode Size (L × W × H)	Steel Core Size (Hc × Wc)	Steel Core Type
JA - MG - H22	22lbs (10kg)	20" × 10" × 2" (508 × 254 × 51mm)	1/4" × 1 1/2" (6.35 × 38mm)	3/4"-10 UNC STUD
JA - MG - H24	24lbs (11kg)	18" × 9" × 2" (457 × 229 × 51mm)	1/4" × 2" (6.35 × 51mm)	3/4"-10 UNC STUD
JA - MG - H44	44lbs (20kg)	18" × 9" × 2" (457 × 229 × 51mm)	1/4" × 2" (6.35 × 51mm)	Two Cast-in Galvanized Steel Straps

Anode Model	Anode Weight	Anode Size (L × W)	Steel Core Size	Steel Core Type
JA - MG - 5L	5lbs (2.3kg)	10" × 5" (254 × 127mm)	13 1/4" × 1/4" (337 × 6.35mm)	Cast-in Galvanized Steel Strap with Mounting Holes
JA - MG - 10L	10lbs (4.6kg)	15" × 6" (381 × 153mm)	15" × 1 1/4" (381 × 31.75mm)	

Anode Model	Anode Weight	Anode Size (L × W × H)	Steel Core Size	Steel Core Type
JA - MG - T36	36lbs (16.3kg)	28" × 4" × 4" (711 × 102 × 102mm)	3/8" × 1-1/2" (9.5 × 38mm)	Longitudinal, galvanized steel core with Mounting Holes
JA - MG - T53	53lbs (24kg)	16" × 7" × 7" (407 × 178 × 178mm)	3/8" × 1-1/2" (9.5 × 38mm)	
JA - MG - T57	57lbs (26kg)	16" × 7" × 7" (407 × 178 × 178mm)	3/8" × 1-3/4" (9.5 × 46mm)	
JA - MG - D60	60lbs (27.2kg)	30" × 6" × 6" (762 × 153 × 153mm)	3/8" × 2" (9.5 × 51mm)	

Anode Model	Anode Weight	Anode Size (L × W × H)	Steel Core Type
JA - MG - P50C	50lbs (22.5kg)	Dia. 8" × 16" (203 × 406mm)	Pipe or Eyelet or custom per request
JA - MG - P100C	100lbs (45.5kg)	Dia. 8" × 32" (203 × 813mm)	
JA - MG - P200C	200lbs (90.8kg)	Dia. 12" × 27" (305 × 686mm)	

### Specification Notes

- Plastisol coating which is an excellent insulator can be applied to the sides or bottom of the anode as an additional option to prevent surface contact contamination thereby preventing any current barrier
- Anodes have cast-in mounting straps for a welded or bolted installation
- All weights and dimensions are nominal and subject to variation in material compositions and Jennings Anodes foundry tolerances.
- Other configurations are available upon special request

## Quality Assurance & Testing

Jennings Anodes casting process ensures the ultimate performance and life of the anode. Our internal testing standards and 3rd party tests are performed to guarantee the quality of the anodes.

Testing	Chemical Composition	Electrochemical Properties	Physical Appearance
<b>Standards &amp; Methods</b>	ISO 9001:2015 Quality Management System and Foundry Internal Standards of Magnesium Anodes		
	ASTM B843	ASTM G97	Foundry ITP
<b>Items</b>	Chemical Analysis	Circuit Potential Current Capacity Current Efficiency	Surface, Size, Weight, (oxide slag, shrinkage, crack), Steel Core, Resistance etc.
<b>Equipment &amp; Devices</b>	Optical Emission Spectrometer OBLF QSN 750	Electrochemical Analyzer EPI 200, Reference Electrode	Calibrated Digital Measuring Devices

## Packing

### Shipping Documents

- Invoice
- Packing List
- Testing Reports (Chemical Composition, Electrochemical Properties Test, Certificate of Compliance)
- Others upon request (Certificate of Origin etc.)