

SuperMAG™

HIGH POTENTIAL MAGNESIUM ANODES

Anodes
as good
as gold



that
always
perform



Galvotec Alloys, Inc.

SuperMAG™

Inspires Confidence

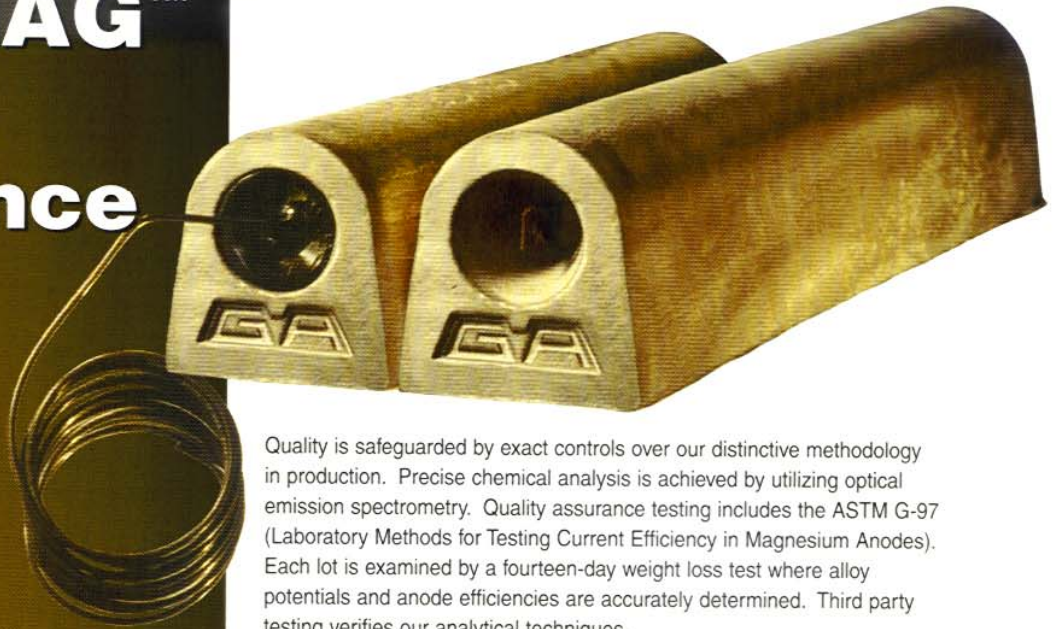
ISO 9002 Certified

The meticulous methods used in the production of SuperMAG™ Magnesium Anodes, will inspire your confidence in any type of anode produced by Galvotec Alloys. Our attention to detail guarantees you an unsurpassed anode from a company you can consistently rely on.

You can be assured, SuperMAG™ Magnesium Anodes made by Galvotec, will perform at peak efficiency and deliver the required potential to effectively protect your metal structure from the perils of corrosion.

SuperMAG™ anodes from Galvotec meet or exceed the ASTM B 843 grade M1C "High Potential".

Our superior standard potential anodes also meet or exceed ASTM B843 grade (AZ63B, AZ63C and AZ63D) H-1A, H-1B and H-1C alloys, respectively.



Quality is safeguarded by exact controls over our distinctive methodology in production. Precise chemical analysis is achieved by utilizing optical emission spectrometry. Quality assurance testing includes the ASTM G-97 (Laboratory Methods for Testing Current Efficiency in Magnesium Anodes). Each lot is examined by a fourteen-day weight loss test where alloy potentials and anode efficiencies are accurately determined. Third party testing verifies our analytical techniques.

Our dedication to reliable standards and controls throughout the testing process will inspire your confidence in each and every lot of Galvotec's SuperMAG™ Magnesium Anodes.



SuperMAG™ anodes can be supplied to you bare, or packaged as per your specifications. Typical backfill is composed of 75% gypsum, 20% bentonite

and 5% sodium sulphate. Anodes are supplied with a lead wire as specified by your requirements. Typical lead wire would consist of 10 ft. of #12 THHN solid. Personalized backfill requirements as well as customized wire dimensions are available upon request.

Galvotec SuperMAG™ High Potential Anodes have a minimum open circuit potential of -1.70 volts referenced to Cu/CuSO₄. Typical Current Capacities are 500 Amp-Hrs/Lb or better.

The H-1 series of Galvotec Magnesium Anodes will typically produce open circuit potential of 1.53-1.55 volts referenced to Cu/CuSO₄.

B 843

TABLE 1 Chemical Requirements^A

| Element | Grade | | | |
|--------------------------------|--------------------|--------------------|--------------------|----------------|
| | AZ63B ^B | AZ63C ^B | AZ63D ^B | M1C |
| | UNS | | | |
| | M11632 | M11634 | M11638 | M15102 |
| Aluminum | 5.3-6.7 | 5.3-6.7 | 5.0-7.0 | 0.01 |
| Zinc | 2.5-3.5 | 2.5-3.5 | 2.0-4.0 | - |
| Manganese | 0.15-0.7 | 0.15-0.7 | 0.15-0.7 | 0.50-1.3 |
| Silicon | 0.10 | 0.30 | 0.30 | 0.05 |
| Copper | 0.02 | 0.05 | 0.10 | 0.02 |
| Nickel | 0.002 | 0.003 | 0.003 | 0.001 |
| Iron | 0.003 | 0.003 | 0.003 | 0.03 |
| Calcium | - | - | - | - |
| Other metallic impurities each | - | - | - | 0.05 |
| Others, total Magnesium | 0.30 remainder | 0.30 remainder | 0.30 remainder | 0.30 remainder |

^ALimits are given as maximum weight percent unless shown as a range.
^BAlloys AZ63B, AZ63C, and AZ63D are commonly known as H1A, H1B, and H1C, respectively.

Chemical Compositions of Magnesium Anodes.



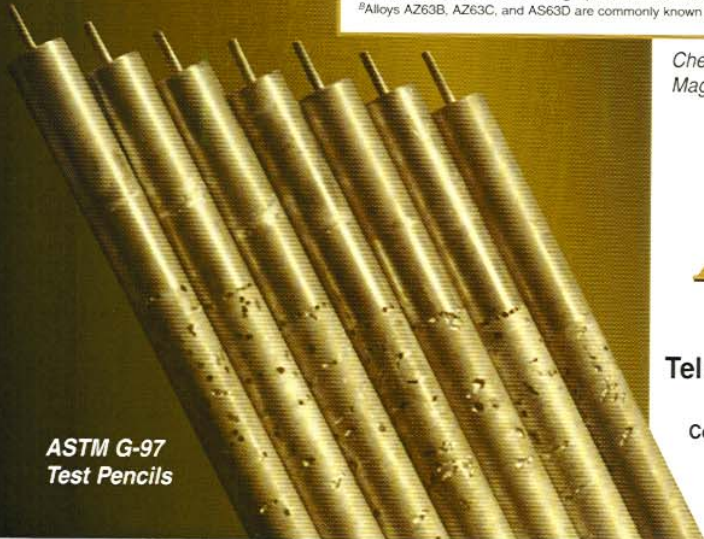
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Galvotec Corrosion Services, LLC
 Offshore/Onshore Design, Services and Materials



ASTM G-97 Test Pencils