

TECHNICAL PUBLICATION FOR: 40-X00 SERIES ACC CAST MAGNESIUM ANODES

ACC 40-x00

American Carbon Company's cast magnesium anodes are cast in accordance with the highest specifications and documentation. Manufactured in a fully ISO9001:2008 certified facility, our process leaves no resource untapped in demanding only the highest quality, most consistent anode. From the discerning raw material selection to the intricate heating process, our anodes are guaranteed to meet the requirements of your project.

STANDARD SIZE ANODES STOCKED IN THE HOUSTON, TX*

| Product Code | Description | Weight/Anode |
|--------------|-------------------------|--------------|
| 40-301 | 3D3 HP Magnesium Anode | 3 |
| 40-302 | 5D3 HP Magnesium Anode | 5 |
| 40-304 | 9D3 HP Magnesium Anode | 9 |
| 40-306 | 17D3 HP Magnesium Anode | 17 |
| 40-307 | 20D2 HP Magnesium Anode | 20 |
| 40-308 | 32D5 HP Magnesium Anode | 32 |
| 40-309 | 48D5 HP Magnesium Anode | 48 |
| 40-311 | 60S4 HP Magnesium Anode | 60 |



^{*}Availability may vary depending on demand. Other sizes may also be available for immediate shipment from Houston, TX. Many more sizes are available on a by-order basis, including all S-shapes, Aqueous style, hull mount, and any specialty magnesium anode you require. Dimensions and full list of sizes available upon request.

CHEMICAL COMPOSITION PER ASTM B843

| Chemical Composition | Low Potential (Grade AZ63B) | High Potential (Grade M1C) |
|------------------------|-----------------------------|----------------------------|
| Magnesium (Mg) | Balance | Balance |
| Aluminum (Al) | 5.30-6.70 | 0.01 max |
| Manganese (Mn) | 0.15 - 0.7 | 0.5 - 1.3 |
| Zinc (Zn) | 2.5-3.5 | 0 |
| Silicon (Si) (Max) | 0.10 | 0.05 |
| Copper (Cu) (Max) | 0.02 | 0.02 |
| Nickel (Ni) (Max) | 0.002 | 0.001 |
| Iron (Fe) (Max) | 0.003 | 0.03 |
| Other Impurities (Max) | 0.3 | 0.3, 0.05 each |

ELECTROCHEMICAL PROPERTIES

| Electrochemical Properties | Low Potential (Grade AZ63B) | High Potential (Grade M1C) |
|--|-----------------------------|----------------------------|
| Open Circuit Voltage (-V respect to Cu/CuSO4) | 1.54 - 1.61 | 1.70 - 1.76 |
| Closed Circuit Voltage (-V respect to Cu/CuSO ₄) | 1.52 - 1.57 | 1.64 - 1.73 |
| Actual Capacity (A•hr/lb) | ≥ 501.7 | ≥ 500 |
| Current Efficiency (%) | ≥ 50 | ≥ 50 |

CONTACT INFO:

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