

# Marine Electric Systems

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January 29, 1998

Innovative Energy Systems, Inc  
9351-J Philadelphia Road  
Baltimore, MD 21237-6060

Attn: Jeff Miller

Re: DeSulfator products

Dear Jeff,

One of the services Marine Electric Systems provides is to design and install deep cycle direct current systems for serious cruising sail and motor vessels. Since we are always trying to improve quality, reliability, and longevity in our equipment choices, we were very interested in your new DeSulfator product line.

After receiving one of your DS-500 battery conditioners we decided to put in to the test with a simple but reliable experiment in our shop. We used a Heart Interface Freedom 10 Inverter/ charger to create a constant load, and charging source, and a Link 2000 battery monitor to track amp hours consumed, for our basic test equipment. We had a 3 year old Rolls 4000 series 4D battery, with a known history of heavy cycling service and inadequate charging, that was on its last legs. We fully charged the battery, then applied a small load using the inverter. We allowed the inverter to run until it reached its' low voltage shutdown trigger of 10.5 volts, and read the amp hours consumed on the Link meter. We then recharged and installed the DeSulfator, allowing it to work for an arbitrary 6 week period, then performed the exact same discharge procedure, and recorded the amp hours. The results were very encouraging, every 6 week cycle showed an increase in amp hour capacity. By the fourth cycle period it was obvious that we had reached the maximum gain, but we had achieved a 36% increase.

While we would like to do some more sophisticated testing, we are confident enough to recommend the DeSulfator on all of our customer's boats. We believe that your product can replace the job of equalizing the batteries, that most boat owners don't understand or don't like todo.

Respectfully submitted,



Robert Campbell, President  
Marine Electrical Systems