



MOTOR & GENERATOR PROTECTION

Meg-alert systems help reduce I/R testing required during new vessel construction at shipyards.

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Meg-alert manufactures a series of automatic Insulation Resistance testers and monitors for motors, generators, and power cables for use on any applications up to 15 KV. Once installed the Meg-alert systems will automatically test the insulation resistance of the equipment whenever the equipment is DE-energized. For example, on a 3 phase AC motor application the motor stator windings, along with the 3 phase power cables from the starter to the motor, as well as the load side of the starter itself and any junction boxes are all continuously tested whenever the motor is offline. The Meg-alert systems perform a "True Dielectric Insulation Resistance test with a safe non-destructive DC test voltage, on the order of the operating voltage(for example 500 VDC), which complies with the ABS requirements for acceptance testing of electrical systems on board new and old vessels.

In the past, this type of testing had to be done by hand with a manual "Megger" type tester. Manual megohm testing is very time consuming, delays the construction process, exposes personnel to dangerous conditions such as Arc Flash or Electrocutation, and is only accurate for the moment the testing is completed. Too often in a shipyard this type of testing is performed at certain intervals during the construction process and then when it comes time to launch the vessel, conditions have changed and insulation breakdown failures occur. With the Meg-alert systems permanently installed, the on board critical equipment circuits can easily be tested all throughout the construction process and right up until the moment they are energized. That way there are no more surprises on start up or during the launch of the vessel. Also, there is no more need for the time consuming process of manual I/R testing unless a problem is detected by the Meg-alert systems and the shipyard technicians need to trouble shoot the cause of the problem.

Meg-alert automatic I/R systems allow shipyards to now be more Proactive instead of Reactive during the construction process, which results in quicker completion times, a safer workplace, and larger construction cost savings. And once the ship is completed and delivered, the shipyard can now ensure their customer a more safe and reliable vessel with the Meg-alert systems on board protecting all the ship's critical equipment.

Meg-alerts newest automatic I/R system the " CableGuard" is also now available to install on board vessels to test the condition of the Shore Power cables before they are connected to the dock and energized. This will eliminate the problems of "Grounded" cables causing catastrophic damage to the ships shore power electrical system and or the dock's shore power breaker and source. One more way how why Meg-alert's Motorguard and Genguard systems should be installed on all your shipboard applications!

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