ALTERNATOR CLEANING

Alternators are a vital element on board any ship or in any power plant. As they contribute greatly to the overall performance, they deserve proper application and maintenance.

Scheduled routine inspections and maintenance will minimize alternator problems. During operation, attention should be paid to vibrations, excessive heat and abnormal noise as these may indicate equipment failure.

Excessive heat is a sign of poor cooling that may be caused by accumulation of dust or oil, or by internal damage, that restricts the flow of air through the alternator. Excess heat accelerates the insulation's aging rate and shortens its life time. A rule of thumb insulation life is reduced to half from its normal for each 10°C (50°F) increase above its design temperature.

Alternator cleaning process

QuantiServ offers a proven in-situ cleaning process that uses only water and a specialized, water-soluble degreaser. The process works as follows:

- Only access panels and, in some cases, cooling fans need to be removed.
- Insulation tests (megger tests) are carried out before and after the cleaning process.
- A special water-based degreaser and demineralized hot water is used for cleaning.
- Once the cleaning has been completed, the alternator will be tightly covered and will be dried by a portable heating and drying system.

It takes around five days to clean one alternator, drying time included. One engineer carries out all the work with an assistant for the first two days.

Benefits of a clean alternator:

- Optimized performance
- Extended life time due to lower thermal loading
- Reduced downtime, reduced costs
- No power de-rating due to high winding temperatures

QuantiServ

GLOBAL PRESENCE

15 locations

info@quantiserv.com
reconditioning@quantiserv.com
mobileteams@quantiserv.com
epoxy-resins@quantiserv.com
in-situ@quantiserv.com