



SAFETY FLASH

Dielectric Testing for Insulated Boom Trucks

Provided below are answers to some recent questions posed to ORCPG regarding the frequency of dielectric testing for insulated boom trucks and some common failure points for the testing.

How often should dielectric testing be performed for insulated boom trucks?

The manufacture's operating manual for your specific boom truck will be the best source of information regarding the frequency of the dielectric testing for that specific vehicle. If lost, the manufacture may end up charging you to obtain a replacement copy. However, often times the maintenance department for the manufacture will be more than willing to answer any questions you may have regarding your specific boom truck.

Terex brand for example, noted that for equipment rated for 46 KV and under that dielectric testing will typically be completed on an annual basis. Keep in mind that any damage, repairs, painting, or other alterations to the system may require dielectric testing be completed again to ensure the system is functioning as it should. Again, the manufacture will be your best source of information.

The American National Standards Institute (ANSI) also outlines requirements for periodic testing of insulated boom trucks in Section A92.2 of their standard. Previous versions of this standard have stated, "Periodic inspection shall be conducted at one to twelve month intervals." Again, this is dependent on use as any damage, repairs, painting, or other alterations to the system may require dielectric testing be completed again to ensure the system is functioning as it should. Please consult the most current ANSI standard for the most accurate requirements.

What are some common problems that cause the truck to fail the test?

- If the gel coat on the boom gets chipped/damaged (i.e. from moving through trees, etc.) it could possibly allow moisture to get into the fiberglass and may fail the dielectric test.
- Specific soaps, waxes, and water should be used to clean the inside and outside of the boom as electricity can travel along any debris accumulating on/in the boom (i.e. dirt, dust, oil, etc.). Certain soaps may also increase the booms ability to carry a current, resulting in a failed test.
- The rotation bolts are another important inspection point to ensure they remain properly torqued, as well as the mounting bolts from the truck to the boom.

Below are a few companies that ORCPG has found that offer dielectric testing for bucket trucks as part of their services. It seems that most manufactures offer this as well. Please be aware that the

companies listed below are offered as a form of assistance, and that ORCPG is NOT endorsing the use of a specific company as little is known about each of them. Please let you Risk Specialist know if you have any further questions.

Utility Crane & Equipment Inc.

-Website: <http://www.utilityce.com/>)

-Work performed in: California, Arizona, New Mexico, Nevada)

Mobile company that can come to your location or you can go to their location nearby for testing.

Altec, Inc.

-Website: <http://www.altec.com/service/>

-Work performed in: 22 locations throughout the U.S.

Terex, Inc.

-Website: <http://www.terex.com/en/>

-Work performed in: 22 locations throughout the U.S.

Locations: <http://www.terex.com/services/en/locations/equipment-services-locations/index.ht>

