Advanced test equipment for high voltage proof and preventive maintenance testing of electrical apparatus www.hvinc.com

## **Application: Aerial Lift Dielectric Testing - AC & DC Voltage**

## **Application Description**

The high voltage dielectric testing of Aerial Lifts, Aerial Platforms, Bucket Trucks, etc. is a very critical testing application that must be performed correctly by trained personnel using the proper equipment and accepted standards and methods, like those described in ANSI, IEEE, IEC, etc. Factory certification testing is normally performed with AC voltage, which best replicates the voltage stress on the truck and worker during live line conditions. For field maintenance testing the booms and liners, both AC and DC voltage can be used. The user must determine the needed test voltage and what the current/power requirements are? Some also test the hydraulic fluid in the booms for its dielectric strength using a Fluids/Oil Dielectric tester. HVI has products for all applications that are generally lighter, smaller, easier to use, ruggedly constructed, and well supported.

## **Selecting the Test Set Model**

The **ALT Series** is designed for AC voltage testing aerial lift devices, although its design advantages of higher power ratings and extreme mobility make it ideal for many field and substation testing applications. The standard models are rated **0 - 120/60 kVac**, **0 - 210/50 kVac**, and **0 - 300 kVac**, all rated **7 kVA**. The ALT-120/60 model offers a **0 - 120 kVac** output for booms and a **0 - 60 kVac** output for liners.

The **PTS Series** of DC hipots offer many improvements and advantages over others. Our most popular model is the pictured **PTS-100U**. It is rated **0 - 100 kVdc @ 10 mAdc** and is a two piece portable design with a 50'/16m shielded cable output and includes a current guard/ground circuit. Models available to 600 kVdc.

The **DTS Series** is for fluids testing, offering both manual & simple controls and the latest in automated design and data reporting, including an integral printer. Pictured here is the **0 - 60 kVac DTS-60A** automated model.

The HPA Series is our line of higher power AC Dielectric Test Sets, ranging from 3 kVac – 300 kVac & up to 40 kVA. The model shown to the right is ideal for testing liners from 0 - 50 kVac @ 200 mAac of test current, for 10 kVA of power.



0-100 kVdc @ 10 mAdc



Fluids Tester, 60 & 100 kVac



**HPA Series** with low PD 0 - 50 kVac @ 10 kVA



ALT-300 Boom Testing



Liner Testing
AC & DC Models



**ALT-300** 

ALT Series - The AC Voltage Truck Testing Lineup





