

HASTINGS HOT STICK TESTER

Catalog No. 6799

The HASTINGS Hot Stick Tester is designed to test sticks according to the new OSHA 29 CFR Part 1910 Standards.

The OSHA regulations require a test of 75KV per foot of length for 1 minute under wet conditions.

They (OSHA) also reference IEEE 978-1984 as a guideline for the examination, cleaning, repairing, and in-service testing of live-line tools.

IEEE 978 lists a variety of ways to test tools. One method outlined in section 5.3 “High-Potential AC Test Method” defines a method of testing at 75KV per foot under wet conditions as stated by OSHA. The only reference to acceptable performance is contained in the last portion of section 5.3 that states “If the current continues to rise after full voltage is reached, the test should be discontinued, the pole cleaned or refinished, and re-tested. If the condition is not corrected the pole should be removed from service.” In other words, if full voltage can be applied without flashover, and the leakage current, regardless of value, is stable, the test sample is considered to have passed.

The 6799 Hot Stick Tester is designed to perform two tests, the newly required OSHA/IEEE style wet test and a dry test. It is our belief that both tests can detect defects the other cannot.

The spacing between the electrodes is 6 inches and the applied voltage is 2,500 volts. The leakage current measured between these electrodes is amplified to give the same results as will be achieved when using full voltage and full distance for the testing. An amplification factor of 15 is used during the wet testing and a factor of 20 used during the dry test. The factors are different as the wet test is referenced to a 75KV per foot voltage while the dry test is referenced to a 100 KV per foot voltage.

In addition to being calibrated to both of the required voltages used in industry at this time, the acceptable limits will also be displayed on the meter face. There are no standards for either the wet leakage current values or the values for dry testing of “in-use sticks”. The values we are requiring for our hot sticks for the wet test will not only be below the level where flashover might occur, but will be sufficiently low to have about a four to one safety factor.

The dry test values will be set according to the various industry standards for new poles, i.e., IEEE, ASTM, and IEC, and will be more critical test for internal defects in a tool.

Operator safety features include a fully insulated case, current limiting resistors to keep the available current below acceptable limits, and an over current relay to shut off power to the unit should excessive current be detected.

HASTINGS Hot Line Tools & Equipment