



RUGGEDLY BUILT. CERTIFIED SAFE.

AMES TESTING

If you are looking for an economical alternative to higher priced brands, without sacrificing too much functionality or quality, then the new line of AMES test and measurement equipment fits the bill.

All of the AMES Digital Multimeters and Clamp Meters were designed with features helping you deal with the severities of almost any environment:

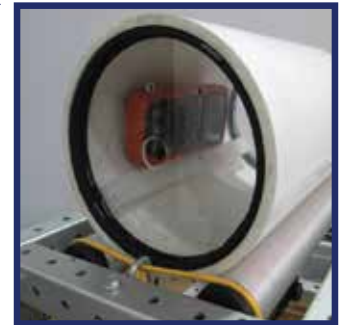
- Convenient work lights
- Non-contact voltage testers
- Cases made from ABS/Polycarbonate-blend plastics and urethane “rubber”
- Removable protective cap that helps reduce the risk of arch flash and accidental shorting by reducing the amount of exposed metal

Each meter in the family has been independently tested for both job site ruggedness and safety to meet the same international safety standards as Fluke®, Klein® and other manufacturers (IEC 61010-2-033). In addition, the products were tested for ruggedness by CSA, an independent agency. To simulate a year of hard use, AMES test units were subjected to multiple drop tests and environmental stresses.



1. ABUSIVE TESTING:

All fasteners, components and circuit boards were subjected to extremes beyond what would be expected in daily use. During this test, samples were placed into a tumbler that created a randomized 4-6" drop, for a total of 500 drops/cycles.



Multimeter in Abuse Testing Tumbler

2. ENVIRONMENTAL TESTING:

Cycle testing was then performed in an environmental chamber with temperature and humidity set at the high end of the AMES specified operating range. Accuracy was checked by a certified calibration technician at four increments on each function. This incremental accuracy verification checked for any possible degradation to the AMES sample while undergoing the abuse testing.



Tumbler in Environmental Chamber During Testing

3. HIGH VOLTAGE IMPULSE TESTING:

After the abuse testing, CSA carried out high voltage impulse testing to see how the multimeter would handle extremely high transient voltage spikes that can cause arc flash. These are the same tests Fluke® and Klein® subject their meters to. These tests verify the circuit board trace clearances of the multimeters and clamp meters, which represents their transient protection and the CAT rating certification mark.



Test Setup Connected
To + V and Com



Impulse Voltage Test Setup

After testing, the AMES samples were visually inspected to make sure there is no flashover of trace clearances, no breakdown of solid insulation and no ruptured components. Test voltages were in accordance with each of the multimeter or clamp meters CAT rating.

AMES samples were pulsed with five positive and five negative impulses at the applicable voltages with a ten second rest between each pulse. After testing, samples were visually inspected.

Nominal AC RMS line-to-neutral or DC voltage of MAINS being measured	IMPULSE WITHSTAND VOLTAGE	
	MEASUREMENT CATEGORY III	MEASUREMENT CATEGORY IV
300	4,000	6,000
$> 300 \leq 600$	6,000	8,000
$> 600 \leq 1,000$	8,000	12,000

We put hundreds of hours of engineering time into making sure the products we design are safe, as well as robust. Designed for optimum durability, reliability and functionality. The AMES line of test and measurement equipment is engineered with the user in mind.

