Challenge

Flood Testing Labs, Inc. (FTL) is one of North America’s preeminent concrete, asphalt, soils, steel, and weld test laboratories. Based in Chicago, FTL services building and roadway construction with both onsite technical services and certified laboratory testing to provide technical certifications for materials. Its largest service is concrete cylinder compression testing. For this, FTL depends on two testing machines.

One of these, a Tinius Olsen 400,000 lb. Universal Testing Machine, was beginning to show the wear and tear associated with long term use in a corrosive atmosphere. The wiring and electrical components were becoming troublesome to maintain. Walt Flood, engineer-in-charge at FTL, knew it was time for an upgrade. He turned to his calibrator, Cal-Rite Corporation, who suggested he consider ADMET.

Solution

Mr. Flood and Cal-Rite wanted a solution that would improve efficiency and test accuracy. They decided to install one of ADMET’s digital machine controllers in their Tinius Olsen frame, and moved an ADMET DL 16 Load and Stress indicator from that machine to another. The end result was a double refit.

ADMET and Cal-Rite worked closely together to ensure the best possible outcome for FTL. Cal-Rite handled the installation and training while ADMET provided backup technical support. The entire installation, including replacing the necessary equipment, required less than a day.

Results

The results have been very positive for FTL. The electronics in their testing machines are new and reliable. Test times have been reduced from 45 minutes to 13 minutes. All of the Young’s Modulus calculations are completed during the test.

ADMET’s digital controller allows FTL to capture data, import into a spreadsheet, and create backups. Mr. Flood notes that the retrofitted machine was recognized by one of his technicians as the most accurate machine he’d ever seen. Mr. Flood concludes, “I’m very pleased with the whole ADMET/Cal-Rite setup.”