



BarronCast Invests in ADMET Technology to Solve Tensile Test Equipment Needs

Challenge

BarronCast Inc. (BCI), headquartered in Oxford, Michigan, is a manufacturer of engineered metal products. The company has been owned by the Barron family since 1923. BCI supplies cast, machined, assembled, and painted components to the defense, automotive, glass, material handling, medical, printing press, combustion turbine, pump, valve, and other commercial markets.

Until recently, BCI had most of its materials and product testing outsourced to local testing labs. The company wanted to bring its material testing in-house to improve quality control and reduce testing time. Greg Barron, Manager of Engineering and Quality Assurance, turned to ADMET for its tensile testing equipment needs.

Solution

Initially, Mr. Barron had the intention of purchasing a used, retrofitted Universal Testing Machine to meet BCI's needs. After doing some research, Mr. Barron noticed that ADMET controllers and indicators were often used in retrofits of other companies' machines. Digging deeper, Mr. Barron discovered that a brand new ADMET machine was competitively priced with the competitors' retrofitted machines.

After diagnosing BCI's testing needs, ADMET's Account Director recommended an Express/eXpert 1600 servo-hydraulic, dual-column test frame equipped with the MTESTQuattro materials testing system. This machine would be utilized in both R&D and production testing.

Results

Upon delivery of BCI's machine, an ADMET engineer visited the site and helped with the initial setup. Mr. Barron was struck by the number of options the MTESTQuattro system offered. One key benefit of ADMET's system was its ability to capture testing data and produce sophisticated reports. In the case of BCI, tests results are printed and filed as a backup for the certification that is sent to customers. A separate report is generated for customers that require raw data. Now that BCI conducts its own testing, the company has plans to consolidate the data from multiple tests into spreadsheets in order to do statistical analyses of tensile strength results on alloys over time.

Mr. Barron is pleased with the eXpress' flexibility. Since the machine uses standard fixture pin mounts, virtually any fixture can be mounted. "We see a lot of possibilities," says Mr. Barron. BCI has already run some push-out tests on pressed fittings and brushings that are installed in castings. Other useful applications are planned for the future.

