

## Certificate of Conformance – Instron's Quality Process for Bluehill 3® Materials Testing Software

Dear Instron Customer,

Instron develops and maintains Bluehill 3® material testing software using a professional development and testing process in accordance with the requirements of Instron's ISO 9001 certification. This process verifies and validates the final product and comprises the following steps:

- Design reviews are carried out to make sure the software conforms to the software specification document.
- All code changes go through a code audit before being included in the final product.
- New versions of a software package then go through a three-step testing procedure:
  - All new features are individually tested to make sure they conform to their specification documents.
  - All problems corrected in the new version are individually tested to ensure the problem has been fixed.
  - A complete release test suite for the software package is carried out.
- We also test any third party package included within or used by an Instron software package to ensure that it meets Instron's standards.

Bluehill 3® calculations are verified using the following methodology:

- A standard set of data is imported into Bluehill 3® and a full set of calculations is performed.
- The result of each calculation is compared against a result previously verified as accurate.
- This process is repeated using several different datasets for each calculation.
- We perform this calculation test suite for every release of Bluehill 3®.

Our software has many thousands of users worldwide. This diverse user base incorporates applications from all areas including: medical, food, aerospace, electronics, textiles, plastics, metals and composites. Many users have independently verified the accuracy of Instron test calculations through comparisons with manual calculations and measurements, and correlation with past test results.

Instron has developed Bluehill 3® software to meet the requirements of a wide range of ASTM, ISO and many other international standards. We supply test methods that are specifically targeted to individual standards. Instron's primary focus is to ensure the software provides for the safe operation of your testing system and the integrity of your test data. While it is not possible to guarantee the correctness of every aspect of our software, Instron has endeavored to provide the most thoroughly tested package available in the materials testing industry.

Sincerely,



Todd M. Dean  
Software Quality Assurance Manager

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