

Dear PQ Systems Software Owner:

PQ Systems, Inc. is dedicated to providing high-quality products and services to its customers. This letter is to assure you that your software package has been rigorously tested against well-known documented sources to insure accuracy of statistical analysis. These outside sources are not affiliated with PQ Systems. They can be used as baseline data and results to compare with SQCpack® Release 8, 7, CHARTrunner® Release 3.6, and CHARTrunner® Lean Release 3.0.

One source used to test PQ Systems software is the *Automotive Industry Action Group, Fundamental Statistical Process Control* reference manual, Second Edition. This manual was developed to standardize reference manuals, reporting formats, and technical nomenclature to be used by Chrysler, Ford, and General Motors. Many of the charts you will see in SQCpack, CHARTrunner, and CHARTrunner Lean as sample charts are derived from data in this manual.

If you create a chart from scratch using data from this manual, you will receive the same results in SQCpack, CHARTrunner, and CHARTrunner Lean as those stated in the manual. Also, if you take raw data from either *The Quality Control Handbook*, 3rd Edition, by Joseph Juran or *Quality*, 3rd Edition, by Donna Summers and perform the same calculations in SQCpack, CHARTrunner, and CHARTrunner Lean, you will receive the same results. Minimal differences due to rounding may ensue, since SQCpack, CHARTrunner, and CHARTrunner Lean carry calculations out to 8 decimals before rounding, while the references used do not. The PQ Systems software results are therefore, more accurate.

In order to facilitate the comparison, we have provided the following Excel files:

- Calculation Verification Validation.xlsx
- Summers.xlsx
- Juran.xlsx

These spreadsheets contain the raw data, the reference and page number, the statistical results from the source data, and the statistical results from SQCpack, CHARTrunner, and CHARTrunner Lean. If you have any questions about the data, references, or results, please contact us.

At PQ Systems, we are committed to continuous improvement and strive to keep raising the bar in the field of quality improvement.

Sincerely,

Beth A. Savage President

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