FTS Calibration and Load Accuracy Testing Protocol

Calibration

During Calibration the MARK -10 has to run through the following loads



During the dwell time at only 0lbs, the software needs to average the last 50 data points (approximately .5 seconds) to generate a zero baseline which will be used to obtain the delta counts during each load. This data must be captured in rows 9 and 10 (columns C through J) of the attached spreadsheet. Another option is to allow Excel to populate the average data. We have added this functionality to the spreadsheet so that you do not have to perform this function in the software.

The software also needs to write to the support file (Excel) the last 50 data points during 0lb dwell and 100 data points (approximately 1 second) for each of the subsequent loads (10-120lbs). These data points will be used to generate calibration factors. This data must be captured in the tables found in B29:J780 and B784:J1535.

Note: No data is acquired during the first five loading condition (140, 70, 0, 140, 70lbs)

Load Accuracy

During Load Accuracy the MARK -10 has to run through the following loads



During the dwell time at only 0lbs, the software needs to average the last 50 data points (approximately .5 seconds) to generate a zero baseline which will be used to obtain the delta counts during each load. This data must be captured in rows 11 and 12 (columns C through J) of the attached spreadsheet. Another option is to allow Excel to populate the average data. We have added this functionality to the spreadsheet so that you do not have to perform this function in the software.

The software also needs to write to the support file (Excel) the last 50 data points during 0lb dwell and 100 data points (approximately 1 second) for each of the subsequent loads (10-120lbs). These data points will be used to test the calibration factors generated during the calibration test. This data must be captured in the tables found in B1539:J2290 and B2294:J3045.

The FTS can run through these load concurrently. The only requirement is that during the 0lb load conditions, the load beams are not generating any unintended loading on the device since a true zero baseline is required for accurate results.

Attached is the excel spreadsheet where the data needs to be written during the test. It contains four tables which need to be populated with the data (as referenced in green above). Once the tables have been populated with data, the excel file will do all the calculations on its own. This includes generating the calibration factors, and obtaining the upper and lower tolerance limits used to see if a device passes or fails.