

As cans are manufactured, they must be sampled and tested to ensure axial strength. Download the Excel file “CAN DATA DOWNLOAD” located at: <http://www.markeredwards.com/APStats/APStats.html> which shows two sets of data for cans having two different wall thicknesses. A **partial** list of this data is shown to the right.

Analyze the data separately for each set of can data (wall thicknesses of 0.0109 and 0.0111 inches):

1. Use Excel’s data analysis add-in descriptive statistics tool to obtain all pertinent for each data set.
2. Create histograms with the CDF (Cumulative Distribution Function) on a secondary y-axis. View a typical (minimum) solution on the next page.
3. Include an additional analysis of the 111 data without any outlier(s).
4. Select the bin (category) widths appropriately to provide sufficiently resolution to determine the data shape for each histogram.
5. Using a modified box plot analysis, identify min, Q1, Q2, Q3, and max.
6. Determine if any outliers can be mathematically omitted because they exceed the 1.5 IQR rule.
7. Include a modified box & whiskers plot of each set of data on a single chart.
8. Write a brief summary of each data set addressing shape, center of the data, variation of the data, skewness, and outliers. Use of a table for this analysis is recommended.
9. From a business viewpoint, discuss the importance of this EDA (Exploratory Data Analysis).

Present your analysis in MS Word format with the following file name: LastName-CanLab.docx (Word will add the suffix automatically. Submit your MS Word and the supporting Excel file as email attachments to: [mheinen\\_1@msn.com](mailto:mheinen_1@msn.com) no later than midnight, Monday October 1, 2018 .

For an example of an adequately formatted paper, view Player Lab by Heinen.PDF at <http://www.markeredwards.com/stats/stats.html>.

CANS109	CANS111
270	287
273	216
258	260
204	291
254	210
228	272
282	260
278	294
201	253
264	292
265	280
223	262
274	295
230	230
250	283
275	255
281	295
271	271
263	268
277	225
275	246
278	297
260	302
262	282
273	310
274	305
286	306
236	262
290	222
286	276
278	270
283	280

