

April 1, 2022

Guided Worksheet - Process Capability

Requirements for this task: Hershey Kisses, a weigh scale, tally sheet and writing utensil

Step 1: Collect 30 Hershey Kisses, a weigh scale, a writing utensil, and this document

Step 2: Zero the scale, remove the wrapper from the Hershey Kiss and weigh and document the weight of a chocolate Kiss

Step 3: Repeat Step 2, re-zeroing the scale every 5th measurement

Step 4: Weigh and document the weight of the foil, do not include the banner, and document the weight of a foil

Step 5: Repeat Step 4, re-zeroing the scale every 5th measurement

Step 6: Analyze the Kiss and Foil data:

Calculate the average weight of the Kisses and Foils:

$$\text{Average } (\mu) = \frac{\text{Sum of Terms}}{\text{Number of Terms}}$$

Determine Standard Deviation of Kisses and Foils:

$$\sigma = \sqrt{\frac{\sum (x_i - \mu)^2}{N}}$$

Graph the weights and control limits:

$$UCL = \mu + 3\sigma$$

$$LCL = \mu - 3\sigma$$

Weight of Kisses					
Average Weight					

Kisses Weight Deviations					
Standard Deviation					

Weight of Foils					
Average Weight					

Foil Weight Deviations					
Standard Deviation					



