

1) Background & Business Case

**Background:** During Round 2 of the quality lab, there was insufficient data collected for certain key measurements necessary for the lab write-up. Specifically, there was a shortage of data on border measurements of the SS series products, yet inversely there were point measurements for each product though this measurement was only to be taken for the SD series products.

**Business Case:**  
When QC record quality data, accurate measurements based on the specific product will enable greater agility for the company to adjust the process to address quality issues related to that particular product.

**Problem Statement:**  
QC is overproducing measurements of one product attribute, and underproducing measurements of another.

2) Current Condition

QC is producing improper measurements for the SS series products.

- In these instances, QC measures the SS series as if they are SD series products.
- The figure to the right depicts the basic SD product. The measurement from the edge of the white square to the line between adjacent points of the pink square should be 4.0 cm (within a +/- 0.1cm tolerance).

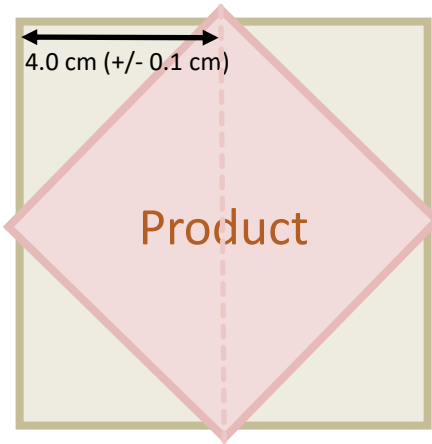
⇒ **Why?** QC did not differentiate between SS and SD series products

⇒ **Why?** There was confusion about what the different metrics are for

**Why?** No discussion was made regarding the importance of and meaning of the measurements

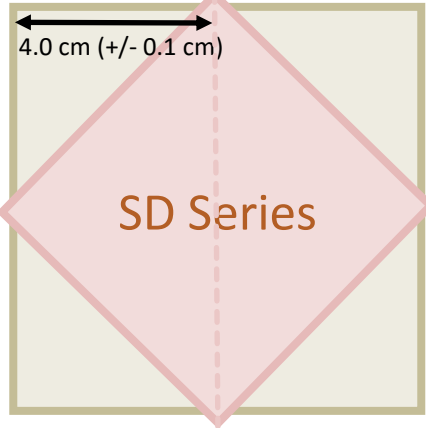
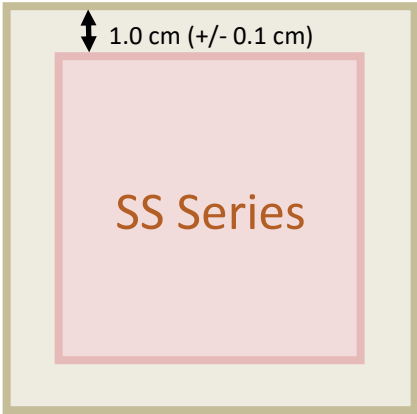
⇒ **Why?** Management directed all focus on process improvements

**Why?** The obvious issues from Round 1 centered around concerns pertaining to quality-at-the-source



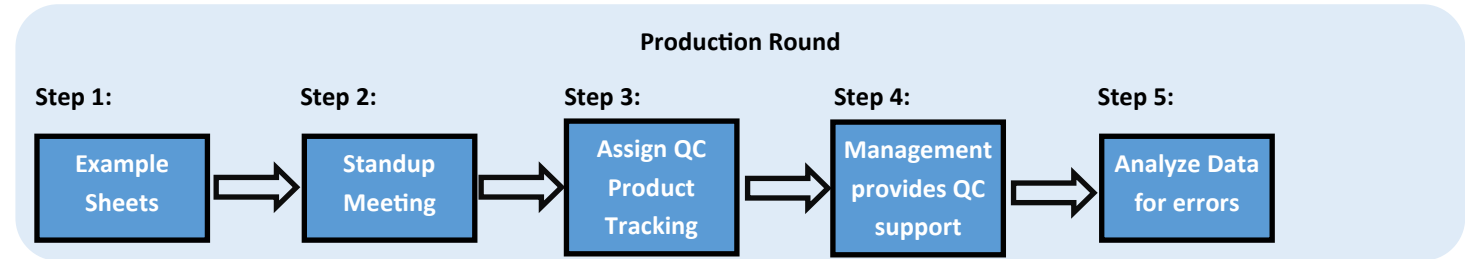
3) Target Condition

- **Target Condition**  
The goal is to produce measurements appropriate to each product 100% of the time.
- **Diagram of Ideal Condition:**  
The SS series products are depicted in the diagram on the left. The inner square is placed precisely in the middle of the outer square. This results in a 1 cm wide border on all Sides between the squares.  
The SD series products are depicted on the right, this configuration places the inner square perpendicular to the larger square with the points each being 4 cm from the edge of the larger square.
- **Hypothesis & Experiment:**  
If management provides a diagram of each product with its specifications, then QC will know which measurements to make at the appropriate time. This will be confirmed when SS series products receive border measurements every time, and SD series products receive point measurements every time.



4) Action Plan (Steps)

1. Produce an example sheet for each product, showing the correct assembly, measurements and tolerances.
2. Hold a stand-up meeting with whole crew to discuss the examples.
3. Assign a person at the QC station to track which product is currently being measured.
4. Management will coordinate with QC, ensuring there is no confusion and the workstation’s needs are filled.
5. Analyze QC data and ensure that the data suits the products measured.



**Measurement:** (TBD)

**Results:** (TBD)