

To: SEWS-US Approved Suppliers

Potential Quality Issue

Supplier Quality Awareness

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Component Evaluation Group (ODC)

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Preface

Recently SEWS experienced an issue regarding the performance of a bracket lock on a plastic injection molded component. Upon a detailed analysis, it was determined the internal lock features were not within the SEWS and OEM engineering specifications.

This caused looseness and low lock retention after assembly to the bracket at OEM production line.

SEWS is providing this information so that your company can prevent this type of failure for current and future projects.

1. Heads Up

2. Background

3. Test Results

1. 3-1 measurement preparation
2. 3-2 measurement method
3. 3-3 critical dimensions

4. Example of Lock Measurements

Sample Preparation

Concept

Eliminate Measurement Error

Pot and Polish

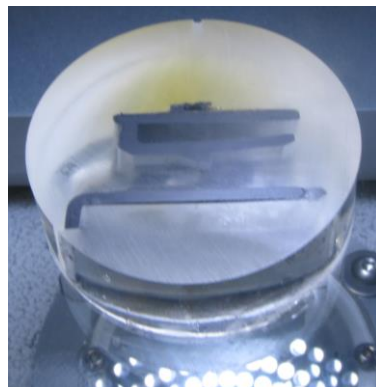
- Cut feature from protector
- Encase lock in plastic
- Polish until desired cross section depth is reached.



What is it?

Define the characteristic

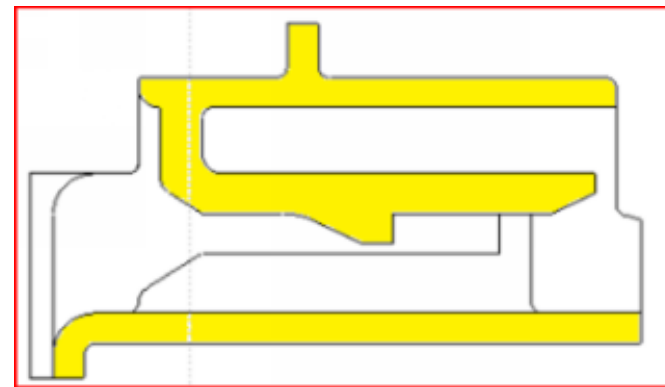
- Use Vision System/Optical comparator
- Align the sample manually
- Measure the profile



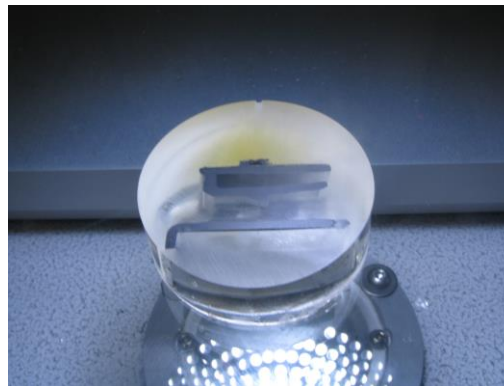
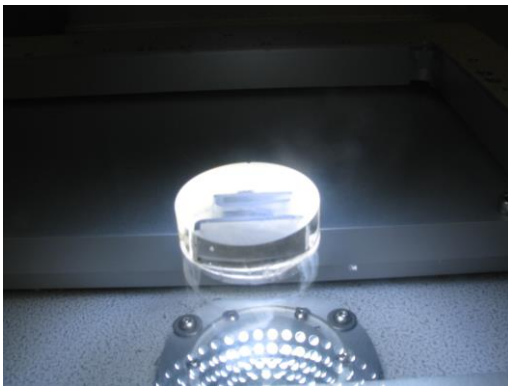
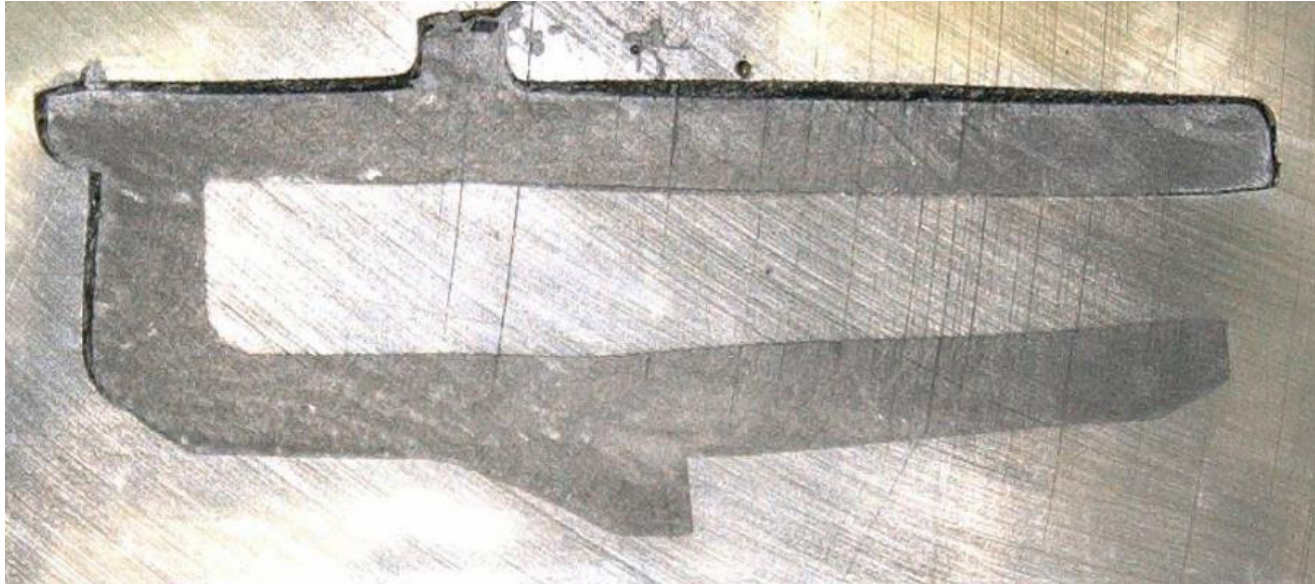
Is it correct?

Analyze

- Compare results to Dwg
- Issue report
- Correct if needed.

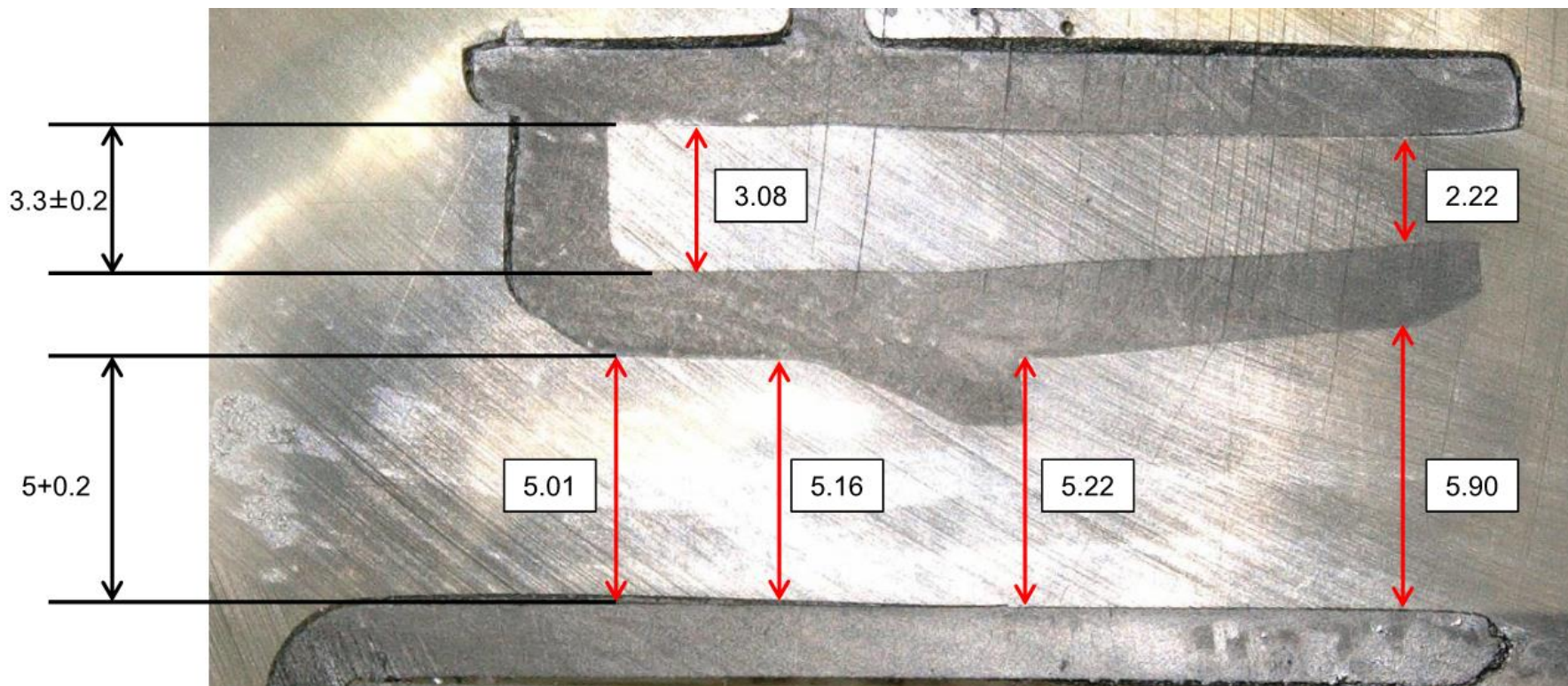


Potted and Polished Sample



Potting prevents any geometry change during sectioning and measurement and allows the sample to be shipped for verification

Example of Deformed Lock Assembly



Measurement Data