4/12/2023 (rev 0)	Topic: Grease Die Extrusion

Grease Thief Analyzer Standardization Troubleshooting

Introduction:

This technical bulletin outlines the methodology for troubleshooting a standardization error on the Grease Thief Analyzer.

Background:

The Grease Thief Analyzer (GTA) has been developed to evaluate grease consistency by measuring the force required to extrude grease through a disposable plastic die over a varying extrusion rate. The Grease Thief Index (GTI) is calculated and used to trend consistency by using the ratio of this force in comparison to the force of the reference grease.

The Concern:

If the GTA standardization (section 6 of GTA Manual rev. 18) is performed without the Reference Spring-Can, or if values from a sample run are imported into the GTA software instead of the values obtained from running the standardization the GTA will set the K value to infinity.

Methodology for Troubleshooting (Section 13 of GTA Manual):

1. Re-run the standardization.
2. When importing the new K and Offset values for the standardization into the GTA software, enter an arbitrary K value (between 3 and 5) into the "current values" box.
3. Enter the new values in the load cell settings on the GTA.
4. Re-run the calibration and standardize the instrument.
5. Confirm values output from new standardization match the values displayed on the load cell settings screen.
6. Run calibration as normal.
7. If calibration passes proceed to sample analysis.
8. If calibration fails, repeat steps 4-6.

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Reference Documents:
Grease Thief Gen 1 Manual, revision 15, 4/12/2023
Grease Thief Gen 2 Manual, revision 5, 4/11/2023

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