

# GDT 70

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## A. Scope

For a complete list of GDTs, see the Table of Contents.

Use this test method to determine the amount of movement the seal can accommodate within a specified force range.

## B. Apparatus

The apparatus consists of the following:

1. Testing Machine: Use a machine with the following capabilities:
  - a. Deflection speed adjustable from 0.2 to 0.5 in/minute (5 to 12.5 mm/minute)
  - b. Load ranges: 0 - 200 lbs and 0 - 1000 lbs (0 - 890 N and 0 - 4448 N)
  - c. Accuracy: + 2% of load, + 10% of speed
2. Measuring Device: Use a device to measure the width of the sample to an accuracy of  $\pm 0.005$  in (0.127 mm).

## C. Sample Size and Preparation

Cut the sealer in as-received condition to a sample 5 in,  $\pm 1/8$  in (125 mm,  $\pm 3$  mm) long. Cut the ends perpendicular to the longitudinal axis of the specimen.

## D. Procedures

1. Run the test at 75 °,  $\pm 10$  °F (25 °,  $\pm 5$  °C).
2. Load the specimen into the testing machine.
3. Add load to the specimen at the rate of 0.5 in/minute (12.7 mm/minute) until the load reaches the maximum load specified for the sealer.
4. Release the load.
5. Reapply it at the same rate.
6. Release the load again.
7. Reapply the load at the rate of 0.2 in/minute (5 mm/minute) until the load reaches the minimum load specified for the sealer.
8. Measure the width of the specimen to the nearest 0.01 in (2.5 mm).
9. Continue to apply the load at the rate of 0.2 in/minute (5 mm/minute) until the load reaches the maximum load specified for the sealer.
10. Measure the width of the specimen to the nearest 0.01 in (2.5 mm).
11. If the difference between the two width measurements is less than the movement specified on the plans, reject the material.

## E. Calculations

No calculations are required for this test.

## F. Report

Report the loads as follows on Form 168.

- Width at minimum load specified.
- Width at maximum load specified.