

PLIABILITY OF SEAT BELT WEBBING

Application

This procedure is used to determine the pliability of seat belt webbing.

Apparatus Required

Pliability Test Stand (for filling specimens)

For detailed plans on this apparatus, contact Interior Materials Engineering, Body Engineering, Dearborn, MI.

Dial Indicator

Model D-81S, low friction full jewelled bearing. Federal Products Corporation, Providence, Rhode Island.

The following modifications must be made on the dial indicator:

- . Remove back spring.
- . Remove hair spring and hair spring pin on take-up gear assembly.
- . Remove lower point and substitute the contact foot.
- . Remove rack stopscrew and replace with rod indicator top.

Adjustable Air Damping Dash Pot

Part No. 50046-1, obtainable from Airport Corporation, 27 Lois Street, Norwalk, CT 06851.

Specimen Fixture

Weight

One 30 g weight.

Timing Device

Timing in tenths of a second - Precision Scientific Catalogue 69230 or equivalent.

Wooden Dowels

Dowel - 22 x 150 mm

Dowel - 13 x 150 mm

Date	Action	Revisions
2001 10 31	Revised	Editorial – no technical change A. Cockman
1994 10 05		

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Pliability Test Stand (for warp specimens)

As indicated in figure 2

Conditioning and Test Conditions

All test values indicated herein are based on material conditioned in a controlled atmosphere of 23 +/- 2 °C and 50 +/- 5 % relative humidity for not less than 24 h prior to testing and tested under the same conditions unless otherwise specified.

Test Procedure (Fill Direction)

1. Check the zero of the dial gage on the Pliability Test Stand as follows:

Insert a 25.4 mm high block on the test stand. Lower the foot assembly until it comes into contact with the block. Then adjust the dial indicator to read zero by adjusting its height above the test stand and/or rotating the dial face.
2. Six specimens, 76 mm x the width of the webbing are required for the test, three for testing the webbing with one side (side A) toward the operator and three for testing the webbing with the opposite side (side B) toward the operator.
3. Take a specimen and with side A toward the operator, wrap the 76 mm length around a 22 mm dowel until both ends meet.
4. Repeat step no. 3 with side B toward the operator.
5. Take the above specimen and with side A toward the operator, wrap the width around a 13 mm dowel until both edges meet.
6. Repeat step no. 5 with side B toward the operator.
7. Insert the webbing side A toward the operator into the specimen fixture (Figure 1) without any unnecessary flexing. Two suitable ways are as follows:
 - A. From an open end, locate the webbing in the slots, one slot at a time, pushing the webbing across the width of the holder.
 - B. From an open end, locate the entire length of the webbing in the lower slots. Lift the webbing with both hands and locate in both upper slots simultaneously.
8. Mount the specimen fixture on the pliability test stand, and add weight as indicated in the applicable specification.