

**DETERMINATION OF LEATHER SOFTNESS****Application**

This test method defines a procedure for the determination of leather softness, applicable to hides and cut parts, in all leather types, used in trim and seating applications.

**Apparatus and Materials Required****ST-300 Leather Softness Tester**

Using 25mm diameter (nominal) aperture (see diagram in Appendix A).

Supplier:

MSA Engineering Systems Limited  
41 Lower Slack  
Wainstalls  
Halifax  
West Yorkshire  
HX2 7TJ  
United Kingdom

Sole worldwide agents for the ST-300 Leather Softness Tester.

**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.

**Specimens**

Cut parts or full hides may be used; sampling should be representative as detailed in the Calculation and Report section.

**Procedure**

1. The leather sample is placed over the circular aperture, ensuring that the aperture is completely covered to allow effective clamping.

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| 2001 11 30 | Activated | J W Williams |

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2. Lower the top arm using the operating lever to retract the load-pin. Press down on the lever, so locking the leather in position, with an audible 'click'.
3. Release the operating lever, allowing the load-pin to lower onto the leather and to apply a force of 4.91N (a 500g mass).
4. The load-pin deflects the leather; this deflection is displayed on the dial gauge in millimeters.
5. Allow a minimum dwell time of 30 seconds then allow the reading on the gauge to stabilize and record.
6. Press the top arm release button to release the clamp, to allow the removal of the leather.

Note: At the beginning of each test period, the zero correction should be ascertained. Place the rigid metal plate supplied with the gauge on the bottom leather clamp and follow steps 2-5 above. Adjust gauge to read zero in this position or add zero correction measured to the results obtained on test samples.

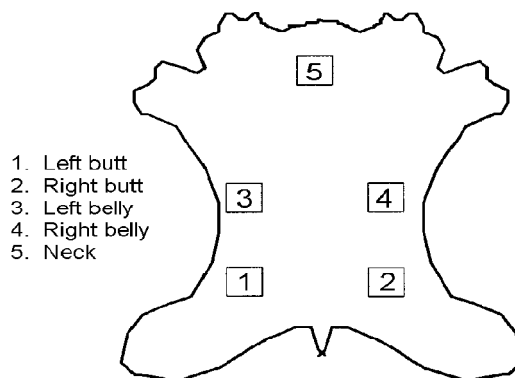
### Calculation and Report

#### Cut Parts

Two measurements shall be taken, one each at opposite ends of the long axis of the part. The reported value for the part shall be the mean of the two measurements. Acceptance criteria will be detailed on the relevant Material Specification or on the Engineering Drawing.

#### Full Hides

Five measurements shall be taken around the hide, in the following locations:



The reported value shall be the mean of these five measurements. Acceptance criteria will be detailed in the relevant Material Specification or on the Engineering Drawing.