

**ISO
3376**

IULTCS/IUP 6

**Leather — Physical and mechanical
tests — Determination of tensile
strength and percentage elongation**

*Cuir — Essais physiques et mécaniques — Détermination de la
résistance à la traction et du pourcentage d'allongement*





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below or ISO's member body in the country of the requester.

CP 401 • Ch. de Blandonnet 8

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Foreword

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t*

Any feedback or questions on this document should be directed to the user's national standards body. A

Leather — Physical and mechanical tests — Determination of tensile strength and percentage elongation

1 Scope

2 Normative references

Leather — Chemical, physical and mechanical and fastness tests — Sampling location

Leather — Physical and mechanical tests — Sample preparation and conditioning

Leather — Physical and mechanical tests — Determination of thickness

Metallic materials — Calibration and verification of static uniaxial testing machines — Part 1:

Tension/compression testing machines — Calibration and verification of the force-measuring system

3 Terms and definitions

— ISO Online browsing platform: available at <https://www.iso.org/obp>

— IEC Electropedia. available at <http://www.electropedia.org/>

4 Principle

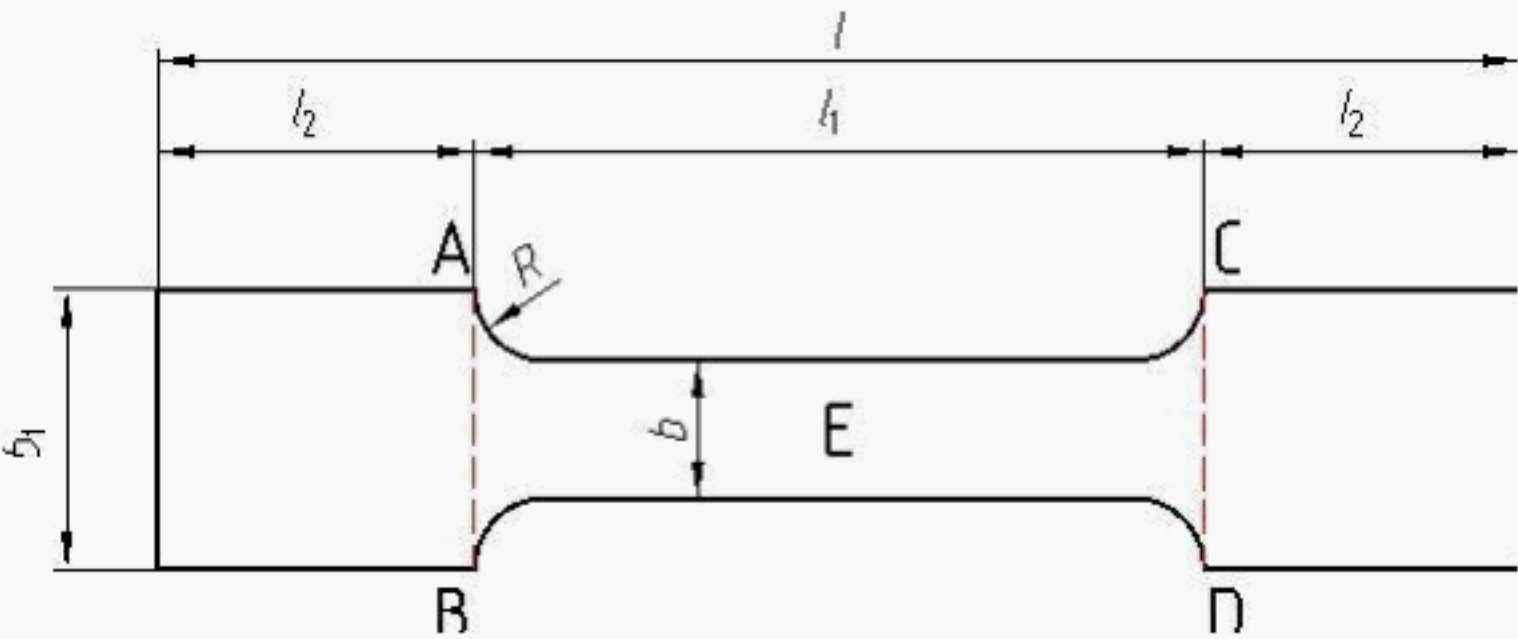
5 Apparatus

5.1 T

5.2 A

5.3 T

5.4 P
r



Key

l
 b

Figure 1 — Shape of test piece

Table 1 — Dimensions of test pieces

Test piece size	l			b		R
Standard						
L						

5.5 V

6 Sampling and sample preparation

6.1

6.2

6.3

7 Procedure

7.1 Determination of dimensions

7.1.1

7.1.2

-

7.2 Determination of tensile strength

7.2.1

7.2.2

7.2.3

7.2.4

Variable results can occur if using the force at the test piece's break, F_{break} , instead of F_{max}

7.3 Determination of the percentage elongation caused by a specified load

7.3.1

F

- for $F_{\text{max}} \leq 100$ N, a pre-load of 0,5 N;
- for $100 \text{ N} < F_{\text{max}} \leq 300$ N, a pre-load of 2,0 N;
-

If the leather's maximum force, F

7.3.2

7.3.3

7.4 Determination of the percentage elongation at maximum force

7.4.1

7.4.2

7.4.3

Variable results can occur if using the elongation at the test piece's break, E_{break} , instead of E_{max} ,

7.5 Slippage

8 Expression of results

8.1 Tensile strength

$$T_n = \frac{F_{w\max}}{t}$$

\bar{w}

t

8.2 Percentage elongation caused by a specified load

8.3 Percentage elongation at maximum force

$$E_{\max} = \frac{L_2 - L_0}{L_0} \times 100$$

9 Test report

