

# ISO 13997:2023-06 (E)

## Protective clothing - Mechanical properties - Determination of resistance to cutting by sharp objects

---

<b>Contents</b>		<b>Page</b>
<b>Foreword</b>		<b>iv</b>
<b>Introduction</b>		<b>v</b>
<b>1 Scope</b>		<b>1</b>
<b>2 Normative reference</b>		<b>1</b>
<b>3 Terms and definitions</b>		<b>1</b>
<b>4 Sampling</b>		<b>2</b>
4.1 General		2
4.2 Textiles and other materials		2
4.3 Gloves		3
4.4 Conditioning		3
<b>5 Test method</b>		<b>4</b>
5.1 Principle		4
5.2 Test apparatus		5
5.2.1 Rigid framework		6
5.2.2 Force application system		7
5.2.3 Specimen holder mount		7
5.2.4 Specimen holder		7
5.2.5 Specimen securing clamp		7
5.2.6 Blades		8
5.2.7 Blade holder		9
5.2.8 Cutting-motion system		9
5.2.9 Cut-stroke length measurement system		9
5.3 Calibration		9
5.3.1 Beam balancing procedure		9
5.3.2 Cutting speed adjustment		10
5.3.3 Validation of blades		10
5.4 Test procedure		11
5.4.1 Specimen mounting		11
5.4.2 Test procedure for measuring the cutting stroke length		12
5.4.3 Test procedure for determining the calculated cutting force		12
5.4.4 Calculations		13
<b>6 Test report</b>		<b>13</b>
<b>Annex A (informative) Inter-laboratory test data analysis</b>		<b>15</b>
<b>Annex B (normative) Calculated cutting force determination</b>		<b>17</b>
<b>Annex C (normative) Testing of the calibration material (see <a href="#">5.3.3.1</a>)</b>		<b>22</b>
<b>Bibliography</b>		<b>23</b>