

DIN EN ISO 13997:2023-12 (E)

Protective clothing - Mechanical properties - Determination of resistance to cutting by sharp objects (ISO 13997:2023)

Contents		Page
European foreword		3
Foreword		4
Introduction		5
1	Scope	6
2	Normative reference	6
3	Terms and definitions	6
4	Sampling	7
4.1	General	7
4.2	Textiles and other materials	7
4.3	Gloves	8
4.4	Conditioning	8
5	Test method	9
5.1	Principle	9
5.2	Test apparatus	10
5.2.1	Rigid framework	11
5.2.2	Force application system	12
5.2.3	Specimen holder mount	12
5.2.4	Specimen holder	12
5.2.5	Specimen securing clamp	12
5.2.6	Blades	13
5.2.7	Blade holder	14
5.2.8	Cutting-motion system	14
5.2.9	Cut-stroke length measurement system	14
5.3	Calibration	14
5.3.1	Beam balancing procedure	14
5.3.2	Cutting speed adjustment	15
5.3.3	Validation of blades	15
5.4	Test procedure	16
5.4.1	Specimen mounting	16
5.4.2	Test procedure for measuring the cutting stroke length	17
5.4.3	Test procedure for determining the calculated cutting force	17
5.4.4	Calculations	18
6	Test report	18
Annex A (informative) Inter-laboratory test data analysis		20
Annex B (normative) Calculated cutting force determination		22
Annex C (normative) Testing of the calibration material (see 5.3.3.1)		27
Bibliography		28