®
TILSATEC

EN388:2016 Mechanical Protection for Hand and Arm

In 2016 significant updates were made to the EN 388 standard to provide a more accurate and reliable assignment of cut levels for hand protection.

Previously, EN 388:2003 classification for cut resistance relied on results obtained from carrying out the coupe test. This test uses a circular blade under a 5N load, which moves in a backward and forward motion over the sample and a 'cut index ' is determined by calculating the number of cycles required to cut through the test sample.

Coupe Test

The coupe test has proven to be unreliable for high cut resistant materials due to blunting of the blade during the test to produce inaccurate results.

For this reason the test method ISO 13997:1999 was introduced. The new EN 388:2016 standard states that if when carrying out the coupe test, data is obtained which indicates blade blunting, the test method described in ISO 13997:1999 shall be carried out and used for the cut protection classification.

The ISO 13997:1999 test is carried out on a TDM test device and uses a single straight edge blade drawn across the sample in one direction at a specified speed. Once the blade cuts through the sample the distance of blade travel is recorded.
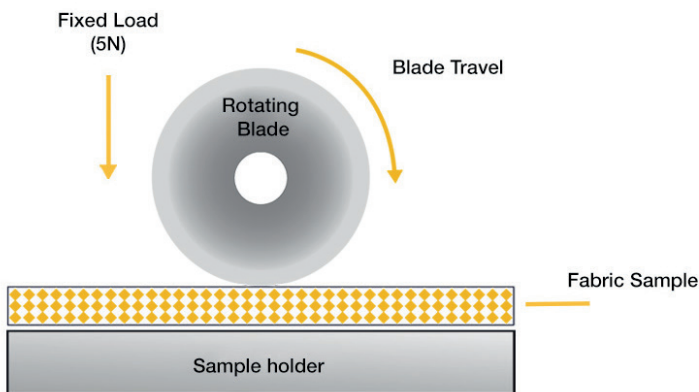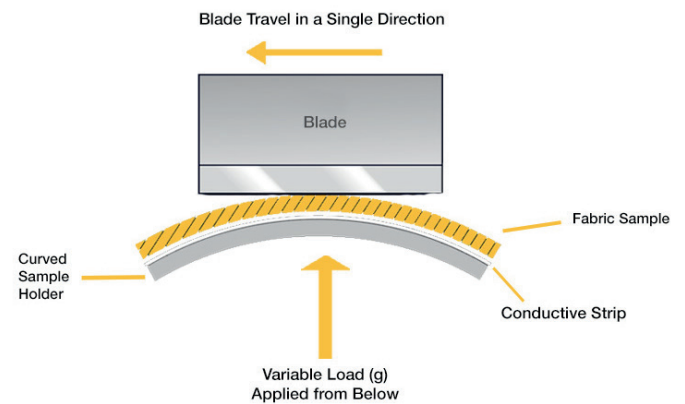
A range of loads are used throughout the test and the cutting distance against the force used (in Newtons) are plotted on a graph to determine the force required to cut through the material at 20mm of blade travel. This method is preferred for high cut resistant materials as the blade is used only once (to eliminate the impact of blade blunting) and a variety of loads can be used throughout the test instead of the fixed load of 5 Newtons applied in the coupe test.

Below are examples of the changes you can expect to see in glove markings and how you can expect Tilsatec gloves to be marked.

TDM Test

EN 388: 2016

3 X 4 2 E P

Abrasion (0-4)	
Cut Coupe (0-5)	
Tear (0-4)	
Puncture (0-4)	
ISO13997 TDM High Cut (A-F)	
Impact PASS/FAIL	

EN388: 2016 Test Data

Product Code

EN388 ANSI
3X42E CUT
CE 9/L
55-5120

ANSI: 105 2016 US Test Data (Not applicable in the EU)

BSiF Registered Safety Supplier™
www.bsif.co.uk/rsss