

STANDARD

EN 388:2016 ISO 13997

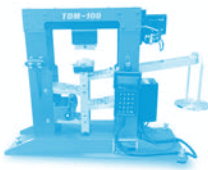
European Standard for Protective Gloves Against Mechanical Risks



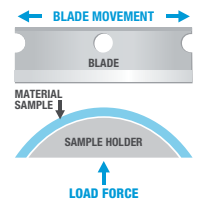
CUT RESISTANT

EN 388:2016 ISO 13997 establishes performance levels, testing and classification for fabric or layers of fabric for their ability to resist cutting by a blade.

This standard uses a Tomodynamometer (TDM-100) machine to measure the amount of weight (newtons) necessary for a blade to cut through material. The blade is replaced after each cut and weight is added as force needed for cut-through at 20 mm cut length. Multiple tests are conducted - ranging from 2 to 30 newtons of force. Test results are represented by levels A to F, with F being the highest level of cut resistance.



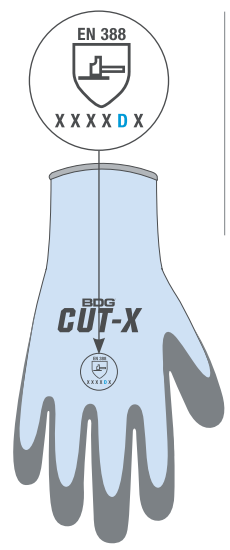
TDM-100 Cut test machine
ISO 13997 testing method.




Test blade
A straight blade moves horizontally across the material sample.
A new blade is used for every individual test.



Glove material sample
Sample taken from glove palm and placed on machine.



Cut resistant gloves
Test results are represented by levels A to F, as depicted on the gloves.




Weight (Newtons)
Weight is added as force required, ranging between 2 to 30 newtons.

EN 388 A	≥ 2 Newtons LIGHT
EN 388 B	≥ 5 Newtons LIGHT - MEDIUM
EN 388 C	≥ 10 Newtons MEDIUM
EN 388 D	≥ 15 Newtons MEDIUM - HEAVY
EN 388 E	≥ 22 Newtons HEAVY
EN 388 F	≥ 30 Newtons EXTRA HEAVY

EN 388:2016

TDM CUT TEST METHOD:
Weight (Newtons) needed to cut through material with 20 mm blade travel.
1 Newton = 102 Grams (approx.)



4 X 4 4 D X

Abrasion Resistance	0-4 Rating
Cut (Coup Test)	0-5 Rating
Tear Resistance	0-4 Rating
Puncture Resistance	0-4 Rating
Cut (TDM Cut Test)	A-F Rating
Impact Protection	P/F/X Pass / Fail / X = Not Tested

The TDM Cut Test provides greater accuracy than the previous EN 388 Coup Test, and has the ability to test higher cut materials and provide a larger range of precision results. If a Coup Test is requested, it now follows the latest revision - EN 388:2016 Coup Test.

 Tests are verified by an accredited third party laboratory.



Bob Dale Gloves is a member of the ISEA (International Safety Equipment Association).

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