



UNDERSTANDING THE NEW ANSI & EN 388 STANDARD FOR CUT RESISTANCE GLOVES

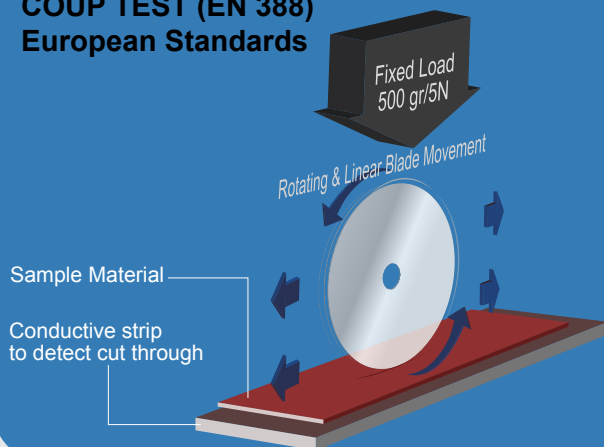
EN 388 (Coup Test)

To be legally sold in the European Economic Area, it needs to have the CE certified marking. And the only test machine accepted for CE certification is the Coup Test.

Steps to the Coup Test:

- Steps for the Coup Test are:
- A test sample is taken from the palm of a glove.
- A rotating circular blade is used to determine cut resistance under a fixed load of 500 grams.
- For accuracy, the test material is compared to a cloth reference material.
- The reference material and the test sample are cut alternately until at least five cut through results are achieved.
- The cut resistance is a ratio of the number of cycles needed to cut through the test sample compared to the reference material.

COUP TEST (EN 388) European Standards



ANSI/ISEA 105-2016

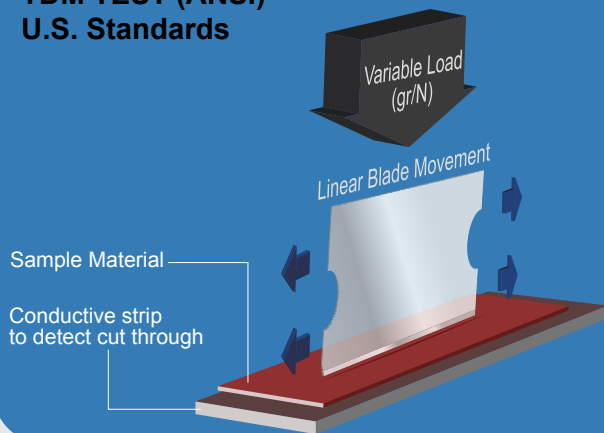
This is the North American standard for measuring cut-resistant materials. It uses a Tomodynamometer Machine (TDM-100) and the test is based on the ASTM F2992-15 standard.

The goal of this test is to measure how much force is needed to cut through a fabric.

Steps to the ANSI test:

- The glove sample is placed on a conductive strip and loaded onto the TDM-100. When the metal blade touches the metal strip, the test is terminated.
- A straight blade is loaded into the machine.
- Weight is added to serve as force.
- The blade moves across the fabric.
- The blade is replaced with a new one to ensure accuracy.
- The sample is cut five times, each with three different loads.
- The distance traveled to cause cut through at various forces is recorded.
- The data is used to determine the load required to cut through the sample.

TDM TEST (ANSI) U.S. Standards



Why ANSI/ISEA 105-2016 is the Preferred Test Method:

It's easy to see why the ANSI/ISEA 105-2016 is now considered the preferred cut test method:

- It is straightforward — there's no comparing the cut-resistant material to a test cloth.
- It accounts for variables — the blade is replaced after each cut is made.
- It's suitable for all types of gloves — dulling of the blade means the Coup Test is not suitable for gloves containing steel wire.

The most important thing to remember is that these two tests are not equivalent. A glove that held up for 3059 grams to cut on the EN 388 scale, can't be considered an ANSI Cut Level A6 (3000 to 3999 grams to cut).

CHOOSE THE RIGHT ANSI LEVEL FOR YOUR GLOVES



200 - 499 GRAMS TO CUT
Assembly, Maintenance, Material Handling and Shipping and Receiving



500 - 999 GRAMS TO CUT
Assembly, Appliance Manufacturing, Automotive, Construction, Maintenance, Material Handling, and Metal Handling



1,000 - 1,499 GRAMS TO CUT
Assembly, Appliance Manufacturing, Automotive, Construction, Maintenance, Material Handling and Metal Handling



1,500 - 2,199 GRAMS TO CUT
Appliance Manufacturing, Automotive, Construction, Glass Handling, Machining, Metal Handling, Metal Stamping and Paper Production.



2,200 - 2,999 GRAMS TO CUT
Appliance Manufacturing, Automotive, Construction, Glass Handling, Machining, Metal Handling, Metal Stamping and Paper Production.



3,000 - 3,999 GRAMS TO CUT
Appliance Manufacturing, Automotive, Construction, Glass Handling, Machining, Metal Handling, Metal Stamping and Paper Production.



4,000 - 4,999 GRAMS TO CUT
Assembly or movement of large, bulky or heavy objects with sharp edges. Also recommended for Assembly or movement of items that are difficult to grip.

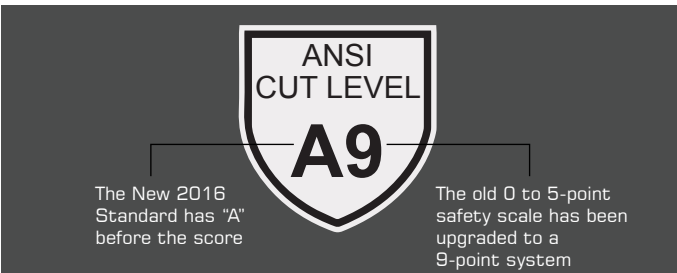


5,000 - 5,999 GRAMS TO CUT
Assembly or movement of large, bulky or heavy objects with sharp edges. Also recommended for Assembly or movement of items that are difficult to grip.



6,000+ GRAMS TO CUT
Assembly or movement of large, bulky or heavy objects with sharp edges. Also recommended for Assembly or movement of items that are difficult to grip.

HOW TO READ THE NEW ICON



CHOOSE THE RIGHT EN 388 LEVEL FOR YOUR GLOVES



2 newtons = 203 grams to cut
Light material handling, small parts assembly without sharp edges



5 newtons = 509 grams to cut
Packaging, warehouse, light duty general purpose



10 newtons = 1019 grams to cut
Light duty metal handling, metal stamping, HVAC, light duty glass handling, plastics, material handling



15 newtons = 1529 grams to cut
Light duty metal handling, appliance manufacturing, bottle and light glass handling, canning, dry walling, electrical, carpet installation, HVAC



22 newtons = 2243 grams to cut
Metal stamping, sheet metal handling, glass handling, automotive assembly



30 newtons = 3059 grams to cut
Heavy duty metal stamping, metal recycling, food processing, pulp and paper

CHANGES TO THE MARKINGS

To account for the new additions of the TDM-100 cut test and impact test to the EN 388 standard, the glove marking will now feature two additional components as seen in the "New Marking" diagram.

OLD MARKING

	Rating
Abrasion	1 2 3 4
Cut (Coup Test)	1 2 3 4 5
Tear	1 2 3 4
Puncture	1 2 3 4



NEW MARKING

	Rating
Abrasion	1 2 3 4
Cut (Coup Test)	1 2 3 4 5
Tear	1 2 3 4
Puncture	1 2 3 4
Cut (TDM-100 Test)	A-F
Impact Protection	P,F,X (P-Passed, F-Failed, X-Not Tested)



New Impact Protection Test

The updated EN 388 2016 standard will also include an impact protection test. This test is intended for gloves designed for protection against impact. Gloves that do not offer impact protection will not be subjected to this test. For that reason, there are three potential ratings that will be given, based on this test.