

# Standards Guide: EN 388:2016 Explained



This piece of legislation provides information about the mechanical resistance of safety gloves, based on abrasion, cut, tear and puncture resistance. It also tests impact protection.

It is easy to spot gloves that conform to the **EN 388** standard, as they will be marked with a shield and up to six (was previously four) figures featured underneath the shield, which denote the level of protection that particular product will offer according to the standard.

**Note:** the higher the number/letter, the better the protection. If a glove was not tested for a certain category, it may be marked with an 'X' instead.

| I                   | II                                         | III              | IV                  | V                                            | VI                |
|---------------------|--------------------------------------------|------------------|---------------------|----------------------------------------------|-------------------|
| Abrasion Resistance | Circular Blade Cut Resistance (Coupe Test) | Tear Resistance  | Puncture Resistance | Straight Blade Cut Resistance (TDM-100 Test) | Impact Resistance |
| Highest Level: 4    | Highest Level: 5                           | Highest Level: 4 | Highest Level: 4    | Highest Level: F                             | Test Passed: P    |

## Which EN 388 Cut Level should you choose?

|                                        |                                                                                                                                                                          |                                        |                                                                                                                                           |                                        |                                                                                                                                                               |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>EN 388</b><br>Cut Level<br><b>A</b> | <b>2 Newtons = 203 grams to cut</b><br><br><b>Ideal for:</b> Light material handling, small parts assembly without sharp edges.                                          | <b>EN 388</b><br>Cut Level<br><b>B</b> | <b>5 Newtons = 509 grams to cut</b><br><br><b>Ideal for:</b> Packaging, warehousing, light duty general handling.                         | <b>EN 388</b><br>Cut Level<br><b>C</b> | <b>10 Newtons = 1019 grams to cut</b><br><br><b>Ideal for:</b> Light duty metal handling, Light duty glass handling, plastic manufacturing, general handling. |
| <b>EN 388</b><br>Cut Level<br><b>D</b> | <b>15 Newtons = 1529 grams to cut</b><br><br><b>Ideal for:</b> Light duty metal handling, appliance manufacturing, glass handling, electrical work, carpet installation. | <b>EN 388</b><br>Cut Level<br><b>E</b> | <b>22 Newtons = 2243 grams to cut</b><br><br><b>Ideal for:</b> Metal stamping, sheet metal handling, glass handling, automotive assembly. | <b>EN 388</b><br>Cut Level<br><b>F</b> | <b>30 Newtons = 3059 grams to cut</b><br><br><b>Ideal for:</b> Heavy duty metal stamping, metal recycling, food processing, pulp and paper recycling.         |

## Why has EN 388 added another cut test?

| Coupe Test | TDM-100 Test | <p>Over the last decade, anti-cut fibre technology has advanced to the point where the blade used in the coupe test (see graphic) is blunted leading to inconsistent readings. The TDM-100 test is closer to 'real-world' situations and measures the amount of force required for a new, straight blade to cut through the glove liner material at a constant speed of 2.5mm/s over a distance of 20mm.</p> <p>Some manufacturer's cut level 5 gloves are only achieving a cut level C in the EN ISO 13997:1999 TDM test which could mean workers are under-protected. Describing the cut rating of a glove as '5C' could be misleading, so Supertouch® is now leading its glove specification based on the newer standards and will work with end users to ensure specifiers are educated and select the right glove for the job.</p> |
|------------|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|            |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |