



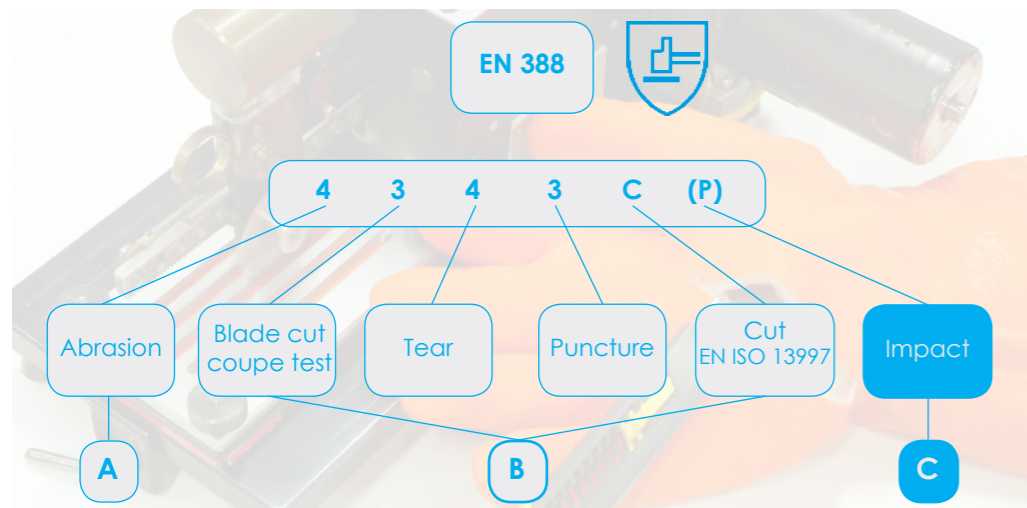
Novelties of the EN388 : 2016 Standard

Personal Protective Equipment
PROTECTIVE GLOVES COMMISSION

SYNAMAP

The 2016 version of the EN388 European Standard is now applicable. What does it change and what are the consequences in terms of glove's certification and making gloves available on the market ?

1. The information given with the pictogram is amended



A. ABRASION RESISTANCE

Changes

The test is performed using a more reliable abrasive paper.

Consequences

The test method and expression of results remain unchanged.

But this paper is slightly more abrasive than the previous one that was used. Some gloves could achieve a lower performance level, although their quality remains as good as before.

B. CUT RESISTANCE

Changes

A new test has to be performed if the usual test (Coupe-test) is found not to be reliable. This applies to high cut resistant gloves which dull the blade during the cut test, thus providing wrong results.

Case 1 :

In the regular case, for all gloves that do not dull the Coupe-test blade, and for which less than 60 cycles are needed to cut the sample, there is no change. The Coupe-test is the reference test method, and the performance level is indicated as before, though adding X in fifth position – meaning ISO cut test not performed.

Example for case 1 :



Case 2 :

Moreover, the manufacturer may decide to determine the performance level according to the EN ISO 13997 test. In such case, the performance level achieved (a letter) is indicated.

Example for case 2 :



Consequences

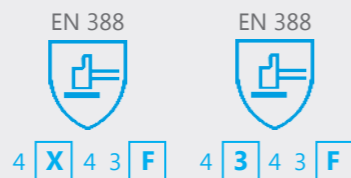
The information given on cut resistance of the gloves is different, although the gloves remain the same in quality.

Beware : gloves strongly dulling the blade will show a Coupe-test performance lower than the one measured according to the previous version of EN 388:2003 – because the test method was amended. It means in no way that quality of the glove has been altered.

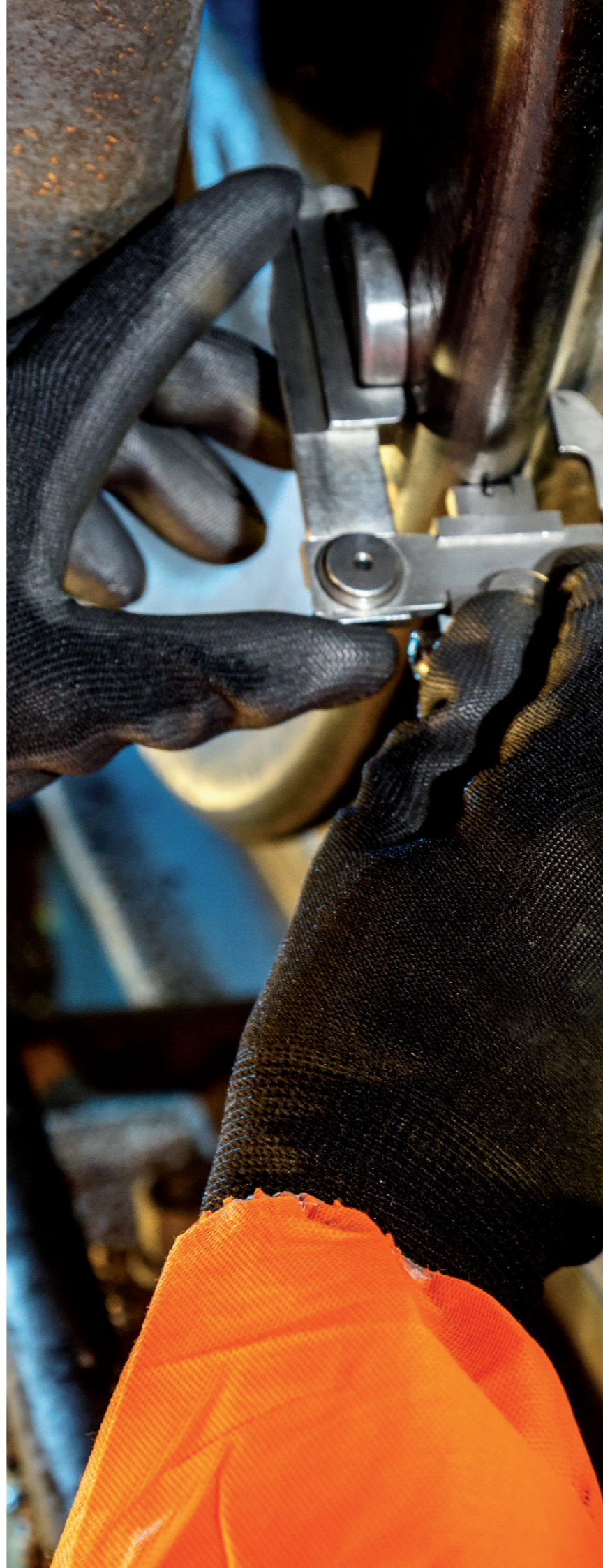
Case 3 :

In case of blade dulling, the Coupe-test is not reliable. In such case, the EN ISO 13997 test method must be performed as the reference test method and the performance letter is indicated. The manufacturer decides whether he wants to provide the Coupe-test performance level on a voluntary basis.

Possible markings as examples for Case 3 :



Note : the impact test is not claimed in these examples.



C. IMPACT RESISTANCE

Changes

This new test enables to claim protection against impacts.

The test shall be performed according to the EN 13594 standard (standard on protective gloves for motorcycle riders)

The glove must reduce the effect of impact on the hand. Thus the requirement is that a 2.5kg mass with a 5 Joules energy falling on the glove shall transmit a force that does not exceed 7kN.

Consequences

Provided the test is performed and the requirement is achieved, the letter P may be affixed in last position to the series of performance levels.

The information leaflet from the manufacturer must also indicate:

- The parts of the gloves that are effectively concerned by this protection
- A warning that this protection does not apply to the fingers

If the test is not claimed or if the performance level is not passed, no letter P may appear with the pictogram.

2. Reminding the tests and performance levels

Performance level (value : more or equal to)						
Test	Level 1	Level 2	Level 3	Level 4	Niveau 5	
Abrasion resistance (number of cycles)	100	500	2 000	8 000	-	
Cut resistance Cup test (index)	1,2	2,5	5,0	10,0	20,0	
Tear resistance (Newton)	10	25	50	75	-	
Puncture resistance (Newton)	20	60	100	150	-	
Performance levels	Level A	Level B	Level C	Level D	Level E	Level F
Cut resistance EN ISO 13997 (Newton)	2	5	10	15	22	30
Performance	- (no letter)			P		
Impact resistance	Fail or not claimed			Pass		

0 : lower than level 1
X : test not performed or not applicable

3. How shall we apply the revised EN 388:2016 ?

As soon as this revised standard is published by the EU OJ (Official Journal of the European Union), it shall be used to certify any new product.

For existing products, it is not necessary to have them certified again. It is though reminded that the new 2016/425 Regulation requires any certification to be renewed as follows :

- PPE manufactured before April 21, 2019 according to the Directive and placed on the market before April 21, 2019, may be made available on the market after this date, their EC-certificates shall remain valid until April 21, 2023.
- PPE manufactured before April 21, 2019 according to the Directive and placed on the market after April 21, 2019, shall be in compliance with the new Regulation and therefore necessarily recertified.

Moreover, it is prudent to have the certificate renewed if older than 5 years, in order to prevent any difficulty with the State administrations such as Customs.

4. If you need more information :

The EN 388 : 2016 is available to be bought through the Standardization Body of your country eg. AFNOR for France : www.boutique.afnor.org/



Syndicat national des acteurs du marché
de la prévention et de la protection

21 rue Leblanc - 75015 PARIS
Tél. : 01 79 97 75 10 - Fax : 01 79 97 75 15

info@synamap.fr - www.synamap.fr