



**TILSATEC**®

**High Performance Hand,  
Arm and Body Protection**

PRODUCT CATALOGUE 2025





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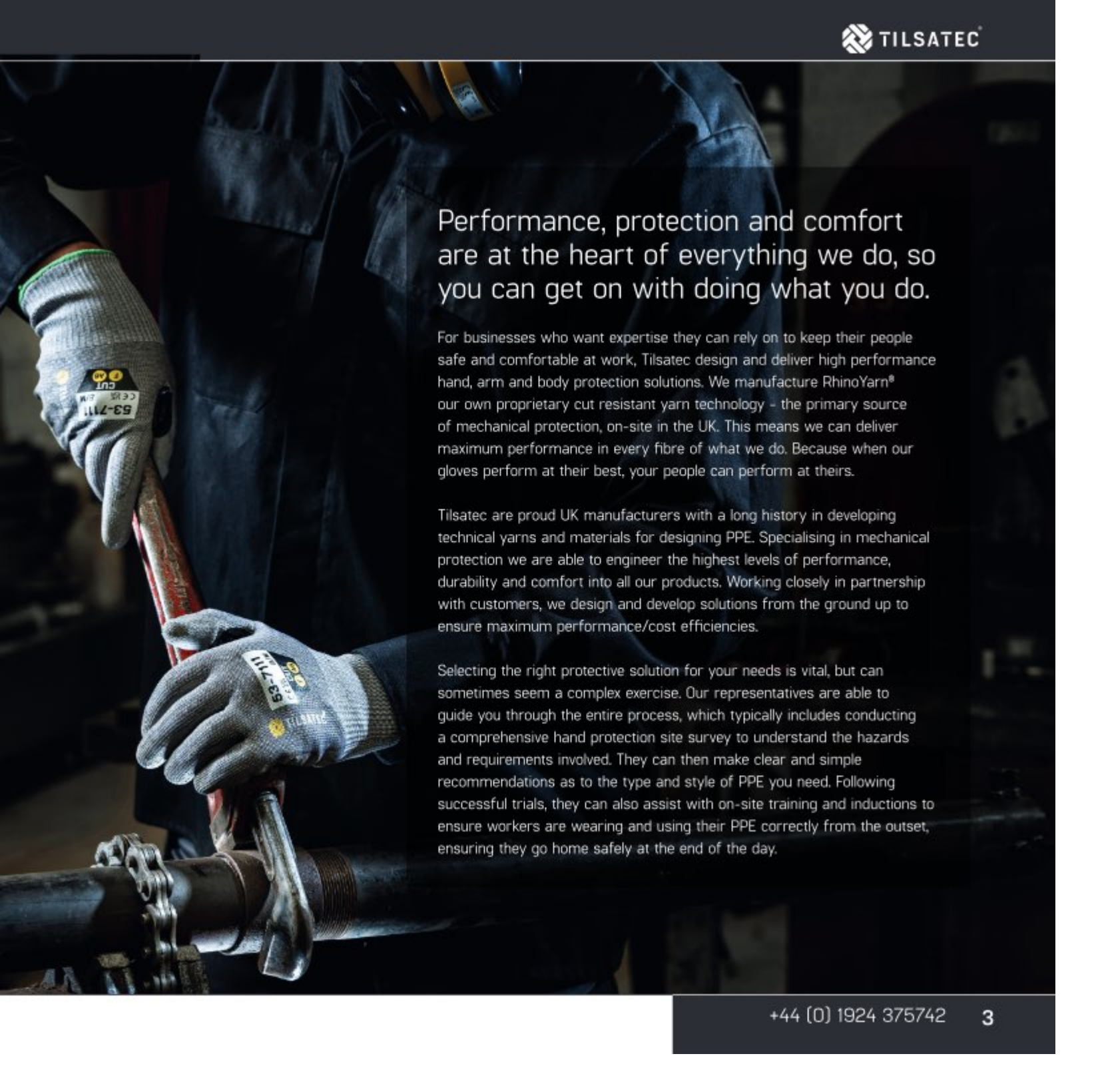
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## Performance, protection and comfort are at the heart of everything we do, so you can get on with doing what you do.

For businesses who want expertise they can rely on to keep their people safe and comfortable at work, Tilsatec design and deliver high performance hand, arm and body protection solutions. We manufacture RhinoYarn® our own proprietary cut resistant yarn technology - the primary source of mechanical protection, on-site in the UK. This means we can deliver maximum performance in every fibre of what we do. Because when our gloves perform at their best, your people can perform at theirs.

Tilsatec are proud UK manufacturers with a long history in developing technical yarns and materials for designing PPE. Specialising in mechanical protection we are able to engineer the highest levels of performance, durability and comfort into all our products. Working closely in partnership with customers, we design and develop solutions from the ground up to ensure maximum performance/cost efficiencies.

Selecting the right protective solution for your needs is vital, but can sometimes seem a complex exercise. Our representatives are able to guide you through the entire process, which typically includes conducting a comprehensive hand protection site survey to understand the hazards and requirements involved. They can then make clear and simple recommendations as to the type and style of PPE you need. Following successful trials, they can also assist with on-site training and inductions to ensure workers are wearing and using their PPE correctly from the outset, ensuring they go home safely at the end of the day.



**We've built a reputation as innovative cut resistance specialists, with a comprehensive range of cut resistant hand, arm and body protective products for use in a variety of industrial sectors.**

Wherever people work in high hazard environments, our products are at the front line, helping them do their jobs safely and efficiently.

Whenever you see the RhinoYarn® mark it means a product has been made using our own proprietary yarn technology - the primary source of mechanical protection, on-site in the UK. With this comes the assurance of full quality control, processing traceability and performance efficiencies built in at every level.

We're incredibly proud to be a UK manufacturer, maintaining generations of expertise in yarn production and design. Determined to stay in complete control we've also created our own purpose-built independently accredited mechanical testing laboratory. Having a facility like this on-site equips us to be ready for the future.

Find out more:





RhinoYarn® is our proprietary yarn technology which blends combinations of engineered, synthetic and natural fibres into high-performance yarns that provide high mechanical protection without compromising on comfort or dexterity. Each component is carefully selected to engineer a product that delivers the desired performance in the most efficient, durable and comfortable structure possible.

When specifying hand protection, it's incredibly important to understand that not all gloves are created equal and the materials used to knit the glove in combination with how they are knitted are what provides the protection, durability and reliability you need that the glove you're wearing does what it says it does.



# TILSATEC MECHANICAL TESTING LABORATORY

## Independent Accreditation

Tilsatec's laboratory is independently accredited by UKAS. The United Kingdom Accreditation Service (UKAS) is the sole accreditation body in the UK for organisations that provide testing services. This accreditation uses the standard ISO 17025 to assess a laboratory's ability to produce high quality, accurate tests and data. The laboratory also supports the following functions:



- ✓ Compliance monitoring and compilation of CE and UKCA certificate applications
- ✓ Performance and quality control testing of raw materials, yarns and finished products
- ✓ Supporting of new product development
- ✓ Bespoke in house testing to suit customer's specific hazards/requirements
- ✓ Benchmark testing to ensure test results are in line with industry standards
- ✓ Ongoing due diligence product testing





## Technical support and product guidance

Alongside our experienced sales representatives, the technical team can provide additional advice and support on the suitability of a product and make recommendations on factors such as cut resistance, grip performance, abrasion, liquid repellency, thermal properties and breathability.

Where a customer may have concerns as to the suitability of a product for their particular application, the laboratory team can assist in evaluating the nature of the tasks being performed and provide a detailed evaluation.



Certificate Number 18854

Tilsatec has a Quality Management System in place which is certified to ISO 9001. The standard is based on a number of quality management principles including a strong customer focus, the motivation and implication of top management, the process approach and continual improvement. This demonstrates the existence of an effective quality management system that satisfies the rigours of an independent, external audit.

If we believe a current EN standard doesn't go far enough in providing customers with the performance data they need, we will develop unique in house test methods which go beyond the standard to give more realistic data, representative of real life working conditions and hazards.



## CE PPE REGULATION (EU) 2016/425

Regulation (EU) 2016/425 on personal protective equipment (PPE) has now replaced the previous Directive (89/686/EEC). The regulation details the requirements for all PPE placed on the market in the European Economic Area (EEA) to comply with the legislation. All Tilsatec PPE products have undergone examination to conform with the EU regulations and are CE marked.

### Category I: Simple PPE

Gloves and sleeves designed to protect against minimal risks such as superficial mechanical injury and cleaning. Manufacturers are permitted to test and self certify products.

### Category II: Intermediate PPE

Hand and arm protection designed to protect against cuts, abrasion, puncture and tearing. This category of products must undergo independent testing and attain certification by an accredited notified body. A CE mark will then be issued by the notified body. No item of PPE can be sold or used in the EU without being issued a CE mark. The name and address of the notified body that issued the CE mark must be present on the Instructions for Use supplied with the product. Ongoing surveillance of performance must be carried out through testing.

### Category III: Complex PPE

PPE in this category includes risks that may cause very serious consequences such as death or irreversible damage to health e.g. chemicals, harmful biological agents, extreme temperatures and cuts by hand-held chainsaws. PPE must undergo independent testing and certification the same as Category II products. The quality assurance system used by the manufacturer must also be independently checked and the identification number of the notified body should appear alongside the CE mark on the Instructions for Use. Ongoing surveillance of performance and manufacturing processes must be carried out through product testing and conducting factory audits.

## EN ISO 21420:2020+A1:2024 General Requirements

The laboratory carries out the general requirements laid out in the recently updated EN ISO 21420 standard. These include sizing and dexterity to guarantee the highest standard of fit and comfort and pH testing to ensure the end user will be safeguarded against any irritation that may be caused by the materials.



## EN388:2016+A1:2018 Abrasion Resistance Testing



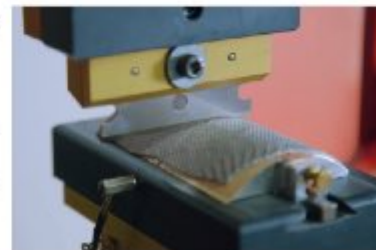
A Martindale Abrasion tester is the internationally accepted equipment for testing abrasion and wearing of fabrics. Tilsatec uses the M235 machine, ensuring accurate and consistent results are achieved. High performance materials can be tested to in excess of 8000 cycles where required, to determined when degradation of the material has occurred.

Abrasion is determined by analysis of the specimen after a number of rubs defined by the performance level. Failure is observed once complete breakthrough of the sample is reached.

## EN ISO 13997:1999 / ASTM F2992-23 Blade Cut Resistance

The laboratory uses a TDM-100 machine to conduct cut resistance testing to the EN ISO 13997 and ASTM F2992 standards. These methods allow for greater accuracy of results when testing high performance materials that may give cutting forces in excess of 100N. The level of the force achieved gives end users an idea of the resistance the glove will offer against cutting hazards.

The test method uses a straight edge blade drawn across the sample in one direction where the blade is replaced after each cut has been performed. A range of loads are used throughout the test and the cutting distance against the force used (in Newtons) is plotted to determine the force required to cut through the material in a 20mm blade stroke.

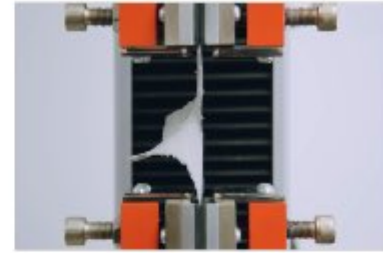






### EN388:2016+A1:2018 Tear and Puncture Resistance

At Tilsatec, a tensometer fitted with a high capacity load cell is used to determine the force required to tear a rectangular specimen apart. A rounded stylus fitted into the tensometer is penetrated through a sample to determine the material's puncture force.



### EN388:2016+A1:2018 / ANSI/ISEA138-19 Impact testing



This is the most recent addition to the EN388: 2016+A1:2018 standard and is an optional test. It should only be included for gloves that claim specific impact resistant properties. The new impact test is based on the EN13594:2015 standard for protective gloves for motorcycle riders. The knuckle area is tested by dropping a striker with impact energy of 5J onto the test subject. To be considered a pass (P), the transmitted force needs to be less than or equal to 7 kN with no single results greater than 9 kN. The knuckle area and other parts of the glove claiming protection, not including the fingers, is tested. ANSI/ISEA138-19 standard requires the testing to be carried out across 18 impact points across 2 gloves; this is 4 impact sites over the knuckles, and 5 impact sites over the fingers per glove. Unlike the EN standard that defines a pass or fail, the ANSI/ISEA138-19 test method specifies 3 performance levels. The average force measurement shall be less than or equal to 9kN for a level 1, less than or equal to 6.5kN for a level 2 and less than or equal to 4kN for a level 3. This testing is similarly carried out under an impact energy of 5J.

### ASTM F2878-19 Hypodermic Needle Puncture Resistance

High-Performance hypodermic needle puncture resistant materials are tested on the tensometer with single use validated 25 gauge needles. This test ensures that the materials offer adequate protection against hypodermic needle hazards where required.

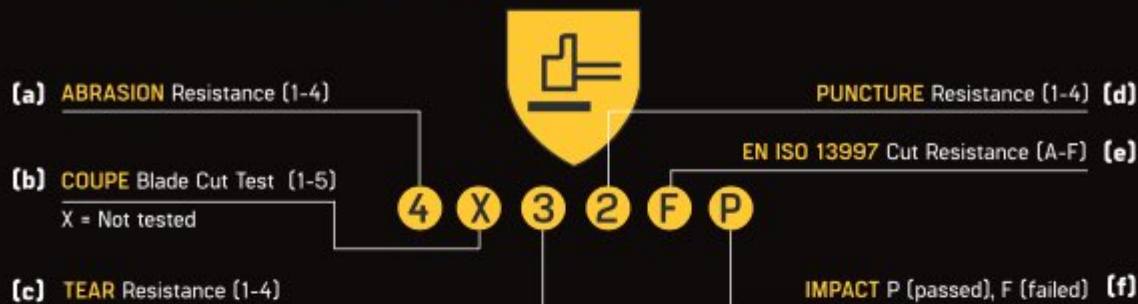


### Other Tests

Tilsatec has the expertise to develop test methods that can give indicative data and information on protection against *contact heat*, *friction testing* to determine gripping properties and *food migration* to ensure gloves that carry the food safe pictogram comply with the current EU regulations.

For a list of accredited testing carried out by the lab visit: <https://www.ukas.com/download-schedule/10386/Testing/>

## EN 388:2016+A1:2018 - Mechanical Protection



### (a) Abrasion Resistance (1-4) Updated in 2016

The Martindale Abrasion tester is used to determine the durability, wearing and abrasion of materials. The test is performed by rubbing circular specimens taken from the palm of the glove against a specified abradant. The sample holder moves in a Lissajous pattern under a 9KPa load and the test is checked at 100, 500, 2000 and 8000 cycle intervals for any signs of abrasion. Failure is confirmed once complete breakthrough of the sample is observed. Four samples are tested and the final performance level is based on the cycles at which any of the four specimens show signs of breakthrough. The update to the EN388 standard included a change to the abradant used for this test. Only the specified type of abradant shall be used to determine the abrasion resistance.



### (b) Coupe Blade Cut Test (1-5)

Previously, the BS 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 specimen until the blade cuts through. A "cutting index" is calculated and the level 1-5 is assigned.



### (c) Tear Resistance (1-4)

A tensometer is used to determine the strength required to tear a sample apart. Four rectangular samples are tested from the palm of 4 separate gloves where two specimens with a 50mm slit in the longitudinal direction are taken across the palm, and two specimens are taken along the length of the glove. The samples are clamped in the tensometer which pulls the samples until they are fully torn apart at a speed of 100mm/min. The force at peak is recorded for each specimen tested. The minimum value achieved from all four test results is used to determine the final tear resistance level that ranges from 1 to 4.



### (d) Puncture Resistance (1-4) Updated in 2016

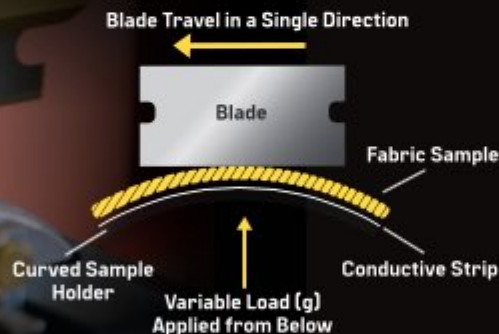
A large 4mm wide probe with rounded stylus is pushed using a tensometer fitted with a compression load cell 50mm through the material taken from the palm of the glove at a speed of 100mm/min. Four specimens are tested and the force at peak is recorded. The minimum value achieved from all four test results is used to determine the final puncture level that ranges from 1 to 4.



### **(e) EN ISO 13997 Cut Resistance (A-F)** New to the standard in 2016

The EN ISO 13997 cut resistance method is one of the recent additions to the EN 388 standard. This test was introduced to accommodate higher cut resistance materials in the market that have a blunting effect on blades and other sharp objects. This method uses a TDM test device, fitted with a single use straight edge blade that is drawn once across the material in one direction. Once the blade cuts through the sample, the distance that the blade has travelled is recorded. (Shown below)

A range of force in newtons are used throughout the test and a graphical representation of force against cutting distance is used to determine the force required to cut through the material at 20mm of blade travel. By using the blade only once and testing a variety of load forces (as opposed to the 5N standard load used in the coupe test), the impact of blade blunting is eliminated and a more accurate representation of cut protection is assigned.




### **(f) Impact P (passed) F (failed)**

This test is new to the EN388: 2016 standard and is optional. It should only be included for gloves that claim specific impact resistant properties. The new impact test is based on the EN13594:2015 standard for protective gloves for motorcycle riders. The knuckle and other areas that claim protection will achieve a Pass or Fail.

## Finding the glove for your industry requirements

- A 2 - 5 NEWTONS**
  - Light material handling
  - Small parts assembly
  - Light duty general purpose
- B 5 - 10 NEWTONS**
  - Packaging
  - White goods manufacturing
  - Warehousing/Logistics
- C 10 - 15 NEWTONS**
  - Metal handling
  - Light assembly
  - Maintenance works
- D 15 - 22 NEWTONS**
  - Electrical installation - Automotive assembly
  - Engineering - Utilities - Aerospace
  - CNC Machining/Metal Fabrication
- E 22 - 30 NEWTONS**
  - Metal stamping - Glass manufacturing
  - Automotive assembly
  - Food processing - Aerospace
  - CNC Machining/Metal Fabrication
- F 30 NEWTONS +**
  - Heavy metal stamping
  - Waste management
  - Recycling
  - Glass handling

This pictogram indicates that the user should always consult the instructions for use: 

## EN407: 2020 - Protection from Thermal Hazards



X 1 X X X X

Products certified to the new EN407:2020 standard shall be affixed with this pictogram. The pictogram accompanying EN407:2020 includes 6 digits which represent performance levels against the specific thermal tests as per the table below.



a b c d e f

Only if a product has been tested to "Limited Flame Spread" achieving a minimum performance level of 1 then the pictogram depicting the flame shall be used.

Performance Level		1	2	3	4
a. Limited Flame Spread	After flame time	≤ 15 s	≤ 10 s	≤ 3 s	≤ 2 s
	After glow time	no requir.	≤ 120 s	≤ 25 s	≤ 5 s
b. Contact Heat	Contact temperature	100°C	250°C	350°C	500°C
	Threshold time	≥ 15 s	≥ 15 s	≥ 15 s	≥ 15 s
c. Convective heat (heat transfer delay)		≥ 4 s	≥ 7 s	≥ 10 s	≥ 18 s
d. Radiant heat (heat transfer delay)		≥ 7 s	≥ 20 s	≥ 50 s	≥ 95 s
e. Small drops molten metal (# drops)		≥ 10	≥ 15	≥ 25	≥ 35
f. Large quantity molten metal (mass)		30g	60g	120g	200g

### a. Limited Flame Spread

The glove is placed vertically over a burner and is tested for ignition times 3 and 15 seconds. Classification is based on the length of time the material continues to burn and glow after the source of ignition is removed.

### b. Contact Heat

The test sample is placed on a calorimeter and a heated cylinder is brought into contact with the specimen. Temperatures of 100, 250, 350 and 500°C are tested to determine the classification. The threshold time shall be calculated, where an increase in calorimeter temperature of 10°C is observed once the heated cylinder is in contact with the sample. A threshold time of greater than 15 seconds demonstrates a pass for the test temperature. If a level 3 contact heat is achieved, then limited flame spread must also be tested and pass level 1.

### c. Convective Heat Resistance

The glove is placed in a controlled chamber and exposed to a flame. The resistance is based on the length of time it takes to transfer the heat from the flame. This rating can only be used if a level 3 or 4 is achieved in the limited flame spread test.

### d. Radiant Heat Resistance

The glove is exposed to radiant heat and the classification is determined by how long it takes for the transfer of heat from the radiant heat source. The back of the hand is tested. This rating can only be used if a level 3 or 4 is achieved in the limited flame spread test.

### e. Resistance to Small Splashes of Molten Metal

The glove is splashed with molten metal and the number of molten metal drops that are required to heat the glove to the required temperature are measured. The classification is based on the average of the number of droplets counted on four samples. Specimen are taken from the palm and the back of the glove. This rating can only be used if a level 3 or 4 is achieved in the limited flame spread test.

### f. Resistance to Large Splashes of Molten Metal

The glove is lined with a skin simulated material and molten metal is poured over the glove. Once the test is complete, the liner material is assessed for any changes such as pin holing or degradation and the classification is based on the weight of molten metal required to cause the changes to the skin simulated material. If a drop of the molten metal is stuck to the glove or if the sample ignites, the material fails the test.

## ASTM F2878-19 - Needlestick Resistance



Resistance to punctures from needlestick is measured in Newtons according to ASTM F2878:19. This standard allows the use of verified 25, 23 or 21g hypodermic medical grade needles, however the ANSI/ISEA 105-2016 standard defines the classification to be based on testing against a 25g needle.

A tensometer is used to drive the needle through the material to simulate real-life puncture hazards as closely as possible. A minimum of 12 samples are tested and the average is determined to give an accurate force required to puncture the material.

## BS EN 1149 - Electrostatic Properties



EN 1149-5 is a European Standard which specifies the performance and design requirements for electrostatic dissipative clothing, used as part of an earthed clothing system to avoid the build up of static charges.

There are a number of important applications where the use of antistatic hand protection is of critical importance, such as:

- To prevent charge build up and release in flammable atmospheric environments where there is a risk of incendiary discharge
- To avoid damage to sensitive electronic componentry during assembly processes
- To control the attraction of dust and other contaminants to critical pre-painted surfaces

## EC FOOD REGULATIONS

Tilsatec food range products are approved for contact with all foodstuffs in compliance with the parent directive 1935/2004/EC. They also comply with the specific requirements laid down in the Commission Regulation (EU) No 10/2011 plastic materials and articles intended to come into contact with food.

The regulation governs the substances that may be used in the manufacture of food contact materials (including gloves for food handling) and specify that under normal foreseeable conditions of use, they do not transfer their constituents to food in quantities which could:

- endanger human health; or
- bring about an unacceptable change in the composition of the food; or
- bring about a deterioration in the organoleptic characteristics (i.e texture, taste, aroma)

To ensure food contact materials comply with these regulations a series of test standards are applied (EN 1186) to determine migration levels from contact materials into the food using a variety of food simulants.

Compliance with the allowable limits enables food gloves to be marked with the following 'food safe' pictogram:

Tilsatec food approved products have been tested according to these standards and meet the total extractive and overall migration limits required for repeat use application.



## EN ISO 21420:2020 - General requirements for protective gloves

Defines the general requirements for most types of protective gloves which includes:

- Glove design and construction
- Sizing and measurement of gloves
- Cleaning
- Dexterity
- Innocuousness
- Product marking, packaging and information supplied by the manufacturer
- Breathability and comfort
- Electrostatic properties



Sizing of gloves according to hand length and circumference:

Glove Size	Hand Circumference [mm]	Hand Length [mm]
4	101	<160
5	127	<160
6	152	160
7	178	171
8	203	182
9	229	192
10	254	204
11	279	215
12	304	>215
13	329	>215

## ANSI/ISEA 105-2016 - Cut Resistance

ANSI/ISEA 105-2016 specifies the use of standard ASTM F2992 as the exclusive method for determining the load (in grams) required to assign a cut resistance rating.

A new 9 level rating scale has been established (A1-A9) compared with the 5 levels defined in ANSI/ISEA 105-2011. This new standard now addresses higher cut resistant materials and additionally gives a more accurate, better aligned and consistent test method between the ANSI/ISEA and EU standards for cut resistance. Classification levels have also been increased with lower ranges between classes to allow for more accurate identification of the PPE required for high hazard use.

In 2016 significant updates were made to EN 388 and ANSI/ISEA 105 standards to provide a more accurate and reliable assignment of cut levels for hand protection. The changes were also designed to increase harmonisation between EN/ANSI test methods and classification levels to provide a clearer basis for comparison of product performance in a global market.

Grams to cut



### Differences between ANSI and EN Cut tests

Whilst the technique is very similar and both standards use the TDM cut testing machine, there are slight differences between the methods. These include, the specification for blade sharpness, cutting load is measured in grams for ANSI and newtons for the EN standard, levels range from A1 – A9 for ANSI and A – F for the EN standard and lastly, the ANSI test requires the test to be carried out in triplicate and the average load for the 3 tests is taken as the final value, whilst the EN test is carried out once.

## IMPACT TESTING

The EN388: 2016+A1:2018 impact test is optional and should only be included for gloves that claim specific impact resistant properties. This test is based on the EN13594:2015 standard for protective gloves for motorcycle riders.

The knuckle area is tested by dropping a striker with impact energy of 5J onto the test subject. To be considered a pass (P), the transmitted force needs to be less than or equal to 7 kN with no single results greater than 9 kN. Only the knuckle area and other areas claiming protection, not including the fingers is tested.

The ANSI/ISEA138 standard is a similar test method that however, requires the testing to be carried out at 18 impact points across 2 gloves, over both the knuckles and fingers. The overall performance level is determined by the lowest level recorded between the knuckles and fingers.

Gloves tested to this standard can be classified to 3 levels as per the following table:



Classification for ANSI 138 Impact resistance

Performance Level	Mean transmitted result	All impacts
1	≤ 9 kN	<11.3
2	≤ 6.5kN	≤ 8.1kN
3	≤ 4kN	≤ 5kN



Performance level 1



Performance level 2



Performance level 3

## GLOBAL GLOVE MARKINGS

It is important to familiarise yourself with how product information, relevant standards and product codes are laid out on our products.

Some may be marked on the back of the hand as shown below and some with a label sewn on the inside.

Always check labelling before using your item of PPE to ensure it meets the standards required for your task.



EU CE Certification



53-7111

Product Code

CE UK CA 11/2XL

Product Size

CUT

F A6

ANSI 105-w2016  
Cut Resistance Data  
(American Standard)

EN388: 2016 Cut  
Resistance Test Data

## CHEMICAL TESTING

### EN ISO 374 - Protective gloves against dangerous chemicals and micro-organisms

Gloves that are intended to protect the user against dangerous chemicals and micro-organisms shall be tested against the requirements set out in EN ISO 374-1, EN ISO 374-2 and EN ISO 374-4.

EN ISO 374-1:2016+A1:2018 defines the requirements for protection against dangerous chemicals. The standard specifies 18 chemicals to which the product may be tested against:

Code Letter	Chemical	CAS Number	Class
A	Methanol	67-56-1	Primary Alcohol
B	Acetone	67-64-1	Ketone
C	Acetonitrile	75-05-8	Nitrile Compounds
D	Dichloromethane	75-09-2	Chlorinated hydrocarbon
E	Carbon Disulphide	75-15-0	Sulphur Containing Organic Compound
F	Toluene	108-88-3	Aromatic hydrocarbon
G	Diethylamine	109-89-7	Amine
H	Tetrahydrofuran	109-99-9	Heterocyclic and ether Compound
I	Ethyl Acetate	141-78-6	Ester
J	n-Heptane	142-82-5	Saturated hydrocarbon
K	Sodium hydroxide 40%	1310-73-2	Inorganic base
L	Sulphuric Acid 96%	7664-93-9	Inorganic mineral acid, oxidising
M	Nitric Acid 65%	7697-37-2	Inorganic mineral acid, oxidising
N	Acetic Acid 99%	64-19-7	Organic acid
O	Ammonium Hydroxide 25%	1336-21-6	Organic base
P	Hydrogen Peroxide 30%	7722-84-1	Peroxide
S	Hydrofluoric Acid 40%	7664-39-3	Inorganic mineral acid
T	Formaldehyde 37%	50-00-0	Aldehyde

Testing is carried out on the palm of three gloves according to the standard EN ISO 16523-1:2015 'Determination of material resistance to permeation by chemicals. Permeation by liquid chemical under conditions of continuous contact'.




Performance levels are assigned as follows:

Performance Level	Measured breakthrough time (mins)
1	>10
2	>30
3	>60
4	>120
5	>240
6	>480





Gloves are categorised as **Type A**, **Type B** or **Type C** based on the number of chemicals they protect against and the performance level they achieve. For classes A and B, the tested chemicals shall be identified by their code letter which shall be marked under the pictogram and for class C, the tested chemical code followed by the phrase "Low Chemical" is recommended:

EN ISO 374-1/Type A	EN ISO 374-1/Type B	EN ISO 374-1/Type C	Type	Minimum performance level	Minimum test chemicals
			A	2	6
			B	2	3
			C	1	1

## EN ISO 374-2:2014 - Resistance to Penetration

EN ISO 374-2:2014 is the standard for the determination of resistance to penetration. This involves testing a minimum of 4 gloves for water and air leaks where all gloves must pass the testing to be able to claim chemical protection according to BS EN ISO 374-1.

The air leak test consists of applying standardised air pressure, dependent on the material thickness, to the glove interior whilst immersed in water. A leak is detected by a stream of air bubbles from the surface of the glove.

For the water leak test, the glove is filled with 1000ml of water. A leak is detected by the appearance of water droplets on the outside of the glove.

## EN ISO 374-4:2019 - Degradation



For all gloves claiming chemical protection, degradation according to EN ISO 374-4:2019 must be carried out. This is determined by measuring the change in puncture resistance of the glove after continuous contact of the external surface with the challenge test chemical. All chemicals that the gloves claim protection against shall be tested for degradation and the percent change in the puncture for the glove material (degradation resistance - DR) shall be reported on the user instructions.

## EN ISO 374-5:2016 - Terminology and performance requirements for micro-organisms risks

The EN ISO 374-5:2016 standard defines the requirements for gloves that protect against viruses, bacteria and fungi. Gloves claiming this standard shall pass the penetration tests described in EN ISO 374-2.

Where gloves claim protection against viruses, they shall pass additional testing according to ISO 16604:2004 - Determination of resistance of protective clothing materials to penetration by blood-borne pathogens - Procedure B.

Marking shall be as follows for gloves tested to EN ISO 374-5:2016

Bacteria and fungi protection	Virus protection
EN ISO 374-5:2016 	EN ISO 374-5:2016 

## ELECTRICAL RESISTANCE

### EN60903:2003 - Electrical Resistance

EN60903:2003 is the standard to which electrically resistant gloves are tested. Gloves are subject to a number of checks as required by the standard. These include; composition checks, shape, dimensions, thickness, and workmanship and finish. The gloves must also pass mechanical requirements for tensile strength, elongation at break, tension set and puncture. There are ageing requirements where the gloves shall withstand mechanical testing after being exposed to high temperatures to simulate the effects of ageing. All gloves shall pass electrical requirements which involve carrying out proof and withstand voltage tests, along with the AC proof test current requirements according to their specific class.

Lastly, the gloves shall pass thermal requirements involving passing dielectric testing after exposure to low temperatures and also specific requirements for when in contact with flames.

The EN 60903 standard divides insulating gloves into 6 classes: 00, 0, 1, 2, 3 and 4 where the maximum use voltage recommended for each class of gloves is designated as:

Class	Proof test voltage AC/DC	Maximum use voltage AC/DC
00	2,500/10,000	500/750
0	5,000/20,000	1,000/1,500
1	10,000/40,000	7,500/11,250
2	20,000/50,000	17,000/25,500
3	30,000/60,000	26,500/39,750
4	40,000/70,000	36,000/54,000

Electrical resistant gloves are categorised for special properties that provides additional protection during electrical work:

Category	Resistant to
A	Acid
H	Dil
Z	Ozone
R	Acid, oil, ozone
C	Extremely low temperature

### ASTM D120 - Electrical Resistance

ASTM D120 is the standard specification for rubber insulating gloves. This specification covers the minimum electrical, chemical, and physical property requirements and the detailed procedures by which such properties are to be determined. The classes assigned are like those set out by the EN60903 standard; 00, 0, 1, 2, 3, and 4. The dielectric test method is also similar; however, the glove thickness requirements are different for gloves conforming to this ASTM standard. Physical properties to be tested include tensile strength, tensile stress, ultimate elongation, tension set, tear and puncture resistance and Shore A hardness.

Gloves covered under this specification are designated as Type I; non-resistant to ozone and made from high grade natural or synthetic rubber or Type II; ozone-resistant made of any elastomer or combination of elastomeric compounds.



## BS EN 61482 - Arc Flash

Electric arc hazards are potential harm from an energy release from an electric arc usually caused by a short circuit or equipment failure in electrotechnical work. Arc flash is the heat transfer response through a material.

BS EN 61482-2 is the standard for protective clothing against the thermal hazards of an electric arc.

There are two test methods that may be used to determine an arc rating:

### Open Arc Test Method EN61842-1-1

This method is used to determine the arc rating of a material or material assembly, expressed by the value of either ATPV (arc thermal protection value), ELIM (incident energy limit) or EBT (energy breakopen threshold). The test tells us at what calorie level the gloves offer protection against a 50% risk of a second-degree burn.

This procedure is carried out on specimens of material mounted on test panels and involves measuring the amount of energy transmitted through the material during and after exposure to an electric arc of 8kA from a distance of 300mm. This is reported in cal/cm<sup>2</sup>.

### Hazard/Risk Categories

The NFPA 70E Standard for electrical safety in the workplace outlines the minimum amount of protective clothing and other protective equipment such as gloves required when used in an arc flash environment. ASTM F2675/F2675M is the standard for Determining Arc Ratings of Hand Protective Products Developed and Used for Electrical Arc Flash Protection. The amount of thermal energy transmitted through the gloves during and after exposure to an electric arc are measured. This test method is to be used for gloves that are flame resistant or that have an adequate flame resistance for the required hazard. These fall into 4 specific hazard/risk categories from 1-4, where 4 is the highest risk. The ATPV value measured in the open arc test is used to determine if the PPE is suitable for the specific hazard/risk category:

Hazard/Risk category NFPA 70E	Minimum Arc rating Cal/cm <sup>2</sup>
1	>4
2	>8
3	>25
4	>40

### Box Arc Test Method EN61482-1-2

EN 61482-1-2 details the requirements and test methods applicable to materials and garments for protective clothing for electrical workers against the thermal hazards of a constrained and directed electric arc (Box Test).

This constrained and directed arc in a low voltage test circuit is used to classify material and clothing in two defined arc protection classes:

Arc Protection class	Incident Energy Level
APC1	4kA
APC2	7kA

Gloves tested to this standard shall demonstrate a minimum arc thermal protection of APC 1. An APC 2 indicates a higher arc thermal protection.

## EN60903 / IEC60903 Re-Testing:

New gloves of all classes that have not been issued for use and held in storage, must be dielectrically retested at 12-month intervals, from date of manufacture.

**In use/issued gloves:** For all classes, a physical inspection of these gloves must be conducted prior to every use by inflating the gloves to visually check for air leaks, damage or tears while pressurized.

High voltage electrical gloves of classes 1, 2, 3 and 4, are only valid for 6 months from date of manufacture or latest retest date. Thereafter, they must be dielectrically tested for use, at no greater than 6-month intervals.

For low voltage electrical gloves of classes 00 & 0, a physical inspection, air inflation and visual check for damage while pressurised is considered adequate. Voluntary dielectric testing can be conducted but is not a requirement.

## ASTM D120 Re-Testing:

This standard advises that gloves intended for use under the requirements of the ASTM D120 can be stored up to 12 months from date of manufacturing as fully compliant. They can be issued anytime during this period but will only be valid for 6 months from date of issue into service. Any gloves that have not been issued into service and are older than 12 months from the manufacturing date, must be retested according to the relevant standard.

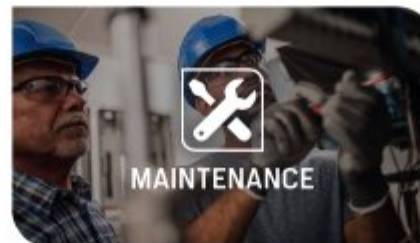
Any gloves found to be leaking, torn or damaged should be replaced. These standards do not highlight an expiry date for products, and it is considered the end user's responsibility to ensure that gloves are thoroughly examined prior to use and stored according to the supplied user instructions.

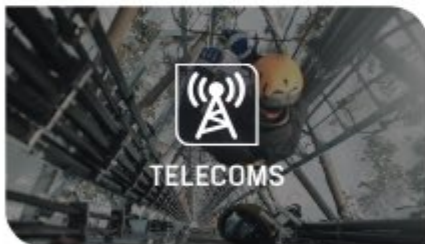
## APPLICATION AND INDUSTRIES

Across many industrial sectors there are jobs that involve cut and puncture hazards, sharps and needles.

Through working with end users and learning about these hazards, we can design optimised solutions for protection, value and user acceptance.

At Tilsatec we understand that each industrial sector will have a wide variety of performance attributes required from their hand and arm protection.





## TECHNOLOGIES & FEATURES



ANTISTATIC



BREATHABLE



CHEMICAL PROTECTION



DMF FREE



DRY GRIP



ELECTRICAL INSULATION



ELECTROSTATIC DISCHARGE



FOOD SAFE



HEAT PROTECTION



IMPACT PROTECTION



LIQUID REPELLENT



NEEDLESTICK PROTECTION



OIL RESISTANCE



PUNCTURE



SILICONE FREE



SUSTAINABLE



THUMB CROTCH



TOUCH SCREEN



WASHABLE

## GUIDE TO GLOVE COATINGS AND FINISHES

In finding the correct hand protection for your industry and application, it's likely you'll encounter various different glove coatings from flat and foam nitrile to PU and latex, so it's important to understand how they differ and which coating type is right for your application.



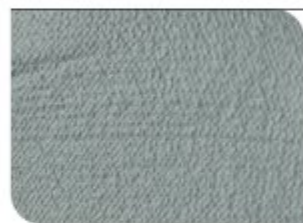
### POLYURETHANE (PU)

- ✓ High Abrasion
- ✓ Robust/Durable
- ✓ High Tactility
- ✓ Dry Grip



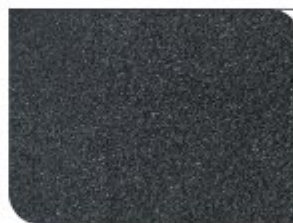
### CRINKLE LATEX

- ✓ Improved Wet Grip (exc. oil)
- ✓ Good dry grip
- ✓ Liquid repellent
- ✓ Increased Comfort



### CLEAN PU

- ✓ High tactility
- ✓ Increased comfort
- ✓ Environmentally friendly
- ✓ Water-based
- ✓ Dry Grip



### BI-POLYMER

- ✓ Robust/Durable
- ✓ Liquid repellent
- ✓ Improved wet & oil grip
- ✓ Additional back of hand abrasion resistant



### FOAM NITRILE

- ✓ Increased comfort [less irritation than PU]
- ✓ Breathable
- ✓ Good wet and dry grip
- ✓ Good dexterity



### SANDY NITRILE

- ✓ Improved wet and dry grip
- ✓ Robust / Durable
- ✓ Good dexterity



### MICROFOAM NITRILE

- ✓ High abrasion resistance
- ✓ Ultimate comfort
- ✓ Breathable
- ✓ High tactility
- ✓ High dexterity



### SMOOTH LATEX

- ✓ Dry grip
- ✓ Easy donning and doffing
- ✓ Flat/smooth nitrile
- ✓ Latex foam

**30%** of hand injuries  
are caused by wearing the  
wrong hand protection

## HAND PROTECTION EVALUATION PROCESS

When it comes to identifying and specifying the right hand protection for your work force, it can seem overwhelming looking at the number of protective gloves now in the market place. Our Hand Protection Evaluation Process is clear, tried and tested, designed to guide you every step of the way and support you beyond your initial selection stage.

With their specialist expertise in high level cut resistance our sales team can provide you with the following support and assistance:

- Conduct a site survey to assess all handling hazards and requirements
- Provide an end user report with product recommendations for every department
- Set up on-site trialling and sampling to ensure gloves are tested thoroughly
- Monitor and assess glove trials
- Deliver product training to staff and distributors
- Provide educational infographics and posters to encourage best practice in hand protection
- Carry out ongoing sales support and site visits



### PHASE 1

Introduction to Tilsatec and site survey to identify hazards



### PHASE 2

Product trials, modifications and re-trials



### PHASE 3

Customer reports and product recommendations



### PHASE 4

Product implementation, ongoing monitoring and support

To find out how the  
**Hand Protection Evaluation Process**  
can benefit your business  
scan the QR code:



TILSATEC

# Collide-x<sup>3</sup>

NEXT LEVEL IMPACT PROTECTION







## NEXT LEVEL IMPACT PROTECTION WITH UNBELIEVABLE DEXTERITY, GRIP, AND COMFORT

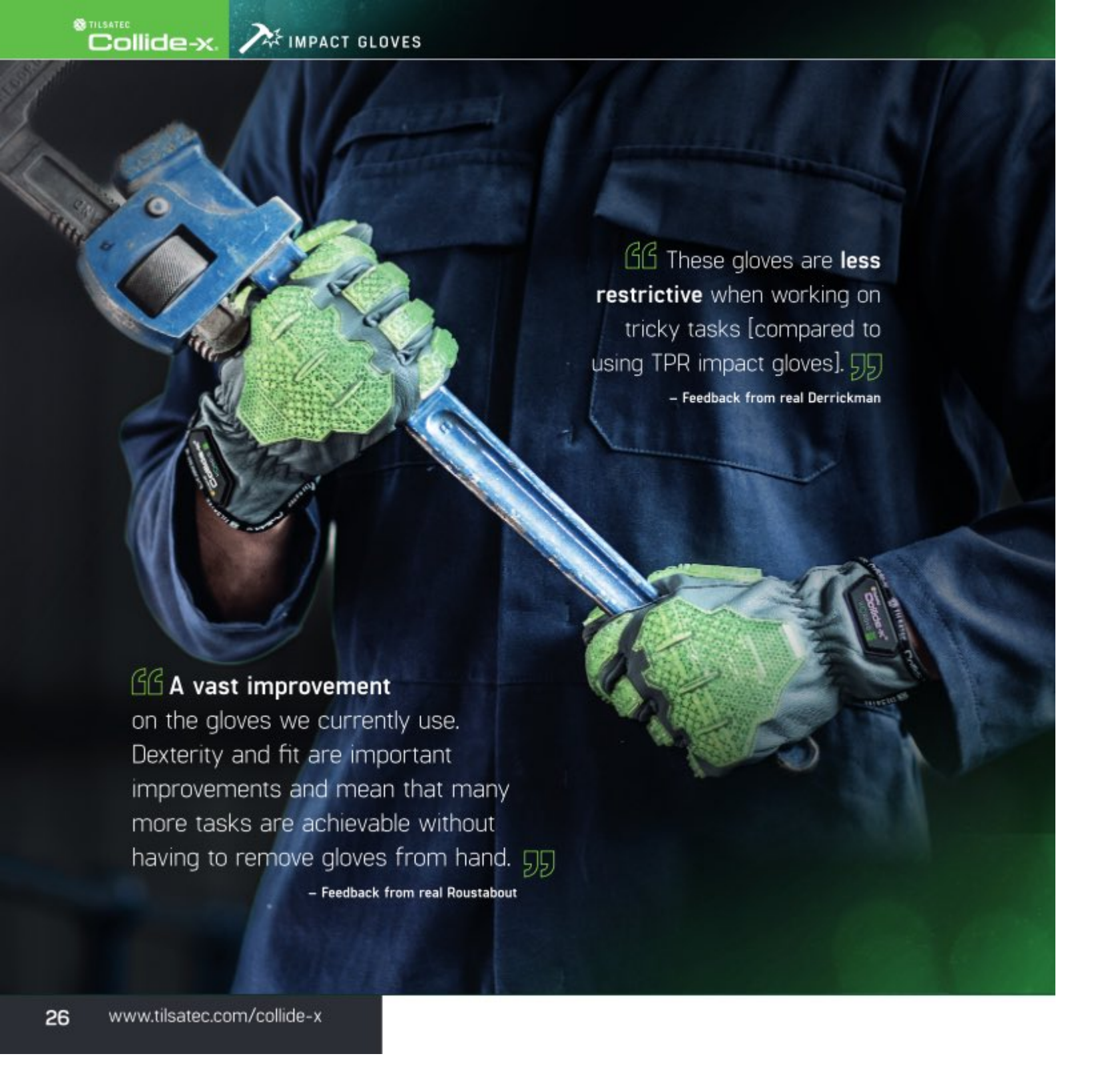
It took over 3 years of research and development to put this groundbreaking 2-step impact reduction technology into a glove that offers maximum comfort and dexterity for even the longest shifts.

### THE RESULT?

Comparing our Collide-X® 6.5mm bumpers to competing 7mm level 2 TPR bumpers, the outcome is an astonishing 38.5% improvement in force reduction. That's way above European EN388 impact standards, and equal to US ANSI impact protection level 3.

Yet it's so comfortable that field workers want to keep it on, performing even the trickiest tasks without restrictions.





“ These gloves are **less restrictive** when working on tricky tasks [compared to using TPR impact gloves]. ”

– Feedback from real Derrickman

“ A vast improvement on the gloves we currently use. Dexterity and fit are important improvements and mean that many more tasks are achievable without having to remove gloves from hand. ”

– Feedback from real Roustabout



# PROTECTED BY KOROYD

## HOW DOES KOROYD WORK?

Unlike traditional TPR, KOR+ advanced impact protection technology uses a 2-step damage control system that absorbs and redirects energy away from localized impact zones, limiting dangerous force to reduce the risk of injury.

The unique encased tubular structure allows for multiple impact performance, ensuring it's always ready to protect when it counts.

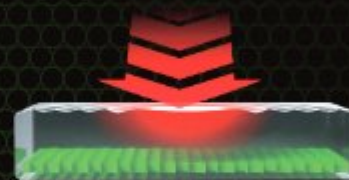
## ERGONOMIC AND FLEXIBLE

KOROYD flexes with finger and hand movements across all key impact areas, allowing the dexterity needed to perform tasks unhindered.

## ULTRALIGHT AND MINIMAL THICKNESS

A thin but vital layer of KOROYD improves performance, allowing for thinner protection without compromise. This reduces fatigue, improves comfort, and minimises the risk of snagging when working in confined spaces.

## 2-STEP DAMAGE CONTROL SYSTEM



## REINFORCED PROTECTION ABSORBS MORE ENERGY

Strengthened by KOROYD, the softer elastomer absorbs more energy than standard protection.



## KOROYD REDIRECTS FORCE

KOROYD spreads energy outwards, redirecting force away from localised impact zones.

Medium weight impact level 3 glove  
with sandy nitrile palm coating

63-6320

CUT **F**



- ANSI/ISEA 138 level 3 impact protection at level 2 bumper thickness
- First application of KORROYD impact technology in hand protection
- Unlike TPR, 2 step damage control system from KORROYD absorbs and redirects energy away from the impact zone
- Unique, first to market (subject to registered design protection) impact bumper design
- 360 degrees cut resistance resulting in EN388: 2016 level F and ANSI 105: 2016 A6 protection
- Robust, reliable mechanical protection from RhinoYarn® technology made in the UK
- Oil grip you can rely on
- Breathable palm and liner reduces perspiration keeping hands cool
- Reinforced thumb crotch for added durability
- Touchscreen compatible



PROTECTED BY  
KORROYD

#### Applications / Industries

- Oil and gas
- Automotive
- Mining
- Metal fabrication / Stamping
- Machinery and equipment
- Construction and scaffolding
- Utilities



**Gauge:** 13gg | **Colour:** Grey/Black/Green

**Cuff Style:** Knit wrist | **Length:** 220-270mm | **Size:** 7/S - 12/3XL

**Packaging:** 6 pairs inner package. Sizes 7, 11, 12 36 pairs/carton  
Sizes 8, 9, 10 72 pairs/carton





**Ultra-lightweight** impact level **3** glove  
with sandy nitrile palm coating



**68-9320**

CUT **F**



- ANSI/ISEA 138 level 3 impact protection at level 2 bumper thickness
- First application of KORROYD impact technology in hand protection
- Unlike TPR, 2 step damage control system from KORROYD absorbs and redirects energy away from the impact zone
- Unique, first to market (subject to registered design protection) impact bumper design
- 360 degrees cut resistance resulting in EN388: 2016 level F and ANSI 105: 2016 A9 protection
- Robust, reliable mechanical protection from RhinoYarn® technology made in the UK
- 18 gauge liner for ultimate fit, feel and dexterity
- Oil grip you can rely on
- Breathable palm and liner reduces perspiration keeping hands cool
- Reinforced thumb crotch for added durability
- Touchscreen compatible



PROTECTED BY **KORROYD**

**Applications / Industries**

- Oil and gas
- Automotive
- Mining
- Metal fabrication / Stamping
- Machinery and equipment
- Construction and scaffolding
- Utilities



**Gauge:** 18gg | **Colour:** Grey/Black/Green  
**Cuff Style:** Knit wrist | **Length:** 220-270mm | **Size:** 7/S - 12/3XL  
**Packaging:** 6 pairs inner package. Sizes 7, 11, 12 36 pairs/carton  
 Sizes 8, 9, 10 72 pairs/carton



## Impact level 3 mechanics glove

69-7310

CUT **F**



- ANSI/ISEA 138 level 3 impact protection at level 2 bumper thickness
- First application of KORROYD impact technology in hand protection
- Unlike TPR, 2 step damage control system from KORROYD absorbs and redirects energy away from the impact zone
- Unique, first to market (subject to registered design protection) impact bumper design
- 360 degrees cut resistance resulting in EN388: 2016 level F and ANSI 105: 2016 A7 protection
- Robust, reliable mechanical protection from RhinoYarn® technology made in the UK
- High grade dual layer synthetic leather suede palm
- Gusset slip on cuff for easy donning and doffing
- Shirred wrist for improved comfort and fit
- Reinforced leather thumb crotch for added durability
- Hi-viz forchettes for increased visibility
- Loop feature to attach to glove clip. Color coded for glove size identification



PROTECTED BY  
KORROYD

### Applications / Industries

- Oil and gas
- Automotive
- Mining
- Metal fabrication / Stamping
- Machinery and equipment
- Construction and scaffolding
- Utilities



**Gauge:** 13gg | **Colour:** Black/Grey/Green

**Cuff Style:** Gusset, Shirred, Slip-On | **Length:** 220-270mm

**Size:** 8/M - 13/4XL | **Packaging:** 6 pairs inner package / 36 pairs/carton



## Impact level 3 leather drivers glove



69-7330

CUT **F**



- ANSI/ISEA 138 level 3 impact protection at level 2 bumper thickness
- First application of KOROYD impact technology in hand protection
- Unlike TPR, 2 step damage control system from KOROYD absorbs and redirects energy away from the impact zone
- Unique, first to market (subject to registered design protection) impact bumper design
- 360 degrees cut resistance resulting in EN388: 2016 level F and ANSI 105: 2016 A7 protection
- Robust, reliable mechanical protection from RhinoYarn® technology made in the UK
- Highly durable hydrophobic premium cow grain leather
- Wing thumb design for flexibility and comfort
- No stitching to palm reduces catch areas
- Gusset slip on cuff for easy donning and doffing
- Gunn cut creates stitching in natural finge creases for improved comfort
- Loop feature to attach to glove clip. Color coded for glove size identification



PROTECTED BY  
**KOROYD**

### Applications / Industries

- Oil and gas
- Automotive
- Mining
- Metal fabrication / Stamping
- Machinery and equipment
- Construction and scaffolding
- Utilities



**Gauge:** 13gg | **Colour:** Black/Grey/Green

**Cuff Style:** Gusset, Shirred, Slip-On | **Length:** 220-270mm

**Size:** 8/M - 13/4XL | **Packaging:** 6 pairs inner package / 36 pairs/carton





**>50%**  
**sustainable**  
**yarn** content  
in all  
**EnVision** products



Cut level **F** glove  
with microfoam palm coating

**55-6725**

CUT **F**



- 54% of the glove is made with sustainable materials (inc. coating)
- Manufactured using a unique combination of Bio Based Dyneema® and recycled polyester (rPET) resulting in a total CO<sub>2</sub> reduction of >780 grams per pair\*
- Energy savings of 0.254 kwh and 3.3 litres less water consumption per pair
- Incredible level F cut resistance to EN388:2016+A1:2018
- Touchscreen compatible reducing need to remove gloves between tasks
- Thumb crotch reinforced for additional resilience in high action area
- Microfoam palm coating delivers secure dry and oil grip
- High dexterity and tactility, close fitting and soft comfort
- Tested after washing to industrial standard



\*Versus same style using virgin materials

### Applications / Industries

- Intricate assembly
- Automotive downstream
- Aftermarket / Component handling
- Construction
- White goods manufacturing
- Aerospace



## Dyneema®

**Bio-based Dyneema®** is the first ever bio-based ultra-high molecular weight polyethylene fibre, reducing reliance on fossil fuel based resources. All bio-based Dyneema® fibres have the exact same characteristics and performance as conventional Dyneema®. Made from trees (a bi-product of pulp and timber) this is known as the mass balance approach, certified by ISCC (International Sustainability & Carbon Certification).

**Gauge:** 15gg | **Colour:** Navy liner / Black coating

**Cuff Style:** Knit wrist | **Length:** 220-270mm | **Size:** 6/XS - 11/2XL

**Packaging:** 12 pairs/paper band. Sizes 6, 7, 11 / 72 pairs/carton  
Sizes 8, 9, 10 / 120 pairs/carton

Cut level **C** glove  
with microfoam palm coating

**55-3725**

CUT **C**



- 64% of the glove is made with sustainable materials (inc. coating)
- Manufactured using a unique combination of Bio Based Dyneema® and recycled polyester (rPET) resulting in a total CO<sub>2</sub> reduction of >820 grams per pair\*
- Energy savings of 0.302 kwh and 4 litres less water consumption per pair
- Level C cut resistance to EN388:2016+A1:2018
- Touchscreen compatible reducing need to remove gloves
- Thumb crotch reinforced for additional resilience in high action area
- Microfoam palm coating delivers secure dry and oil grip
- Incredible fine tactility and dexterity, close fitting and soft comfort
- Tested after washing to industrial standard



\*Versus same style using virgin materials

### Applications / Industries

- Intricate assembly
- Automotive downstream
- Aftermarket / Component handling
- Construction
- White goods manufacturing
- Aerospace
- Logistics and warehousing



Carbon emissions reduced  
by **>600g** for every pair  
of gloves made with  
**Bio-Based Dyneema®**,  
when compared  
to Generic HMPE yarn.



**Gauge:** 15gg | **Colour:** Navy liner / Black coating

**Cuff Style:** Knit wrist | **Length:** 220-270mm | **Size:** 6/XS - 11/2XL

**Packaging:** 12 pairs/paper band. Sizes 6, 7, 11 / 72 pairs/carton  
Sizes 8, 9, 10 / 120 pairs/carton

Cut level **A** glove  
with microfoam palm coating

**55-1725**

CUT **A**



- 65% of the glove is made with sustainable materials (incl. coating)
- Manufactured using a unique combination of recycled polyester (rPET) and recycled nylon (rPA) resulting in a total CO<sub>2</sub> reduction of >320 grams per pair\*
- Energy savings of 0.276 kwh and 6 litres less water consumption per pair
- Level A cut resistance to EN388:2016+A1:2018
- High level abrasion resistance (>20,000 cycles) gives durability and increases life span
- Touchscreen compatible reducing need to remove gloves
- Thumb crotch reinforced for additional resilience in high action area
- Microfoam palm coating delivers secure dry and oil grip
- Incredible fine tactility and dexterity, close fitting and soft comfort
- Tested after washing to industrial standard



\*Versus same style using virgin materials

### Applications / Industries

- Intricate assembly
- Automotive downstream
- Aftermarket / Component handling
- Construction
- White goods manufacturing
- Aerospace
- Logistics and warehousing



### Product Packaging

Quantities of 12 pairs come wrapped in an FSC paper band.  
Outer cartons contain 72 pairs per carton for sizes 6, 7 & 11,  
120 pairs per carton for sizes 8, 9 & 10.



**Gauge:** 15gg | **Colour:** Navy liner / Black coating

**Cuff Style:** Knit wrist | **Length:** 220-270mm | **Size:** 6/XS - 11/2XL

**Packaging:** 12 pairs/paper band. Sizes 6, 7, 11 / 72 pairs/carton  
Sizes 8, 9, 10 / 120 pairs/carton

Cut level **C** plant based glove  
with microfoam palm coating

**55-3825**

CUT **C**



- 54% of the glove is made with sustainable materials (inc. coating)
- Manufactured using a unique combination of plant and bio-based yarns resulting in lower CO<sub>2</sub> emissions
- Less water consumption and energy usage
- Level C cut resistance to EN388:2016+A1:2018
- EN388:2016+A1 2018 abrasion level 4
- Touchscreen compatible reducing need to remove gloves
- Thumb crotch reinforced for additional resilience in high action area
- Microfoam palm coating delivers secure dry and oil grip
- Incredible fine tactility and dexterity, close fitting and soft comfort



### Applications / Industries

- Intricate assembly
- Automotive downstream
- Aftermarket / Component handling
- Construction
- White goods manufacturing
- Aerospace



**Gauge:** 15gg | **Colour:** Green liner / Black coating

**Cuff Style:** Knit wrist | **Length:** 220-270mm | **Size:** 6/XS - 11/2XL

**Packaging:** 12 pairs/paper band. Sizes 6, 7, 11 / 72 pairs/carton  
Sizes 8, 9, 10 / 120 pairs/carton

Cut level **A** plant based glove  
with microfoam palm coating

**55-1825**

CUT **A**



- 52% of the glove is made with sustainable materials (incl. coating)
- Manufactured using a unique combination of plant and bio-based yarns resulting in lower CO<sub>2</sub> emissions
- Less water consumption and energy usage
- Level A cut resistance to EN388:2016+A1:2018
- Touchscreen compatible reducing need to remove gloves
- Thumb crotch reinforced for additional resilience in high action area
- Microfoam palm coating delivers secure dry and oil grip
- Incredible fine tactility and dexterity, close fitting and soft comfort



### Applications / Industries

- Intricate assembly
- Automotive downstream
- Aftermarket / Component handling
- Construction
- White goods manufacturing
- Aerospace
- Logistics and warehousing



**Gauge:** 15gg | **Colour:** Green liner / Black coating

**Cuff Style:** Knit wrist | **Length:** 220-270mm | **Size:** 6/XS - 11/2XL

**Packaging:** 12 pairs/paper band. Sizes 6, 7, 11 / 72 pairs/carton  
Sizes 8, 9, 10 / 120 pairs/carton

Nitrile cut level **F** chemical gauntlet with microfoam palm coating

55-6177

CUT **F**



- EN374-1:2016+A1:2018 Permeation Type A
- EN374-5:2016 bacteria and fungi
- EN388:2016+A1:2018 level F cut resistance
- EN407: 2020 contact heat level 1
- Incident Indicator - high contrast liner to identify damage to the chemical barrier
- Nitrile microfoam palm dip for improved wet and dry grip
- Under edge size indicator for fast product sizing identification



Applications / Industries

- Petrochemicals
- Oil & Gas
- Mining
- Heavy machinery
- Manufacturing
- Maintenance
- Waste
- Metal fabrication



**Incident Indicator –**  
High contrast liner to identify damage to the chemical barrier



**Size Indicator –**  
Under edge size indicator for fast product sizing identification

**Gauge:** 15gg | **Colour:** Grey/black  
**Cuff Style:** Gauntlet | **Length:** 35cm | **Size:** 7/S - 11/2XL  
**Packaging:** 6 pairs/paper band, 48 pairs/carton



Nitrile cut level **D** chemical gauntlet with microfoam palm coating

**55-4173**

CUT **D**



- EN374-1:2016+A1:2018 Permeation Type A
- EN374-5:2016 bacteria and fungi
- EN388:2016+A1:2018 level D cut resistance
- EN407: 2020 contact heat level 1
- Incident Indicator - high contrast liner to identify damage to the chemical barrier
- Nitrile microfoam palm dip for improved wet and dry grip
- Under edge size indicator for fast product sizing identification



### Applications / Industries

- Petrochemicals
- Oil & Gas
- Mining
- Heavy machinery
- Manufacturing
- Maintenance
- Waste
- Metal fabrication



**Gauge:** 15gg | **Colour:** Blue/black

**Cuff Style:** Gauntlet | **Length:** 35cm | **Size:** 7/S - 11/2XL

**Packaging:** 6 pairs/paper band, 48 pairs/carton



TILSATEC

# Pulse®

Electrical Insulating Gloves



Providing protection for low voltage and high voltage applications the range includes the following options:

### LOW Voltage

- **Pulse® Class 00** Electrical Insulating Gloves maximum use voltage **500V ac / 750V dc**, 28cm and 36cm in red or yellow
- **Pulse® Class 0** Electrical Insulating Gloves maximum use voltage **1000V ac / 1500V dc**, 28cm and 36cm in red or yellow

### HIGH Voltage

- **Pulse® Class 1** Electrical Insulating Gloves maximum use voltage **7,500V ac / 11,250V dc**, 36cm in red/black
- **Pulse® Class 2** Electrical Insulating Gloves maximum use voltage **17,000V ac / 25,500V dc**, 36cm in red/black
- **Pulse® Class 3** Electrical Insulating Gloves maximum use voltage **26,500V ac / 39,750V dc**, 36cm in red/black
- **Pulse® Class 4** Electrical Insulating Gloves maximum use voltage **36,000 ac / 54,000V dc**, 41cm in red/black



24-9010 / 24-9012

11"/28cm

Class 00

24-9020 / 24-9022

14"/36cm

Class 00



	24-9010	24-9012	24-9020	24-9022
Class	00	00	00	00
Max Use	500V	500V	500V	500V
Category	A/Z/C	A/Z/C	A/Z/C	A/Z/C
ARC	APC1 / ATPV - 8.4 cal/cm <sup>2</sup>			
ASTM D120	Type 1	Type 1	Type 1	Type 1
Cuff	Straight with beaded edge			
Colour	Red (MTO*)	Yellow	Red (MTO*)	Yellow
Length	11" / 28cm	11" / 28cm	14" / 36cm	14" / 36cm
Sizes	8-11	8-11	8-11	8-11
Packaging	1 pair p/polybag and individual box. 10 pairs p/carton			



\*Made to order.  
Contact to confirm lead times.

## SPECIAL CATEGORIES CLASSES

Meets the special properties:

A - Acid

C - Extreme low temperature

H - Oil resistant

Z - Ozone

R = A + Z + H

CLASS	LENGTH CM/INCH		CATEGORIES	PROOF TEST VOLTAGE AC/DC	MAXIMUM USE VOLTAGE AC/DC	SIZES	ARC
Class 00 Beige	28/11	36/14	A/Z/C	2.500/10.000	500/750	8, 9, 10, 11	APC1 ATPV - 8.4 cal/cm <sup>2</sup>
Class 0 Red	28/11	36/14	A/Z/C	5.000/20.000	1.000/1.500	8, 9, 10, 11	APC2 ATPV - 8.5 cal/cm <sup>2</sup>
Class 1 White	36/14		R/C	10.000/40.000	7.500/11.250	8, 9, 10, 11	APC2 ATPV - 10.6 cal/cm <sup>2</sup>
Class 2 Yellow	36/14		R/C	20.000/60.000	17.000/25.500	8, 9, 10, 11	APC2 ATPV - 21.0 cal/cm <sup>2</sup>
Class 3 Green	36/14		R/C	30.000/60.000	26.500/39.750	8, 9, 10, 11	APC2 ATPV - 40.5 cal/cm <sup>2</sup>
Class 4 Orange	41/16		R/C	40.000/70.000	36.000/54.000	9, 10, 11	APC2 ATPV - 36.2 cal/cm <sup>2</sup>

AC = Alternative Current (Flows both ways)

DC = Direct Current (Flows one way)



Manufactured and tested in  
accordance with IEC 60903,  
EN 60903 and ASTM D120.



**24-0010**

11"/28cm

**Class 0**

**24-0012**

11"/28cm

**Class 0**



**24-0020**

14"/36cm

**Class 0**

**24-0022**

14"/36cm

**Class 0**



	24-0010	24-0012
Class	0	0
Max Use	1000V	1000V
Category	A/Z/C	A/Z/C
ARC	APC2 / ATPV - 8.5 cal/cm <sup>2</sup>	
ASTM D120	Type 1	Type 1
Cuff	Straight with beaded edge	
Colour	Red (MTO*)	Yellow
Length	11" / 28cm	11" / 28cm
Sizes	8-11	8-11
Packaging	1 pair p/polybag in box. 10 pairs p/carton	

	24-0020	24-0022
Class	0	0
Max Use	1000V	1000V
Category	A/Z/C	A/Z/C
ARC	APC2 / ATPV - 8.5 cal/cm <sup>2</sup>	
ASTM D120	Type 1	Type 1
Cuff	Straight with beaded edge	
Colour	Red (MTO*)	Yellow
Length	14" / 36cm	14" / 36cm
Sizes	8-11	8-11
Packaging	1 pair p/polybag in box. 10 pairs p/carton	



\*Made to order. Contact to confirm lead times.



\*Made to order. Contact to confirm lead times.

CE



Manufactured and tested in accordance with IEC 60903, EN 60903 and ASTM D120.

CE



Manufactured and tested in accordance with IEC 60903, EN 60903 and ASTM D120.

**24-1024**  
14"/36cm  
Class 1



**24-2024**  
14"/36cm  
Class 2



**24-3024**  
14"/36cm  
Class 3



**24-4034**  
16"/41cm  
Class 4



	24-1024	24-2024
Class	1	2
Max Use	7500V	17000V
Category	R/C	R/C
ARC	APC2 / ATPV - 10.6 cal/cm <sup>2</sup>	APC2 / ATPV - 21.0 cal/cm <sup>2</sup>
ASTM D120	Type 1	Type 1
Cuff	Straight with beaded edge	
Colour	Black/Red (MTO*)	Black/Red (MTO*)
Length	14" / 36cm	14" / 36cm
Sizes	8-11	8-11
Packaging	1 pair p/polybag in box. 10 pairs p/carton	



\*Made to order. Contact to confirm lead times.

CE



Manufactured and tested in accordance with IEC 60903, EN 60903 and ASTM D120.

	24-3024	24-4034
Class	3	4
Max Use	26500V	36000V
Category	R/C	R/C
ARC	APC2 / ATPV - 40.5 cal/cm <sup>2</sup>	APC2 / ATPV - 36.2 cal/cm <sup>2</sup>
ASTM D120	Type 1	Type 1
Cuff	Straight with beaded edge	
Colour	Black/Red (MTO*)	Black/Red (MTO*)
Length	14" / 36cm	16" / 41cm
Sizes	8-11	9-11
Packaging	1 pair p/polybag in box. 10 pairs p/carton	



\*Made to order. Contact to confirm lead times.

CE



Manufactured and tested in accordance with IEC 60903, EN 60903 and ASTM D120.

## Leather protector gloves

It is important to ensure Leather Protector Gloves are worn over Pulse® Electrical Insulating Gloves to provide protection from cuts, abrasions and punctures and preserve the rubber insulating glove underneath. Leather Protector Gloves from Tilsatec are available in sizes 8-11 and designed to fit perfectly over rubber insulating gloves ensuring a secure grip and comfortable wear.



LEATHER PROTECTOR GLOVES			
Product code	Length cm/inch	Sizes	Product description
29-6250	25/10"	8-11	Unlined Leather Protector
29-7450	25/10"	8-11	Aramid Lined Leather Protector
29-6252	30/12"	8-11	Unlined Leather Protector
29-7452	30/12"	8-11	Aramid Lined Leather Protector
29-7454	35/14"	8-11	Aramid Lined Leather Protector
29-7456	40/16"	8-11	Aramid Lined Leather Protector

### Features (Unlined):

- Designed and developed for use with Tilsatec Pulse® electrical gauntlets
- Premium cow grain and cow suede leather for increased durability, fit and dexterity
- Hydrophobic treated for improved liquid resistance
- Aramid stitching for increased durability and flame resistance
- Flame resistant strap and buckle
- Arc Flash tested according to ASTM2675/F2675M-13
- WARNING: Tilsatec Pulse® leather protectors do NOT protect against shock or voltage.

### Features (Lined):

- Designed and developed for use with Tilsatec Pulse® electrical gauntlets
- Premium cow grain and cow suede leather for increased durability, fit and dexterity
- Hydrophobic treated for improved liquid resistance
- Aramid liner and stitching offering increased cut protection and flame resistance
- EN388: 2016+A1 2018 level C cut resistance
- Arc Flash tested according to ASTM2675/F2675M-13
- WARNING: Tilsatec Pulse® leather protectors do NOT protect against shock or voltage.



### Pulse Storage Bag

To keep Pulse® rubber insulating gloves and leather protectors in good condition they need to be stored correctly. Tilsatec can supply storage bags designed with one pocket to keep your pair of insulating gauntlets in and one pocket for your leather protector glove. Ensuring gloves lie flat, reduces the likelihood of creasing which can limit the life of the gloves. No more than 1 pair of each should be stored in the bag at once. The bag also has a loop to the back to allow it to be clipped to your waist whilst in use.





Made in the UK and developed by Tilsatec's specialist team of yarn technologists, RhinoYarn® technology is our engineered yarn process that combines various technical fibres and materials.

When blended together to create a composite yarn significantly higher levels of cut and mechanical protection can be achieved without compromising on comfort or dexterity.





## High Cut Range

Tilsatec offer one of the widest ranges of hand and arm protection solutions providing level F cut protection in Europe. Every product in the high cut range is made using our own RhinoYarn® Technology manufactured on-site in the UK.



## Medium weight cut level F PU palm coated glove with thumb reinforcement

**53-7111**
**CUT F**

- EN388: 2016+A1:2018 level F cut resistance
- New RhinoYarn® composition using lighter, finer steel
- Additional black nitrile reinforcement to thumb crotch for high action area increasing lifespan of glove
- Robust palm coating provides good dry and light oil grip
- EN388: 2016 level 3 puncture and high abrasion levels
- Tested after washing to industrial wash standards



**Gauge:** 13gg | **Colour:** Grey liner / Grey coating  
**Cuff Style:** Knit wrist | **Length:** 220-270mm | **Size:** 6/XS - 11/2XL  
**Packaging:** 12 pairs/polybag 120 pairs/carton



### Applications / Industries

- Assembly
- Automotive industry
- Glass manufacturing
- Metal fabrication / stamping
- White goods manufacturing



## Medium weight cut level F PU palm coated glove with extended cuff and thumb reinforcement

**53-7112**
**CUT F**

- EN388: 2016+A1:2018 level F cut resistance
- New RhinoYarn® composition using lighter, finer steel
- Additional black nitrile reinforcement to thumb crotch for high action area increasing lifespan of glove
- Robust palm coating provides good dry and light oil grip
- Extended cuff area for added protection handling
- Tested after washing to domestic and industrial wash standards



**Gauge:** 13gg | **Colour:** Grey liner / Grey coating  
**Cuff Style:** Knit wrist | **Length:** 220-270mm | **Size:** 6/XS - 11/2XL  
**Packaging:** 12 pairs/polybag. Sizes 6, 7, 11 72 pairs/carton, 8, 9, 10 120 pairs/carton



### Applications / Industries

- Assembly
- Automotive industry
- Glass manufacturing
- Metal fabrication / stamping
- White goods manufacturing





**Medium weight** cut level **F** sandy foam nitrile palm coated glove with reinforcement**53-7121**CUT **F**

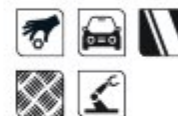
- EN388: 2016+A1:2018 level F cut resistance
- New RhinoYarn® composition using lighter, finer steel
- Black nitrile reinforcement to thumb crotch
- 360 breathability reduces perspiration
- Sandy foam nitrile palm coating provides good wet and dry grip
- Tested after washing to industrial standards



**Gauge:** 13gg | **Colour:** Grey liner / Black coating  
**Cuff Style:** Knit wrist | **Length:** 220-270mm | **Size:** 6/XS - 11/2XL  
**Packaging:** 12 pairs/polybag 120 pairs/carton

**Applications / Industries**

- Assembly
- Automotive industry
- Glass manufacturing
- Metal fabrication / stamping
- White goods manufacturing

**Medium weight** cut level **F** leather reinforced sandy foam nitrile palm coated glove with reinforcement**53-7191**CUT **F**

- EN388: 2016+A1:2018 level F cut resistance
- New RhinoYarn® composition using lighter, finer steel
- EN407:2020 contact heat level 1
- Leather palm combined with foam nitrile coating delivers incredible robustness and handling comfort
- Foam nitrile palm coating allows breathability and prevents oil ingress to hand
- Leather reinforcement to thumb crotch



**Gauge:** 13gg | **Colour:** Grey liner / Grey leather  
**Cuff Style:** Knit wrist | **Length:** 220-270mm | **Size:** 7/S - 11/2XL  
**Packaging:** 12 pairs/polybag 72 pairs/carton

**Applications / Industries**

- Assembly
- Automotive industry
- Glass manufacturing
- Metal fabrication / stamping
- White goods manufacturing





Extreme level F  
cut resistance

360°  
breathability

Reinforced  
thumb crotch

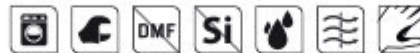
Sandy foam nitrile  
palm coating

RhinoYarn®  
cut resistant technology

## Ultra-lightweight 18 gauge cut level F bi-polymer foam palm coated glove

**58-6120**CUT **F**

- RhinoYarn® cut resistant technology
- Extreme level F cut resistance without compromising dexterity (ANSI 105-2016: A9)
- Tough and durable bi-polymer foam coating
- Reinforced nitrile thumb crotch for added durability
- Excellent dry and light oil grip
- Tested after washing to domestic and industrial wash standards



**Gauge:** 18gg | **Colour:** Black liner / Black coating  
**Cuff Style:** Knit wrist | **Length:** 230-270mm | **Size:** 7/S - 11/2XL  
**Packaging:** 12 pairs/polybag 120 pairs/carton



### Applications / Industries

- Component assembly
- Aerospace
- Automotive industry
- Metal handling
- Manufacturing



## Medium weight cut level F sandy foam nitrile palm coated glove with thumb reinforcement

**50-6121**CUT **F**

- RhinoYarn® cut resistant technology
- Level F cut resistance to EN388:2016+A1:2018
- Thumb crotch is reinforced for additional resilience
- High level of abrasion and durability
- 360° breathability
- Dark colour hides dirt extending life of the glove
- Tested after washing to domestic and industrial standards



**Gauge:** 10gg | **Colour:** Black liner / Black coating  
**Cuff Style:** Knit wrist | **Length:** 230-270mm | **Size:** 7/S - 11/2XL  
**Packaging:** 12 pairs/polybag 120 pairs/carton



### Applications / Industries

- Metal fabrication/stamping
- Glass and DGU manufacturing
- Transportation
- Manufacturing
- Construction
- Waste handling / Recycling



## Medium weight cut level **F** PU palm coated glove with thumb reinforcement

**50-6111**
**CUT **F****


- RhinoYarn® cut resistant technology
- Level F cut resistance to EN388:2016+A1:2018
- EN407:2020 contact heat level 1
- Black thumb crotch reinforced for additional resilience in high action area
- PU palm coating provides secure dry and light oil grip
- Tested after washing to industrial wash standards



**Gauge:** 10gg | **Colour:** Black liner / Grey coating  
**Cuff Style:** Knit wrist | **Length:** 220-270mm | **Size:** 6/XS - 11/2XL  
**Packaging:** 12 pairs/polybag 120 pairs/carton


**Applications / Industries**

- Assembly
- Automotive industry
- Metal fabrication/stamping
- Transportation
- Manufacturing
- Construction



## Medium weight cut level **F** latex palm coated glove

**50-6130**
**CUT **F****


- RhinoYarn® cut resistant technology
- Level F cut resistance to EN388:2016+A1:2018
- EN407:2020 contact heat level 1
- Crinkle latex palm coating delivers excellent dry and wet grip
- Durable and hard wearing for heavy duty applications
- Tested after washing to domestic and industrial wash standards



**Gauge:** 10gg | **Colour:** Black liner / Black coating  
**Cuff Style:** Knit wrist | **Length:** 230-270mm | **Size:** 7/S - 11/2XL  
**Packaging:** 12 pairs/polybag 120 pairs/carton


**Applications / Industries**

- Glass manufacturing
- Metal fabrication/stamping
- Waste handling/recycling
- Manufacturing
- Construction



## Lightweight PU palm coated cut level E glove

**55-5110**CUT **E**

- RhinoYarn® cut resistant technology
- EN388: 2016+A1:2018 level E cut resistance
- Fine 15 gauge lightweight liner
- High level of tactility and dexterity
- Durable PU palm coating provides secure dry grip and light oil grip
- Seamless liner and cuff gives a smooth, comfortable feel
- Tested after washing to domestic and industrial wash standards



**Gauge:** 15gg | **Colour:** Grey liner / Grey coating  
**Cuff Style:** Knit wrist | **Length:** 230-270mm | **Size:** 7/S - 11/2XL  
**Packaging:** 12 pairs/polybag 120 pairs/carton



### Applications / Industries

- Final fix / light assembly
- Automotive assembly
- Light metal fabrication
- Transportation
- Aerospace
- White goods manufacturing



## Lightweight cut level E foam nitrile palm coated glove

**55-5120**CUT **E**

- RhinoYarn® cut resistant technology
- EN388: 2016+A1:2018 level E cut resistance
- High level of tactility and dexterity
- Breathable liner and palm coating
- Foam nitrile palm delivers good dry and oil grip
- Tested after washing to industrial wash standard
- Approved for food contact to EU Regulation 10/2011



**Gauge:** 15gg | **Colour:** Grey liner / Black coating  
**Cuff Style:** Knit wrist | **Length:** 230-270mm | **Size:** 7/S - 11/2XL  
**Packaging:** 12 pairs/polybag 120 pairs/carton



### Applications / Industries

- Final fix / light assembly
- Automotive assembly
- Light metal fabrication
- Aerospace
- White goods manufacturing
- Transport
- Handling/packing foodstuffs



## Comfort+

The Comfort+ range is made using our new non-reinforced RhinoYarn® free from alloy and mineral yarns meaning no steel or fibre glass is present, removing the possibility of irritation to the skin.

The new yarn structure can be adapted to deliver a broad spectrum of cut levels without compromising the level of comfort or dexterity.

### COMFORT WITHOUT COMPROMISE

**Comfort+** medium weight cut level **F** glove  
with sandy nitrile palm coating

**53-6321**

CUT **F**



- New non-reinforced RhinoYarn® structure for increased comfort and flexibility for all day wear
- 13 gauge seamless liner free from alloy and mineral yarns
- Sandy nitrile palm coating delivers secure dry and oil grip
- Reinforced thumb for increased durability in high wear zones
- Touchscreen capable
- Tested after washing to industrial standard



#### Applications / Industries

- Assembly
- Automotive industry
- Glass manufacturing
- Metal fabrication / stamping
- Construction
- White goods manufacturing



**Gauge:** 13gg | **Colour:** Grey liner / Black coating

**Cuff Style:** Knit wrist | **Length:** 220-270mm | **Size:** 6/XS - 11/2XL

**Packaging:** 12 pairs/paper band. Sizes 6, 7, 11 72 pairs/carton,  
Sizes 8, 9, 10 120 pairs/carton



## Comfort+ lightweight cut level E glove with microfoam nitrile palm coating

55-5325

CUT **E**

- New non-reinforced RhinoYarn® structure for increased comfort and flexibility for all day wear
- 15 gauge seamless liner free from alloy and mineral yarns
- Microfoam nitrile palm coating delivers ultimate comfort with high tactility and dexterity
- Reinforced thumb for increased durability in high wear zones
- Touchscreen capable
- Tested after washing to industrial standard



**Gauge:** 15gg | **Colour:** Grey liner / Black coating

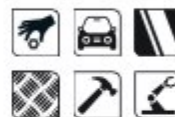
**Cuff Style:** Knit wrist | **Length:** 220-270mm | **Size:** 6/XS - 11/2XL

**Packaging:** 12 pairs/paper band. Sizes 6, 7, 11 72 pairs/carton, Sizes 8, 9, 10 120 pairs/carton



### Applications / Industries

- Assembly
- Automotive industry
- Glass manufacturing
- Metal fabrication / stamping
- Construction
- White goods manufacturing



## NEW Comfort+ mediumweight cut level F liner glove

33-6320

CUT **F**

- New non-reinforced RhinoYarn® structure for increased comfort and flexibility for all day wear
- 13 gauge seamless liner free from alloy and mineral yarns
- Available in sizes 6-11



**Gauge:** 13gg | **Colour:** Grey liner

**Cuff Style:** Knit wrist | **Length:** 220-270mm | **Size:** 6/XS - 11/2XL

**Packaging:** 12 pairs/paper band. Sizes 6, 7, 11 72 pairs/carton, Sizes 8, 9, 10 120 pairs/carton



### Applications / Industries

- Assembly
- Automotive industry
- Glass manufacturing
- Metal fabrication / stamping
- Construction
- White goods manufacturing





## Comfort+ lightweight cut level **D** glove with microfoam nitrile palm coating

**55-4325**CUT **D**

- New non-reinforced RhinoYarn® structure for increased comfort and flexibility for all day wear
- 15 gauge seamless liner free from alloy and mineral yarns
- Microfoam nitrile palm coating delivers ultimate comfort with high tactility and dexterity
- Reinforced thumb for increased durability in high wear
- Touchscreen capable
- Available in sizes 5-12
- Tested after washing to industrial standard



**Gauge:** 15gg | **Colour:** Grey liner / Black coating  
**Cuff Style:** Knit wrist | **Length:** 220-270mm | **Size:** 5/XXS - 12/3XL  
**Packaging:** 12 pairs/paper band. Sizes 5, 6, 7, 11 72 pairs/carton,  
 Sizes 8, 9, 10 120 pairs/carton



### Applications / Industries

- Assembly
- Automotive industry
- Glass manufacturing
- Metal fabrication / stamping
- Construction
- White goods manufacturing



## Comfort+ lightweight cut level **D** glove with PU palm coating

**55-4311**CUT **D**

- New non-reinforced RhinoYarn® structure for increased comfort and flexibility for all day wear
- 15 gauge seamless liner free from alloy and mineral yarns
- PU Palm coating delivers high levels of dry grip, durability, tactility and dexterity
- Good dry grip for secure handling
- Touchscreen capable
- Available in sizes 5-12
- Tested after washing to industrial standard

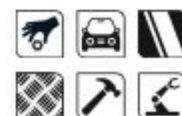


**Gauge:** 15gg | **Colour:** Grey liner / Grey coating  
**Cuff Style:** Knit wrist | **Length:** 220-270mm | **Size:** 5/XXS - 12/3XL  
**Packaging:** 12 pairs/paper band. Sizes 5, 6, 7, 11 72 pairs/carton,  
 Sizes 8, 9, 10 120 pairs/carton



### Applications / Industries

- Assembly
- Automotive industry
- Glass manufacturing
- Metal fabrication / stamping
- Construction
- White goods manufacturing

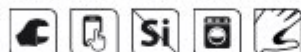


## Comfort+ ultra-lightweight cut level **D** glove with microfoam nitrile palm coating

**58-4325**

CUT **D**

- New non-reinforced RhinoYarn® structure for increased comfort and flexibility for all day wear
- 18 gauge seamless liner free from alloy and mineral yarns
- Microfoam nitrile palm coating delivers ultimate comfort with high tactility and dexterity
- Reinforced thumb for increased durability in high wear
- Touchscreen capable
- Available in sizes 5-12
- Tested after washing to industrial standard



**Gauge:** 18gg | **Colour:** Grey liner / Black coating  
**Cuff Style:** Knit wrist | **Length:** 220-270mm | **Size:** 5/XXS - 12/3XL  
**Packaging:** 12 pairs/paper band. Sizes 5, 6, 7, 11, 12 72 pairs/carton  
 Sizes 8, 9, 10 120 pairs/carton



### Applications / Industries

- Assembly
- Automotive industry
- Glass manufacturing
- Metal fabrication / stamping
- Construction
- White goods manufacturing



## Comfort+ ultra-lightweight cut level **D** glove with PU palm coating

**58-4311**

CUT **D**

- New non-reinforced RhinoYarn® structure for increased comfort and flexibility for all day wear
- 18 gauge seamless liner free from alloy and mineral yarns
- PU Palm coating delivers high levels of dry grip, durability, tactility and dexterity
- Good dry grip for secure handling
- Touchscreen capable
- Available in sizes 5-12
- Tested after washing to industrial standard



**Gauge:** 18gg | **Colour:** Grey liner / Grey coating  
**Cuff Style:** Knit wrist | **Length:** 220-270mm | **Size:** 5/XXS - 12/3XL  
**Packaging:** 12 pairs/paper band. Sizes 5, 6, 7, 11, 12 72 pairs/carton,  
 Sizes 8, 9, 10 120 pairs/carton



### Applications / Industries

- Assembly
- Automotive industry
- Glass manufacturing
- Metal fabrication / stamping
- Construction
- White goods manufacturing



**Comfort+** lightweight cut level **D** liner glove**35-4329**CUT **D**

- New non-reinforced RhinoYarn® structure for increased comfort and flexibility for all day wear
- 15 gauge seamless liner free from alloy and mineral yarns
- Available in sizes 5-12



**Gauge:** 15gg | **Colour:** Grey liner | **Cuff Style:** Knit wrist  
**Length:** 220-270mm | **Size:** 5/XXS - 12/3XL

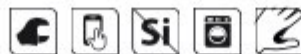
**Packaging:** 12 pairs/paper band. Sizes 5, 6, 7, 11, 12 72 pairs/carton,  
 Sizes 8, 9, 10 120 pairs/carton

**Applications / Industries**

- Assembly
- Automotive industry
- Glass manufacturing
- Metal fabrication / stamping
- Construction
- White goods manufacturing

**NEW Comfort+** medium weight cut level **D** glove  
with PU palm coating**53-4311**CUT **D**

- New non-reinforced RhinoYarn® structure for increased comfort and flexibility for all day wear
- 13 gauge seamless liner free from alloy and mineral yarns
- PU Palm coating delivers high levels of dry grip, durability, tactility and dexterity.
- Good dry grip for secure handling
- Touchscreen capable
- Available in sizes 5-12



**Gauge:** 13gg | **Colour:** Grey liner / Grey coating

**Cuff Style:** Knit wrist | **Length:** 220-270mm | **Size:** 5/XXS - 12/3XL

**Packaging:** 12 pairs/paper band. Sizes 5, 6, 7, 11, 12 72 pairs/carton,  
 Sizes 8, 9, 10 120 pairs/carton

**Applications / Industries**

- Assembly
- Automotive industry
- Glass manufacturing
- Metal fabrication / stamping
- Construction
- White goods manufacturing



## NEW Comfort+ medium weight cut level D glove with sandy nitrile palm coating

53-4321

CUT **D**



- New non-reinforced RhinoYarn® structure for increased comfort and flexibility for all day wear
- 13 gauge seamless liner free from alloy and mineral yarns
- Sandy nitrile palm coating delivers secure dry and oil grip
- Reinforced Thumb for increased durability in high wear zones
- Touchscreen capable



**Gauge:** 13gg | **Colour:** Grey liner / Black coating  
**Cuff Style:** Knit wrist | **Length:** 220-270mm | **Size:** 6/XS - 11/2XL  
**Packaging:** 12 pairs/paper band. Sizes 6, 7, 11 72 pairs/carton, Sizes 8, 9, 10 120 pairs/carton



### Applications / Industries

- Assembly
- Automotive industry
- Glass manufacturing
- Metal fabrication / stamping
- Construction
- White goods manufacturing



## Comfort+ lightweight cut level C glove with microfoam nitrile palm coating

55-3325

CUT **C**



- New non-reinforced RhinoYarn® structure for increased comfort and flexibility for all day wear
- 15 gauge seamless liner free from alloy and mineral yarns
- Microfoam nitrile palm coating delivers ultimate comfort with high tactility and dexterity
- Reinforced thumb for increased durability in high wear
- Touchscreen capable
- Tested after washing to industrial standard



**Gauge:** 15gg | **Colour:** Grey liner / Black coating  
**Cuff Style:** Knit wrist | **Length:** 220-270mm | **Size:** 6/XS - 11/2XL  
**Packaging:** 12 pairs/paper band. Sizes 6, 7, 11 72 pairs/carton, Sizes 8, 9, 10 120 pairs/carton



### Applications / Industries

- Assembly
- Automotive industry
- Glass manufacturing
- Metal fabrication / stamping
- Construction
- White goods manufacturing



## Comfort+ medium weight cut level C glove with PU palm coating

**53-3314**CUT **C**

- Incredibly soft and comfortable for all day wear
- New non-reinforced RhinoYarn® structure with UHMWPE and high power spandex for optimal cut and comfort
- 13 gauge seamless liner free from alloy and mineral yarns
- Clean PU coating (ultra-low levels of DMF\*)
- Good dry grip for secure handling
- Touchscreen capable
- Tested after washing to industrial wash



\* REACH regulation for DMF content is 1000ppm, glove is tested below 10ppm

**Gauge:** 13gg | **Colour:** White liner / Grey coating  
**Cuff Style:** Knit wrist | **Length:** 220-270mm | **Size:** 6/XS - 11/2XL  
**Packaging:** 12 pairs/paper band. Sizes 6, 7, 11 72 pairs/carton, Sizes 8, 9, 10 120 pairs/carton



### Applications / Industries

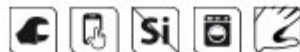
- Assembly
- Automotive industry
- Glass manufacturing
- Metal fabrication / stamping
- Construction
- White goods manufacturing



## Comfort+ lightweight cut level B glove with microfoam nitrile palm coating

**55-2325**CUT **B**

- New non-reinforced RhinoYarn® structure for increased comfort and flexibility for all day wear
- 15 gauge seamless liner free from alloy and mineral yarns
- Microfoam nitrile palm coating delivers ultimate comfort with high tactility and dexterity
- Reinforced thumb for increased durability in high wear
- Touchscreen capable
- Tested after washing to industrial standard



**Gauge:** 15gg | **Colour:** Grey liner / Black coating  
**Cuff Style:** Knit wrist | **Length:** 220-270mm | **Size:** 6/XS - 11/2XL  
**Packaging:** 12 pairs/paper band. Sizes 6, 7, 11 72 pairs/carton, Sizes 8, 9, 10 120 pairs/carton



### Applications / Industries

- Assembly
- Automotive industry
- Glass manufacturing
- Metal fabrication / stamping
- Construction
- White goods manufacturing





Ultra-lightweight **ESD** glove with microfoam palm coating

**58-1924**

CUT **A**

- Tested to EN 1149-2:1997 and EN 16350 ESD Antistatic
- Exceptional level of fingertip sensitivity and tactility
- Touchscreen compatible
- 360 degrees breathability keeps hands cool and dry
- 18 gauge seamless liner and cuff gives a smooth comfortable feel



**Applications / Industries**

- Final fix / light assembly
- Finishing and Inspection
- Electronics
- Aerospace
- Logistics and warehousing



**Gauge:** 18gg | **Colour:** Navy liner / Black coating

**Cuff Style:** Knit wrist | **Length:** 230-270mm

**Size:** 7/S - 11/2XL | **Packaging:** 12 pairs/polybag

Sizes 7, 11 72 pairs/carton, 8, 9 & 10 120 pairs/carton

## Multi-purpose ultra-lightweight cut level B sandy foam nitrile palm coated glove

58-2221

CUT **B**

- Made using advanced knitting technology it delivers an ergonomic fit and feel for incredible dexterity and tactility
- Level B cut resistance to EN388: 2016
- High level 4 abrasion resistance
- Sandy foam nitrile palm coating delivers secure dry and oil grip
- Thumb crotch reinforcement gives additional durability and longevity



**Gauge:** 18gg | **Colour:** Grey liner / Black coating

**Cuff Style:** Knit wrist | **Length:** 230-270mm | **Size:** 7/S - 11/2XL

**Packaging:** 12 pairs/polybag, Sizes 7, 11 72 pairs/carton,  
Sizes 8, 9, 10 120 pairs/carton



### Applications / Industries

- Intricate assembly
- Automotive downstream after market / component handling
- Construction
- White goods manufacturing
- Aerospace



## Multi-purpose cut level C PU palm coated glove

53-3210

CUT **C**

- Cost efficient solution delivering level C cut resistance to EN388:2016+A1:2018
- Hard wearing robust PU coating
- Good grip in dry and slight oil conditions
- Dirt masking colour for longer wear life



**Gauge:** 13gg | **Colour:** Grey liner / Grey coating

**Cuff Style:** Knit wrist | **Length:** 230-270mm | **Size:** 7/S - 11/2XL

**Packaging:** 12 pairs/polybag 120 pairs/carton



### Applications / Industries

- Automotive downstream
- Metal / component handling
- Construction
- White goods manufacturing



## Lightweight cut level F antimicrobial food safe glove

71-7110

CUT **F**

- EN388:2016 level F (ANSI 105-2016 A7) cut resistance
- Inherent antimicrobial component safe for food handling
- Yarn structure (free from glass fibre) delivers better grip and mechanical protection
- Tested to EN ISO 15797 industrial wash test to withstand x50 washes at up to 85°C and drying up to 70°C
- Extended cuff for added protection
- Ambidextrous



**Gauge:** 13gg | **Colour:** Blue liner | **Cuff Style:** Knit wrist  
**Length:** 255-305mm | **Size:** 6/XS - 11/2XL  
**Packaging:** 6 pieces/polybag 216 pieces/carton



### Applications / Industries

- Meat carving and deboning
- Butchery
- Fish filleting and processing
- Suitable for beef, pork and poultry



## Heavyweight cut level F antimicrobial food safe glove

73-9110

CUT **F**

- EN388:2016 level F (ANSI 105-2016 A9) cut resistance
- Inherent antimicrobial component safe for food handling
- Yarn structure (free from glass fibre) delivers better grip and mechanical protection
- Tested to EN ISO 15797 industrial wash test to withstand x50 washes at up to 85°C and drying up to 70°C with no effect on cut resistance
- Extended cuff for added protection
- Ambidextrous



**Gauge:** 7gg | **Colour:** Blue liner | **Cuff Style:** Knit wrist  
**Length:** 255-305mm | **Size:** 6/XS - 11/2XL  
**Packaging:** 6 pieces/polybag 144 pieces/carton



### Applications / Industries

- Meat carving and deboning
- Butchery
- Fish filleting and processing
- Suitable for beef, pork and poultry







## NEW Medium weight cut level F antimicrobial food safe glove

72-6110

CUT **F**

- EN388: 2016 level F cut resistance
- New yarn structure delivers improved grip
- Permanent antimicrobial component
- Free from glass fibre to prevent product contamination
- Tested to EN ISO 15797 industrial wash test to withstand x50 washes at up to 85°C and drying up to 70°C with no effect on cut resistance
- Extended cuff for added protection
- Ambidextrous



### Applications / Industries

- Meat carving and deboning
- Butchery
- Fish filleting and processing
- Suitable for beef, pork and poultry



**Gauge:** 10gg | **Colour:** Blue liner

**Cuff Style:** Knit wrist | **Length:** 255-305mm

**Size:** 6/XS - 11/2XL

**Packaging:** 6 pieces/polybag 144 pieces/carton



# RHINO GUARD™

Extreme Cut & Puncture Protection

## Cut Puncture and Needlestick Protection

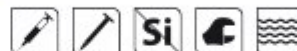
RHINO GUARD™ is a highly engineered textile composite primarily designed to provide the highest levels of protection against a wide range of puncture hazards.

The material is constructed from an innovative combination of advanced fibres, modified fabric structure and a unique coating technology to high levels of protection against both large and small puncture threats including needles and syringes.



Mechanics glove with **Rhinoguard™****49-6220**CUT **E****Gauge:** N/A | **Colour:** Black / Yellow**Cuff Style:** Neoprene | **Length:** 230-270mm**Size:** 8/M - 11/2XL | **Packaging:** Packed per pair 36 pairs/carton

- EN388:2016+A1:2018 level E cut resistance
- RhinoYarn® cut resistant technology
- EN388: 2016 level 4 puncture resistance
- ASTM F2878-19 hypodermic needle test: 6.4 Newtons (Level 3)
- Leather reinforcement for high action areas
- Rubber pull tab for quick donning and doffing
- Neoprene expandable wrist for safety and comfort

**Applications / Industries**

- Emergency services: Police, Fire Fighters, Search and Rescue
- Security services
- Local authorities, house clearance teams
- Waste management
- Metal forming / handling

**ASTM F2878-19 Hypodermic Needle Puncture Resistance**

High performance hypodermic needle puncture resistant materials are tested on the tensometer with single use validated 28, 25 and 21 gauge needles. This test ensures that the materials offer adequate protection against hypodermic needle hazards where required.

## Hot end gauntlet glove

11-3328

CUT **C**



- EN388:2016+A1:2018 level C cut resistance
- EN407:2020 contact heat level 2
- Loop pile knitted glove section for improved thermal protection and cushioning from repeated handling
- Extended gauntlet style cuff provides forearm protection
- Black colour hides dirt, extending life of the glove
- Ambidextrous



**Gauge:** 7gg | **Colour:** Black glove / Black cuff  
**Cuff Style:** Canvas gauntlet | **Length:** 420-440mm  
**Size:** 8/M - 10/XL | **Packaging:** 6 pairs/polybag 36 pairs/carton



### Applications / Industries

- Glass manufacturing
- Hot end operations
- High heat areas requiring some mechanical protection



## Heavy weight cut level D aramid knit glove

37-4523

CUT **D**



- EN388:2016+A1:2018 level D cut resistance
- Durable and long lasting
- EN407:2020 limited flame spread level 4
- EN407:2020 contact heat level 1 protection
- Reinforced thumb crotch for high action areas



**Gauge:** 7gg | **Colour:** Yellow  
**Cuff Style:** Knit wrist | **Length:** 230-260mm  
**Size:** 7/S - 11/2XL | **Packaging:** 12 pairs/polybag 96 pairs/carton



### Applications / Industries

- Assembly
- Automotive industry
- Metal fabrication / stamping



## X-Heavy cut level D aramid knit glove

**37-4528**CUT **D**

- EN388:2016+A1:2018 level D cut resistance
- Durable and long lasting
- EN407:2020 limited flame spread level 4
- EN407:2020 contact heat level 1 protection
- Reinforced thumb crotch for high action areas

**Gauge:** 7gg | **Colour:** Yellow**Cuff Style:** Knit wrist | **Length:** 220-250mm**Size:** 6/XS - 9/L | **Packaging:** 12 pairs/polybag 72 pairs/carton

### Applications / Industries

- Assembly
- Automotive industry
- Metal fabrication / stamping



## Medium weight cut level B aramid knit glove

**37-5620**CUT **B**

- EN388:2016+A1:2018 level B cut resistance
- Durable and long lasting
- EN407:2020 contact heat level 1 protection
- Reinforced thumb crotch for high action areas

**Gauge:** 7gg | **Colour:** Yellow**Cuff Style:** Knit wrist | **Length:** 240-250mm**Size:** 8/M - 9/L | **Packaging:** 12 pairs/polybag 96 pairs/carton

### Applications / Industries

- Assembly
- Automotive industry
- Metal fabrication / stamping





## Heavy weight cut level F glove

37-6620

CUT **F**

- RhinoYarn® cut resistant technology
- EN388:2016+A1:2018 level F cut resistance
- EN407:2020 contact heat level 1
- Soft, comfortable seamless liner with good dexterity
- Reinforced thumb crotch for high action area



### Applications / Industries

- Assembly
- Metal fabrication
- Glass industry
- Logistics



**Gauge:** 7gg | **Colour:** Yellow/grey liner

**Cuff Style:** Knit wrist

**Length:** 230-260mm | **Size:** 7/S - 10/XL

**Packaging:** 12 pairs/bound 96 pairs/bound



## Medium weight FR backed cut level F leather palm glove

33-6631

CUT **F**

- RhinoYarn® cut resistant technology
- EN388:2016+A1:2018 level F cut resistance
- EN407:2020 contact heat level 1
- EN388: 2016 level 4 puncture resistance
- Leather palm provides oil resistance and good grip
- Flame resistant fabric provides protection to the back of the hand



**Gauge:** 13gg | **Colour:** Black fabric / Grey palm  
**Cuff Style:** Knit wrist | **Length:** 240-260mm  
**Size:** 8/M - 10/XL | **Packaging:** 12 pairs/polybag 72 pairs/carton



### Applications / Industries

- Assembly
- Automotive industry
- Metal fabrication / stamping
- Oil & Gas
- Utilities



## Medium weight FR backed cut level F leather palm glove

204

CUT **F**

- RhinoYarn® cut resistant technology
- EN388:2016+A1:2018 level F cut resistance
- EN407:2020 contact heat level 1
- EN388: 2016 level 3 puncture resistance
- Leather palm provides oil resistance and good grip
- Flame resistant fabric provides protection to the back of the hand



**Gauge:** 7gg | **Colour:** Yellow fabric / Grey palm  
**Cuff Style:** Knit wrist | **Length:** 240-260mm  
**Size:** 8/M - 10/XL | **Packaging:** 12 pairs/polybag 72 pairs/carton



### Applications / Industries

- Assembly
- Automotive industry
- Metal fabrication / stamping
- Oil & Gas
- Utilities



# Arm and Body Protection

The new 90 series of sweatshirts is the culmination of Tilsatec's deep expertise in delivering high level, comfortable cut protection in an innovative new high performance fabric technology.

Designed to protect workers in industries such as glass manufacturing, metal fabrication, automotive manufacturing, and waste recycling or any other environment with high cut hazards.



## Crew Neck Sweatshirt with Breathable Back

90-5113

CUT **E**

- New fabric technology made from RhinoYarn®
- EN388:2016+A1:2018 level E cut resistance\*
- Made with Tilsatec's innovative new fabric technology
- Cut and slash resistant, high abrasion resistance and puncture protection to EN388:2016+A1:2018
- Delivers body protection covering major arteries and key vulnerable areas
- Cool touch, lightweight fabric provides maximum user comfort
- Double stitched comfort cuff with built in thumb loop
- Underarm vents for enhanced breathability
- Breathable mesh back reduces perspiration keeping you cooler for longer
- Stretch fabric trim to neck and base sits comfortably against the skin

\*EN388:2016+A1:2018 classification is based on testing the sleeve area only

**Gauge:** N/A | **Colour:** Grey fabric/Black trim

**Cuff Style:** Comfort cuff w/thumb slot

**Length:** See size chart

**Size:** S - 2XL | **Packaging:** Packed p/piece

Size	To fit chest	Length
S	86CM/34"	73CM
M	92CM/36"	74CM
L	102CM/40"	75CM
XL	112CM/44"	75CM
2XL	122CM/48"	76CM



EN388:2016



3 X 4 4 E

### Applications / Industries

- Glass industry
- Handling raw glass
- Cutting stations
- Automoxative industry
- Metal fabrication / stamping
- Waste Recycling





The advanced garment design is developed using the latest in cutting edge technology and manufacturing techniques.



Soft and lightweight, the fabric has a 'cool to the touch feel' and the inclusion of under arm vents ensures maximum wearer comfort.



## Turtleneck Sweatshirt (with full coverage)



**90-5233**

CUT **E**

- New fabric technology made from RhinoYarn®
- EN388:2016+A1:2018 level E cut resistance\*
- Made with Tilsatec's innovative new fabric technology
- Cut and slash resistant, high abrasion resistance and puncture protection to EN388:2016+A1:2018
- Delivers full body protection front and back covering major arteries and key vulnerable areas
- High turtleneck design provides added protection when handling larger panels
- Cool touch, lightweight fabric provides maximum user comfort
- Double stitched comfort cuff with built in thumb loop
- Underarm vents for enhanced breathability
- Soft inner fabric on neck for improved comfort

\*EN388:2016+A1:2018 classification is based on testing the sleeve area only

**Gauge:** N/A | **Colour:** Grey fabric/Black trim

**Cuff Style:** Comfort cuff w/thumb slot

**Length:** See size chart

**Size:** S - 2XL | **Packaging:** Packed p/piece

Size	To fit chest	Length
S	86CM/34"	73CM
M	92CM/36"	74CM
L	102CM/40"	75CM
XL	112CM/44"	75CM
2XL	122CM/48"	76CM

### Applications / Industries

- Glass industry
- Handling raw glass
- Cutting stations
- Automoxative industry
- Metal fabrication / stamping
- Waste Recycling



## Medium weight cool touch cut level **D** sleeve with comfort cuff

**81-4121-CK/CV**

CUT **D**



- RhinoYarn® cut resistant technology
- EN388:2016+A1:2018 level D cut resistance
- Comfortable thumb slot keeps sleeve in place without discomfort
- 81-4121/CK - elasticated top to keep sleeve up
- 81-4121/CV - hook and loop adjustable strap



**Gauge:** 13gg | **Colour:** Light Grey  
**Cuff Style:** Comfort cuff with thumb slot  
**Length:** 21" / 53cm | **Size:** One size  
**Packaging:** Packed per piece 100 pieces/carton



### Applications / Industries

- Automotive industry
- Aerospace
- Metal fabrication / stamping
- Manufacturing
- Glass industry



## Medium weight cool touch cut level **F** sleeve with comfort cuff

**81-6121-CK/CV**

CUT **F**



- EN388: 2016+A1:2018 level F cut resistance
- RhinoYarn® cut resistant technology
- Comfortable thumb slot keeps sleeve in place without discomfort
- 81-6121/CK - elasticated top to keep sleeve up
- 81-6121/CV - hook and loop adjustable strap



**Gauge:** 13gg | **Colour:** Light Grey  
**Cuff Style:** Comfort cuff with thumb slot  
**Length:** 21" / 53cm | **Size:** One size  
**Packaging:** Packed per piece 100 pieces/carton



### Applications / Industries

- Automotive industry
- Aerospace
- Metal fabrication / stamping
- Manufacturing
- Glass industry



## 21" flame retardant cut level F sleeve with thumb slot

85-5221

CUT **F**



- EN388:2016+A1:2018 level F cut resistance
- EN407:2020 limited flame spread level 2
- EN407:2020 contact heat level 1
- Hook and loop top fastening strap for adjustable fit
- Thumb slot to keep sleeve in place
- Various finishes and fixings available on request



**Gauge:** N/A | **Colour:** Green  
**Cuff Style:** Knit wrist with thumb slot  
**Length:** 21" / 53cm | **Size:** One size  
**Packaging:** Packed per piece 100 pieces/carton



### Applications / Industries

- Automotive industry
- Metal fabrication / stamping
- Manufacturing



## 20" flame retardant cut level E sleeve with thumb slot

84-3520

CUT **E**



- EN388:2016+A1:2018 level E cut resistance
- RhinoYarn® cut resistant technology
- Lightweight and loose fitting
- Inherently flame resistant
- EN407:2020 limited flame spread level 3
- Hook and loop top fastening strap for adjustable fit
- Thumb slot to keep sleeve in place



**Gauge:** N/A | **Colour:** Yellow  
**Cuff Style:** Knit wrist with thumb slot  
**Length:** 20" / 50cm | **Size:** One size  
**Packaging:** Packed per piece 50 pieces/carton



### Applications / Industries

- Automotive industry
- Metal fabrication / stamping
- Manufacturing



## 18" aramid sleeve with thumb slot

**84-3118-BE**  
**84-3118-TE**

CUT **C**



- EN388: 2016+A1:2018 level C cut resistance
- RhinoYarn® technology
- EN407:2020 contact heat level 1
- Tubular elasticated style with thumb slot to keep sleeve in place
- Available as style 84-3118BE with option of bar tack fingers



**Gauge:** N/A | **Colour:** Yellow  
**Cuff Style:** Knit wrist with thumb slot  
**Length:** 18" / 45cm | **Size:** One size  
**Packaging:** Packed per piece 100 pieces/carton



### Applications / Industries

- Glass manufacturing
- Metal fabrication / stamping
- Automotive industry
- Manufacturing
- Aerospace



**MADE IN BRITAIN**



## 10/14/18/21" cut level E tubular sleeve with thumb slot

**85-5110/14/18/21**

CUT **E**



- EN388:2016+A1:2018 level E cut resistance
- EN407:2020 contact heat level 1
- Seamless knit with a smooth finish
- Tubular close fitting shape for maximum dexterity
- Thumb slot to keep sleeve in place
- Available in lengths of 10", 14", 18" and 21"
- Elasticated top to prevent sleeve falling down



**Gauge:** N/A | **Colour:** Green  
**Cuff Style:** Knit wrist with thumb slot  
**Length:** 21"/53cm | **Size:** One size  
**Packaging:** Packed per piece 100 pieces/carton



### Applications / Industries

- Automotive industry
- Metal fabrication / stamping
- Manufacturing
- Glass industry
- Waste handling



**MADE IN BRITAIN**



## 8" cut level F wrist guard with adjustable straps

**89-5606** CUT **F**



- EN388:2016+A1:2018 level F cut resistance
- EN388: 2016 level 4 puncture resistance
- Protects the wrist and lower arm
- Adjustable sizing for accurate fit and wearer comfort
- Dark colour hides dirt
- Will not mark glass panels



**Gauge:** N/A | **Colour:** Black with black straps

**Cuff Style:** N/A

**Length:** 8"/20cm | **Size:** One size

**Packaging:** Packed per pair 25 pairs/carton



### Applications / Industries

- Assembly
- Automotive industry
- Glass manufacturing
- Metal fabrication / stamping
- Transportation
- White goods manufacturing



## Medium weight cut level F antimicrobial food safe sleeve

**74-8111** CUT **F**



- EN388:2016 level F (ANSI 105-2016 A8) cut resistance
- Inherent antimicrobial component safe for food handling
- Tested to EN ISO 15797 industrial wash test to withstand x50 washes at up to 85°C and drying up to 70°C with no effect on cut resistance
- Designed for use with the Tilsatec food safe glove range
- Thumb slot for a secure fit



**Gauge:** 10gg | **Colour:** Blue

**Cuff Style:** Knit wrist

**Length:** 20"/50cm | **Size:** One size

**Packaging:** Packed per piece 100 pieces/carton



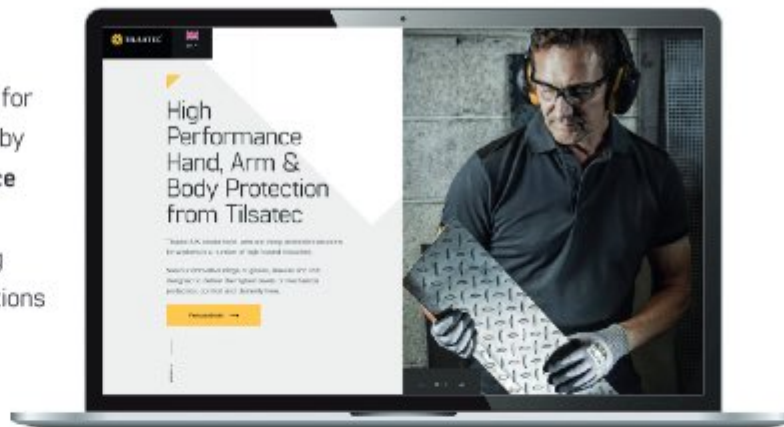
### Applications / Industries

- Meat carving and deboning
- Butchery
- Fish filleting and processing
- Suitable for beef, pork and poultry

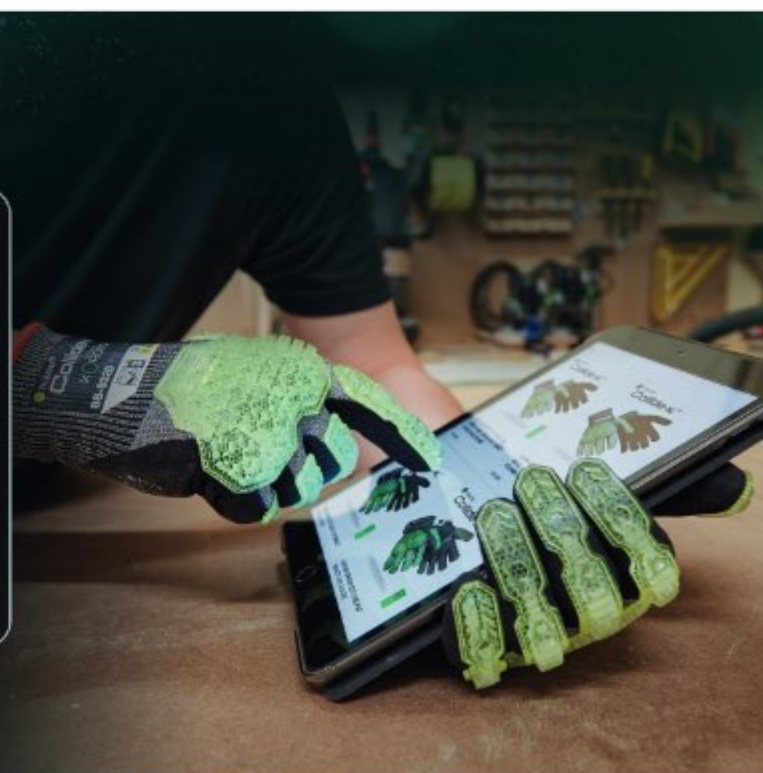


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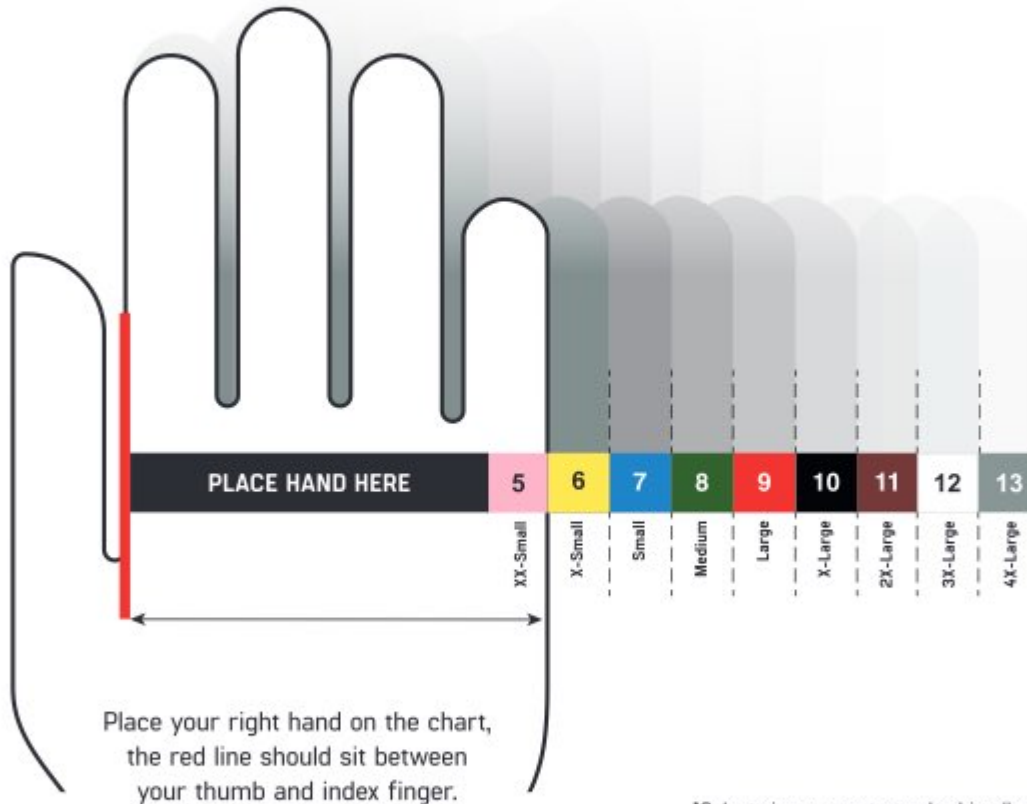








Tilsatec gloves are available in a range of sizes. To ensure optimum fit and comfort, selecting the correct size glove is essential. Measure your hand against the chart below to see what size glove you need.



\*Select sizes are not standard in all styles. Contact us to discuss your special sizing needs.



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