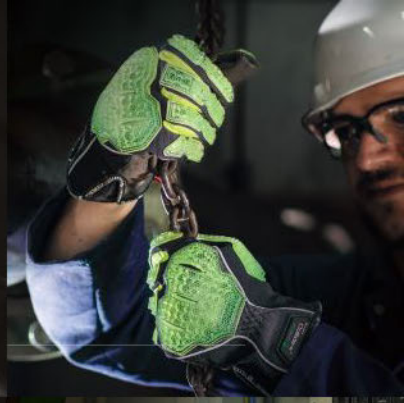
TILSATEC®

High Performance Hand, Arm and Body Protection

PRODUCT CATALOGUE **2026**



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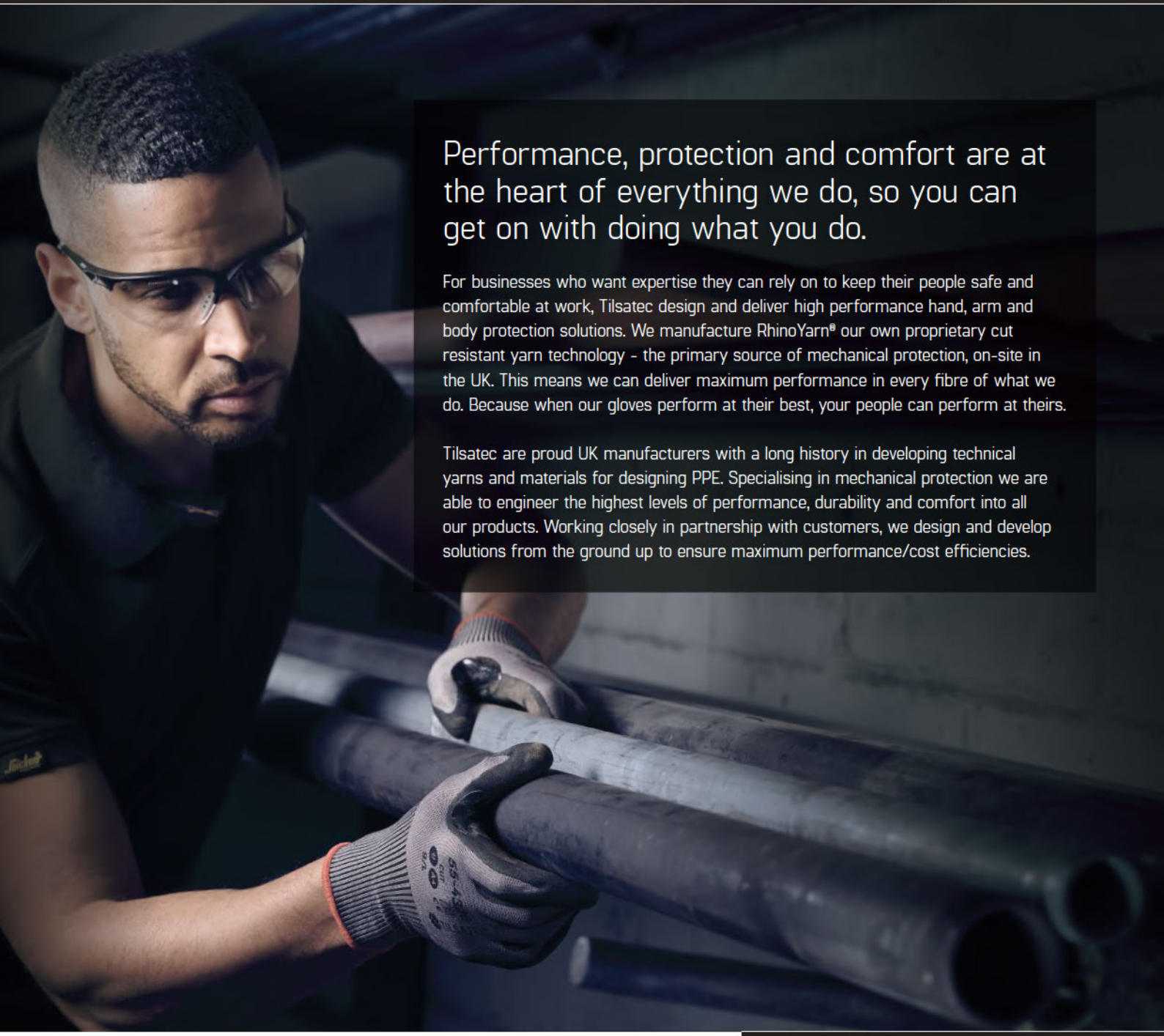
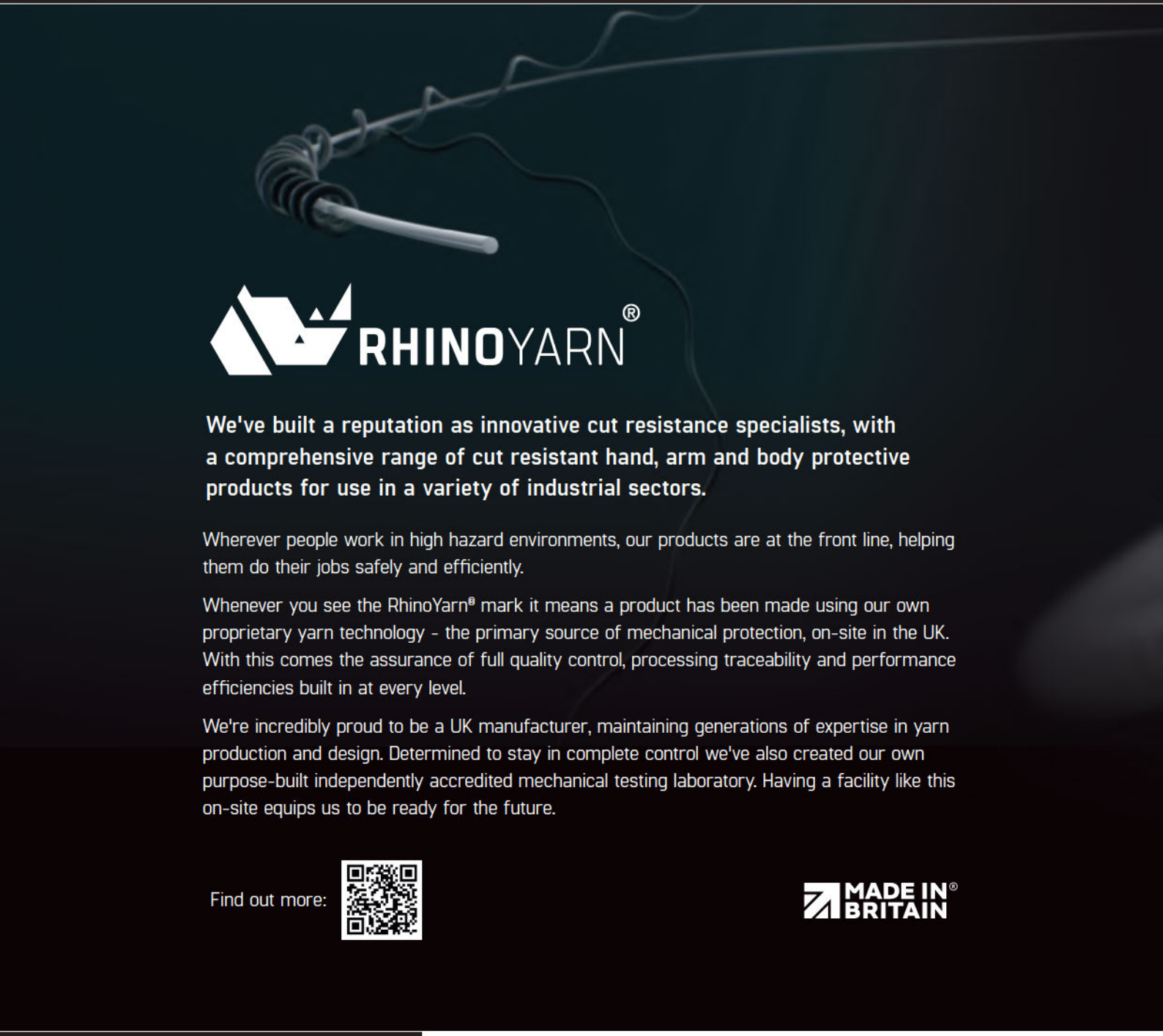


Performance, protection and comfort are at the heart of everything we do, so you can get on with doing what you do.

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.



RHINOYARN®

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:

MADE IN BRITAIN®

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:

UKAS TESTING
10386

- 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.

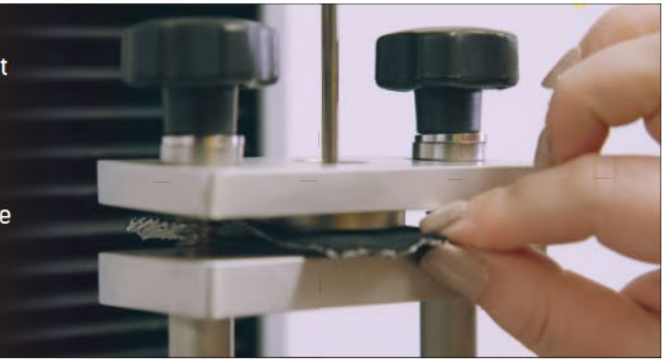
Where a customer may have concerns as to the suitability of a product for their particular application, the laboratory team can assist in evaluating the nature of the tasks being performed and provide a detailed evaluation.

ISO 9001 ISOQAR REGISTERED UKAS MANAGEMENT SYSTEMS 0026

Certificate Number 14054

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.

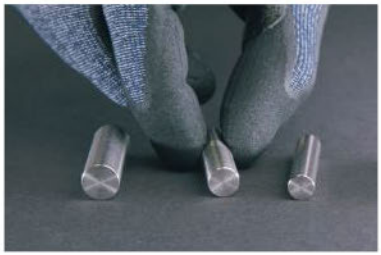
Category II: Intermediate PPE

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

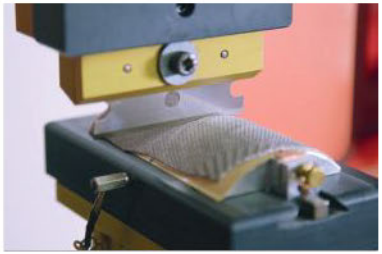


The laboratory carries out the general requirements laid out in the recently updated EN ISO 21420 standard. These include sizing and dexterity to guarantee the highest standard of fit and comfort and pH testing to ensure the end user will be safeguarded against any irritation that may be caused by the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

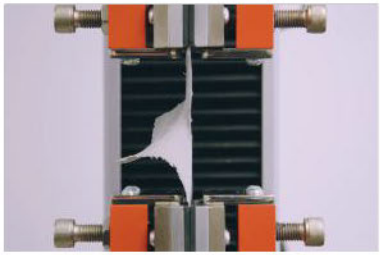
EN ISO 13997:1999 / ASTM F2992-23 Blade Cut Resistance



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 / ANSI/ISEA 105-24
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 an optional test within the EN388:2016+A1:2018 standard and should only be included for gloves that claim specific impact resistant properties. The 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. The 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.

EN407:2020 Contact heat

EN 407 contact heat testing measures how well a glove resists heat transfer when in direct contact with a hot surface ranging from 100°C to 500°C. The glove's performance level (1 to 4) is based on how long it takes for the inner surface to reach a 10°C temperature rise

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, *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 vist: **https://www.ukas.com/download-schedule/10386/Testing/**

Tilsatec's New Polymer Laboratory

Expanding our in-house capabilities with a new Polymer Laboratory at the West Yorkshire Head Office.

Being onsite alongside the manufacturing facility and testing laboratory is hugely advantageous allowing for rapid prototyping and testing, accelerating our research into specialised technologies that meet evolving industry demands.

Equipped with the latest technology and specialist equipment, this investment enables us to conduct research into new materials and processes, advancing hand protection solutions across diverse industries. Leading this initiative is Masood Shah, our Coatings Research and Development Manager. With over two decades of industry experience, Masood is responsible for creating some of the most innovative coating technologies found on the market today.

Key Research Areas and Capabilities

The Tilsatec Polymer Laboratory is poised to revolutionise hand protection through focused research in several key areas. We will be developing novel, high-performance polymer blends, meticulously testing and analysing polymer materials, and investigating the intricate relationship between polymer structure and performance.

These research efforts will directly translate into tangible improvements in our range, including gloves with enhanced cut resistance, superior grip, advanced chemical barrier properties, and increased comfort. By understanding and manipulating polymer science at a fundamental level, we can engineer hand protection that ensures the highest level of safety and performance for our customers.

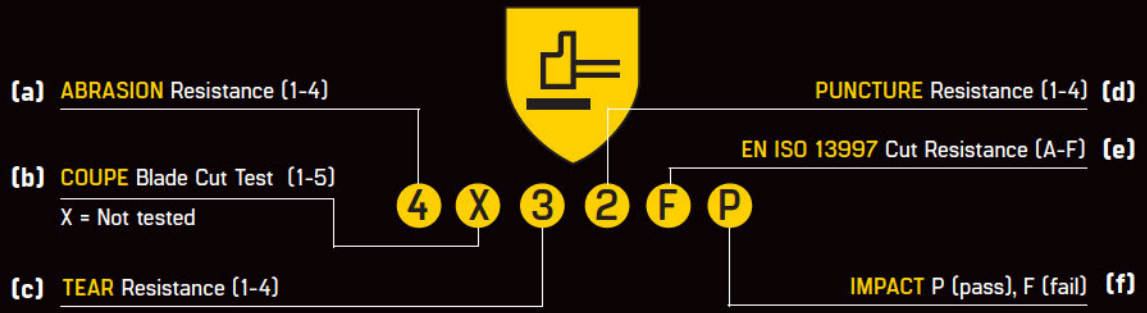
Benefits to Customers and Industry

At the heart of modern hand protection is the intricate science of polymers. These versatile materials, comprising long chains of molecules, are the core building blocks in engineering gloves with specific, targeted properties. Whether it's enhancing grip through specialised coatings, or ensuring chemical barrier performance with impermeable films, polymers are the key.

By manipulating the molecular structure and composition of various materials, we can meet the ever-evolving demands of diverse industries. This scientific approach allows us to go beyond essential protection, creating gloves that not only offer cut protection but also provide end users with enhanced comfort, dexterity, and overall performance.

"Our lab will be continuously testing new formulations to ensure they withstand practical conditions such as high temperatures, abrasions, impacts, and exposure to chemicals."

EN 388:2016+A1:2018 - Mechanical Protection



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

The 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)

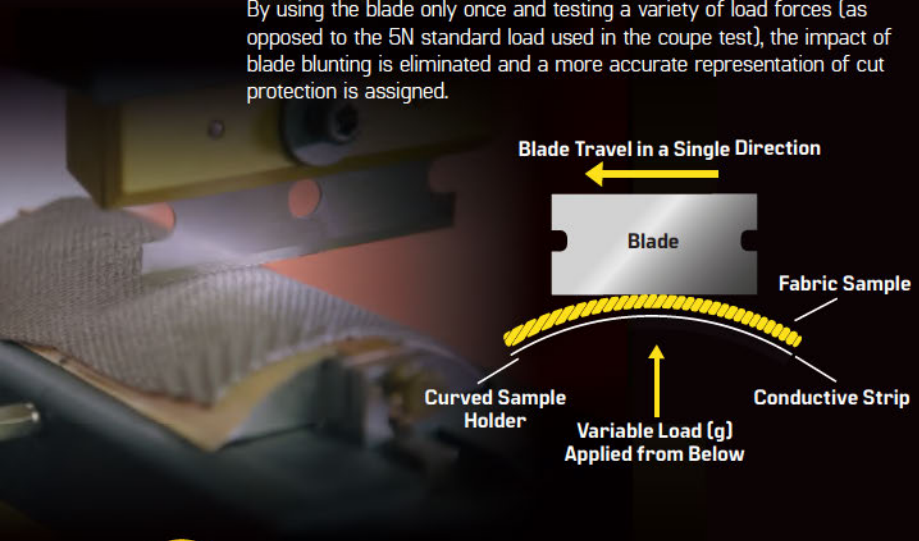
A tensometer is used to determine the strength required to tear a sample apart. Four rectangular samples are tested from the palm of 4 separate gloves where two specimens with a 50mm slit in the longitudinal direction are taken across the palm, and two specimens are taken along the length of the glove. 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)

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)

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

Products certified to the 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.

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.

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

EN511:2006 - Protective gloves against cold contact

(a) Protective against connective cold

The Convective Cold Resistance test evaluates a glove's insulation properties by measuring its thermal resistance using a heated hand-shaped model in a cold chamber. The glove is placed on the model, and the power required to maintain its temperature is recorded. The lower the power loss, the better the insulation.

(b) Protective against contact cold

Contact Cold Resistance measures a glove's thermal resistance when in direct contact with a cold surface. A guarded hot plate is pressed against the cold surface with the glove material in between, and the resulting thermal conductivity is calculated. Lower conductivity indicates better protection.

(c) Protective against water penetration

Water Penetration evaluates whether water enters the gloves after 30 minutes of immersion. The glove is scored as 0 if water penetrates and 1 if it remains fully waterproof.

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.

EU / EC (Reg. 1935/2004 & 10/2011):

Gloves are evaluated using overall and specific migration testing, which measures the amount of substances that could transfer from the glove into food. Simulants representing aqueous, acidic, and fatty foods are applied under defined temperatures and exposure times to replicate realistic contact conditions. Metal analysis is also performed to ensure that any trace metals (e.g., lead, cadmium, nickel) remain within safe limits. Compliance is confirmed with a Declaration of Conformity.

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+A1:2024 - 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:

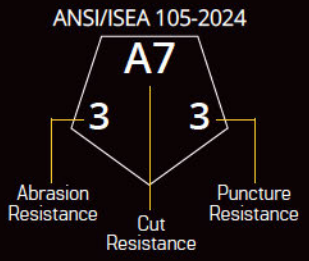
Glove Size	Hand Circumference (mm)	Hand Length (mm)
4	101	<160
5	127	<160
6	152	160
7	178	171
8	203	182
9	229	192
10	254	204
11	279	215
12	304	>215
13	329	>215

ANSI/ISEA 105-2024 - Hand and Arm Protection Standard

This standard provides a detailed framework for classifying and testing hand and arm protection products based on their performance against mechanical, chemical, and thermal hazards.

Widely recognized across North America, it establishes clear criteria and test methods to evaluate cut, puncture, abrasion, chemical resistance, heat and flame protection.

The standard generally aligns with international EN methods for mechanical and thermal protection, helping end users select gloves that are fit for purpose and reliable in real-world workplace conditions.



ANSI/ISEA 105-2024 - Cut Resistance

ANSI/ISEA 105-2024 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 a smaller range 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.

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.

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 165231 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 are 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
JKLMNO	JKL	A-Low Chemical

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.

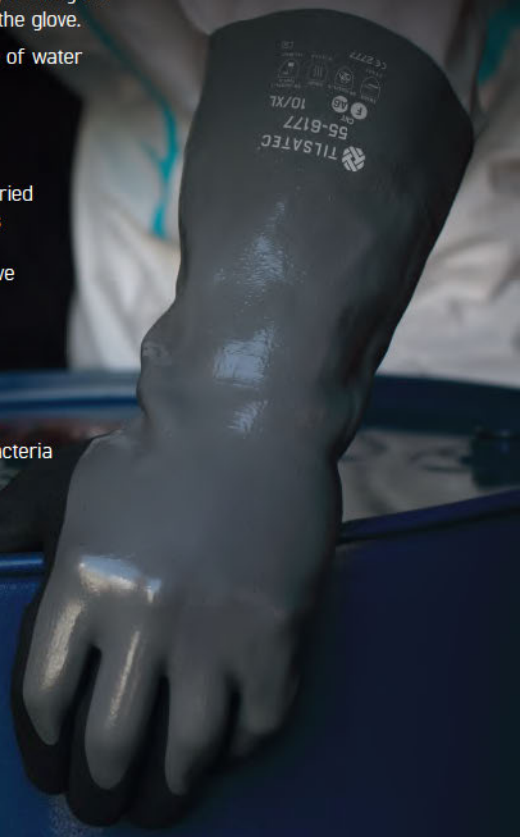
EN ISO 374-5:2016 - Terminology and performance requirements for micro-organisms risks

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 VIRUS



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	Oil
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/cm3.

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.

ASTM F2675 - Arc flash protection and 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/cm²
1	>4
2	>8
3	>25
4	>40

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.

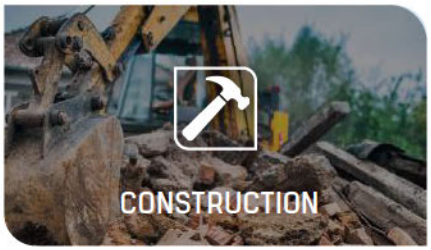
Any gloves found to be leaking, torn or damaged should be replaced. These standards do not highlight an expiry date for products, and it is considered the end user's responsibility to ensure that gloves are thoroughly examined prior to use and stored according to the supplied user instructions.

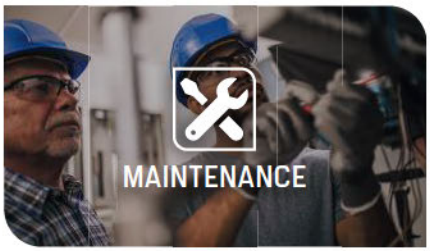
APPLICATION AND INDUSTRIES

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.

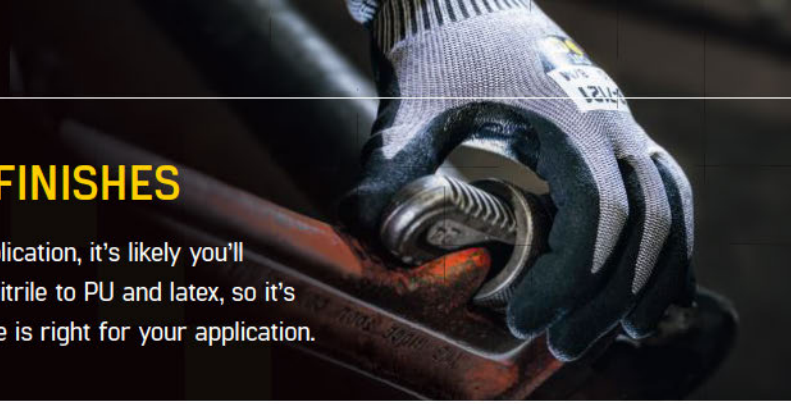




Scan here for more details on industry sectors

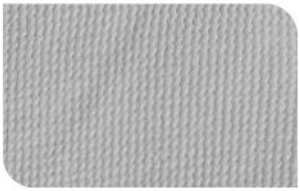
TECHNOLOGIES & FEATURES

- 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



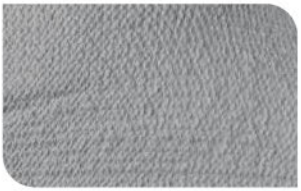
GUIDE TO GLOVE COATINGS AND FINISHES

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



CLEAN PU

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

FOAM NITRILE

- Increased comfort (less irritation than PU)
- Breathable
- Good wet and dry grip
- Good dexterity

MICROFOAM NITRILE

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

NEOPRENE FOAM

- Resist oils, greases
- Good dry and oil grip
- Soft spongy feel
- Moderate thermal insulation

CRINKLE LATEX

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

BI-POLYMER

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

SANDY NITRILE

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

SMOOTH LATEX

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

SANDY LATEX

- Superior Dry Grip
- Excellent dry and good wet grip
- Textured gritty feel
- Contact Heat Resistant

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:

Collide-x.3®

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-X³ 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.

RHINOYARN

"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.

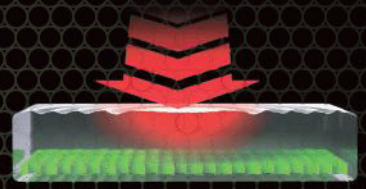
ERGONOMIC AND FLEXIBLE

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

ULTRALIGHT AND MINIMAL THICKNESS

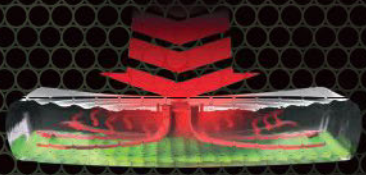
A thin but vital layer of KOROYD improves performance, allowing for thinner protection without compromise. This reduces fatigue, improves comfort, and minimises the risk of snagging when working in confined spaces.

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

ANSI / ISEA 138 3 | EN388:2016 4X42FP | EN407:2020 X1XXXX | CE

63-6320

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 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
- Tested to EN ISO 15797 industrial wash test to withstand x5 washes at up to 40°C and drying up to 40°C with no effect on cut and impact resistance
- Touchscreen compatible

PROTECTED BY KOROYD

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 - 11/2XL
Packaging: 6 pairs inner package. Sizes 7, 11 36 pairs/carton
Sizes 8, 9, 10 72 pairs/carton

RHINOYARN

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

ANSI / ISEA 138 — 3

EN388:2016 — 4 X 4 3 F P

CE

68-9320

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 A9 protection
- Robust, reliable mechanical protection from RhinoYarn® technology made in the UK
- 18 gauge liner for ultimate fit , feel and dexterity
- Awarded Red Dot Product Design Award 2025
- Breathable palm and liner reduces perspiration keeping hands cool
- Reinforced thumb crotch for added durability
- Tested to EN ISO 15797 industrial wash test to withstand x5 washes at up to 40°C and drying up to 40°C with no effect on cut and impact resistance
- Touchscreen compatible

PROTECTED BY KOROYD

Applications / Industries

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

Gauge: 18gg **I Colour:** Grey/Black/Green
Cuff Style: Knit wrist **I Length:** 220-270mm **I Size:** 7/S - 11/2XL
Packaging: 6 pairs inner package. Sizes 7, 11 36 pairs/carton
Sizes 8, 9, 10 72 pairs/carton

RHINOYARN

Impact level **3 mechanics** glove

ANSI / ISEA 138 3 | EN388:2016 4X42FP | EN407:2020 X1XXXX | CE

69-7310

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
- 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. Colour 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 **I Colour:** Black/Grey/Green
Cuff Style: Gusset, Shirred, Slip-On **I Length:** 230-280mm
Size: 7/S - 13/4XL **I Packaging:** 6 pairs inner package / 36 pairs/carton

RHINOYARN

Impact level **3 leather drivers** glove

ANSI / ISEA 138 — 3
EN388:2016 — 4X43FP
EN407:2020 — X1XXXX
CE

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. Colour 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 **I Colour:** Black/Grey/Green
Cuff Style: Gusset, Shirred, Slip-On **I Length:** 230-280mm
Size: 7/S - 13/4XL **I Packaging:** 6 pairs inner package / 36 pairs/carton

RHINOYARN

>50% sustainable yarn content in all EnVision® products

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

55-6725

CUT F

MADE WITH 68% RECYCLED & BIO BASED YARNS

BIO-BASED DYNEEMA® FIBRE AT HEART

EN388:2016 4X42F

FSC

CE

- 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_2 reduction of >780 grams per pair**
- Carbon footprint: 442g CO_2e per pair* (cradle to distributor)
- LCA (Life Cycle Assessment) conducted
- 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 **I Colour:** Navy liner / Black coating
Cuff Style: Knit wrist **I Length:** 220-270mm **I 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**

MADE WITH 83% RECYCLED & BIO BASED YARNS

BIO-BASED DYNEEMA® FIBRE AT HEART

EN388:2016 4X42C

FSC

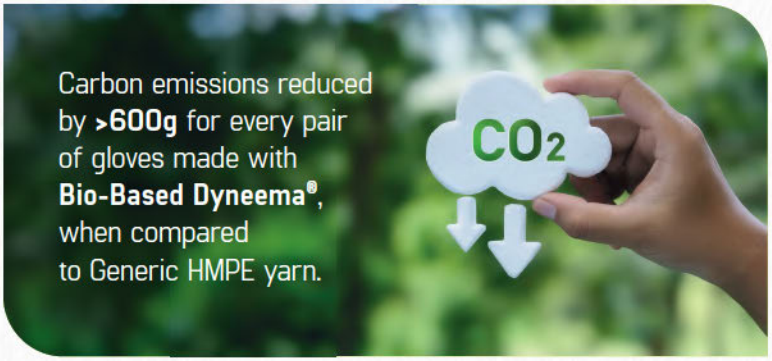
CE

- 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_2 reduction of >820 grams per pair**
- Carbon footprint: 508g CO_2e per pair* (cradle to distributor)
- LCA (Life Cycle Assessment) conducted
- 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



Gauge: 15gg **I Colour:** Navy liner / Black coating
Cuff Style: Knit wrist **I Length:** 220-270mm **I 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**

MADE WITH 86% RECYCLED YARNS

EN388:2016
4X42A

FSC

CE

- 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_2 reduction of >320 grams per pair*
- Carbon footprint: 430g CO_2e per pair* (cradle to distributor)
- LCA (Life Cycle Assessment) conducted
- 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
- Food approved against aqueous foodstuffs

*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 **I** **Colour:** Navy liner / Black coating
Cuff Style: Knit wrist **I** **Length:** 220-270mm **I** **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**

MADE WITH 73% PLANT & BIO BASED YARNS

BIO-BASED DYNEEMA® FIBRE AT HEART

EN388:2016 4X42C

FSC

- Certified 29% bio-based content awarded Eurofins bronze badge
- Manufactured using a unique combination of plant and bio-based yarns
- Carbon footprint: 422g CO_2e per pair* (cradle to distributor)
- LCA (Life Cycle Assessment) conducted
- Less water consumption and energy usage
- Accredited plant-based by the Vegetarian Society
- 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

Biobased Content verified by eurofins BRONZE

Plant Based Certified

Applications / Industries

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

Gauge: 15gg **I Colour:** Green liner / Black coating
Cuff Style: Knit wrist **I Length:** 220-270mm **I 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

MADE WITH 77% PLANT & BIO BASED YARNS

FSC

- Certified 55% bio-based content awarded Eurofins silver badge
- Manufactured using a unique combination of plant and bio-based yarns
- Carbon footprint: 406g CO_2e per pair* (cradle to distributor)
- LCA (Life Cycle Assessment) conducted
- Less water consumption and energy usage
- Accredited plant-based by the Vegetarian Society
- 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

Biobased Content verified by eurofins SILVER

Plant Based Certified

*Calculation was performed by external experts and is aligned with ISO 14040, ISO 14044, and the Product Environmental Footprint (PEF) methodology. Assumptions and parameters are based on the PEFCR for Apparel and Footwear.Scope: Cradle to customer (distributor). The reported CO_2 values correspond to the defined calculation period and may be updated as data, assumptions, or methodologies evolve.

Applications / Industries

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

Gauge: 15gg **I Colour:** Green liner / Black coating
Cuff Style: Knit wrist **I Length:** 220-270mm **I 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

EN388:2016 4X42F | EN ISO374-5 | EN407:2020 X1XXXX | EN ISO374-1 Type A JKLMNO | except with acidic/fatty foods | CE

55-6177

CUT F

- EN ISO 374-1:2016+A1:2018 Permeation Type A
- EN ISO 374-5:2016 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 **I Colour:** Grey/black
Cuff Style: Gauntlet **I Length:** 35cm **I Size:** 7/S - 11/2XL
Packaging: 6 pairs/paper band, 48 pairs/carton

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

EN388:2016 4X42D | EN ISO374-5 | EN407:2020 X1XXXX | EN ISO374-1 Type A JKLMNO | except with acidic/fatty foods | CE

55-4173

CUT D

- EN ISO 374-1:2016+A1:2018 Permeation Type A
- EN ISO 374-5:2016 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 **I Colour:** Blue/black
Cuff Style: Gauntlet **I Length:** 35cm **I 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/cm²			
ASTM D120	Type 1	Type 1	Type 1	Type 1
Cuff	Straight with beaded edge			
Colour	Red	Yellow	Red	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			

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/cm²
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/cm²
Class 1 White	36/14		R/C	10.000/40.000	7.500/11.250	8, 9, 10, 11	APC2 ATPV - 10.6 cal/cm²
Class 2 Yellow	36/14		R/C	20.000/50.000	17.000/25.500	8, 9, 10, 11	APC2 ATPV - 21.0 cal/cm²
Class 3 Green	36/14		R/C	30.000/60.000	26.500/39.750	8, 9, 10, 11	APC2 ATPV - 40.5 cal/cm²
Class 4 Orange	41/16		R/C	40.000/70.000	36.000/54.000	9, 10, 11	APC2 ATPV - 36.2 cal/cm²

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.

CE

24-0010
11"/28cm
Class 0

24-0012
11"/28cm
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/cm²	
ASTM D120	Type 1	Type 1
Cuff	Straight with beaded edge	
Colour	Red	Yellow
Length	11" / 28cm	11" / 28cm
Sizes	8-11	8-11
Packaging	1 pair p/polybag in box. 10 pairs p/carton	

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

24-0020
14"/36cm
Class 0

24-0022
14"/36cm
Class 0

	24-0020	24-0022
Class	0	0
Max Use	1000V	1000V
Category	A/Z/C	A/Z/C
ARC	APC2 / ATPV - 8.5 cal/cm²	
ASTM D120	Type 1	Type 1
Cuff	Straight with beaded edge	
Colour	Red	Yellow
Length	14" / 36cm	14" / 36cm
Sizes	8-11	8-11
Packaging	1 pair p/polybag in box. 10 pairs p/carton	

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

	24-1024	24-2024
Class	1	2
Max Use	7500V	17000V
Category	R/C	R/C
ARC	APC2 / ATPV - 10.6 cal/cm²	APC2 / ATPV - 21.0 cal/cm²
ASTM D120	Type 1	Type 1
Cuff	Straight with beaded edge	
Colour	Black/Red	Black/Red
Length	14" / 36cm	14" / 36cm
Sizes	8-11	8-11
Packaging	1 pair p/polybag in box. 10 pairs p/carton	

CE

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

24-3024
14"/36cm
Class 3

24-4034
16"/41cm
Class 4

	24-3024	24-4034
Class	3	4
Max Use	26500V	36000V
Category	R/C	R/C
ARC	APC2 / ATPV - 40.5 cal/cm²	APC2 / ATPV - 36.2 cal/cm²
ASTM D120	Type 1	Type 1
Cuff	Straight with beaded edge	
Colour	Black/Red	Black/Red
Length	14" / 36cm	16" / 41cm
Sizes	8-11	8-12
Packaging	1 pair p/polybag in box. 10 pairs p/carton	

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.

29-6250 29-7450 29-6252 29-7452 29-7454 29-7456

Product code	Length cm/inch	Sizes	Product description	ATPV
29-6250	25/10"	8-11	Unlined Leather Protector	25.8cal/cm²
29-7450	25/10"	8-11	Aramid Lined Leather Protector	43cal/cm²
29-6252	30/12"	8-11	Unlined Leather Protector	25.8cal/cm²
29-7452	30/12"	8-11	Aramid Lined Leather Protector	43cal/cm²
29-7454	35/14"	8-11	Aramid Lined Leather Protector	43cal/cm²
29-7456	40/16"	8-11	Aramid Lined Leather Protector	43cal/cm²

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
- WARNING: Tilsatec Pulse® leather protectors do NOT protect against shock or voltage.

EN388:2016
2X11X

EN407:2020
41XXXX

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
- WARNING: Tilsatec Pulse® leather protectors do NOT protect against shock or voltage.

EN388:2016
3X32C

EN407:2020
41XXXX

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.

Medium weight cut level **F** arc flash glove

EN388:2018 4X43F | EN407:2020 41XXXX | CE 2834 Cat III

23-6690 CUT **F**

- Meets NFPA 70E requirements for arc flash PPE (Category 2)
- Achieves ATPV 11.7cal/cm² according to ASTM F2675/2675M
- Level F cut resistance to EN388:2016+A1:2018
- EN407:2020 Limited flame spread level 4
- EN407:2020 Contact heat level 1
- Neoprene foam palm coating provides excellent wet and dry grip
- Robust 13gg aramid liner for heavy duty handling applications

Gauge: 13gg **I Colour:** Yellow liner / Black coating
Cuff Style: Knit wrist **I Length:** 220-270mm **I Size:** 7/S - 12/2XL
Packaging: 12 pairs/paper band, 72 pairs/carton

Applications / Industries

- Environments with cut, heat, flame and potential for arc-flash risks
- Oil and gas processing and refineries
- Heavy equipment and vehicle maintenance
- Electrical equipment operation and maintenance
- Construction
- Metal handling and stamping

Leather arc flash ground glove

EN388:2018 2X32A | EN407:2020 41XX4X | CE 2834 Cat III

20-7251 CUT **A**

- Achieves ATPV 30cal/cm² according to ASTM F2675/2675M
- Meets NFPA 70E requirements for arc flash PPE (Category 3)
- EN407: 2020 Limited flame spread level 4
- EN407: 2020 Contact heat level 1
- EN407: 2020 Small splashes of Molten metal level 4
- Premium soft goatskin leather outer with ergonomic form fit
- Inner palm reinforcement for added durability and improved comfort
- Added reinforcement to thumb, index finger and back of knuckles for high wear areas
- WARNING: Gloves do not provide protection against electrical voltage or shock

Gauge: n/a **I Colour:** Gold yellow **I Cuff Style:** Shirred wrist
Length: 254mm / 10" **I Size:** 7/S - 11/2XL
Packaging: 6 pairs/paper band, 36 pairs/carton

Applications / Industries

- Environments with heat, flame and potential for arc-flash risks
- Oil & Gas
- Utilities
- Linemen
- Electrical equipment operation and maintenance

Leather arc flash cut level **D** ground glove

EN388:2018 3X32D | EN407:2020 41XX4X | CE 2834 Cat III

20-7451

CUT D

- Aramid liner provides EN388: 2016+A1: 2018 level D cut resistance
- Achieves ATPV 37cal/cm² according to ASTM F2675/2675M
- Meets NFPA 70E requirements for arc flash PPE (Category 3)
- EN407: 2020 Limited flame spread 4
- EN407: 2020 Contact heat level 1
- EN407: 2020 Small splashes of Molten metal level 4
- Premium soft goatskin leather outer with ergonomic form fit
- Inner palm reinforcement for added durability and improved comfort
- Added reinforcement to thumb, index finger and back of knuckles for high wear areas
- WARNING: Gloves do not provide protection against electrical voltage or shock

Applications / Industries

- Environments with heat, flame and potential for arc-flash risks
- Oil & Gas
- Utilities
- Linemen
- Electrical equipment operation and maintenance

Gauge: Aramid liner **I Colour:** Gold yellow
Cuff Style: Shirred wrist **I Length:** 254mm / 10" **I Size:** 7/S - 11/2XL **Packaging:** 6 pairs/paper band - 36 pairs/carton

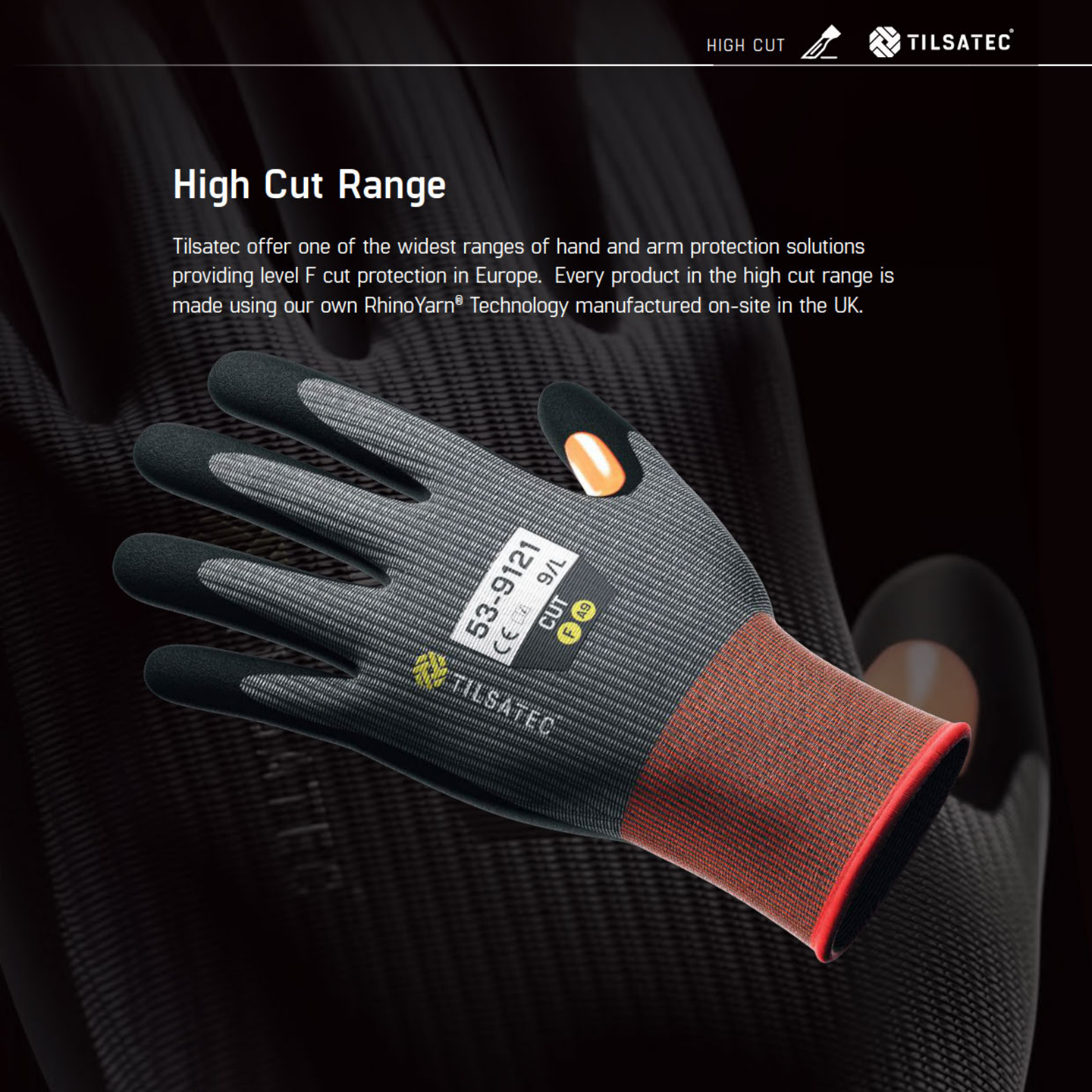
RHINOYARN®

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

EN388:2018
4X43F

53-9111 CUT **F**

- New RhinoYarn® cut resistant technology
- EN388: 2016+A1:2018 level F cut resistance
- Fine 13 gauge medium weight liner
- High level of tactility and dexterity
- Robust PU palm coating provides secure dry grip and light oil grip
- Thumb crotch reinforced in high wear zone
- Seamless liner and cuff gives a smooth, form-fitting feel
- Tested after washing to industrial wash standards

Gauge: 13gg **I** **Colour:** Grey liner / Grey coating
Cuff Style: Knit wrist **I** **Length:** 210-280mm **I** **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

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

RHINOYARN

Medium weight cut level **F** sandy nitrile palm coated glove

EN388:2016
4X42F
EN407:2020
X1XXXX

53-9121 CUT **F**

- New RhinoYarn® cut resistant technology
- EN388: 2016+A1:2018 level F cut resistance
- EN407: 2020 contact heat level 1
- Fine 13 gauge medium weight liner
- High level of tactility and dexterity
- Sandy nitrile palm coating provides good dry and wet grip
- Thumb crotch reinforced in high wear zone
- Seamless liner and cuff gives a smooth, form-fitting feel
- Tested after washing to industrial wash standards

Gauge: 13gg **I** **Colour:** Grey liner / Black coating
Cuff Style: Knit wrist **I** **Length:** 210-280mm **I** **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

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

RHINOYARN

EN388:2016 3X44F | EN407:2020 X2XXXX | EN511:2006 X1X | CE

Medium weight cut level **F** latex fully coated thermal winter glove

53-7153

CUT F

- EN388: 2016+A1: 2018 level F cut resistance
- EN511: 2006 cold contact 1
- EN407: 2020 heat contact 2
- EN388: 2016+A1: 2018 puncture level 4
- Full dip latex coating for liquid protection
- Sandy latex palm for added wet and dry grip
- Aerated thermal lining retains heat generated from the wearer eliminating heat loss
- True to size fit and feel for comfortable flexing

Applications / Industries

- Construction and scaffolding
- Material handing in cold storage
- Transportation of industrial goods
- Metal holdings in outdoor conditions

Gauge: 13gg **I Colour:** Grey liner / Blue and black coating
Cuff Style: Knit wrist **I Length:** 220-270mm **I Size:** 6/XS - 12/3XL
Packaging: 6 pairs/polybag band, 72 pairs/carton

RHINOYARN

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

EN388:2018 4X43F CE

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

Applications / Industries

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

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

RHINOYARN

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

EN388:2018 4X43F CE

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 industrial wash standards

Applications / Industries

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

Gauge: 13gg **I** **Colour:** Grey liner / Grey coating
Cuff Style: Knit wrist **I** **Length:** 265-290mm **I** **Size:** 6/XS - 11/2XL
Packaging: 12 pairs/polybag. Sizes 6, 7, 11 72 pairs/carton, 8, 9, 10 120 pairs/carton

RHINOYARN

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

except with acidic/fatty foods

EN388:2016 4X42F

EN407:2020 X1XXXX

CE

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
- Food approved against aqueous foodstuffs

Gauge: 13gg **I** **Colour:** Grey liner / Black coating
Cuff Style: Knit wrist **I** **Length:** 220-270mm **I** **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

RHINOYARN

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

EN388:2016 4X43F

EN407:2020 X1XXXX

CE

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 **I** **Colour:** Grey liner / Grey leather
Cuff Style: Knit wrist **I** **Length:** 220-270mm **I** **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

RHINOYARN

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

EN388:2016 4X43F CE

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

Applications / Industries

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

RHINOYARN

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

EN388:2016 4X43F EN407:2020 X1XXXX CE

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 **I Colour:** Black liner / Black coating
Cuff Style: Knit wrist **I Length:** 230-270mm **I 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

RHINOYARN

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

EN388:2016 4X42F
EN407:2020 X1XXXX
CE

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

Applications / Industries

- Assembly
- Automotive industry
- Metal fabrication/stamping
- Transp ortation
- Manufacturing
- Construction

RHINOYARN

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

EN388:2016 4X42F
EN407:2020 X1XXXX
CE

50-6130

CUT F

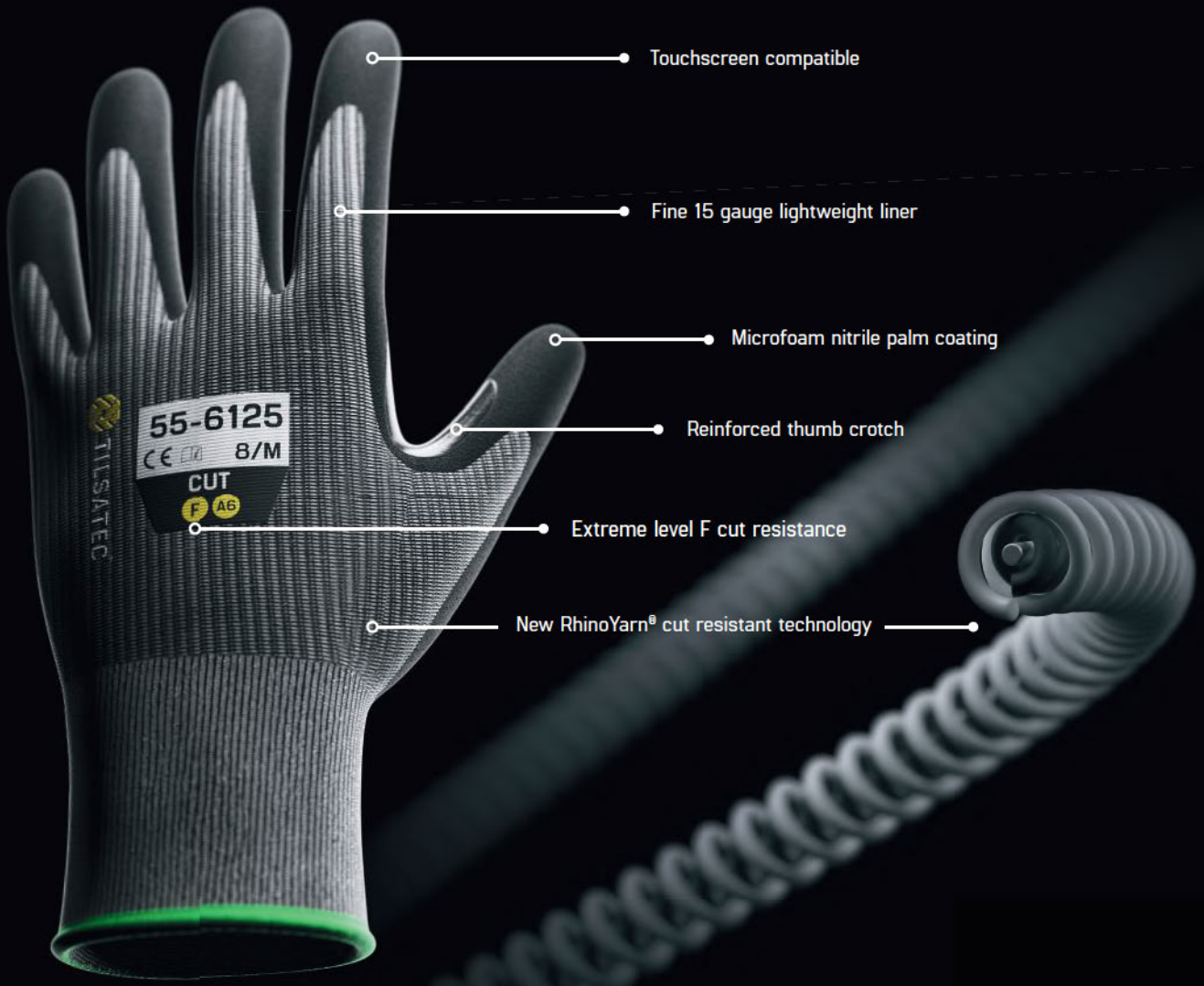
- RhinoYarn® cut resistant technology
- Level F cut resistance to EN388:2016+A1:2018
- EN407:2020 contact heat level 1
- Crinkle latex palm coating delivers excellent dry and wet grip
- Durable and hard wearing for heavy duty applications
- Tested after washing to domestic and industrial wash standards

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

Applications / Industries

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

RHINOYARN


Touchscreen compatible
Fine 15 gauge lightweight liner
Microfoam nitrile palm coating
Reinforced thumb crotch
Extreme level F cut resistance
New RhinoYarn® cut resistant technology
55-6125
8/M
CUT
F
A6
TILSATEC
RHINOYARN

EN388:2016
4X43F

CE

Lightweight cut level **F** microfoam nitrile palm coated glove

55-6125 CUT **F**

- New RhinoYarn® cut resistant technology
- EN388: 2016+A1:2018 level F cut resistance
- Fine 15 gauge lightweight liner
- High level of tactility and dexterity
- Breathable microfoam nitrile palm coating provides good dry and wet grip
- Seamless liner and cuff gives a smooth, form-fitting feel
- Thumb crotch reinforced in high wear zone
- Touchscreen compatible
- Tested after washing to domestic and industrial wash standards

Applications / Industries

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

Gauge: 15gg **I** **Colour:** Grey liner / Black coating
Cuff Style: Knit wrist **I** **Length:** 210-280mm
Size: 5/XXS - 12/3XL
Packaging: 12 pairs/paper band
Sizes 5, 6, 7, 11 & 12 72 pairs/carton,
8, 9 & 10 120 pairs/carton

RHINOYARN

Lightweight cut level **F** PU palm coated glove

EN388:2016 4X43F CE

55-6111

CUT F

- New RhinoYarn® cut resistant technology
- EN388: 2016+A1:2018 level F cut resistance
- Fine 15 gauge lightweight liner
- High level of tactility and dexterity
- Robust PU palm coating provides secure dry grip and light oil grip
- Thumb crotch reinforced in high wear zone
- Seamless liner and cuff gives a smooth, form-fitting feel
- Tested after washing to industrial wash standards

Gauge: 15gg **I** **Colour:** Grey liner / Grey coating
Cuff Style: Knit wrist **I** **Length:** 210-280mm **I** **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

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

RHINOYARN

Lightweight cut level **F** sandy foam nitrile palm coated glove

EN388:2016 4X42F EN407:2020 X1XXXX CE

55-6121

CUT F

- New RhinoYarn® cut resistant technology
- EN388: 2016+A1:2018 level F cut resistance
- Fine 15 gauge lightweight liner
- High level of tactility and dexterity
- Sandy nitrile palm coating provides good dry and wet grip
- EN407: 2020 contact heat level 1
- Thumb crotch reinforced in high wear zone
- Tested after washing to industrial wash standards
- Touchscreen compatible

Gauge: 15gg **I** **Colour:** Grey liner / Black coating
Cuff Style: Knit wrist **I** **Length:** 210-280mm **I** **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

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

RHINOYARN

Lightweight cut level **F** full dip nitrile with sandy foam nitrile palm coated glove

EN388:2016 4X43F
EN407:2020 X1XXXX
CE

55-6142 CUT **F**

- New RhinoYarn® cut resistant technology
- EN388: 2016+A1:2018 level F cut resistance
- EN407: 2020 contact heat level 1
- Fine 15 gauge lightweight liner
- High level of tactility and dexterity
- A full dip nitrile coating provides liquid and oil repellency, whilst the sandy foam palm provides strong grip performance
- Seamless liner and cuff gives a smooth, form-fitting feel
- Tested after washing to industrial wash standards

Applications / Industries

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

Gauge: 15gg **I** **Colour:** Grey liner / Black coating
Cuff Style: Knit wrist **I** **Length:** 210-280mm **I** **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

RHINOYARN

Lightweight cut level **F** sandy latex palm coated glove

EN388:2016 3X43F
EN407:2020 X1XXXX
CE

55-6132 CUT **F**

- New RhinoYarn® cut resistant technology
- EN388: 2016+A1:2018 level F cut resistance
- EN407: 2020 contact heat level 1
- Fine 15 gauge lightweight liner
- High level of tactility and dexterity
- New sandy latex palm coating provides incredible grip performance
- Seamless liner and cuff gives a smooth, form-fitting feel
- Thumb crotch reinforced in high wear zone
- Tested after washing to industrial wash standards

Applications / Industries

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

Gauge: 15gg **I** **Colour:** Grey liner / Grey coating
Cuff Style: Knit wrist **I** **Length:** 210-280mm **I** **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

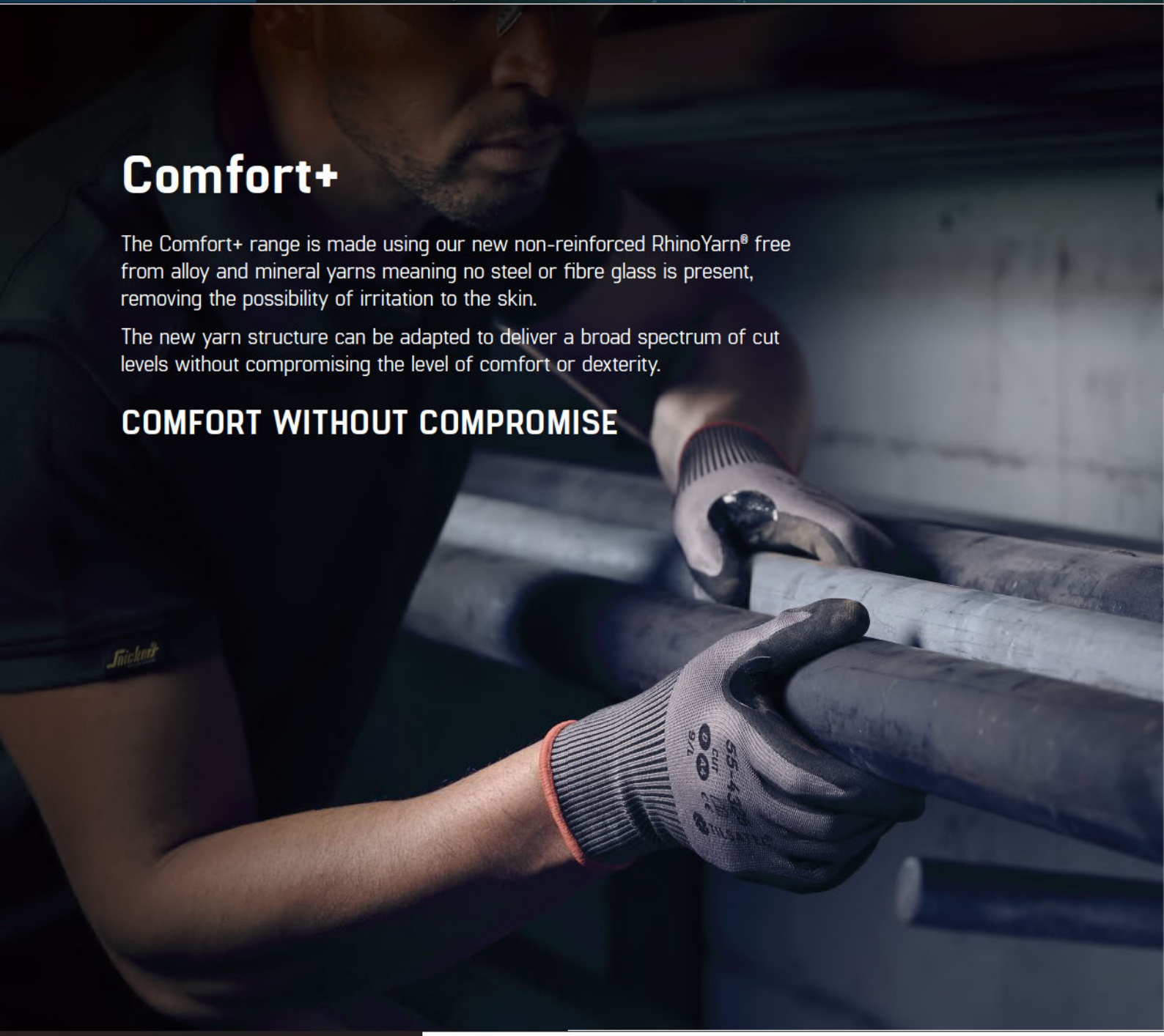
RHINOYARN

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

EN388:2018 4X42F

EN407:2020 X1XXXX

CE

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

Gauge: 13gg **I** **Colour:** Grey liner / Black coating
Cuff Style: Knit wrist **I** **Length:** 220-270mm **I** **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

RHINOYARN

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

EN388:2018 4X43E

CE

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 **I** **Colour:** Grey liner / Black coating
Cuff Style: Knit wrist **I** **Length:** 220-270mm **I** **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

RHINOYARN

Comfort+ mediumweight cut level **F** liner glove

EN388:2018
4X42F

CE

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
- Tested after washing to industrial standard
- Approved for food contact to EU Regulation 10/2011

Gauge: 13gg **I Colour:** Grey liner
Cuff Style: Knit wrist **I Length:** 220-270mm **I 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

RHINOYARN

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

except with acidic/fatty foods

EN388:2018
4X43D

CE

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
- Food approved against aqueous foodstuffs

Gauge: 15gg **I Colour:** Grey liner / Black coating
Cuff Style: Knit wrist **I Length:** 210-275mm **I 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

RHINOYARN

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

EN388:2018 4X42D CE

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 **I Colour:** Grey liner / Grey coating
Cuff Style: Knit wrist **I Length:** 210-275mm **I 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

RHINOYARN

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

EN388:2018 4X42D CE

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 **I Colour:** Grey liner / Black coating
Cuff Style: Knit wrist **I Length:** 210-275mm **I 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

RHINOYARN

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

EN388:2018
4X42D
CE

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 **I Colour:** Grey liner / Grey coating
Cuff Style: Knit wrist **I Length:** 210-275mm **I 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

RHINOYARN®

Comfort+ lightweight cut level **D** liner glove

EN388:2018
3X43D
CE

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
- Tested after washing to industrial standard
- Approved for food contact to EU Regulation 10/2011

Gauge: 15gg **I Colour:** Grey liner **I Cuff Style:** Knit wrist
Length: 210-275mm **I 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

RHINOYARN

Comfort+ medium weight cut level **D** glove with PU palm coating

EN388:2018
4X42D
CE

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 **I Colour:** Grey liner / Grey coating
Cuff Style: Knit wrist **I Length:** 210-275mm **I 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

RHINOYARN

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

EN388: 2016
4X42D
CE

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
- Tested after washing to industrial standard

Gauge: 13gg **I Colour:** Grey liner / Black coating
Cuff Style: Knit wrist **I Length:** 210-275mm **I Size:** 5/XXS - 12/3XL
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

RHINOYARN

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

EN388:2018
4X43C
CE

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 **I Colour:** Grey liner / Black coating
Cuff Style: Knit wrist **I Length:** 220-270mm **I 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

RHINOYARN

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

EN388:2016
4X42C

53-3314 CUT **C**

- Incredibly soft and comfortable for all day wear
- New non-reinforced RhinoYarn® structure with UHWMPE 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 5ppm

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

Applications / Industries

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

RHINOYARN

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

EN388:2016
4X43B

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 **I Colour:** Grey liner / Black coating
Cuff Style: Knit wrist **I Length:** 220-270mm **I 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

RHINOYARN

EN388:2016
3 X 2 1 A

EN16350 EN1149-2
Vertical Resistance
RV <1 x 10^8 Ω

CE

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 **I Colour:** Navy liner / Black coating
Cuff Style: Knit wrist **I 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** glove sandy foam nitrile palm coated glove

EN388:2016 4X42B CE

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 **I Colour:** Grey liner / Black coating
Cuff Style: Knit wrist **I Length:** 230-270mm **I 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

EN388:2016 4X43C CE

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 **I Colour:** Grey liner / Grey coating
Cuff Style: Knit wrist **I Length:** 230-270mm **I 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

EN388:2016 3X4XF CE

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

Applications / Industries

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

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

MADE IN BRITAIN RHINOYARN

Heavyweight cut level **F** antimicrobial food safe glove

EN388:2016 4X4XF EN407:2020 X1XXXX CE

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

Applications / Industries

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

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

MADE IN BRITAIN RHINOYARN

MADE IN BRITAIN

EN388:2018 2X41F

EN407:2020 X1XXXX

CE

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

RHINOYARN

Hot end gauntlet glove

EN388:2016 2X22C EN407:2020 X2XXXX CE

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 **I Colour:** Black glove / Black cuff
Cuff Style: Canvas gauntlet **I Length:** 420-440mm
Size: 8/M - 10/XL **I 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

EN388:2016 1X4XD EN407:2020 41XXXX CE

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

Applications / Industries

- Assembly
- Automotive industry
- Metal fabrication / stamping

X-Heavy cut level **D** aramid knit glove

EN388:2016 1X4XD
EN407:2020 41XXXX
CE

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

Applications / Industries

- Assembly
- Automotive industry
- Metal fabrication / stamping

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

Medium weight cut level **B** aramid knit glove

EN388:2016 1X4XB
EN407:2020 41XXXX
CE

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

Applications / Industries

- Assembly
- Automotive industry
- Metal fabrication / stamping

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

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

EN388:2016
3 X 4 X F
CE

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
- Tested after washing to industrial standard

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

Applications / Industries

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

MADE IN BRITAIN
RHINOYARN

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

EN388:2016 3X4XD CE

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
- Tested after washing to industrial standard

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

Applications / Industries

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

MADE IN BRITAIN RHINOYARN

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

EN388:2016 1X4XF EN407:2020 21XXXX CE

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

Applications / Industries

- Automotive industry
- Metal fabrication / stamping
- Manufacturing

MADE IN BRITAIN RHINOYARN

18" aramid sleeve with thumb slot

84-3118-BE
84-3118-TE

CUT **C**

EN388:2016 1X32C
EN407:2020 X1XXXX
CE

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

Applications / Industries

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

MADE IN BRITAIN

RHINOYARN

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

85-5110/14/18/21

CUT **E**

EN388:2016 2X3XE
EN407:2020 X1XXXX
CE

- 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 **I Colour:** Green
Cuff Style: Knit wrist with thumb slot
Length: 10", 14", 18" & 21" **I Size:** One size
Packaging: Packed per piece 100 pieces/carton

Applications / Industries

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

RHINOYARN

8" cut level F wrist guard with adjustable straps

EN388:2016 2X44F CE

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 **I Colour:** Black with black straps
Cuff Style: N/A
Length: 8"/20cm **I Size:** One size
Packaging: Packed per pair 25 pairs/carton

Applications / Industries

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

RHINOYARN

Medium weight cut level F antimicrobial food safe sleeve

EN388:2016 4X4XF CE

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 **I Colour:** Blue
Cuff Style: Knit wrist
Length: 20"/50cm **I Size:** One size
Packaging: Packed per piece 100 pieces/carton

Applications / Industries

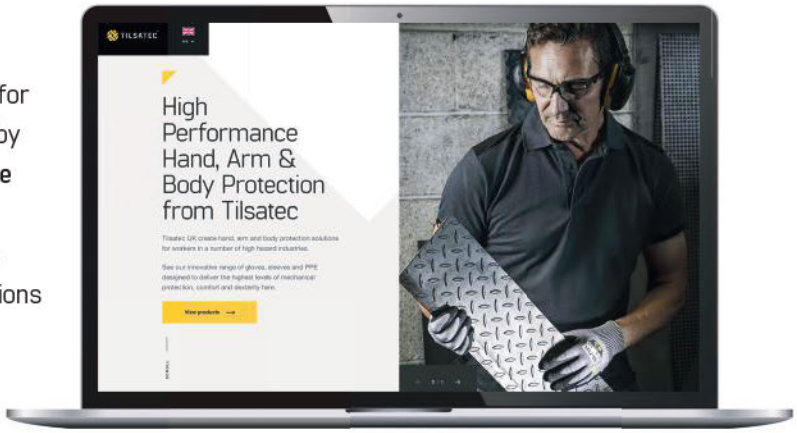
- Meat carving and deboning
- Butchery
- Fish filleting and processing
- Suitable for beef, pork and poultry

MADE IN BRITAIN

RHINOYARN

tilsatec.com

Visit our website **tilsatec.com** to search for your ideal hand, arm or body protection by **EN standard, product code, performance features** or **description**. Here you have access to a range of resources including product specification sheets, EU declarations of conformity, videos, infographics, blog articles and much more.

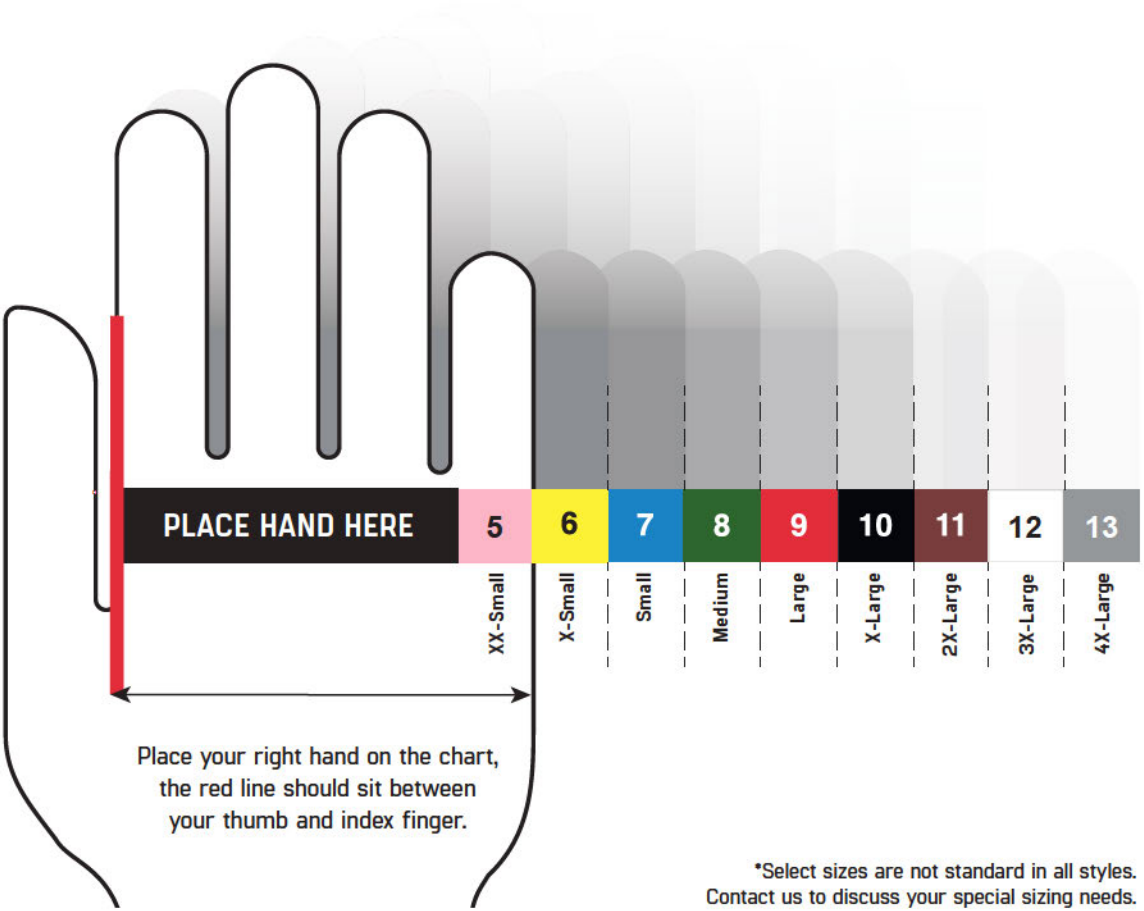


tilsatec.com/collide-x

NOTES

NOTES

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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