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TILSATEC®









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, wherever there are cut and puncture hazards, sharps or needles, our products are at the front line, helping them do their jobs safely and efficiently.

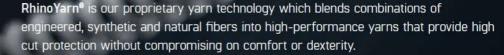
Whenever you see the RhinoYarn[®] mark it means a product has been made using our own proprietary yarn technology - the primary source of mechanical protection, on site in the UK. With this comes the assurance of full quality control, processing traceability and performance efficiencies built in at every 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 independent Research and Development laboratory. Having a facility like this on site equips us to be ready for the future.

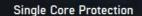
Find out more:





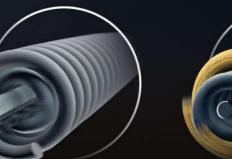


Each component is carefully selected to engineer a product that delivers the desired performance in the most efficient, durable and comfortable structure possible.





Dual Core Protection



Steel Core Aramid







Independent Accreditation

Tilsatec's laboratory is independently accredited by UKAS. The United Kingdom Accreditation Service (UKAS) is the sole accreditation body recognized by Government in the UK to assess, against international standards, organizations that provide testing services. This accreditation uses the standard ISO 17025 to assess a laboratory's ability to



produce high quality, accurate tests and data. The laboratory also supports the following functions:

Compliance monitoring and compilation of CE and UKCA certificate applications

Performance and quality control testing of

raw materials, varns and finished products



Supporting of new product development



Customised in house testing to suit customer's specific hazards/requirements



Ongoing due diligence product testing



Benchmark testing to ensure test results are in line with industry standards

For a list of accredited testing carried out by the lab vist: https://www.ukas.com/wp-content/uploads/schedule_uploads/00002/10386Testing-Single.pdf

If we believe a current 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



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.

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.





EN388: 2016+A1:2018 / ANSI/ISEA 105:2024 Blade Cut Resistance

The laboratory uses a TDM-100 machine to conduct cut resistance testing to the EN ISO 13997:1999 and ASTM F2992-23 standards. This allows the testing of high performance material with cutting forces in excess of 100 newtons, which is necessary to achieve the highest accuracy in results. The measured force provides end users with an indication of the glove's resistance to 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 or grams) is plotted to determine the force required to cut through the material in a 20mm blade stroke.



EN388:2016+A1:2018 / ANSI/ISEA 105-2024 Abrasion Resistance Testing

A Martindale Abrasion tester is the internationally accepted equipment for E388 testing abrasion and wearing of fabrics. Tilsatec uses the M235 machine, to ensure accurate and consistent results are achieved. Highperformance materials can be tested beyond 8,000 cycles, where necessary, to determine the point at which material degradation occurs. The ANSI/ISEA 105 abrasion test uses a Taber Abraser machine, where rotating abrasive wheels rub against glove material under set pressure to measure how many cycles it withstands before wearing through.

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.



EN388: 2016+A1:2018 / ANSI/ISEA 105:2024 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.



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



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

This test is only 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. Additional areas of the glove that claim protection against impact hazards are also subjected to testing. ANSI/ISEA138-19 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 also carried out under an impact energy of 5J.



EN ISO 21420:2020+A1:2024 General Requirements

The laboratory carries out the general requirements laid out in the recently updated EN ISO 21420:2020+A1:2024 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.

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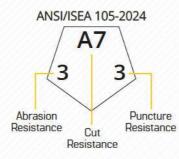
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ANSI/ISEA 105-2024 - Hand and Arm Protection Standard

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

The update from ANSI/ISEA 105-2016 to ANSI/ISEA 105-2024 expands the scope of protection to include sleeves (arm protection), whereas the previous version focused solely on hand protection.

ANSI/ISEA 105-2024 specifies the test method ASTM F2992-23 for assessing the cut resistance of a material when exposed to a cutting edge under specified loads. The cut test apparatus (a tomodynamometer) is composed of a blade holder with a straight-line motion mechanism, a cutting edge, a test specimen fitted with a conductive strip and double-sided mounting tape secured to a fixed specimen holder. During testing,

the apparatus drives the cutting edge across the specimen until enough force is applied to achieve a complete cut-through. This test measures the force (in grams) required to establish a cut resistance rating.

Although the ASTM F2992 standard was updated in 2023, the changes were minimal; the most notable being that the TDM-100 may now be supplied by any manufacturer, rather than the sole supplier mentioned in the 2015 version of the standard. The test continues to use a nine-level rating scale (A1-A9), which has proven useful in distinguishing high-performance materials with very high cut resistance.

TDM Only Grams to cut



To demonstrate compliance with a cut resistance rating under ANSI/ISEA 105-2024, testing must be carried out using the ASTM F2992-23 method. The glove can then be marked with the new pentagonal pictogram, which illustrates the three key performance tests for hand and arm protection: abrasion, cut, and puncture. The cut resistance rating appears in the upper centre of the pentagon in a larger font, while abrasion is displayed on the inner left and puncture on the inner right. If a test is not performed or no rating is achieved, the corresponding position is marked with an "X."

Differences between ANSI/ISEA and EN Cut tests

While 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/ISEA and newtons for the EN standard, levels range from A1 - A9 for ANSI/ISEA and A - F for the EN standard and lastly, the ANSI/ISEA test requires the test to be carried out in triplicate and the average load for the 3 tests is taken as the final value, while the EN test is carried out once.

ANSI/ISEA 105-2024 Abrasion resistance

In the Taber abrasion test, the specimen rotates on a horizontal turntable while two "H-18" vitrified medium-coarse wheels are applied to its surface under a load of 500 g (for levels 0-3) or 1000 g (for levels 4-6). Each wheel traces a circular, spiralling path across the specimen as it rotates. One wheel exerts a pressing force into the surface, while the other drags across it, generating a combination of rolling, slipping, and sliding abrasion rather than simple scratching.

Testing is conducted in accordance with ASTM D3389 for coated or unsupported materials and ASTM D3884 for uncoated materials. The glove or sleeve's abrasion resistance is classified according to the levels specified in ANSI/ISEA 105, based on the number of

abrasion cycles to failure; through the coating and liner for coated/unsupported materials, and through the specimen for uncoated

The average of a minimum of 5 specimens shall be used to report the classification level.



ANSI/ISEA 105-2024 Puncture resistance

The ANSI/ISEA puncture test uses a standardised 9.5mm diameter probe with a bevelled tip to measure the force needed to pierce the glove or sleeve material. Performance is rated on a 0-5 scale, with higher numbers meaning stronger resistance. This test is for general puncture hazards (like nails or glass) and does not cover hypodermic needle hazards.



ANSI/ISEA 105-2024 Conductive heat resistance

This contact heat test (using test method ASTM F1060) measures thermal insulation of protective clothing materials exposed briefly to surfaces up to 600 °F (316 °C).

A weighted sensor records heat transfer through the specimen, correlating it to pain sensation and second-degree burn thresholds. "Alarm time", the interval between initial pain and burn threshold, is also measured.

Classification is based on ≥15 s to second-degree burn and >4 s alarm time.

Level	Highest contact temperature (°C) at which both time-to-2nd degree burn ≥ 15 seconds and alarm time ≥ 4 seconds		
0	< 80		
1	80 - 139		
2	140 - 199		
3	200 - 259		
4	260 - 319		
5	320 - 370		

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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 388:2016+A1:2018 - Mechanical Protection

Abrasion Resistance (1-4) Updated in 2016

The Martindale Abrasion tester is used to determine the durability, wearing and abrasion of materials. The test is performed by rubbing circular specimens taken from the palm of the glove against a specified abradant. The sample holder moves in a Lissajous pattern under a 9KPa load and the test is checked at 100, 500, 2000 and 8000 cycle intervals for any signs of abrasion. Failure is defined as the point at which 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 specimen first 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.

EN ISO 21420:2020+A1:2024 -

Defines the general

which includes:

of gloves

Cleaning

Dexterity

Innocuousness

the manufacturer

requirements for most

types of protective gloves

· Glove design and construction

· Product marking, packaging

· Breathability and comfort

Electrostatic properties

and information supplied by

· Sizing and measurement

General requirements for protective gloves

Glove

Size

10

12

Designation of hand sizes according

(mm)

101

152

178

203

229

254

279

304

329

Hand Circumference Hand Length

(mm)

<160

<160

160

171

182

192

204

215

>215

>215

to hand length and circumference:

X = Not tested

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.

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.

Puncture Resistance (1-4) Updated in 2016

EN388:2016+A1:2018

4 X 3 2 F P

A 4.5 mm wide probe with a rounded stylus is driven 50 mm through the glove material using a tensometer fitted with a compression load cell at a speed of 100 mm/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.

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

The FN ISO 13997 cut resistance test has been incorporated into the EN 388 standard in its updated version. 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.

Throughout the test, varying forces (in newtons) are applied, and a plot of force against cutting distance is used to establish the force necessary to cut through the material at a blade travel of 20 mm. 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

Finding the glove for your industry requirements

A 2 - 5 NEWTONS

- Light material handling
- Small parts assembly

- Food processing Aerospace

R 5 - 10 NEWTONS

- Packaging
- White goods manufacturing
- Warehousing/Logistics

15 - 22 NEWTONS

- Electrical installation - Automotive assembly

P (pass) F (fail)

This test is the most recent

addition to the EN388: 2016

standard and is optional. It

should only be included for

impact resistant properties.

The impact test is based on

the EN13594:2015 standard

for protective gloves for

knuckle area, along with

claiming protection, are

pass or fail.

tested and rated as either

any other parts of the glove

motorcycle riders. The

gloves that claim specific

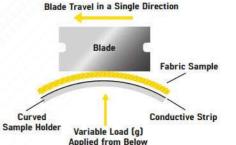
- Engineering Utilities Aerospace
- CNC Machining/Metal Fabrication

30 NEWTONS +

- Heavy metal stamping
- Waste management
- Glass handling

DM test process used for the ISO 13997 standard

is assigned.



- Light duty general purpose

10 - 15 NEWTONS

- Metal handling
- Light assembly
- Maintenance works

22 - 30 NEWTONS

- Metal stamping Glass manufacturing
- Automotive assembly
- CNC Machining/Metal Fabrication

- Recycling

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

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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. The knuckle area and any other areas claiming protection are tested.

The ANSI/ISEA 138 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/ISEA 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

Performance level 2 level 3





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.



EN1149 - Antistatic

EN 1149-5: 2008 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

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 numbers 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 min performance level of 1 then the pictogram depicting the flame shall be used.



abcdef

Performance Level		1	2	3	4
After flame time	After flame time	< 20 s	< 10 s	<3s	< 2 s
a. Limited Flame Spread	After glow time	no requir.	< 120 s	< 25 s	<5s
h Ondereller	Contact temperature	212°F	482°F	662°F	932°F
b. Contact Heat	Threshold time	> 15 s	> 15 s	> 15 s	> 15 s
c. Convective heat (heat transfer delay)		>4s	>7s	> 10 s	> 18 s
d. Radiant heat (heat transfer delay)		>7s	> 20 s	> 50 s	> 95 s
e. Small drops molten metal (# drops)		> 10	> 15	> 25	> 35
f. Large quantity molten metal (mass)		30q	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.

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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. EN ISO 374-4 and EN ISO 374-5.

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
Α	Methanol	67-56-1	Primary Alcohol
В	Acetone	67-64-1	Ketone
С	Acetonitrile	75-05-8	Nitrile Compound
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
Н	Tetrahydrofuran	109-99-9	Heterocyclic and ether Compound
3	Ethyl Acetate	141-78-6	Ester
J	n-Heptane	142-82-5	Saturated hydrocarbon
К	Sodium hydroxide 40%	1310-73-2	Inorganic base
L	Sulphuric Acid 96%	7664-93-9	Inorganic mineral acid, oxidising
М	Nitric Acid 65%	7697-37-2	Inorganic mineral acid, oxidising
N	Acetic Acid 99%	64-19-7	Organic acid
0	Ammonium Hydroxide 25%	1336-21-6	Organic base
Р	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 16523-1:2015+A1:2018 'Determination of material resistance to permeation by chemicals. Permeation by liquid chemical under conditions of continuous contact'.

Performance levels are assigned as follows:

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

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

EN ISO 374-1/Type A	EN ISO 374-1/Type B		Туре	Minimum performance level	Minimum test chemicals
			Α	2	6
			В	2	3
JKLMNO	JKL	A-Low Chemical	С	1	1

EN ISO 374-2:2019 - Resistance to Penetration

EN ISO 374-2:2019 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



17

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ASTM D120-21 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; nonresistant 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.

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	
Α	Acid	
Н	Oil	
Z	Ozone	
R	Acid, oil, ozone	
С	Extremely low temperature	

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/cm ²	
1	>4	
2	>8	
3	>25	
4	>40	

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

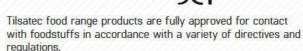
EN 61482-1-2 details the requirements and test methods applicable to materials and garments for protective clothing for electrical workers against the thermal hazards of a constrained and directed electric arc (Box Test).

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 Protec	tion class	Incident Energy Level
API	C1	4kA
APO	22	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.

Food Regulations



These govern the substances permitted in the manufacture of food contact materials (including gloves used in food handling) and require that, under normal and foreseeable conditions of use, such products do not transfer their constituents to food in quantities that could:

- · Endanger human health
- · Cause an unacceptable change in the composition of the food
- · Impair the organoleptic qualities of the food (such as texture, taste, or aroma)

To demonstrate compliance, a series of standardised tests are applied to assess migration levels from the contact materials into food, using a range of food simulants.

U.S. / FDA (21 CFR):

Gloves undergo extraction testing, where water and hexane are used to simulate contact with aqueous and fatty foods.

This testing determines whether any chemicals are released from the glove material under normal and foreseeable use, ensuring safety for direct food contact.

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.

Global Glove Markings

It is important to familiarize 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.



ultra-high dexterity and tactility which is essential in determining product selection Tilsatec have a wide range 15 and 18 gauge products with thin durable coatings to aid users in the intricate work required in these applications, without compromising protection.

Assembling small parts or products requires



Maintenance

Maintenance and repairs of factories. machinery and equipment is required in various applications to prolong their life. Tilsatec offer a range of products with superior grip, oil resistance, dexterity, durability and cut resistance.

Workers in the glass industry need

hand and arm protection that provides

a high level of cut resistance which also

provides good grip and safe handling to

prevent product damage. We understand

these requirements and have solutions

for many areas of manufacture.

TECHNOLOGIES \ FEATURES



























Aerospace

Construction

Food

It is crucial for workers in the aerospace industry using cut resistant hand protection to have close fitting, dexterous gloves with high levels of tactility to be able to carry out fine, precision work. Any coatings applied to the gloves need to provide secure grip without loss of dexterity.

Construction encompasses many areas

work, cementing and general handling of

materials amongst others. Tilsatec offer

gloves to suit a number of these tasks

Our cut resistant food gloves have been

developed specifically for the food industry.

Fully launderable without diminishing the

available in a choice of weights and styles

suitable for use with beef, pork, poultry

and vegetable processing applications.

antimicrobial properties, the range is

resistant leather and coated gloves.

from general purpose gloves to highly cut

including masonry, dry walling, timber

have a wide variety of performance attributes required from their hand and arm protection.

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



Automotive

Manufacturing and assembly in the automotive and transportation industries present a wide range of cut and puncture hazards. Be it body weld, metal stamping or general handling, Tilsatec have developed products designed specifically

for each of these areas.

Manufacturing

A broad category, manufacturing includes the assembly and manufacture of house hold appliances/white goods and any assembling of parts/ components where there may be potential sharp/cut hazards.



Metal Fabrication

Safety is key in the metal manufacturing and fabrication industry. Worker's hands are exposed to a number of hazards requiring cut resistance, puncture resistance, liquid protection and heat



Glass



Oil & Gas

Oil & Gas is a huge industry with many varied sectors, each with their own specific hand and arm protection needs. We have developed a small, specially designed range of gloves to provide high cut resistance, heat and FR protection, impact and liquid protection.



Petrochemical

With similar hand protection requirements to the oil & gas industry. workers involved in the production of petrochemicals particularly down stream require category III hand protection for high hazard environments.



Power Transmission

The industry has a risk of death from electrocution if the incorrect PPE is worn. Tilsatec can provide a range of Electrical Insulated Gloves to help protect workers from these risks from Class 00 (500v AC) up to Class 4 (36 000v AC).



Telecoms

Technicians and engineers are often in hazardous situations working overhead. underground and in enclosed spaces. Tilsatec products provide grip when ascending/descending towers, assist with handling small parts and protect users from electrocution and cut injuries.



Utilities

The Utilities sector can provide unique environments where high levels of protection are required, but with the greatest amount of dexterity and sensitivity to carry out sometimes delicate handling operations, be it handling blades, cables or pulling lines.



Waste

Waste management and waste disposal is one of the fastest growing industrial sectors. It presents many cut and puncture hazards inclding needlestick hazards. Typical operations include waste collection and removal, recycling, sorting and landfill management.

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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 resistantance
- · 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

- · Electrical Insulating
- Dry grip
- · Easy donning and doffing

SANDY LATEX

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

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

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 trials 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

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



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



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Electrical Insulating Gloves

LOW Voltage

- Pulse® Class 00 Electrical Insulating Gloves maximum use voltage 500V ac / 750V dc, (11"/28cm) and (14"/36cm) in yellow/red/black
- Pulse® Class O Electrical Insulating Gloves maximum use voltage 1000V ac / 1500V dc, (11"/28cm) and (14"/36cm) in yellow/red/black

HIGH Voltage

- Pulse® Class 1 Electrical Insulating Gloves maximum use voltage 7,500V ac / 11,250V dc, [14"/36cm] [16"/41cm] and (18"/46cm) in dual black/red or black/yellow
- Pulse® Class 2 Electrical Insulating Gloves maximum use voltage 17,000V ac / 25,500V dc, [14"/36cm] [16"/41cm] and (18"/46cm) in dual black/red or black/yellow
- Pulse® Class 3 Electrical Insulating Gloves maximum use voltage 26,500V ac / 39,750V dc, (14"/36cm) (16"/41cm) and (18"/46cm) in dual black/red or black/yellow
- Pulse® Class 4 Electrical Insulating Gloves maximum use voltage 36,000 ac / 54,000V dc, (16"/41cm) and (18"/46cm) in dual black/red or black/yellow

Tilsatec specialize in high performance hand and arm PPE, having delivered mechanical protection for workers in high hazard industries for over two decades.

With tremendous experience and expertise in engineering technical products with high value add performance, Tilsatec is well placed to serve the industries of tomorrow.

Rubber insulating gloves are one of the most critical items of PPE for electrical workers. The Tilsatec Pulse range is certified and tested according to ASTM D120 and IEC EN60903 under Category III Personal Protective Equipment and covered by Module D of the PPE Regulation (EU) 2016/425. These are products that protect against potentially deadly hazards or serious and irreversible injuries to health.

Pulse® Electrical Insulating Gloves from Tilsatec provide protection from electrical hazards for those working in electrical engineering and maintenance, EV manufacturing and servicing, telecoms, power utilities and other electrical applications Designed to deliver maximum protection, performance, comfort and fit, Pulse® won't let you down.

Key Features

- Made from 100% natural high grade rubber latex
- Environmentally friendly dipping process free from the use of solvents
- Dual certified to both EN 60903 and ASTM D120
- o- Ergonomic design and finger shape minimizes hand fatigue
- Smooth chlorinated surface finish and rolled cuff edge aid donning and doffing
- Superior flexibility in cold environments
- Silicon free
- Manufacturing facility certified to ISO 9001: 2015 and ISO 14001:2015



Class 00



Code	Length	Color	Cuff	Cat	Proof	Max	Size**	EN Arc	ATPV Arc Rating
24-9010°	11" / 28cm	Red	Straight / Beaded	A/Z/C	2.500/10.000	500/750	7-12	APC 1	8.4 cal/cm ²
24-9011	11" / 28cm	Black	Straight / Beaded	A/Z/C	2.500/10.000	500/750	7-12	APC 1	8.4 cal/cm ²
24-9012	11" / 28cm	Yellow	Straight / Beaded	A/Z/C	2.500/10.000	500/750	7-12	APC 1	8.4 cal/cm ²
24-9020*	14" / 36cm	Red	Straight / Beaded	A/Z/C	2.500/10.000	500/750	7-12	APC 1	8.4 cal/cm ²
24-9021	14" / 36cm	Black	Straight / Beaded	A/Z/C	2.500/10.000	500/750	7-12	APC 1	8.4 cal/cm ²
24-9022	14" / 36cm	Yellow	Straight / Beaded	A/Z/C	2.500/10.000	500/750	7-12	APC 1	8.4 cal/cm ²

Applications

- Power Utilities and Public Works
- Electric Public Transport Maintenance
- ► EV Battery Manufacturing and Assembly
- EV Aftermarket Service and Maintenance
- Excavation and Cable Laying
- Electrical Maintenance
- Cable Jointing
- Field services

EN Category description

- A Acid
- Z Ozone
- C Extreme low temperature

Packaging

1 pair p/polybag and individual box. 10 pairs p/carton



Certification



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



AC = Alternative Current (Flows both ways)

Class 0



AC = Alternative Current (Flows both ways)

Code	Length	Color	Cuff	Cat	Proof	Max	Size**	EN Arc	ATPV Arc Rating
24-0010°	11" / 28cm	Red	Straight / Beaded	A/Z/C	5.000/20.000	1.000/1.500	7-12	APC 2	8.5 cal/cm ²
24-0011*	11" / 28cm	Black	Straight / Beaded	A/Z/C	5.000/20.000	1.000/1.500	7-12	APC 2	8.5 cal/cm ²
24-0012*	11" / 28cm	Yellow	Straight / Beaded	A/Z/C	5.000/20.000	1.000/1.500	7-12	APC 2	8.5 cal/cm ²
24-0020*	14" / 36cm	Red	Straight / Beaded	A/Z/C	5.000/20.000	1.000/1.500	7-12	APC 2	8.5 cal/cm ²
24-0021*	14" / 36cm	Black	Straight / Beaded	A/Z/C	5.000/20.000	1.000/1.500	7-12	APC 2	8.5 cal/cm ²
24-0022*	14" / 36cm	Yellow	Straight / Beaded	A/Z/C	5.000/20.000	1.000/1.500	7-12	APC 2	8.5 cal/cm ²

Applications

- Power Utilities and Public Works
- Electric Public Transport Maintenance
- EV Battery Manufacturing and Assembly
- o- EV Aftermarket Service and Maintenance
- Excavation and Cable Laying
- Electrical Maintenance
- Cable Jointing
- o- Field services

EN Category description

- A Acid
- Z Ozone
- C Extreme low temperature

Packaging

1 pair p/polybag and individual box. 10 pairs p/carton

DC = Direct Current (Flows one way) **Including half sizes

Certification



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



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ELECTRICAL INSULATING

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ELECTRICAL INSULATING

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Class 1



ANSI/ASTM Class 1 D120 Type I IEC/EN 60903 MAX USE VOLT 7500v AC

AC = Alternative Current (Flows both ways)

"Including half sizes

Code	Length	Color	Cuff	Cat	Proof	Max	Size**	EN Arc	ATPV Arc Rating
24-1024*	14" / 36cm	Dual Black/Red	Straight / Beaded	R/C	10.000/40.000	7.500/11.250	8-12	APC 2	10.6 cal/cm ²
24-1025	14" / 36cm	Dual Black/Yellow	Straight / Beaded	R/C	10.000/40.000	7.500/11.250	8-12	APC 2	10.6 cal/cm ²
24-1026	14" / 36cm	Dual Black/Red	Bell / Beaded	R/C	10.000/40.000	7.500/11.250	8-12	APC 2	10.6 cal/cm ²
24-1027	14" / 36cm	Dual Black/Yellow	Bell / Beaded	R/C	10.000/40.000	7.500/11.250	8-12	APC 2	10.6 cal/cm ²
24-1034	16" / 41cm	Dual Black/Red	Straight / Beaded	R/C	10.000/40.000	7.500/11.250	8-12	APC 2	10.6 cal/cm ²
24-1035	16" / 41cm	Dual Black/Yellow	Straight / Beaded	R/C	10.000/40.000	7.500/11.250	8-12	APC 2	10.6 cal/cm ²
24-1036	16" / 41cm	Dual Black/Red	Bell / Beaded	R/C	10.000/40.000	7.500/11.250	8-12	APC 2	10.6 cal/cm ²
24-1037	16" / 41cm	Dual Black/Yellow	Bell / Beaded	R/C	10.000/40.000	7.500/11.250	8-12	APC 2	10.6 cal/cm ²
24-1044	18" / 46cm	Dual Black/Red	Straight / Beaded	R/C	10.000/40.000	7.500/11.250	8-12	APC 2	10.6 cal/cm ²
24-1045	18" / 46cm	Dual Black/Yellow	Straight / Beaded	R/C	10.000/40.000	7.500/11.250	8-12	APC 2	10.6 cal/cm ²
24-1046	18" / 46cm	Dual Black/Red	Bell / Beaded	R/C	10.000/40.000	7.500/11.250	8-12	APC 2	10.6 cal/cm ²
24-1047	18" / 46cm	Dual Black/Yellow	Bell / Beaded	R/C	10.000/40.000	7.500/11.250	8-12	APC 2	10.6 cal/cm ²

Applications

- Power Utilities and Public Works
- Electric Public Transport Maintenance
- EV Battery Manufacturing and Assembly
- EV Aftermarket Service and Maintenance
- Excavation and Cable Laying
- Electrical Maintenance
- Cable Jointing
- Field services

EN Category description

- R Acid, Ozone, Oil resistant
- C Extreme low temperature

Packaging

1 pair p/polybag and individual box. 10 pairs p/carton



Certification



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

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Class 2



ANSI/ASTM Class 2 D120 Type I

IEC/EN 60903

MAX USE VOLT 17000v AC

Code	Length	Color	Cuff	Cat	Proof	Max	Size**	EN Arc	ATPV Arc Rating
24-2024*	14" / 36cm	Dual Black/Red	Straight / Beaded	R/C	20.000/50.000	17.000/25.500	8-12	APC 2	21.0 cal/cm ²
24-2025	14" / 36cm	Dual Black/Yellow	Straight / Beaded	R/C	20.000/50.000	17.000/25.500	8-12	APC 2	21.0 cal/cm ²
24-2026*	14" / 36cm	Dual Black/Red	Bell / Beaded	R/C	20.000/50.000	17.000/25.500	8-12	APC 2	21.0 cal/cm ²
24-2027	14" / 36cm	Dual Black/Yellow	Bell / Beaded	R/C	20.000/50.000	17.000/25.500	8-12	APC 2	21.0 cal/cm ²
24-2034*	16" / 41cm	Dual Black/Red	Straight / Beaded	R/C	20.000/50.000	17.000/25.500	8-12	APC 2	21.0 cal/cm ²
24-2035	16" / 41cm	Dual Black/Yellow	Straight / Beaded	R/C	20.000/50.000	17.000/25.500	8-12	APC 2	21.0 cal/cm ²
24-2036*	16" / 41cm	Dual Black/Red	Bell / Beaded	R/C	20.000/50.000	17.000/25.500	8-12	APC 2	21.0 cal/cm ²
24-2037	16" / 41cm	Dual Black/Yellow	Bell / Beaded	R/C	20.000/50.000	17.000/25.500	8-12	APC 2	21.0 cal/cm ²
24-2044	18" / 46cm	Dual Black/Red	Straight / Beaded	R/C	20.000/50.000	17.000/25.500	8-12	APC 2	21.0 cal/cm ²
24-2045	18" / 46cm	Dual Black/Yellow	Straight / Beaded	R/C	20.000/50.000	17.000/25.500	8-12	APC 2	21.0 cal/cm ²
24-2046	18" / 46cm	Dual Black/Red	Bell / Beaded	R/C	20.000/50.000	17.000/25.500	8-12	APC 2	21.0 cal/cm ²
24-2047	18" / 46cm	Dual Black/Yellow	Bell / Beaded	R/C	20.000/50.000	17.000/25.500	8-12	APC 2	21.0 cal/cm ²

Applications

- Power Utilities and Public Works
- Substation Installation
- Electric Driven Public Transport Maintenance
- Switchgear and Transformer Maintenance
- EV Battery Manufacturing and Assembly
- EV Aftermarket Service and Maintenance
- Overhead Power Line Maintenance and Repairs
- Excavation and Cable Laying

EN Category description

C - Extreme low temperature

Packaging

1 pair p/polybag and individual box. 10 pairs p/carton

AC = Alternative Current (Flows both ways) DC = Direct Current (Flows one way)

**Including half sizes

- R Acid, Ozone, Oil resistant

Certification



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

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ELECTRICAL INSULATING

Class 3



Code	Length	Color	Cuff	Cat	Proof	Max	Size**	EN Arc	ATPV Arc Rating
24-3024*	14" / 36cm	Dual Black/Red	Straight / Beaded	R/C	30.000/60.000	26.500/39.750	8-12	APC 2	40.5 cal/cm ²
24-3025	14" / 36cm	Dual Black/Yellow	Straight / Beaded	R/C	30.000/60.000	26.500/39.750	8-12	APC 2	40.5 cal/cm ²
24-3026	14" / 36cm	Dual Black/Red	Bell / Beaded	R/C	30.000/60.000	26.500/39.750	8-12	APC 2	40.5 cal/cm ²
24-3027	14" / 36cm	Dual Black/Yellow	Bell / Beaded	R/C	30.000/60.000	26.500/39.750	8-12	APC 2	40.5 cal/cm ²
24-3034	16" / 41cm	Dual Black/Red	Straight / Beaded	R/C	30.000/60.000	26.500/39.750	8-12	APC 2	40.5 cal/cm ²
24-3035	16" / 41cm	Dual Black/Yellow	Straight / Beaded	R/C	30.000/60.000	26.500/39.750	8-12	APC 2	40.5 cal/cm ²
24-3036	16" / 41cm	Dual Black/Red	Bell / Beaded	R/C	30.000/60.000	26.500/39.750	8-12	APC 2	40.5 cal/cm ²
24-3037	16" / 41cm	Dual Black/Yellow	Bell / Beaded	R/C	30.000/60.000	26.500/39.750	8-12	APC 2	40.5 cal/cm ²
24-3044	18" / 46cm	Dual Black/Red	Straight / Beaded	R/C	30.000/60.000	26.500/39.750	8-12	APC 2	40.5 cal/cm ²
24-3045	18" / 46cm	Dual Black/Yellow	Straight / Beaded	R/C	30.000/60.000	26.500/39.750	8-12	APC 2	40.5 cal/cm ²
24-3046	18" / 46cm	Dual Black/Red	Bell / Beaded	R/C	30.000/60.000	26.500/39.750	8-12	APC 2	40.5 cal/cm ²
24-3047	18" / 46cm	Dual Black/Yellow	Bell / Beaded	R/C	30.000/60.000	26.500/39.750	8-12	APC 2	40.5 cal/cm ²

Applications

- Power Utilities and Public Works
- Substation Installation
- Electric Driven Public Transport Maintenance
- Switchgear and Transformer Maintenance
- EV Battery Manufacturing and Assembly
- EV Aftermarket Service and Maintenance
- Overhead Power Line Maintenance and Repairs
- Excavation and Cable Laying

EN Category description

- R Acid, Ozone, Oil resistant
- C Extreme low temperature

Packaging

1 pair p/polybag and individual box. 10 pairs p/carton



Certification

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

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**Including half sizes

Class 4



D120 Type I

EC/EN 60903

MAX USE VOLT 36000 AC

Code	Length	Color	Cuff	Cat	Proof	Max	Size**	EN Arc	ATPV Arc Rating
24-4034°	16" / 41cm	Dual Black/Red	Straight / Beaded	R/C	40.000/70.000	36.000/54.000	8-12	APC 2	36.2 cal/cm ²
24-4035	16" / 41cm	Dual Black/Yellow	Straight / Beaded	R/C	40.000/70.000	36.000/54.000	8-12	APC 2	36.2 cal/cm ²
24-4036	16" / 41cm	Dual Black/Red	Bell / Beaded	R/C	40.000/70.000	36.000/54.000	8-12	APC 2	36.2 cal/cm ²
24-4037	16" / 41cm	Dual Black/Yellow	Bell / Beaded	R/C	40.000/70.000	36.000/54.000	8-12	APC 2	36.2 cal/cm ²
24-4044	18" / 46cm	Dual Black/Red	Straight / Beaded	R/C	40.000/70.000	36.000/54.000	8-12	APC 2	36.2 cal/cm ²
24-4045	18" / 46cm	Dual Black/Yellow	Straight / Beaded	R/C	40.000/70.000	36.000/54.000	8-12	APC 2	36.2 cal/cm ²
24-4046	18" / 46cm	Dual Black/Red	Bell / Beaded	R/C	40.000/70.000	36.000/54.000	8-12	APC 2	36.2 cal/cm ²
24-4047	18" / 46cm	Dual Black/Yellow	Bell / Beaded	R/C	40.000/70.000	36.000/54.000	8-12	APC 2	36.2 cal/cm ²

AC = Alternative Current (Flows both ways) DC = Direct Current (Flows one way)

> *Stocked **Including half sizes

Applications

- Power Utilities and Public Works
- Substation Installation
- Electric Driven Public Transport Maintenance
- Switchgear and Transformer Maintenance
- EV Battery Manufacturing and Assembly
- EV Aftermarket Service and Maintenance
- Overhead Power Line Maintenance and Repairs
- Excavation and Cable Laying

EN Category description

- R Acid, Ozone, Oil resistant
- C Extreme low temperature

Packaging

1 pair p/polybag and individual box. 10 pairs p/carton

Certification



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



ELECTRICAL INSULATING



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 7-12 and designed to fit perfectly over rubber insulating gloves ensuring a secure grip and comfortable wear.



Product code	Length cm/inch	Sizes	Product description	ATPV
29-6250	25/10"	7-12	Unlined Leather Protector	25.8cal/cm²
29-7450	7450 25/10" 7-12 Aramid Lined Leather Protector		Aramid Lined Leather Protector	43cal/cm ²
29-6252	30/12"	7-12	Unlined Leather Protector	25.8cal/cm²
29-7452	30/12"	7-12	Aramid Lined Leather Protector	43cal/cm ²
29-7454	35/14"	7-12	Aramid Lined Leather Protector	43cal/cm ²
29-7456	40/16"	7-12	Aramid Lined Leather Protector	43cal/cm ²

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
- Suede leather extended to index finger for guick visual differentiator from lined glove
- Arc Flash tested according to ASTM2675/F2675M-23 25.8cal/cm²
- WARNING: Tilsatec Pulse⁸ leather protectors do NOT protect against shock or voltage.

ANSI/ISEA 105-2024 X 3 2





Features (Lined):

- Designed and developed for use with Tilsatec Pulse⁶ 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-23 ATPV 43cal/cm²
- WARNING: Tilsatec Pulse® leather protectors do NOT protect against shock or voltage.









Product Packaging











The Tilsatec Pulse® Electrical Insulating Glove Kit offers a comprehensive solution for electrical and mechanical protection, available with a range of glove classes to suit every voltage requirement. Each kit includes a certified electrical insulating glove, a specialized leather protector, and a durable storage bag with a belt loop for ease of access.

All kits are packaged in a durable storage bag to ensure your PPE is kept safe and ready for use.

Kit SKU Code	Electrical Insulating Glove	Classification Rating	Insulating Glove Length	Color	Leather Protector	Protector Style	Leather Protector Length	Storage Bag SKU	Storage Bag Size
02-0010	24-0010	Class O	11"	Red	29-6250	Unlined	10"	22-X999	M
02-0011	24-0011	Class 0	11"	Black	29-6250	Unlined	10"	22-X999	M
02-0012	24-0012	Class 0	11°	Yellow	29-6250	Unlined	10"	22-X999	М
02-0013	24-0010	Class 0	11"	Red	29-7450	Lined	10"	22-X999	M
02-0014	24-0011	Class 0	11"	Black	29-7450	Lined	10"	22-X999	M
02-0015	24-0012	Class 0	11"	Yellow	29-7450	Lined	10"	22-X999	М
02-0016	24-0020	Class D	14 ⁿ	Red	29-6252	Unlined	12"	22-X999	M
02-0017	24-0021	Class 0	14"	Black	29-6252	Unlined	12"	22-X999	M
02-0018	24-0022	Class 0	14"	Yellow	29-6252	Unlined	12"	22-X999	M
02-0019	24-0020	Class 0	14"	Red	29-7452	Lined	12"	22-X999	M
02-0020	24-0021	Class 0	14"	Black	29-7452	Lined	12"	22-X999	M
02-0021	24-0022	Class 0	14"	Yellow	29-7452	Lined	12"	22-X999	M
02-0022	24-1024	Class 1	14"	Black/Red	29-6252	Unlined	12"	22-X999	M
02-0023	24-1024	Class 1	14"	Red/Black	29-7452	Lined	12"	22-X999	M
02-0024	24-2024	Class 2	14 ⁿ	Black/Red	29-6252	Unlined	12"	22-X999	M
02-0025	24-2024	Class 2	14"	Black/Red	29-7452	Lined	12"	22-X999	M
02-0026	24-2026	Class 2	14"	Black/Red	29-6252	Unlined	12"	22-X999	M
02-0027	24-2026	Class 2	14"	Black/Red	29-7452	Lined	12"	22-X999	M
02-0028	24-2034	Class 2	16"	Black/Red	29-7454	Lined	14"	22-X999	L
02-0029	24-2036	Class 2	16"	Black/Red	29-7454	Lined	14"	22-X999	L
02-0030	24-3024	Class 3	14"	Black/Red	29-6250	Unlined	10"	22-X999	M
02-0031	24-3024	Class 3	14"	Black/Red	29-7450	Lined	10"	22-X999	М
02-0032	24-4034	Class 4	16"	Black/Red	29-6252	Unlined	12"	22-X999	L
02-0033	24-4034	Class 4	16"	Black/Red	29-7452	Lined	12"	22-X999	L
02-0034	24-9010	Class 00	11"	Red	29-6250	Unlined	10"	22-X999	М
02-0035	24-9010	Class 00	11"	Red	29-7450	Lined	10"	22-X999	M
02-0036	24-9020	Class 00	14"	Red	29-6252	Unlined	12"	22-X999	М
02-0037	24-9020	Class 00	14"	Red	29-7452	Lined	12"	22-X999	M

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ELECTRICAL INSULATING

Pulse:







Leather arc flash ground glove

- Achieves ATPV 30cal/cm² according to ASTM F2675/2675M-23
- Meets NFPA 70E requirements for arc flash PPE (Category 3)
- EN407: 2020 limited flame spread level 4, contact heat level 1, 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

n/a
Gold yellow
Shirred wrist
10" / 254mm
6/XS - 12/3XL
6 pairs/paper band, 36 pairs/carton

Applications / Industries

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















23-6690





Medium weight cut level A6 arc flash glove

- Meets NFPA 70E requirements for arc flash PPE (Category 2)
- Achieves ATPV 11.7cal/cm² according to ASTM F2675/2675M-23
- ANSI/ISEA 105-2024 A6 cut resistance
- EN407:2020 burning behaviour level 4
- EN407:2020 contact heat level 1
- Neoprene foam palm coating provides excellent
- Robust 13gg aramid liner for heavy duty handling applications







Gauge	13gg
Color	Yellow/black mix liner / Black coating
Cuff Style	Knit wrist
Length	220-270mm
Sizes	7/S - 12/3XL
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









20-7451



ARC FLASH

TILSATEC .

Applications / Industries

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















Leather arc flash cut A4 ground glove

- Aramid liner provides ANSI/ISEA 105:2016 A4 cut resistance
- (Achieves ATPV 37cal/cm² according to ASTM F2675/2675M-23
- Meets NFPA 70E requirements for arc flash PPE (Category 3)
- EN407: 2020 limited flame spread level 4, contact heat level 1, 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

auge	Aramid liner
olor	Gold yellow
uff Style	Shirred wrist
ength	10" / 254mm
izes	6/XS - 12/3XL
ackaging	6 pairs/paper band, 36 pairs/carton











€ 2834





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

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

THE RESULT?

Comparing our Collide-X^a 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.











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.

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KOROYD

ANSI/ISEA 105-2024

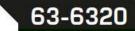








TILSATEC Collide-x.3





Gauge	13gg			
Color	Grey/Black and Green			
Cuff Style	Knitwrist			
Length	220-270mm			
Sizes	7-11			
Packaging	6 pairs inner package. Sizes 7, 11 36 pairs per case, Sizes 8, 9, 10 72 pairs per case			

Applications / Industries

- (Oil and gas
- Automotive
- Mining
- Metal fabrication / Stamping

CE

- (Machinery and equipment
- Construction and scaffolding
- **Utilities**



Collide-x³ medium weight cut level A6 impact level 3 glove with sandy nitrile palm coating

- C ANSI/ISEA 138 level 3 impact protection at level 2 bumper thickness
- First application of KOROYD impact technology in hand
- 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/ISEA 105: 2024 A6 protection
- Robust, reliable mechanical protection from RhinoYarn technology made in the UK

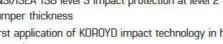
- wash standards















KOROYD









- Oil grip you can rely on
- Reinforced thumb crotch for added durability
- Touchscreen compatible
- Tested after washing to domestic and industrial













		C
Gauge	18gg	_
Color	Grey/Black and Green	
Cuff Style	Knitwrist	
Length	220-270mm	
Sizes	7-12	

Color	Grey/Black and Green
Cuff Style	Knitwrist
Length	220-270mm
Sizes	7-12
Packaging	6 pairs inner package. Sizes 7, 11, 12 36 pairs per case, Sizes 8, 9, 10 72 pairs per case

Applications / Industries

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





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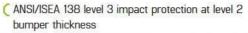
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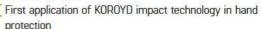


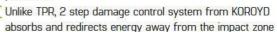


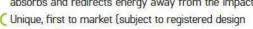


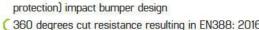


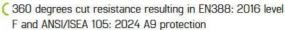
Collide-x³ ultra-lightweight

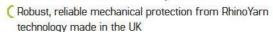












(18 gauge liner for ultimate fit, feel and dexterity

- Oil grip you can rely on
- Reinforced thumb crotch for added durability
- Touchscreen compatible
- Tested after washing to domestic and industrial wash standards







** **

69-7310

CUT





Gauge	13gg	
Color	Black/Grey/Green	
Cuff Style	Gusset, Shirred, Slip-On	
Length	230-270mm	
Sizes	7-13	
Packaging	6 prs inner package / 36prs per case	

Applications / Industries

- (Oil and gas
- Automotive

Utilities

- Mining
- Metal fabrication / Stamping
- Machinery and equipment
- Construction and scaffolding

CE

















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Collide-x³ mechanics cut level A7 impact level 3 glove

- 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/ISEA 105: 2024 A7 protection
- Robust, reliable mechanical protection from RhinoYarn technology made in the UK
- High grade dual layer synthetic leather suede palm
- Gusset slip on cuff for easy donning and doffing
- Shirred wrist for improved comfort and fit
- Reinforced leather thumb crotch for added durability
- (Hi-viz forchettes for increased visibility
- (Loop feature to attach to glove clip. Color coded for glove size identification

EN388: 2016











Gauge	13gg
Color	Grey/Green
Cuff Style	Gusset, Shirred, Slip-on
Length	230-270mm
Sizes	7-13
Packaging	6 prs inner package / 36prs per case

Applications / Industries

- COil and gas
- C Automotive Mining
- (Metal fabrication / Stamping
- (Machinery and equipment
- Construction and scaffolding
- (Utilities

CE





69-7330



KOROYD

Collide-x³ drivers cut level A7 impact level 3 glove

- (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/ISEA 105: 2024 A7 protection
- Robust, reliable mechanical protection from RhinoYarn technology made in the UK
- (Highly durable hydrophobic premium cow grain leather
- Wing thumb design for flexibility and comfort
- (No stitching to palm reduces catch areas Gusset slip on cuff for easy donning and doffing
- (Gunn cut creates stitching in natural finge creases for improved comfort
- Loop feature to attach to glove clip. Color coded for glove size identification















1-877-466-8499

43



High Cut Range

Our latest yarn composition utilizes tungsten steel spun incredibly fine to deliver extreme ANSI/ISEA-105 A9 cut protection.

M HIGH CUT





Medium weight cut level A9 PU palm coated glove

NEW RhinoYarn® cut resistant technology

ANSI/ISEA 105:2024 A9 cut resistance

Fine 13 gauge lightweight liner

High level of tactility and dexterity

Robust PU palm coating provides secure dry grip and light oil grip

Seamless liner and cuff gives a smooth, form-fitting feel

Tested after washing to domestic and industrial wash standards



Gauge	13gg
Color	Grey liner / Grey coating
Cuff Style	Knit wrist
Length	210-280mm
Sizes	6/XS - 12/3XL
Packaging	12 pairs/paper band Sizes 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

4



53-9121

CE



Medium weight cut level A9 sandy nitrile palm coated glove

NEW RhinoYarn® cut resistant technology

ANSI/ISEA 105:2024 A9 cut resistance Fine 13 gauge lightweight liner

High level of tactility and dexterity

Sandy nitrile palm coating provides good dry and wet grip

Seamless liner and cuff gives a smooth, form-fitting feel

Tested after washing to domestic and industrial wash standards



Gauge	13gg
Color	Grey liner / Black coating
Cuff Style	Knit wrist
Length	210-280mm
Sizes	6/XS - 12/3XL
Packaging	12 pairs/paper band Sizes 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

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ANSI/ISEA 105-2024





CE



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



Gauge	13gg	
Color Grey liner / Black and blue coati		
Cuff Style	Knit wrist	
Length	220-270mm	
Sizes	6/XS - 12/3XL	
Packaging	6 pairs/paper band, 72 pairs/carton	

Applications / Industries

Construction and scaffolding

Material handing in cold storage

Transportation of industrial goods

Metal holdings in outdoor conditions













1-877-466-8499

HIGH CUT

💸 TILSATEC[®]

CUT

53-7111



Medium weight cut level A6 PU palm coated glove with thumb reinforcement



- ANSI/ISEA 105:2024 A6 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 Puncture level 3 and high abrasion levels
- Tested after washing to domestic and industrial



Gauge	13gg
Color	Grey liner / Grey coating
Cuff Style	Knit wrist
Length	220-270mm
Sizes	6/XS - 11/2XL
Packaging	12 pairs/polybag 120 pairs/case

Applications / Industries

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









53-7121



Medium weight cut level A6 sandy foam nitrile palm coated glove with reinforcement



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TILSATEC

- ANSI/ISEA 105:2024 A6 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
- Can be laundered at 104°F for up to x3 washes
- Approved for food contact in compliance with FDA requirements



auge	13gg	-00
olor	Grey liner / Black coating	-0.0
uff Style	Knit wrist	100
ength	220-270mm	
izes	6/XS - 11/2XL	
ackaging	12 pairs/polybag 120 pairs/case	

Applications / Industries

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













A6

53-7112



Medium weight cut level A6 PU palm coated glove with extended cuff and thumb reinforcement

- ANSI/ISEA 105:2024 A6 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 Puncture level 3 and high abrasion levels
- Tested after washing to domestic and industrial wash standards.



Gauge	13gg	
Color Grey liner / Grey coating		
Cuff Style	Knit wrist	
Length	265-290mm	
Sizes	6/XS - 11/2XL	
Packaging	12 pairs/polybag Sizes 7, 11 72 pairs/case	
	8 9 & 10 120 nairs/case	

Applications / Industries

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









53-7191

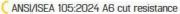
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Medium weight cut level A6 leather reinforced foam nitrile palm coated glove with reinforcement





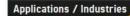
- New RhinoYarn® composition using lighter, finer steel
- EN407:2020 contact heat level 1
- Leather palm combined with foam nitrile coating delivers incredible robustness and handling comfort
- Foam nitrile palm coating allows breathability and prevents oil ingress to hand
- Leather reinforcement to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





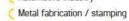


13gg
Grey liner / Grey leather
Knit wrist
220-270mm
6/XS - 12/3XL
12 pairs/polybag 72 pairs/case



























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RhinoYarn® cut resistant technology ANSI/ISEA 105:2024 A9 cut resistance without

compromising dexterity

Tough and durable bi-polymer foam coating

Reinforced nitrile thumb crotch for added durability

Ultra-lightweight 18 gauge cut level A9

bi-polymer foam palm coated glove

Excellent dry and light oil grip

Tested after washing to domestic and industrial













Gauge	18gg
Color	Black liner / Black coating
Cuff Style	Knit wrist
Length	230-270mm
Sizes	6/XS - 12/3XL
Packaging	12 pairs/polybag 120 pairs/case

Applications / Industries

Component assembly

Aerospace



A9

Automotive industry Metal handling

Manufacturing





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50-6111

CE

CE



Medium weight cut level A6 PU palm coated glove with thumb reinforcement

RhinoYarn® cut resistant technology

ANSI/ISEA 105:2024 A6 cut resistance

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 domestic and industrial wash







	10gg	•
	Black liner / Grey coating	
tyle	Knit wrist	•
1	220-270mm	•
	6/XS - 12/3XL	•
ging	12 pairs/polybag 120 pairs/case	•

Applications / Industries

Assembly

Automotive industry

Metal fabrication/stamping

Transportation

Manufacturing

Construction











50-6121

CE



Medium weight cut level A6 sandy foam nitrile palm coated glove with thumb reinforcement

A6

- RhinoYarn® cut resistant technology
- ANSI/ISEA 105:2024 A6 cut resistance Thumb crotch is reinforced for additional resilience
- High level of abrasion and durability
- 360 breathability
- Dark color hides dirt extending life of the glove
- Can be laundered at 104°F for up to x3 washes







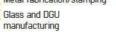




Gauge	10gg
Color	Black liner / Black coating
Cuff Style	Knit wrist
Length	230-270mm
Sizes	7/S - 12/3XL
Packaging	12 pairs/polybag 120 pairs/case

Applications / Industries

Metal fabrication/stamping



manufacturing Transportation



Construction Waste handling / Recycling









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50-6130 Medium weight cut level A6



latex palm coated glove

RhinoYarn® cut resistant technology

ANSI/ISEA 105:2024 A6 cut resistance

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







Gauge	10gg
Color	Black liner / Black coating
Cuff Style	Knit wrist
ength .	230-270mm
Sizes	7/S - 11/2XL
ackaging	12 pairs/polybag 120 pairs/case



Metal fabrication/stamping

Manufacturing











www.tilsatec-na.com

TILSATEC









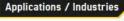




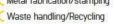








CGlass manufacturing















Lightweight cut level A6 PU palm coated glove

NEW RhinoYarn® cut resistant technology

ANSI/ISEA 105:2024 A6 cut resistance

Fine 15 gauge lightweight liner

High level of tactility and dexterity

Robust PU palm coating provides secure dry grip

Seamless liner and cuff gives a smooth, form-fitting feel

Tested after washing to domestic and industrial wash standards



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Gauge	15gg
Color	Grey liner / Grey coating
Cuff Style	Knit wrist
Length	210-280mm
Sizes	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





CUT

55-6142



CE

Lightweight cut level A6 full dip nitrile with sandy foam nitrile palm coating

NEW RhinoYarn® cut resistant technology

ANSI/ISFA 105:2024 A6 cut resistance

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 domestic and industrial wash standards



Gauge	1 5gg
Color	Grey liner / Black coating
Cuff Style	Knit wrist
Length	210-280mm
Sizes	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



A6

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HIGH CUT

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55-6121



Medium weight cut level A6 sandy foam coated glove with reinforcement

NEW RhinoYarn® cut resistant technology

ANSI/ISEA 105:2024 A6 cut resistance

Fine 15 gauge lightweight liner

High level of tactility and dexterity

Sandy nitrile palm coating provides good dry and wet grip

Seamless liner and cuff gives a smooth, form-fitting feel

Tested after washing to domestic and industrial



Cuff Style

Length







15gg	
Grey liner / Black coating	
Knit wrist	-
210-280mm	- 05
FAVE 10/0VI	100

5/XXS - 12/3XL 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

<u>~</u> Light metal fabrication

Transportation Aerospace







White goods manufacturing



55-6132



CE

Lightweight cut level A6 sandy latex palm coated glove

NEW RhinoYarn® cut resistant technology

ANSI/ISEA 105:2024 A6 cut resistance

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

Tested after washing to domestic and industrial wash standards











Sizes 8, 9 & 10 120 pairs/carton

Applications / Industries

Final fix / light assembly

Automotive assembly Light metal fabrication

Aerospace

White goods manufacturing

Transport

Handling/packing foodstuffs













www.tilsatec-na.com

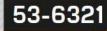
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www.tilsatec-na.com

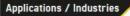
Comfort + COMFORT WITHOUT COMPROMISE

Tilsatec's newest non-reinforced glove range, engineered to perform at all levels of cut resistance from A2-A6, without the use of alloy and mineral yarns.

No alloy/no mineral yarn results in increased comfort and dexterity while maintaining high levels of cut protection from level A2 - A6







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

Cuff Style

White goods manufacturing

13gg

Knit wrist

220-270mm

6/XS - 11/2XL

12 pairs/paper band

Sizes 6, 7 & 11 72 pairs/case

Sizes 8, 9 & 10 120 pairs/case

Comfort+ medium weight cut level A6 glove with sandy nitrile palm coating

- 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











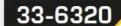




Grey liner / Black coating









Comfort+ mediumweight cut level A6 liner glove

- 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



Gauge	13gg
Color	Grey liner
Cuff Style	Knit wrist
Length	220-270mm
Sizes	6/XS - 11/2XL
Packaging	12 pairs/paper band Sizes 6, 7 & 11 72 pairs/case Sizes 8, 9 & 10 120 pairs/case

CUT

COMFORT+

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Applications / Industries

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











CUT

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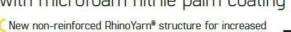
CE





CE

Comfort+ lightweight cut level A5 glove with microfoam nitrile palm coating



- 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
Color	Grey liner / Black coating
Cuff Style	Knit wrist
Length	220-270mm
Sizes	6/XXS - 11/3XL
Packaging	12 pairs/paper band. Sizes 6, 7, 11 72 pairs/case.

Sizes 8, 9 & 10 120 pairs/case

Applications / Industries

Assembly







Metal fabrication / stamping



White goods manufacturing















CE

55-4311





- 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	1599
Color	Grey liner / Grey coating
Cuff Style	Knit wrist
Length	220-270mm
Sizes	5/XXS - 12/3XL
D. J. J.	10 :- (0: 0.7 11 0.10

12 pairs/paper band. Sizes 5, 6, 7, 11 & 12 72 pairs/case, Sizes 8, 9 & 10 120 pairs/case

Applications / Industries

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







CUT

CE

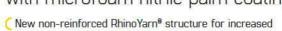
CE

58-4325



12 pairs/paper band. Sizes 5, 6, 7, 11 & 12 72 pairs/case. Sizes 8, 9 & 10 120 pairs/case

Comfort+ lightweight cut level A4 glove with microfoam nitrile palm coating



- 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
- Food approved against aqueous foodstuffs
- Tested after washing to industrial standard

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Gauge	15gg
Color	Grey liner / Black coating
Cuff Style	Knit wrist
Length	220-270mm
Sizes	5/XXS - 12/3XL
Dankanian	10 mains former hand Cines E C 7 11 C 10

Applications / Industries

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



COMFORT+

TILSATEC

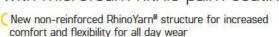






CUT

Comfort+ ultra-lightweight cut level A4 glove with microfoam nitrile palm coating



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
Color	Grey liner / Black coating
Cuff Style	Knit wrist
Length	220-270mm
Sizes	5/XXS - 12/3XL
Packaging	12 pairs/paper band, Sizes 5, 6, 7, 11 & 12

72 pairs/case. Sizes 8, 9 & 10 120 pairs/case

Applications / Industries







Metal fabrication / stamping

Construction

White goods manufacturing













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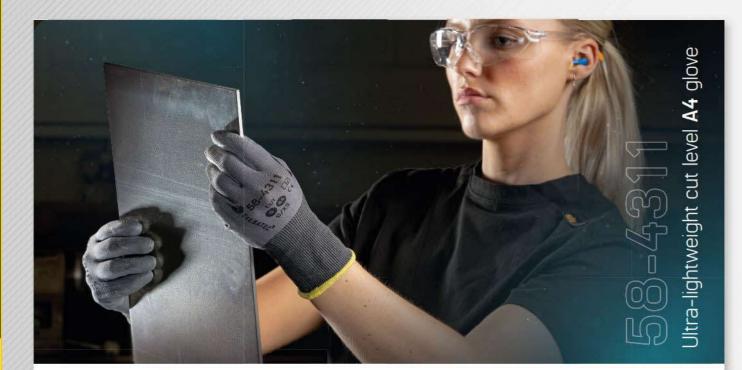
57

58-4311

CE

COMFORT+





Comfort+ ultra-lightweight cut level A4 glove with PU palm coating

- 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
Color	Grey liner / Grey coating
Cuff Style	Knit wrist
Length	220-270mm
Sizes	5/XXS - 12/3XL
Packaging	12 pairs/paper band. Sizes 5, 6, 7, 11 & 12 72 pairs/case. Sizes 8, 9 & 10 120 pairs/case

Applications / Industries

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







CUT

A4

35-4329 Comfort+ lightweight

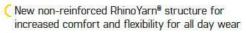


CE

CE

53-4311

cut level A4 liner glove



- 15 gauge seamless liner free from alloy and mineral yarns
- Available in sizes 5-12
- Tested after washing to industrial standard



Gauge	15gg
Color	Grey liner
Cuff Style	Knit wrist
Length	220-270mm
Sizes	5/XXS - 12/3XL
Packaging	12 pairs/paper band. Sizes 5, 6, 7, 11 & 12



Applications / Industries

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







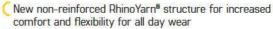




CUT

Comfort+ medium weight cut level A4 glove with PU palm coating

72 pairs/case, Sizes 8, 9 & 10 120 pairs/case



- 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







auge	13gg
olor	Grey liner / Grey coating
uff Style	Knit wrist
ength	220-270mm
zes	5/XXS - 12/3XL
ackaging	12 pairs/paper band. Sizes 5, 6, 7, 11 & 12 72 pairs/case Sizes 8, 9 & 10 120 pairs/case

Applications / Industries







- Class manufacturing
- Metal fabrication / stamping Construction
- White goods manufacturing









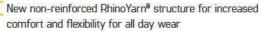




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Comfort+ medium weight cut level A4 glove with sandy nitrile palm coating



13 gauge seamless liner free from alloy and mineral yarns (Assembly

Sandy nitrile palm coating delivers secure dry and oil grip

Reinforced thumb for increased durability in high wear zones

Touchscreen capable







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Gauge	13gg
Color	Grey liner / Black coating
Cuff Style	Knit wrist
Length	220-270mm
Sizes	5/XXS - 12/3XL
Packaning	12 nairs/naner hand Sizes 5 6 7 11 & 12 72 nairs/nase

Sizes 8, 9 & 10 120 pairs/case

Applications / Industries

Automotive industry Glass manufacturing

Metal fabrication / stamping

Construction

White goods manufacturing

4



ANSI/ISEA 105-2024





CUT

53-3314



CE

Comfort+ medium weight cut level A3 glove with PU palm coating

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

Knit wrist 220-270mm 6/XS - 11/2XL

Tested after washing to industrial standard

White liner / Grey coating

Packaging 12 pairs/polybag 120 pairs/case



Gauge

Cuff Style





* REACH regulation for DMF content is

ANSI/ISEA 105-2024



Applications / Industries

Assembly

Construction

Automotive industry

Glass manufacturing

Metal fabrication / stamping

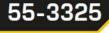
White goods manufacturing



A3

COMFORT+

TILSATEC





Comfort+ lightweight cut level A3 glove with microfoam nitrile palm coating

- 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





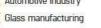


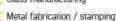
Gauge	15gg
Color	Grey liner / Black coating
Cuff Style	Knit wrist
Length	220-270mm
Sizes	6/XS - 11/2XL
Packaging	12 pairs/paper band. Sizes 6, 7 & 11 72 pairs/case Sizes 8, 9 & 10 120 pairs/case

Applications / Industries



Automotive industry



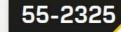














CE

Comfort+ lightweight cut level A2 glove with microfoam nitrile palm coating

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
Color	Grey liner / Black coating
Cuff Style	Knit wrist
ength.	220-270mm
Sizes	6/XS - 11/2XL
Packaging Packaging	12 pairs/paper band. Sizes 6, 7 & 11 72 pairs/case Sizes 8, 9 & 10 120 pairs/case

applications / Industries





Glass manufacturing Metal fabrication / stamping

Construction

(White goods manufacturing















TILSATEC

EnVision®

People. Planet. Protection.

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BIO-BASED DYNEEMA®

sustainable YCITI content in all EnVision° products



55-6725





EnVision® ANSI cut level A6 glove with microfoam palm coating

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 CO2 reduction of >780 grams per pair*

Energy savings of 0.254 kwh and 3.3 litres less water consumption per pair

Gauge

Color

Length

Cuff Style

ANSI/ISEA 105:2024 A6 cut resistance

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













15gg

Knit wrist

220-270mm

6/XS - 11/2XL

12 pairs/paper band

Sizes 6, 7 and 11 72 pairs/case

Sizes 8, 9 and 10 120 pairs/case

Navy liner / Black coating

Applications / Industries

Intricate assembly

Automotive downstream

Aftermarket / Component handling

Construction

White goods manufacturing

Aerospace

CE

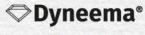












Bio-based Dyneema® is the first ever biobased ultra-high molecular weight polyethylene fiber, reducing reliance on fossil fuel based resources. All bio-based Dyneema® fibers have the exact same characteristics and performance as conventional Dyneema®. Made from trees (a bi-product of pulp and timber)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



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





1-877-466-8499

63

CUT

A6

CUT

55-3725



EnVision® ANSI cut level A3 glove with microfoam palm coating

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 CO2 reduction of >820 grams per pair*

Energy savings of 0.302 kwh and 4 litres less water consumption per pair

ANSI/ISEA 105:2024 A3 cut resistance

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













Applications / Industries

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

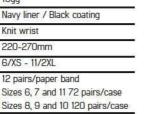














CUT

Dyneema°

Bio-based Dyneema® is the first ever biobased ultra-high molecular weight polyethylene fiber, reducing reliance on fossil fuel based resources. All bio-based Dyneema® fibers 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).



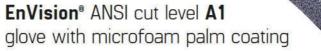
Carbon emissions reduced by >600q for every pair of gloves made with Bio-Based Dyneema®, when compared to Generic HMPE yarn.











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 CO2 reduction of >320 grams per pair*

Energy savings of 0.276 kwh and 6 litres less water consumption per pair

ANSI/ISEA 105:2024 A1 cut resistance

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 agueous foodstuffs













Applications / Industries

- Intricate assembly
- Automotive downstream Aftermarket / Component handling
- Construction

CE

- White goods manufacturing
- Aerospace Logistics and warehousing















Product Packaging

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



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Plant Based

EnVision® plant-based cut level A3 glove with microfoam palm coating

Certified 29% bio-based content awarded Eurofins bronze badge

- Manufactured using a unique combination of plant and bio-based yarns
- Carbon footprint: 422g CO2e per pair
- LCA (Life Cycle Assessment) conducted
- Less water consumption and energy usage
- ANSI/ISEA 105:2024 A3 cut resistance
- Accredited plant-based by the Vegetarian Society
- Touchscreen compatible reducing need to remove gloves
- Thumb crotch reinforced for additional resilience in high action area
- Microfoam palm coating delivers secure dry and oil grip
- Incredible fine tactility and dexterity, close fitting and soft comfort















Applications / Industries

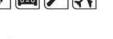
- Intricate assembly
- Automotive downstream
- Aftermarket / Component handling
- Construction
- White goods manufacturing
- Aerospace















Sizes 8, 9 and 10 120 pairs/case

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

Dyneema°

Carbon Certification).

Bio-based Dyneema® is the first ever bio-

fiber, reducing reliance on fossil fuel based

resources. All bio-based Dyneema® fibers

have the exact same characteristics and

based ultra-high molecular weight polyethylene

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 &



55-1825

CUT







Certified 55% bio-based content awarded Eurofins silver badge

- Manufactured using a unique combination of plant and bio-based yarns
- Carbon footprint: 386g CO2e per pair
- LCA (Life Cycle Assessment) conducted
- Less water consumption and energy usage
- ANSI/ISEA 105:2024 A1 cut resistance
- Accredited plant-based by the Vegetarian Society
- High level abrasion resistance 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











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 cases contain 72 pairs per case for sizes 6, 7 & 11, 120 pairs per case for sizes 8, 9 & 10.



www.tilsatec-na.com

Cut Resistant Chemical Gauntlets

Combining chemical protection with our 15gg cut resistant technology to ensure high cut level A4 and A6. Made with a special blend of Nitrile to ensure high levels of comfort, flexibility and dexterity

55-6177



Gauge	15gg
Color	Grey/black
Cuff Style	Gauntlet
Length	35cm
Sizes	7/S - 11/2XL
Packaging	6 pairs/paper band, 48 pairs per case

CE

Nitrile cut level A6 chemical gauntlet with microfoam palm coating

- EN ISO 374-1:2016+A1:2018 Permeation Type A
- EN ISO 374-5:2019 bacteria and fungi
- ANSI/ISEA 105:2024 A6 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
- Approved for food contact in compliance with FDA requirements













Applications / Industries

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











8

CUT **A6**

Incident Indicator high contrast liner to identify damage to the chemical barrier



Under edge size indicator for fast product sizing identification



55-4173



Gauge	15gg	
Color	Blue/black	
Cuff Style	Gauntlet	
Length	35cm	
Sizes	7/S - 11/2XL	
Packaging	6 pairs/paper band, 48 pairs per case	



Nitrile cut level A4 chemical gauntlet with microfoam palm coating

- EN ISO 374-1:2016+A1:2018 Permeation Type A
- EN ISO 374-5:2019 bacteria and fungi
- ANSI/ISEA 105:2024 A4 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
- Approved for food contact in compliance with FDA requirements











Applications / Industries

























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CHEMICAL GAUNTLETS

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HISATES TILSATED TILSATEC ILSATEC

GP2000PU



GP2000MF



DeTach™ tear-away safety glove

- ANSI/ISEA 105: 2024 A1 cut resistance
- De|Tach™ tear-away technology
- Fine gauge lightweight shell provides high tactility and dexterity
- 14 built-in tear-away zones on the fingers
- GP2000PU grey polyurethane coating
- GP20000MF black microfoam coating



Cuff Style





13gg	
Red liner / GP2000PU - Grey coating GP2000MF - Black coating	
Integrated knit wrist	
5/XXS - 12/3XL	

12 pairs/polybag 144 pairs/case

Applications / Industries

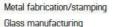
White goods manufacturing



Construction

Utilities













Aerospace



333DT-PU



CR+ DeTach™ tear-away safety glove with grey polyurethane palm coating

- ANSI/ISEA 105: 2024 A4 cut resistance CR+ De|Tach™ tear-away technology
- Fine gauge lightweight shell provides high
- 5 built-in tear-away zones on the fingers





tactility and dexterity



Gauge	13gg	
Color	Green liner / Grey coating	
Cuff Style	Integrated knit wrist	
Sizes	5/XXS - 12/3XL	
Packaging	12 pairs/polybag 144 pairs/case	

Applications / Industries

Assembly

Automotive industry



Glass manufacturing

Construction

White goods manufacturing

Utilities

Aerospace

ANSI/ISEA 105-2024



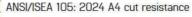


A4

333DT-MF



CR+ DeTach™ tear-away safety glove with black microfoam nitrile palm coating



CR+ De|Tach™ tear-away technology

Fine gauge lightweight shell provides high tactility and dexterity

5 built-in tear-away zones on the fingers





Gauge	13gg
Color	Green liner / black coating
Cuff Style	Integrated knit wrist
Sizes	5/XXS - 12/3XL
Packaging	12 pairs/polybag 144 pairs/case

Applications / Industries

Assembly

Automotive industry

Metal fabrication / stamping

Glass manufacturing

Construction

White goods manufacturing

Utilities

Aerospace

ANSI/ISEA 105-2024





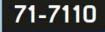
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www.tilsatec-na.com

× FOOD-SAFE

🂸 TILSATEC

A6





Lightweight anitimicrobial cut level A7 food glove



(ANSI level A7 (ANSI/ISEA 105) cut resistance

- Inherent antimicrobial component safe for food handling
- Yarn structure (free from glass fibre) delivers better grip and mechanical protection
- Tested after washing to industrial standard

Heavyweight anitimicrobial

ANSI level A9 (ANSI/ISEA 105) cut resistance

Tested after washing to industrial standard

Extended cuff for added protection

Inherent antimicrobial component safe for food handling

Yarn structure (free from glass fibre) delivers better grip

cut level A9 food glove

and mechanical protection

- Extended cuff for added protection
- Ambidextrous
- Approved for food contact in compliance with FDA requirements



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451	3
	7

Gauge	13gg
Color	Blue liner
Cuff Style	Knit wrist
Length	255-305mm
Sizes	6/XS - 11/2XL
Packaging	6 pieces/polybag, 216 pieces/case





Applications / Industries

Meat carving and deboning

(Fish filleting and processing

(Suitable for beef, pork

and poultry

(Butchery



73-9110



Approved for food contact in compliance with FDA requirements

Ambidextrous

Gauge	7 gg
Color	Blue liner
Cuff Style	Knit wrist
Length	255-305mm
Sizes	6/XS - 11/2XL
Packaging	6 pieces/polybag, 144 pieces/case





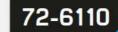
Applications / Industries

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









CE



Medium weight anitimicrobial cut level A6 food glove

- (ANSI level A6 (ANSI/ISEA 105) cut resistance
- Inherent antimicrobial component safe for food handling
- (Yarn structure (free from glass fibre) delivers better grip and mechanical protection
- Tested after washing to industrial standard
- Extended cuff for added protection
- Ambidextrous
- Approved for food contact in compliance with FDA requirements



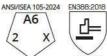


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Gauge	10gg
Color	Blue liner
Cuff Style	Knit wrist
Length	255-305mm
Sizes	6/XS - 11/2XL
Packaging	6 pieces/polybag, 144 pieces/case

Applications / Industries

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











72

73

203

205

CE



Leather drivers cut level A6 glove with electric arc protection

- ANSI/ISEA 105: 2024 A6 cut resistance
- RhinoYarn® cut resistant technology
- EN407 contact heat level 1
- Electric arc resistance: ATPV rating of 37.5cal./cm2
- Soft, full grain goatskin leather outer
- Good grip and abrasion resistance



Packaging



Gauge	7gg	
Color	Gold	
Cuff Style	Shirred Wrist	
Length	230-260mm	
Sizes	6/XS - 13/4XL	

12 pairs/polybag 72 pairs/case

Applications / Industries

Assembly

- Automotive industry
- Metal fabrication / stamping
- Construction
- Petrochemical
- Utilities



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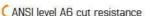
CE

208

CE



Medium duty cut level A6 leather palm glove



- ANSI puncture level A4
- Provide good wet and dry grip and high levels of abrasion resistance
- Reinforced thumb crotch provides additional protection for handling sheet







Gauge	7gg
Color	Grey liner/grey palm
Cuff Style	Integrated Knit wrist
Length	230-260mm
Sizes	6/XS - 11/2XL
Packaging	12 pairs/polybag 72 pairs/case

Applications / Industries

- Aerospace
- Assembly
- Automotive industry
- Metal fabrication / stamping
- Glass manufacturing
- Construction









207 Medium duty cut level A6 glove with leather palm glove



- CANSI puncture level A4
- Provide good wet and dry grip and high levels of abrasion resistance
- Reinforced thumb crotch provides additional protection for handling sheet materials







Gauge	7 gg
Color	Grey liner/grey palm
Cuff Style	Integrated Knit wrist
Length	230-260mm
Sizes	8/S - 10/XL
Packaging	12 pairs/polybag 72 pairs/case

Applications / Industries

- Aerospace
- (Assembly
- C Automotive industry
- Metal fabrication / stamping
- Glass manufacturing
- Construction







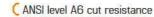




CUT

A6

Medium weight cut level A6 gauntlet with split leather outer



- CANSI puncture level 4
- CEN407 heat level 1
- CLeather knuckle strap for added protection

Sizes	7/S - 12/3XL	
Glove Base	Tilsatec - RhinoYarn [®]	
Construction	gauntlet safety cuff	
Glove Shell	Split Leather	
Cuff/Wrist	Gauntlet safety cuff	

12 pairs/polybag 72 pairs/case

Applications / Industries

- Aerospace
- Assembly
- Automotive industry Metal fabrication / stamping
- Class manufacturing













81-4121-ск/сч



Medium weight cool touch cut level A4 sleeve with comfort cuff

ANSI level A4 (ANSI/ISEA 105) cut resistance

- RhinoYarn[®] cut resistant technology
- Comfortable thumb slot keeps sleeve in place without discomfort
- 81-4121/CK elasticated top to keep sleeve up
- 81-4121/CV hook and loop adjustable strap



Gauge	13gg	
Color	Light Grey	
Cuff Style	Comfort cuff with thumb slot	
Length	21" / 53cm	
Sizes	One size	
Packaging	Packed p/piece 100 pieces p/case	

Applications / Industries

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







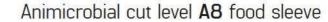






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CE





ARM PROTECTION

TILSATEC

ANSI level A8 (ANSI/ISEA 105) 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
- Elasticated top to keep sleeve in place
- Meets FDA food contact requirements

Gauge	10gg
Color	Blue
Cuff Style	Knit wrist
Length	20"/50cm
Sizes	One Size
Packaging	Packed per piece 100 pieces/case

Applications / Industries

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









81-6121-ck/cv



Medium weight cool touch cut level A7 sleeve with comfort cuff

- ANSI level A7 (ANSI/ISEA 105) cut resistance
- RhinoYarn[®] cut resistant technology
- Comfortable thumb slot keeps sleeve in place
- 81-6121/CK elasticated top to keep sleeve up
- 81-6121/CV hook and loop adjustable strap



Gauge	13gg	
Color	Light Grey	
Cuff Style	Comfort cuff with thumb slot	
Length	21" / 53cm	
Sizes	One size	
Packaging	Packed p/piece 100 pieces p/case	

Applications / Industries

- Automotive industry
 - Aerospace
 - Metal fabrication / stamping

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- Manufacturing
- Glass industry







TTP880SP/DP



Heavy Duty Sleeves



- ANSI level A7 (ANSI/ISEA 105) cut resistance Dual-Ply
- RhinoYarn® cut resistant technology
- Fine gauge lightweight liner provides high comfort and dexterity
- FN407 contact heat level 1
- Thumb slot for a secure fit
- ANSI/ISEA 105 Conductive Heat 2

Product Code	TTP880SP (Single-Ply) TTP880DP (Dual-Ply)
Sizes	12", 14", 18", 20", 22", 24"
Cuff/Wrist	Integrated knit wrist with thumbslot
Construction	Tube Knit
Packaging	10 per bundle, 200 pieces/case

Applications / Industries

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













SP Single-Ply







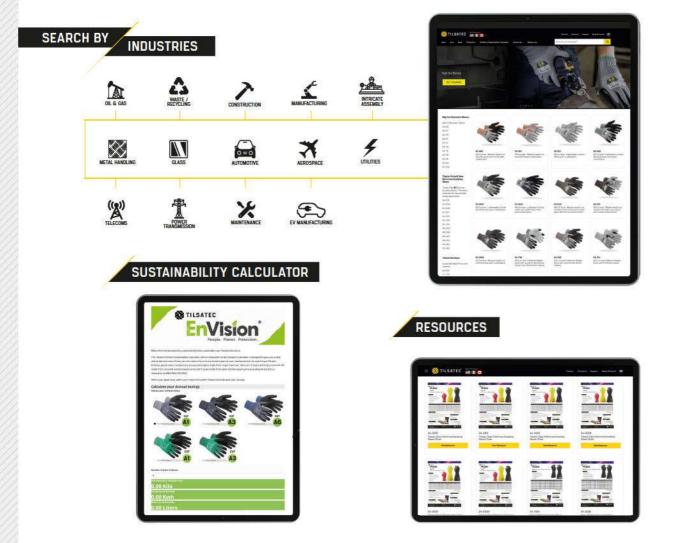




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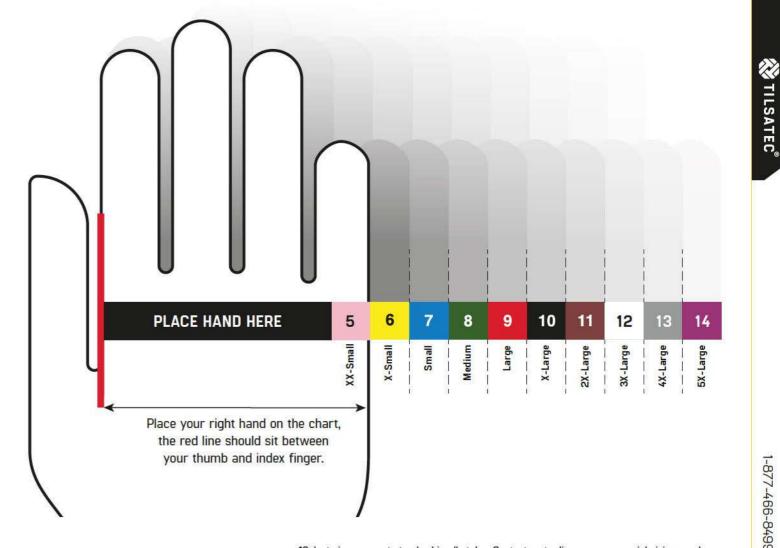
ONLINE RESOURCES

Visit our website tilsatec-na.com to search for your ideal hand, arm or body protection by 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.



GLOVE SIZING CHART

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.



Tilsatec NA | 1-877-466-8499 | customerservicena@tilsatec.com | www.tilsatec-na.com TILSATEC North America, 5770 N. Hix Road, Westland, MI 48185, USA







