TILSATEC®

High Performance Hand, Arm & Body Protection Product Catalogue

Show Edition 2017

www.tilsatec.com

PERFORMANCE IN EVERY FIBRE

CONTENTS

TILSATEC®

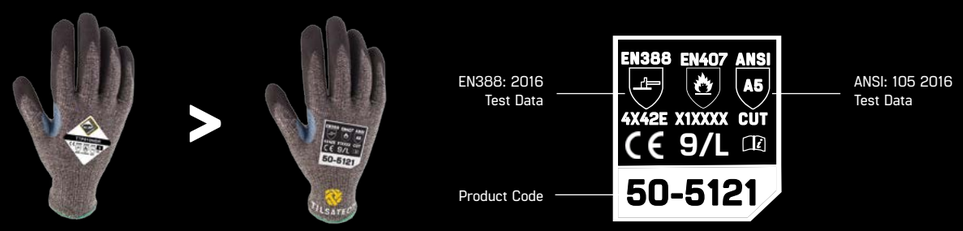
Since the company's inception in 2001 we've grown year on year, expanded into new markets and become firmly established as an expert manufacturer of high performance hand and arm protection. Unique in the market in producing the cut resistant Rhino yarn technology on site in the UK, Tilsatec have carved out a strong position as much more than glove manufacturers.

Having recently added to our in house manufacturing capabilities, allowing for increased scope in R&D and product innovation, the company is also in the process of establishing its first in house mechanical testing laboratory and will be seeking UKAS accreditation for 2018. This further demonstrates our commitment to ensuring product quality and performance are paramount.

Earlier in 2017 we rolled out a global rebrand and new identity for the business, one which represents Tilsatec's unique capabilities, breadth of manufacturing experience and technical expertise. To coincide with the rebrand a new product coding system has also been introduced. You will see some of the previous sub brands and product names have been replaced with a new streamlined 6 digit product code, which looks like this:

50-5121

The first 2 digits represent the family or category to which a particular product has been assigned. There are 8 product categories in total built around the key industries and product performance features required to best serve customers in these sectors.
You will still find all of your favourite products you currently use in the range; they just might have a different reference code now. Below is an example of the current branding vs the new to show how you can expect products to look.



We will also be changing the case quantities of many of our coated products to **120 pairs per case.** Consequently volumetrics for those products will also alter.
There will inevitably be a period of transition as stocks gradually rotate and new branded products come through the system.
Although we are moving to the new coding structure from August, it might be that some orders are fulfilled with current branded products until such time.

RHINOYARN®

Whenever you see the Rhino Yarn mark it means a product has been made using our own yarn technology. With this comes the assurance of full quality control, processing traceability and mechanical performance efficiencies built in at every level.

How Does It Work?

Rhino Yarn technology is an engineered yarn process which combines various technical fibres and materials. Such materials can be used on their own, but when blended together to create a composite yarn, can achieve significantly higher levels of cut protection, without compromising on comfort or dexterity.

Each component is carefully selected to engineer a product which delivers the desired mechanical performance in the most efficient and value driven structure possible.

Manufactured on site by a dedicated team of yarn technologists, Tilsatec are able to design bespoke developments to meet customers' exacting needs in a wide range of industries.

Backed up by 135 years of experience in yarn and textile manufacturing, an extensive R&D facility and more recently investment in a comprehensive glove testing laboratory, Tilsatec is well placed to meet the rapidly changing and diverse hand and arm protection needs of industry, today and in the future.

BSiF BRITISH SAFETY INDUSTRY FEDERATION Member

BSiF Registered Safety Supplier™

The British Safety Industry Federation (BSIF) is the lead association for the Personal Protective Equipment (PPE) Directive and is recognised as a Competent Authority by the Health & Safety Executive (HSE). The BSIF has active links with many government departments and over 130 representative Trade Bodies.
Set up in 1994, the Federation currently has some 160 members, ranging from manufacturers and distributors of safety products through to test houses, certification bodies and safety professionals.
Today the BSIF is firmly established as the major independent voice of the British safety industry, helping to both influence legislation and provide industry in general with a source of authoritative information on a range of workplace safety issues, while representing the needs of its members.
Tilsatec are members of the BSIF and also a **Registered Safety Supplier**. The purpose of this scheme is to provide a signposting service for employers to help them purchase 'safe' products and eliminate counterfeit, unsafe and illegal safety products from the market. So when you buy PPE from Tilsatec you can be assured it is compliant and approved to industry legislation and regulation. Find out more about BSIF and what they do: **www.bsif.co.uk**

EN Standards Explained

The Personal Protective Equipment (PPE) Directive (89/686/EEC) is written to ensure all PPE meets common standards of quality and performance and is categorised to enable safety professionals to match the PPE to the level of risk or hazard identified. Protective gloves which are classified as PPE must be CE marked and comply with relevant EN standards (described below).
The PPE Directive specifies three classes of gloves for different levels of user risk; 'minimal', 'intermediate' and 'mortal or irreversible'.

Simple design - minimal risk
Gloves which may be used in low risk situations such as gardening gloves or cleaning gloves. Manufacturers are permitted to test and certify gloves themselves - gloves within this category are CE marked as follows: CE

Intermediate design - intermediate risk
Gloves which may be used to protect against intermediate risks such as mechanical protection gloves providing cut, puncture and abrasion resistance, must be subjected to independent testing and certified by a notified body.
Only approved bodies may issue a CE mark, without which the gloves may not be sold. The name and address of the Notified Body must appear on the instructions for use that accompany the gloves. Gloves of intermediate design are CE marked as follows: CE

Complex design - irreversible or mortal risk
Gloves which are designed to protect against the highest level of risk eg chemicals, must be tested and certified by a Notified Body.
The quality assurance system used by the manufacturer to guarantee homogeneity of production must be independently checked. The body carrying out this evaluation will be identified by a number which must appear alongside the CE mark. Gloves of complex design are CE marked as follows: CE 0321

Note: The original PPE Directive 89/686/EEC has been amended by both the 93/95/EEC Directive and the CE marking Directives 93/68/EEC and 95/58/EEC.

EN420: 2003 - General requirements for protective gloves
Defines the general requirements for most types of protective gloves which includes:

- Glove construction
- Ergonomy
- Dexterity
- Innocuousness
- Product marking and packaging information
- Sizing
- Water vapour transmission and absorption
- Electrostatic properties

Sizing of gloves according to hand length and circumference:

Glove Size	Hand Circumference (mm)	Hand Length (mm)	Min length of glove (mm)
6	152	160	220
7	178	171	230
8	203	182	240
9	229	192	250
10	254	204	260
11	279	215	270

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

EN388: 2016 - Mechanical Protection
The Mechanical Risks pictogram is shown with five or six performance levels, each representing test performance against specific mechanical hazards. The letter in the fifth position corresponds to the ISO 13997 cut resistance level. Where a letter 'P' is shown in the sixth position, gloves are certified to provide impact protection.

a b c d e f

Performance Level	1	2	3	4	5
Abrasion Resistance (cycles)	100	500	2000	8000	n/a
Blade Cut Resistance (index)	1.2	2.5	5.0	10.0	20.0
Tear Resistance (newtons)	10	25	50	75	n/a
Puncture Resistance (newtons)	20	60	100	150	n/a

	a	b	c	d	e	f
ISO13997 Cut Resistance (newtons)	2	5	10	15	22	30
Impact Protection	PASS (P) or FAIL (no marking)					

Level 'X' indicates not tested or not applicable

EN407: 2004 - Protection from Thermal Hazards
The heat and flame pictogram is shown with six numbers, representing performance levels against specific thermal hazard tests.

a b c d e f

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

Needlestick Resistance
Resistance to punctures from needlestick is measured in Newtons according to ASTM F2878:10 which uses a 25 gauge hypodermic medical grade needle.

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

Two different test methods exist for the characterisation of antistatic performance according to EN 1149-5.

EN 1149-1: Test method for measurement of surface resistivity.
A specimen is placed on an insulating base plate and an electrode assembly placed on top. A Direct Current (DC) potential is applied and the resistance of the fabric is measured. This test determines the resistance over a short distance and is most appropriate for materials for which the electrostatic behaviour is based on surface conductivity. Materials must record < 2.5 x $10^{(9)}$ ohms to meet the requirements of the standard.

EN 1149-3: Test method for measurement of charge decay.
A specimen is charged by an induction effect. The induced charge on the test material influences the field that is observed by a probe positioned above the test surface. The decrease in field charge is used to determine the half decay time and the shielding factor of the material. A half decay time of < 4 seconds or shielding factor of > 0.2 are required to meet the conditions of EN1149-5 using this test method.

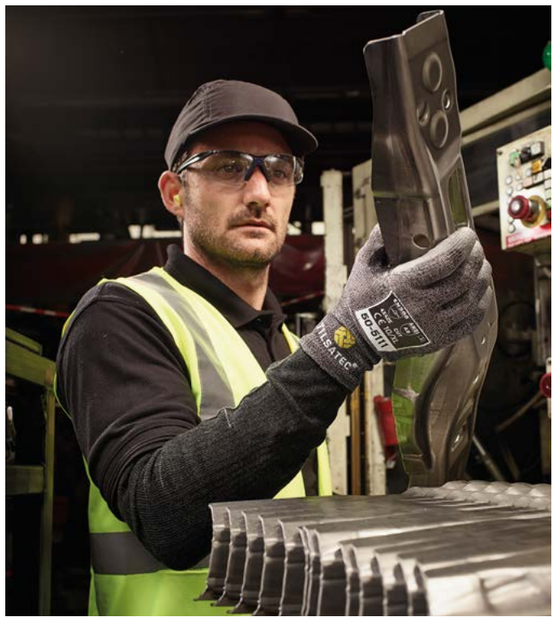
EC Food Directive
Tilsatec Blue Rhino products are approved for contact with all foodstuffs in compliance with the parent directive 1935/2004/EC. They also comply with the specific requirements laid down in European Commission Directive 2002/72/EC which governs the substances that may be used in the manufacture of food contact materials (including gloves for food handling) and specify that under normal foreseeable conditions of use, they do not transfer their constituents to food in quantities which could:
- endanger human health; or
- bring about an unacceptable change in the composition of the food; or
- bring about a deterioration in the organoleptic characteristics (i.e texture, taste, aroma)

To ensure food contact materials comply with these regulations a series of test standards are applied (EN 1186) to determine migration levels from contact materials into the food using a variety of food simulants.
Compliance with the allowable limits enables food gloves to be marked with the following 'food safe' pictogram:

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

COATED Cut Resistant Gloves

The new Tilsatec range of lightweight coated gloves delivers grip, comfort and dexterity combined with high level mechanical protection, designed to meet the new standards in cut protection



50-5121 NEW

Medium weight cut resistant foam nitrile palm coated glove with thumb reinforcement

Features & Benefits

- EN388: 2016 level E cut resistance
- Rhino Yarn™ cut resistant technology
- High level of abrasion resistance
- EN407 contact heat level 1
- Secure grip, particularly in dry and oily conditions
- Breathable open back and coating reduces perspiration
- Dark colour hides dirt, extending life of the glove
- Seamless liner and cuff gives a smooth, comfortable feel
- Thumb crotch is reinforced for additional durability and resilience

Applications / Industries

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

Performance

EN388:2016 4X42E

EN407:2004 X1XXXX

CE

RHINOYARN

Code	Description	Gauge	Colour	Cuff Style	Length	Sizes	Packaging
50-5121	Medium weight cut resistant foam nitrile palm coated glove w/thumb reinforcement	10gg	Black liner Black coating	Knit wrist	230-270mm	7/S - 11/2XL	12 pairs/polybag 120 pairs/carton

50-5111 NEW

Medium weight cut resistant PU palm coated glove with thumb reinforcement

Features & Benefits

- EN388: 2016 level E cut resistance
- Rhino Yarn™ cut resistant technology
- High level of abrasion resistance
- PU Palm coating provides secure dry and light oil grip
- Dark colour hides dirt, extending life of the glove
- Seamless liner and cuff gives a smooth, comfortable feel
- Thumb crotch is reinforced for additional durability and resilience

Applications / Industries

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

Performance

EN388:2016 4X42E

CE

RHINOYARN

Code	Description	Gauge	Colour	Cuff Style	Length	Sizes	Packaging
50-5111	Medium weight cut resistant PU palm coated glove w/thumb reinforcement	10gg	Black liner Grey coating	Knit wrist	220-270mm	6/XS - 11/2XL	12 pairs/polybag 120 pairs/carton

50-5130 NEW

Medium weight cut resistant latex palm coated glove

Features & Benefits

- EN388: 2016 level E cut resistance
- Rhino Yarn™ cut resistant technology
- High level of abrasion resistance
- Level 3 puncture resistance
- Crinkle latex palm coating delivers excellent dry and wet grip
- Dark colour hides dirt, extending life of the glove
- Seamless liner and cuff gives a smooth, comfortable feel

Applications / Industries

- Glass manufacturing
- Metal fabrication / stamping
- Waste handling
- Recycling
- Construction
- White goods manufacturing

Performance

EN388:2016 3X43E

CE

RHINOYARN

Code	Description	Gauge	Colour	Cuff Style	Length	Sizes	Packaging
50-5130	Medium weight cut resistant latex palm coated glove	10gg	Black liner Black coating	Knit wrist	230-270mm	7/S - 11/2XL	12 pairs/polybag 120 pairs/carton

55-5120 NEW

Lightweight cut resistant foam nitrile palm coated glove

Features & Benefits

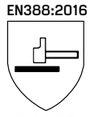
- EN388: 2016 level E cut resistance
- Rhino Yarn™ cut resistant technology
- Fine 15 gauge lightweight liner
- High level of tactility and dexterity
- Breathable liner and palm coating
- Sandy foam nitrile palm delivers good dry and oil grip

Applications / Industries

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

Performance

EN388:2016



3 X 4 3 E

Antistatic according to the requirements of EN 1149-5 : 2008 using EN 1149-3 : 2004 induction charging test method.

Code	Description	Gauge	Colour	Cuff Style	Length	Sizes	Packaging
55-5120	Lightweight cut resistant foam nitrile palm coated glove	15gg	Black liner Black coating	Knit wrist	230-270mm	7/S - 11/2XL	12 pairs/polybag 120 pairs/carton

55-5110 NEW

Lightweight cut resistant PU palm coated glove

Features & Benefits

- EN388: 2016 level E cut resistance
- Rhino Yarn™ cut resistant technology
- Fine 15 gauge lightweight liner
- High level of tactility and dexterity
- Durable PU palm coating provides good grip
- Dark colour hides dirt, extending life of the glove
- Seamless liner and cuff gives a smooth, comfortable feel

Applications / Industries

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

Performance

EN388:2016

3 X 4 3 E

Antistatic according to the requirements of EN 1149-5 : 2008 using EN 1149-3 : 2004 induction charging test method.

Code	Description	Gauge	Colour	Cuff Style	Length	Sizes	Packaging
55-5110	Lightweight cut resistant PU palm coated glove	15gg	Black liner Grey coating	Knit wrist	220-270mm	6/XS - 11/2XL	12 pairs/polybag 120 pairs/carton

55-5123 NEW

Lightweight cut resistant fully coated foam nitrile glove

Features & Benefits

- EN388: 2016 level E cut resistance
- Rhino Yarn™ cut resistant technology
- Fine 15 gauge lightweight liner
- High level of tactility and dexterity
- Sandy foam nitrile palm delivers good dry and oil grip
- Flat nitrile full dip provides oil and liquid protection

Applications / Industries

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

Performance

EN388:2016

3 X 4 3 E

Antistatic according to the requirements of EN 1149-5 : 2008 using EN 1149-3 : 2004 induction charging test method.

Code	Description	Gauge	Colour	Cuff Style	Length	Sizes	Packaging
55-5123	Lightweight cut resistant fully coated foam nitrile coated glove	15gg	Black liner Black coating	Knit wrist	230-270mm	7/S - 11/2XL	12 pairs/polybag 120 pairs/carton

53-5420

Medium weight cut resistant foam nitrile palm coated glove

Features & Benefits

- ISO 13997 level 5 cut resistance
- Rhino Yarn™ cut resistant technology
- Excellent dry and oil grip
- Palm coating repels oil and liquids
- Highly breathable liner and coating
- EN407 contact heat level 1

Applications / Industries

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

Performance

EN388: 2003

4 5 4 2

EN407: 2004

X 1 X X X X

Antistatic according to the requirements of EN 1149-5 : 2008 using EN 1149-3 : 2004 induction charging test method.

Code	Description	Gauge	Colour	Cuff Style	Length	Sizes	Packaging
53-5420	Medium weight cut resistant foam nitrile palm coated glove	13gg	Green liner Black coating	Knit wrist	230-270mm	7/S - 11/2XL	12 pairs/polybag 108 pairs/carton

58-4120 NEW

18gg super lightweight cut resistant
foam nitrile palm coated glove

Features & Benefits

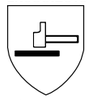
- EN388: 2016 level D cut resistance
- Rhino Yarn™ cut resistant technology
- Ultra fine 18 gauge lightweight liner
- Extremely high level of tactility and dexterity
- Breathable liner and palm coating
- Sandy foam nitrile palm delivers good dry and oil grip

Applications / Industries

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

Performance

EN388:2016



3 X 4 1 D

Antistatic according to the requirements of EN 1149-5 : 2008 using EN 1149-3 : 2004 induction charging test method.

RHINOYARN®

Code	Description	Gauge	Colour	Cuff Style	Length	Sizes	Packaging
58-4120	18gg super lightweight cut resistant foam nitrile palm coated glove	18gg	Black liner Black coating	Knit wrist	230-270mm	7/S - 11/2XL	12 pairs/polybag 120 pairs/carton

58-4110 NEW

18gg super lightweight cut resistant
PU palm coated glove

Features & Benefits

- EN388: 2016 level D cut resistance
- Rhino Yarn™ cut resistant technology
- Ultra fine 18 gauge lightweight liner
- Extremely high level of tactility and dexterity
- Durable PU palm coating provides good grip
- Dark colour hides dirt, extending life of the glove
- Seamless liner and cuff gives a smooth, comfortable feel

Applications / Industries

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

Performance

EN388:2016

3 X 4 1 D

Antistatic according to the requirements of EN 1149-5 : 2008 using EN 1149-3 : 2004 induction charging test method.

RHINOYARN®

Code	Description	Gauge	Colour	Cuff Style	Length	Sizes	Packaging
58-4110	Lightweight cut resistant PU palm coated glove	18gg	Black liner Grey coating	Knit wrist	220-270mm	6/XS - 11/2XL	12 pairs/polybag 120 pairs/carton

58-5420

18gg super lightweight cut resistant
foam nitrile palm coated glove

MADE WITH Kevlar® GENUINE

The first 18 gauge glove on the market to achieve level E cut resistance. This is the next generation of hand protection from Tilsatec.
Made with Dupont™ Kevlar® the 58-5420 is super lightweight, providing that much sought after second skin feel without compromising on protection or dexterity. The fine, soft liner is constructed to maximise comfort for long periods of wear. The foam nitrile palm coating is latex free and provides superb grip, touch sensitivity and tactility.

Features & Benefits

- EN388: 2016 level E cut resistance
- 18 gauge super lightweight Kevlar® liner
- Dupont™ Kevlar® Innovation Award winner 2016
- Second skin feel and dexterity
- Good oil and dry grip
- Breathable open back and palm
- Ergonomic form fitting seamless liner

DuPont™ Kevlar® Innovation Award Winner 2016

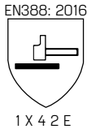
'These awards recognize innovative glove designs from DuPont™ Kevlar® licensees who are meeting evolving marketplace needs using Kevlar fiber in their glove construction.'

Applications / Industries

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

Performance

EN388: 2016



1 X 4 2 E

Antistatic according to the requirements of EN 1149-5 : 2008 using EN 1149-3 : 2004 induction charging test method.

Code	Description	Gauge	Colour	Cuff Style	Length	Sizes	Packaging
58-5420	18 gauge cut resistant foam nitrile palm coated glove	18gg	Yellow liner Black coating	Knit wrist	230-270mm	7/S - 11/2XL	12 pairs/polybag 108 pairs/carton

ARC Resistant Gloves

In 2018 Tilsatec will be launching a new range of arc resistant gloves designed to deliver arc flash resistance combined with high level cut protection.

COMING SOON

27-6120

Hi viz arc and cut resistant leather drivers glove

Features & Benefits

- EN388: 2016 level E cut resistance
- Made with Dupont™ Kevlar® liner inside
- Arc rating: ATPV = 37 cal/cm² (ASTM F2675)
- Soft cowhide leather outer
- Hi-viz fingertips aid visibility on site
- Moisture wicking yarn to keep hands cool
- Reinforced key wear zones extends the life of the glove

MADE WITH Kevlar GENUINE

Applications / Industries

- Power utilities
- Metal fabrication
- Metal stamping
- Oil and gas industry
- Petrochemical
- Engineering

Performance

EN388: 2016 — 4 X 4 3 E — TBC

EN407: 2004 — X 1 X X X X

Code	Description	Gauge	Colour	Cuff Style	Length	Sizes	Packaging
27-6120	Hi-viz cut resistant leather drivers glove	13gg	White with hi-viz fingertips	Shirred wrist	230-270mm	7/S - 11/2XL	12 pairs/polybag 120 pairs/carton

20-5114

Cut resistant FR arc resistant impact glove

MADE WITH Kevlar GENUINE

The new 20-5114 glove is a multi-faceted, powerhouse in hand protection. Designed to provide arc flash resistance, flame resistance, high cut resistance, certified impact protection and grip, it pushes the boundaries of what one glove can deliver.

Constructed using exclusive black Kevlar® fibre providing level D cut protection, the glove is inherently FR so it will not burn, melt or drip under flame exposure. Ideal for workers carrying out tasks where arc flash or flame exposure are a hazard.

Features & Benefits

- EN388: 2016 level D cut resistance
- Black Dupont™ Kevlar® composite yarn
- Protects against electric arc hazards
- Arc rating: ATPV = 20 cal/cm² (ASTM F2675) TBC
- Inherently FR glove construction (including impact pads)
- EN407 contact heat level 1
- Certified impact protection to the new EN388: 2016 standard
- Hi-viz, durable TPR pads to the back of the hand and knuckles
- Ergonomic Poron® impact protection fabric layer inside
- Palm coating provides superb grip and abrasion resistance
- Dark colour hides dirt, extending life of the glove
- Coated with a water repellent surface treatment
- Thumb crotch reinforcement for additional durability

Applications / Industries

- Oil & Gas industry
- Petrochemical
- Power Utilities
- Site maintenance
- Engineering
- Applications where flame exposure is a hazard

Performance

EN388: 2016 — 2 X 4 2 D P

EN407: 2004 — 4 1 X X X X

Code	Description	Gauge	Colour	Cuff Style	Length	Sizes	Packaging
20-5114	Cut resistant FR arc resistant impact glove	13gg	Black liner Black coating	Knit wrist	230-270mm	7/S - 11/2XL	12 pairs/polybag 120 pairs/carton

RHINOGUARD™ Cut Puncture and Needlestick Protection

RHINOGUARD™ is a highly engineered textile composite primarily designed to provide the highest levels of protection against a wide range of puncture hazards. The material is constructed from an innovative combination of advanced fibres, modified fabric structure and a unique coating technology to deliver high levels of protection against both large and small puncture threats (including needles and syringes). Uniquely for a puncture resistant material, RHINOGUARD™ also provides protection against cuts, heat and flame, abrasion and liquids. All of this is achieved in a lightweight, thin and flexible material which can be employed in a range of demanding environments.

49-5410

Rhinoguard™ arm guard

The 9" arm guard provides cut, puncture and needlestick protection in a simple yet effective arm guard. With robust velcro fastening strips the sleeve stays firmly in place when in use, can be adjusted for a secure fit and allows for quick and easy removal.

49-5114

Rhinoguard™ sleeve

The 9" arm guard provides cut, puncture and needlestick protection in a simple yet effective arm guard. With robust velcro fastening strips the sleeve stays firmly in place when in use, can be adjusted for a secure fit and allows for quick and easy removal. As the RHINOGUARD™ fabric provides liquid protection the sleeve is ideal for glass handling, metal forming, waste management and recycling.

Features & Benefits

- ISO 13997 level 5 cut resistance (level E cut resistance under EN388: 2016. Certification in progress)
- Rhino Yarn™ cut resistant technology
- EN388 level 4 puncture resistance
- ASTM F2878-10 hypodermic needle test: 5.7 Newtons
- Arm guard has 2 velcro straps for an adjustable fit
- Liquid protection
- The fire resistant properties of RHINOGUARD™ will not diminish with multiple laundering cycles
- RHINOGUARD™ fabric is stable in exposure to temperatures of up to 200°f

Applications / Industries

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

Performance

EN388: 2003

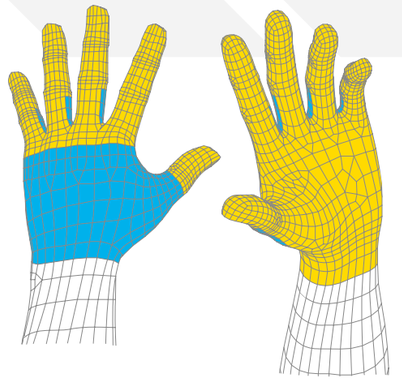
4544

Code	Description	Gauge	Colour	Cuff Style	Length	Sizes	Packaging
49-5410	Rhinoguard™ arm guard	N/A	Grey	N/A	9"	one size	Packed per piece 10 pieces/carton
49-5411	Rhinoguard™ 19" sleeve	N/A	Grey	N/A	19"	one size	Packed per piece 10 pieces/carton

49-6220

Rhinoguard™ mechanics glove

The RHINOGUARD™ mechanics glove delivers cut, abrasion, puncture and needle resistance in a powerful combination of mechanical protection for extreme working conditions. The areas of the glove with RHINOGUARD™ inside include the palm, fingers, finger crotches and fingertips to ensure the most exposed regions to hazards have full protection coverage.



Level 5 cut resistance (to ISO 13997) + Rhinoguard™ cut, puncture and needlestick protection.

Level 5 cut resistance (to ISO 13997)

Features & Benefits

- ISO 13997 level 5 cut resistance (level E cut resistance under EN388: 2016. Certification in progress)
- Rhino Yarn™ cut resistant technology
- EN388 level 4 puncture resistance
- ASTM F2878-10 hypodermic needle test: 5.7 Newtons
- Leather reinforcement for high action areas
- Rubber pull tab for quick donning and doffing
- Neoprene expandable wrist for safety and comfort

Applications / Industries

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

Performance

EN388: 2003

4544

Code	Description	Gauge	Colour	Cuff Style	Length	Sizes	Packaging
49-6220	Mechanics glove with Rhinoguard™	N/A	Grey	Neoprene	230 - 270mm	7/S - 11/2XL	Packed per pair 36 pairs/carton

FOOD-SAFE Cut Resistant Gloves

The Tilsatec range of antimicrobial, cut resistant food gloves are designed specifically for the food industry. Fully launderable, the antimicrobial properties are engineered to last the lifetime of the gloves and there is a weight and style to suit most food preparation applications where cut resistance is required.

405B

Lightweight antimicrobial cut resistant food glove

Features & Benefits

- Rhino Yarn™ cut resistant technology
- ISO 13997 level 5 cut resistance (level E cut resistance under EN388: 2016. Certification in progress)
- Permanent anti-microbial component
- May be washed at up to 92°C
- Colour coded to prevent cross contamination
- Extended cuff for added protection
- Designed for knife hand use
- Ambidextrous

Applications / Industries

- Vegetable preparation
- Food packaging and processing
- Light duty meat carving and slicing
- Butchery

Performance

EN388: 2003 — 2 5 4 X

EN407: 2004 — X 1 X X X X

CE

Antistatic according to the requirements of EN 1149-5 : 2008 using EN 1149-3 : 2004 induction charging test method.

RHINOYARN®

Tilsatec antimicrobial food gloves do not contain any glass materials which may fibrillate and break off when in contact with food stuffs. Gloves are suitable for contact with all food stuffs in compliance with EC Regulation 1935/2004.

Code	Description	Gauge	Colour	Cuff Style	Length	Sizes	Packaging
405B	Lightweight cut resistant food glove	10gg	Blue	Knit wrist	255-305mm	6/XS - 11/2XL	6 pieces/polybag 216 pieces/carton

407B

Medium weight antimicrobial cut resistant food glove

Features & Benefits

- Rhino Yarn™ cut resistant technology
- ISO 13997 level 5 cut resistance (level F cut resistance under EN388: 2016. Certification in progress)
- Permanent anti-microbial component
- May be washed at up to 92°C
- Colour coded to prevent cross contamination
- Extended cuff for added protection
- Designed for knife hand use
- Ambidextrous

Applications / Industries

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

Performance

EN388: 2003 — 4 5 4 X

EN407: 2004 — X 1 X X X X

CE

Antistatic according to the requirements of EN 1149-5 : 2008 using EN 1149-3 : 2004 induction charging test method.

RHINOYARN®

Code	Description	Gauge	Colour	Cuff Style	Length	Sizes	Packaging
407B	Medium weight cut resistant food glove	10gg	Blue	Knit wrist	255-305mm	6/XS - 11/2XL	6 pieces/polybag 144 pieces/carton

410B

Heavyweight antimicrobial cut resistant food glove

Features & Benefits

- Rhino Yarn™ cut resistant technology
- ISO 13997 level 5 cut resistance (level F cut resistance under EN388: 2016. Certification in progress)
- Permanent anti-microbial component
- May be washed at up to 92°C
- Colour coded to prevent cross contamination
- Extended cuff for added protection
- Designed for knife hand use
- Ambidextrous

Applications / Industries

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

Performance

EN388: 2003 — 2 5 4 X

EN407: 2004 — X 1 X X X X

CE

Antistatic according to the requirements of EN 1149-5 : 2008 using EN 1149-3 : 2004 induction charging test method.

RHINOYARN®

Tilsatec antimicrobial food gloves do not contain any glass materials which may fibrillate and break off when in contact with food stuffs. Gloves are suitable for contact with all food stuffs in compliance with EC Regulation 1935/2004.

Code	Description	Gauge	Colour	Cuff Style	Length	Sizes	Packaging
410B	Heavy weight cut resistant food glove	7gg	Blue	Knit wrist	255-305mm	6/XS - 11/2XL	6 pieces/polybag 144 pieces/carton

KNITTED / LEATHER Cut Resistant Gloves

Our range of knitted and leather gloves offer a number of weights and styles, leather configurations and palm coverings to provide enhanced abrasion resistance, grip and puncture protection.

33-5620 / 33-5610

Medium duty cut resistant liner glove
Medium duty cut resistant PVC dot grip glove

Features & Benefits

- ISO 13997 level 5 cut resistance
- Rhino Yarn™ cut resistant technology
- High comfort and dexterity
- Ideal as an under glove with a disposable over
- Available with a pvc dot pattern to the palm for enhanced grip
- Antistatic to EN1149-5: 2008

Applications / Industries

- Light assembly
- Metal fabrication
- Aerospace
- White goods manufacturing
- Logistics

Performance

EN388: 2003 — 2 5 4 X
EN407: 2004 — X 1 X X X X

CE

Antistatic according to the requirements of EN 1149-5 : 2008 using EN 1149-3 : 2004 induction charging test method.

RHINOYARN®

Code	Description	Gauge	Colour	Cuff Style	Length	Sizes	Packaging
33-5620	Medium duty cut resistant liner glove	13gg	green liner	Knit wrist	230-270mm	7/S - 11/2XL	12 pairs/polybag 108 pairs/carton
33-5610	Medium duty cut resistant pvc dot grip glove	13gg	green liner	Knit wrist	230-270mm	7/S - 11/2XL	12 pairs/polybag 108 pairs/carton

37-5622

Medium duty cut resistant 'loop out' glove with thumb reinforcement

Features & Benefits

- Rhino Yarn™ cut resistant technology
- ISO 13997 level 5 cut resistance
- Loop out construction for extra comfort and durability
- Reinforced thumb crotch
- Ambidextrous

Applications / Industries

- Assembly
- Automotive industry
- Metal fabrication / stamping

Performance

EN388: 2003 — 2 5 3 X

CE

RHINOYARN®

11-3328

Hot end gauntlet glove

Features & Benefits

- EN407 contact heat level 2
- Rhino Yarn™ cut resistant technology
- EN388 level 3 cut resistance
- Loop pile knitted glove section for improved thermal protection and cushioning from repeated handling
- Extended gauntlet style cuff provides forearm protection
- Black colour hides dirt, extending life of the glove
- Ambidextrous

Applications / Industries

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

Performance

EN388: 2003 — 2 3 2 2
EN407: 2004 — X 2 X X X X

CE

RHINOYARN®

Code	Description	Gauge	Colour	Cuff Style	Length	Sizes	Packaging
11-3328	Hot end gauntlet glove	7gg	Black glove White cuff	Canvas gauntlet	420-440mm	8/M - 10/XL	12 pairs/polybag 36 pairs/carton

37-5620

Medium duty cut resistant aramid knit glove

Features & Benefits

- EN388 level 3 cut resistance
- Rhino Yarn™ cut resistant technology
- Good level of abrasion resistance
- Durable and long lasting
- EN407 burning behaviour level 4
- EN407 contact heat level 2 protection
- Reinforced thumb crotch for high action areas
- Can be repeat laundered extending product life

Applications / Industries

- Assembly
- Automotive industry
- Metal fabrication / stamping

Performance

EN388: 2003 — 1 3 4 X

EN407: 2004 — 4 2 X X X X

CE

RHINOYARN®

Code	Description	Gauge	Colour	Cuff Style	Length	Sizes	Packaging
37-3520	Medium duty cut resistant aramid knit glove	7gg	yellow	Knit wrist	240-260mm	8/M - 10/XL	12 pairs/polybag 96 pairs/carton

37-4523

Heavy duty cut resistant aramid knit glove

Features & Benefits

- ISO 13997 level 4 cut resistance
- Rhino Yarn™ cut resistant technology
- Durable and long lasting
- EN407 burning behaviour level 4
- EN407 contact heat level 1 protection
- Reinforced thumb crotch for high action areas
- Can be repeat laundered extending product life

Applications / Industries

- Assembly
- Automotive industry
- Metal fabrication / stamping

Performance

EN388: 2003 — 1 4 4 X

EN407: 2004 — 4 1 X X X X

CE

RHINOYARN®

Code	Description	Gauge	Colour	Cuff Style	Length	Sizes	Packaging
37-4523	Heavy duty cut resistant aramid knit glove	7gg	yellow	Knit wrist	240-260mm	8/M - 10/XL	12 pairs/polybag 96 pairs/carton

37-4528

X-Heavy duty cut resistant aramid knit glove

Features & Benefits

- ISO 13997 level 4 cut resistance
- Rhino Yarn™ cut resistant technology
- Durable and long lasting
- EN407 burning behaviour level 4
- EN407 contact heat level 1 protection
- Reinforced thumb crotch for high action areas
- Can be repeat laundered extending product life

Applications / Industries

- Assembly
- Automotive industry
- Metal fabrication / stamping

Performance

EN388: 2003 — 1 4 4 X

EN407: 2004 — 4 1 X X X X

CE

RHINOYARN®

Code	Description	Gauge	Colour	Cuff Style	Length	Sizes	Packaging
37-4528	X-Heavy cut resistant aramid knit glove	7gg	yellow	Knit wrist	240-270mm	8/M - 11/2XL	12 pairs/polybag 96 pairs/carton

84-3106

6” cut resistant aramid knit cuff

Features & Benefits

- EN388 level 3 cut resistance
- Rhino Yarn™ cut resistant technology
- Good level of abrasion resistance
- Durable and long lasting
- EN407 burning behaviour level 4
- EN407 contact heat level 2 protection
- Can be repeat laundered extending product life

Applications / Industries

- Assembly
- Automotive industry
- Metal fabrication / stamping

Performance

EN388: 2003 — 1 3 4 X

EN407: 2004 — 4 2 X X X X

CE

RHINOYARN®

Code	Description	Gauge	Colour	Cuff Style	Length	Sizes	Packaging
84-3106	6” cut resistant aramid cuff	7gg	yellow	Knit wrist	6”	one size	Packed per piece 216 pieces/carton

37-6620

Medium duty cut resistant glove

Features & Benefits

- ISO 13997 level 5 cut resistance
- Rhino Yarn™ cut resistant technology
- Soft, comfortable seamless liner with good dexterity
- Reinforced thumb crotch for high action area
- Suitable for industrial laundering to extend product life
- Also available with a pvc dot pattern to the palm for enhanced grip
- Antistatic to EN1149-5: 2008

Applications / Industries

- Assembly
- Metal fabrication
- Glass industry
- Logistics

Performance

EN388: 2003 — 2 5 4 X

EN407: 2004 — X 1 X X X X

Antistatic according to the requirements of EN 1149-5 : 2008 using EN 1149-3 : 2004 induction charging test method.

Code	Description	Gauge	Colour	Cuff Style	Length	Sizes	Packaging
37-6620	Medium duty cut resistant glove	7gg	yellow/grey liner	Knit wrist	230-260mm	7/S - 10/XL	12 pairs/polybag 96 pairs/carton

204

Medium duty FR backed cut resistant leather glove

Features & Benefits

- ISO 13997 level 5 cut resistance
- Rhino Yarn™ cut resistant technology
- EN407 contact heat level 1
- EN388 Level 3 puncture resistance
- Leather palm provides oil resistance and good grip
- Flame resistant fabric provides protection from weld spatter to the back of the hand

Applications / Industries

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

Performance

EN388: 2003 — 4 5 4 3

EN407: 2004 — X 1 X X X X

Antistatic according to the requirements of EN 1149-5 : 2008 using EN 1149-3 : 2004 induction charging test method.

Code	Description	Gauge	Colour	Cuff Style	Length	Sizes	Packaging
204	Medium duty FR backed cut resistant leather glove	7gg	Yellow fabric Grey palm	Knit wrist	230-270mm	7/S - 11/2XL	12 pairs/polybag 72 pairs/carton

37-5630

Medium duty cut resistant leather palm glove

Features & Benefits

- ISO 13997 level 5 cut resistance
- Rhino Yarn™ cut resistant technology
- EN388 level 4 abrasion resistance
- EN388 Level 3 puncture resistance
- Leather palm suitable for oily and dry handling
- Enhanced protection to finger tips from extended leather palm
- Reinforced thumb crotch

Applications / Industries

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

Performance

EN388: 2003 — 4 5 4 3

EN407: 2004 — X 1 X X X X

Antistatic according to the requirements of EN 1149-5 : 2008 using EN 1149-3 : 2004 induction charging test method.

Code	Description	Gauge	Colour	Cuff Style	Length	Sizes	Packaging
37-5630	Medium duty cut resistant leather palm glove	7gg	Grey liner Grey palm	Knit wrist	225-270mm	7/S - 11/2XL	12 pairs/polybag 72 pairs/carton

33-5631

Light weight FR backed cut resistant leather glove

Features & Benefits

- ISO 13997 level 5 cut resistance
- Rhino Yarn™ cut resistant technology
- EN407 contact heat level 1
- EN388 Level 3 puncture resistance
- Leather palm provides oil resistance and good grip
- Flame resistant fabric provides protection from weld spatter to the back of the hand

Applications / Industries

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

Performance

EN388: 2003 — 4 5 4 3

EN407: 2004 — X 1 X X X X

Antistatic according to the requirements of EN 1149-5 : 2008 using EN 1149-3 : 2004 induction charging test method.

Code	Description	Gauge	Colour	Cuff Style	Length	Sizes	Packaging
33-5631	Lightweight FR backed cut resistant leather glove	13gg	Black fabric Grey palm	Knit wrist	230-270mm	7/S - 11/2XL	12 pairs/polybag 72 pairs/carton

Arm & Body Protection

Many industrial applications such as metal stamping and glass handling require additional protection to the wrist, arm and torso. The Tilsatec range incorporates solutions in various lengths and styles to protect all of these areas.

81-5221 NEW

21” cut resistant sleeve with comfort cuff and velcro upper arm

Features & Benefits

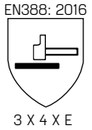
- EN388: 2016 level E cut resistance
- Rhino Yarn™ cut resistant technology
- EN407 contact heat level 1
  Velcro top fastening for adjustable secure fit
- Also available in 18” length and in various finishes and fastenings to the upper arm (M00’s apply).

Applications / Industries

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

Performance

EN388: 2016



3 X 4 X E

EN407: 2004

X 1 X X X X

CE

RHINOYARN

Code	Description	Gauge	Colour	Cuff Style	Length	Sizes	Packaging
81-5221	21” cut resistant sleeve with comfort cuff and velcro upper arm	7gg	Black knit Black cuff	Comfort cuff	21”	One Size	Packed per piece 100 pieces/carton
81-5118	18” cut resistant sleeve with comfort cuff and velcro upper arm	7gg	Black knit Black cuff	Comfort cuff	18”	One size	Packed per piece 100 pieces/carton

001

Seamless knitted cut resistant sweatshirt

The 001 sweatshirt is a highly cut resistant garment designed to protect workers in industries such as glass manufacturing, metal fabrication, automotive manufacturing and waste recycling.

The advanced garment design is developed using the latest in cutting edge technology and manufacturing techniques. Soft and lightweight, the fabric has a ‘cool to the touch feel’ and the inclusion of under arm vents ensures maximum wearer comfort. Fully washable at up to 60°C with no impairment to the cut resistant properties.

Features & Benefits

- ISO 13997 level 5 cut resistance
- Rhino Yarn™ cut resistant technology
- Seamless knitted construction for ease of movement
- Full body protection covering major arteries and key vulnerable areas
- Cool touch, lightweight fabric provides maximum user comfort
- High neck design allows safe handling of sheet materials
- Underarm vents for enhanced breathability
- Easy care - may be washed at up to 60°C and tumble dried

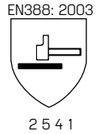
Size	To fit chest	Length
S	86CM /34”	73CM
M	92CM / 36”	74CM
L	102CM / 40”	75CM
XL	112CM / 44”	75CM
2XL	122CM 48”	76CM

Applications / Industries

- Glass industry
- Handling raw glass
- Cutting stations
- Automotive industry
- Metal fabrication / stamping

Performance

EN388: 2003



2 5 4 1

CE

RHINOYARN

Code	Description	Gauge	Colour	Cuff Style	Length	Sizes	Packaging
001	Seamless knitted cut resistant sweatshirt	N/A	Grey	Knit wrist w/ thumb slot	See size chart	S - 2XL	Packed per piece

85-5218 NEW

21” FR cut resistant sleeve with thumb slot

Features & Benefits

- ISO 13997 level 5 cut resistance
- Rhino Yarn™ cut resistant technology
- Inherently flame resistant
- Velcro top fastening for adjustable secure fit
- Thumb slot to keep sleeve in place
- Various finishes and fixings available on request

Applications / Industries

- Automotive industry
- Metal fabrication / stamping
- Manufacturing

Performance

EN388: 2003

1 5 4 X

EN407: 2004

2 1 X X X X

CE

Code	Description	Gauge	Colour	Cuff Style	Length	Sizes	Packaging
85-5221	21” FR cut resistant sleeve with thumb slot	N/A	Green	Knit wrist w/ thumb slot	21”	one size	Packed per piece 100 pieces/carton
85-5218	18” FR cut resistant sleeve with thumb slot	n/A	Green	Knit wrist w/ thumb slot	18”	one size	Packed per piece 100 pieces/carton

84-3420

20” FR cut resistant sleeve

Features & Benefits

- EN388 level 3 cut resistance
- Rhino Yarn™ cut resistant technology
- Lightweight and loose fitting
- Inherently flame resistant
- EN407 burning behaviour level 3
- Velcro top fastening for adjustable secure fit
- Thumb slot to keep sleeve in place
- Available with a liner for enhanced comfort

Applications / Industries

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

Performance

EN388: 2003

1 3 4 1

EN407: 2004

3 1 X X 2 X

CE

Code	Description	Gauge	Colour	Cuff Style	Length	Sizes	Packaging
84-3420	20” FR cut resistant sleeve	N/A	Yellow	Knit wrist w/ thumb slot	20”	one size	Packed per piece 100 pieces/carton

85-5110
85-5114
85-5118
85-5121

10/14/18/21” cut resistant knitted sleeve with thumb slot

The 85-51 family of seamless knitted tubular sleeves provide ISO 13997 level 5 cut protection. The smooth finish provides enhanced wearer comfort and ease of movement and a thumb slot keeps the sleeve firmly in place and an elasticated top prevents the sleeve from falling down the arm.

Features & Benefits

- ISO 13997 level 5 cut resistance
- Rhino Yarn™ cut resistant technology
- Seamless knit with a smooth finish
- Tubular close fitting shape for maximum dexterity
- Thumb slot to keep sleeve in place
- Various finishes and fixings available on request
- Elasticated top to prevent sleeve falling down

Applications / Industries

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

Performance

EN388: 2003

1 5 3 X

EN407: 2004

X 1 X X X X

CE

Code	Description	Gauge	Colour	Cuff Style	Length	Sizes	Packaging
85-5110	10” cut resistant knitted sleeve with thumb slot	N/A	Green	Knit wrist w/ thumb slot	10”	one size	Packed per piece 100 pieces/carton
85-5114	14” cut resistant knitted sleeve with thumb slot	N/A	Green	Knit wrist w/ thumb slot	14”	one size	Packed per piece 100 pieces/carton
85-5118	18” cut resistant knitted sleeve with thumb slot	N/A	Green	Knit wrist w/ thumb slot	18”	one size	Packed per piece 100 pieces/carton
85-5121	21” cut resistant knitted sleeve with thumb slot	N/A	Green	Knit wrist w/ thumb slot	21”	one size	Packed per piece 100 pieces/carton

420B

Lightweight antimicrobial cut resistant food sleeve

Features & Benefits

- ISO 13997 level 5 cut resistance (level E cut resistance under EN388: 2016. Certification in progress)
- Permanent anti-microbial component
- Low linting to prevent product contamination
- May be washed at up to 92°C
- Designed for use with a Tilsatec food glove
- Thumb slot for a secure fit
- Elasticated top to keep sleeve in place

Applications / Industries

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

Performance

EN388: 2003 — 2 5 4 X

EN407: 2004 — X 1 X X X X

Antistatic according to the requirements of EN 1149-5 : 2008 using EN 1149-3 : 2004 induction charging test method.

RHINOYARN®

Tilsatec antimicrobial food sleeves do not contain any glass materials which may fibrillate and break off when in contact with food stuffs. Sleeves are suitable for contact with all food stuffs in compliance with EC Regulation 1935/2004.

Code	Description	Gauge	Colour	Cuff Style	Length	Sizes	Packaging
420B	Lightweight cut resistant food sleeve	10gg	Blue	Knit wrist w/ thumb slot	20”	one size	Packed per piece 100 pieces/carton

89-5606

8” wrist guard with velcro straps

Features & Benefits

- ISO 13997 level 5 cut resistance
- Rhino Yarn™ cut resistant technology
- EN388 level 4 puncture resistance
- Protects the wrist and lower arm
- Adjustable sizing for accurate fit and wearer comfort
- Dark colour hides dirt
- Will not mark glass panels

Applications / Industries

- Glass industry
- Metal fabrication / stamping
- Manufacturing
- Waste management

Performance

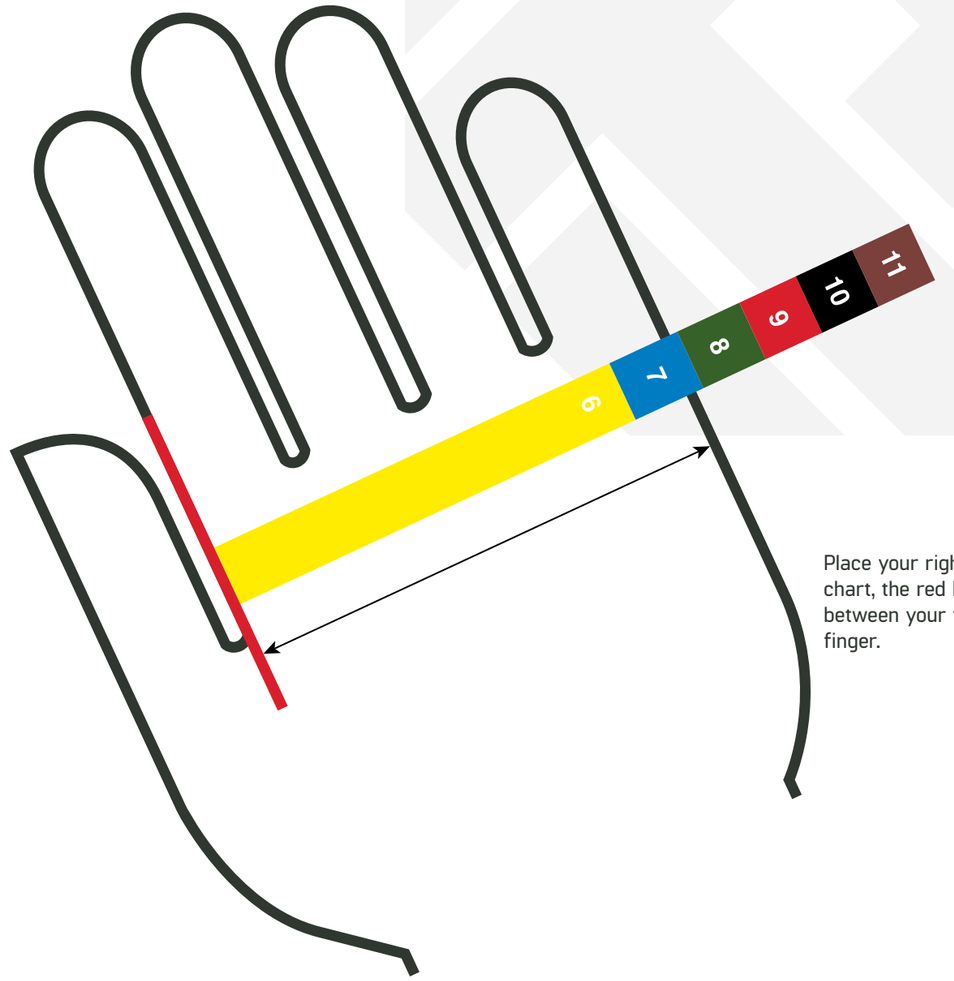
EN388: 2003 — X 5 X 4

RHINOYARN®

Code	Description	Gauge	Colour	Cuff Style	Length	Sizes	Packaging
89-5606	8” cut resistant wrist guard with velcro strap	N/A	Black w/black straps	N/A	8”	one size	Packed per pair 10 pairs/carton

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.



Place your right hand on the chart, the red line should sit between your thumb and index finger.

Sizes are identified by the following cuff colours:

Size	6 X-Small	7 Small	8 Medium	9 Large	10 X-Large	11 XX-Large
Colour coded cuff						

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

TILSATEC LIMITED
Flanshaw Lane, Wakefield
West Yorkshire, WF2 9ND
England

Tel: +44 1924 375742
Email: info@tilsatec.com
www.tilsatec.com