

# KOZANE® PROTECTIVE GARMENTS



**GRANBERG®**  
FEARLESS PERFORMANCE

## ABOUT GRANBERG

With more than 60 years of experience protecting workers in challenging Norwegian climate conditions, Granberg has been producing and selling work gloves in many parts of the world.

We are a proud and well-established company with a worldwide client base and a continued focus on product design and product development for customer satisfaction. Since 1961, our mission has been to offer the correct hand protection through customer proximity, responsiveness, knowledge, and technological innovation.

Today, we have a selection of over 200 types of safety gloves, designed to protect workers in various industries, including food processing and medical fields.

We have helped inspire and provide protection in workplaces in the manufacturing industry, in the private sector and the public sector. Our products are engineered, designed, and manufactured using the latest technology and the most advanced materials.

All of this made it possible to recruit the best talents and develop the strongest brands in the industry. Patented materials, products, and innovative solutions that best serve our customers are what we are and who we are.

**Granberg's research and development team are the creators behind the Kozane® range of high-performance fabrics.**

Our core range has been carefully selected from over 50 fabrics – technical fibres with cut, abrasion, puncture, heat, and tear properties combined with unique knitting technologies – to offer solutions to different sectors where cuts and lacerations pose a risk to human life.

Kozane® fabrics cover a wide range of applications, including:

- Cut-resistant lining for gloves.
- Cut-resistant body armour covers.
- Slash-resistant clothing for prison officers, police and army forces, private security personnel etc.
- Anti-theft bags, luggage, and upholstery
- Motorcycle, outdoor or sports apparel
- Cut-resistant clothing and PPE for numerous manufacturing industries (sheet glass, flat metal, automobile).
- Cut and liquid-resistant PPE for food processing and packaging.

**GRANBERG**<sup>®</sup>  
FEARLESS PERFORMANCE

## VISION

To lead the way towards a future with zero hand injuries.

## MISSION

We spread knowledge to raise awareness of the importance of correct hand protection. We combine our expertise with an innovative mindset to develop products that exceed our customers' complex safety requirements.

## GRANBERG'S CORE VALUES



### HONESTY

We are proud of who we are and the products we produce. Our confidence allows us to be open and transparent in all our decisions.

This is how we gain trust of our customers, and manage to create healthy, long-lasting relationships.



### PASSION

At Granberg, we are genuinely passionate about what we do: helping people feel safe.

This driving force keeps us up to date, motivating us always to learn more and keep developing.



### COURAGE

At Granberg, we would rather try and fail than risk becoming stagnant.

With a courageous mindset, we are not afraid to explore uncharted ways to find new, better solutions that lead the industry forward.



### EXPERTISE

With more than 60 active years in the industry, we collectively have the expertise to deliver high-quality products consistently — developed to perform optimally in every situation.

## ABOUT KOZANE®

Our motivation to lead the industry forward, and thirst to find unconventional solutions and positively impact the world around us, has led to establishing a dedicated R&D centre in 2017.

Thanks to a carefully selected team of textile specialists and engineers, our testing and R&D centre creates unique high-performance fabrics, breaking barriers in the protective fabrics industry and expanding the company's interests outside the glove sector.

The Kozane® range of high-performance cut-resistant fabrics offers industry-leading protection wherever needed, delivering flexible, lightweight, and breathable protection that truly performs. Their unique composition and outstanding performance make them suitable for various applications, including personal protective equipment (PPE) for the military, security and law enforcement, industry, health and social care, special education, extreme sports and more.

## ABOUT KOZANE® EXTREME

Kozane® Extreme offers the optimum cut resistance and wearability combination, weighing only 375 gr/m<sup>2</sup>. The unique three-dimensional knitted fabric combines a high-performance top layer with a soft polyester bottom layer for optimum comfort and protection.

Offering the highest possible cut, tear, and puncture protection according to the EN388:2016 standard, personal protective equipment made from Kozane® Extreme can effectively prevent severe cuts and lacerations.

Kozane® Extreme is stronger than traditional aramid fibres, such as Kevlar, Twaron and Nomex. It continues to perform even when wet or exposed to ultraviolet light. It is also very comfortable against the skin, making it perfect for cut-resistant garments in high-risk industries.

## KOZANE® EXTREME PERFORMANCE RATINGS

EN 388:2016 **Abrasion** resistance



EN 388:2016 **Tear** resistance



EN 388:2016 **Puncture** resistance



EN 388:2016 **Straight blade Cut** resistance (EN ISO 13997:1999)



ANSI ASTM F2992-15 (Cut Score: 5,215 grams)



## IMPORTANT INFORMATION

- Do not use Kozane® products for protection from high-speed or serrated blades.
- Do not use Kozane® products near moving machines or where there is a risk of entanglement.
- Kozane® products are designed to minimise the risk of injury from potential hazards in the industrial workspace (abrasions, cuts, tears, and punctures).
- Kozane® products are only used for the designated purpose; no item of PPE can provide full protection.
- Kozane® products are not designed to protect the hands; gloves must be worn when required.
- Kozane® products do not protect from hypodermic needles or similar sharp pointed objects.
- Care and attention must always be taken when carrying out potentially hazardous activities in the workspace.
- Kozane® Extreme is a high-performance cut-resistant fabric, however it is not cut-proof.



**kozane**<sup>®</sup>  
BY GRANBERG

# KOZANE 707-19



## CUT-RESISTANT HI-VIS SWEATER

Designed to offer the highest possible cut resistance in combination with breathability and comfort, as well as high visibility for extra protection.

The protective areas are on the neck, arms, shoulders, abdomen, and chest.

Featuring thumb loops, a breathable, durable mesh on the back and a 1/4 zip.

### SIZES

S – 3XL

### COLOURS

Black and fluorescent yellow.

ART. 707-19

Manufactured using our Kozane® Extreme high-performance fabric, offering the optimum combination between outstanding levels of protection and comfortability.

Featuring high levels of cut, puncture, abrasion, and tear resistance as well as being the most lightweight high-performance fabric of its class.

### Suitable for:

- Glass handling and manufacturing
- Paper/Pulp processing
- Industrial manufacturing
- Automotive
- Building and Construction
- Recycling
- Mining

| Standard  | Level     |
|---|-----------|
| EN388:2016  |           |
| <b>Abrasion</b> resistance                              | <b>3</b>  |
| <b>Circular blade cut</b> resistance                    | <b>X</b>  |
| <b>Tear</b> resistance                                  | <b>4</b>  |
| <b>Puncture</b> resistance                              | <b>4</b>  |
| <b>Straight blade Cut</b> resistance (EN ISO 3997:1999) | <b>F</b>  |
| ANSI ASTM F2992-15                                      | <b>A8</b> |

### CARE INSTRUCTIONS



Tumble dry at max 40 °C.



# KOZANE 707-08



## CUT-RESISTANT SHIRT

Designed to offer the highest cut resistance on the arms in combination with breathability and comfort for the body provided by a lightweight, yellow woven fabric.

Suitable for work environments with a risk of cuts and lacerations to the arms, featuring a 1/4 zip and thumb loops.

### SIZES

S – 3XL

### COLOURS

Fluorescent yellow and black.

ART. **707-08**

Manufactured using our Kozane® Extreme high-performance fabric, offering the optimum combination between outstanding levels of protection and comfortability.

It features high cut, puncture, abrasion, and tear resistance levels and is the most lightweight, high-performance fabric of its class.

### Suitable for:

- Glass handling and manufacturing
- Paper/Pulp processing
- Industrial manufacturing
- Automotive
- Building and Construction
- Recycling
- Mining

| Standard  | Level     |
|---|-----------|
| EN388:2016  |           |
| <b>Abrasion resistance</b>                              | <b>3</b>  |
| <b>Circular blade cut resistance</b>                    | <b>X</b>  |
| <b>Tear resistance</b>                                  | <b>4</b>  |
| <b>Puncture resistance</b>                              | <b>4</b>  |
| <b>Straight blade Cut resistance (EN ISO 3997:1999)</b> | <b>F</b>  |
| ANSI ASTM F2992-15                                      | <b>A8</b> |

### CARE INSTRUCTIONS



Tumble dry at max 40 °C.



# KOZANE 707-09



## CUT-RESISTANT SHIRT WITH BELLY PATCH

Designed to offer the highest cut resistance on the arms and abdomen in combination with breathability and comfort for the body provided by a lightweight, yellow woven fabric.

Suitable for work environments where there is a risk of cuts and lacerations to the arms and the stomach area, featuring a 1/4 zip and thumb loops.

### SIZES

S – 3XL

### COLOURS

Fluorescent yellow and black.

ART. 707-09

Manufactured using our Kozane® Extreme high-performance fabric, offering the optimum combination between outstanding levels of protection and comfortability.

It features high cut, puncture, abrasion, and tear resistance levels and is the most lightweight, high-performance fabric of its class.

### Suitable for:

- Glass handling and manufacturing
- Paper/Pulp processing
- Industrial manufacturing
- Automotive
- Building and Construction
- Recycling
- Mining

| Standard  | Level     |
|---|-----------|
| EN388:2016  |           |
| <b>Abrasion resistance</b>                              | <b>3</b>  |
| <b>Circular blade cut resistance</b>                    | <b>X</b>  |
| <b>Tear resistance</b>                                  | <b>4</b>  |
| <b>Puncture resistance</b>                              | <b>4</b>  |
| <b>Straight blade Cut resistance (EN ISO 3997:1999)</b> | <b>F</b>  |
| ANSI ASTM F2992-15                                      | <b>A8</b> |

### CARE INSTRUCTIONS



Tumble dry at max 40 °C.



# KOZANE 707-11



## CUT-RESISTANT JACKET

Offering maximum protection on the front upper thigh area, arms, neck, shoulders, abdomen, and chest.

Featuring a full zip, a breathable back for extra comfort offered by a durable mesh, and two front pockets.

Ideal for use when handling and carrying sharp objects, machine parts, blades, and tools, suitable for equipment and machinery maintenance tasks.

### SIZES

S – 3XL

### COLOURS

Black and fluorescent yellow.

ART. 707-11

Manufactured using our Kozane® Extreme high-performance fabric, offering the optimum combination between outstanding levels of protection and comfortability.

Featuring high levels of cut, puncture, abrasion, and tear resistance as well as being the most lightweight high-performance fabric of its class.

### Suitable for:

- Forestry
- Glass handling and manufacturing
- Paper/Pulp processing
- Industrial manufacturing
- Automotive
- Building and Construction
- Recycling
- Mining

| Standard  | Level     |
|---|-----------|
| EN388:2016  |           |
| <b>Abrasion resistance</b>                              | <b>3</b>  |
| <b>Circular blade cut resistance</b>                    | <b>X</b>  |
| <b>Tear resistance</b>                                  | <b>4</b>  |
| <b>Puncture resistance</b>                              | <b>4</b>  |
| <b>Straight blade Cut resistance (EN ISO 3997:1999)</b> | <b>F</b>  |
| ANSI ASTM F2992-15                                      | <b>A8</b> |

### CARE INSTRUCTIONS



Tumble dry at max 40 °C.



# KOZANE 705-12



## SLASH-RESISTANT HI-VIS VEST

A tactical, high-visibility vest offering slash and puncture resistance.

The vest features reflective tape on the front and back and on the main pockets, a full front zip, Velcro on the shoulders and sides for size adjustment, straps for epaulets on the shoulders, five removable pockets for phone, flashlight, ID card, radio etc.

There is a "Security" badge on the back and front, attached with Velcro which can be personalised.

### SIZES

XS – 3XL

### COLOURS

Fluorescent yellow.

ART. 705-12

Manufactured using our Kozane® Original Double-Sided high-performance fabric, featuring the highest levels of cut, puncture, abrasion, and tear resistance.

### Suitable for:

- Private security
- Army
- Police
- Prisons and Corrections
- Border Agency
- Parking enforcement

| Standard  | Level |
|---|-------|
| EN388:2016  |       |
| <b>Abrasion</b> resistance                              | 4     |
| <b>Circular blade cut</b> resistance                    | X     |
| <b>Tear</b> resistance                                  | 4     |
| <b>Puncture</b> resistance                              | 4     |
| <b>Straight blade Cut</b> resistance (EN ISO 3997:1999) | F     |
| ANSI ASTM F2992-15                                      | A7    |

### CARE INSTRUCTIONS





# KOZANE 702-12



## CUT-RESISTANT LONG APRON

Offering maximum protection on the front upper thigh area, abdomen, and chest.

Featuring adjustable straps for a great fit and increased comfort.

### SIZES

One Size

### COLOURS

Black.

ART. 702-12

Manufactured using our Kozane® Extreme high-performance fabric, offering the optimum combination between outstanding levels of protection and comfortability.

Featuring high levels of cut, puncture, abrasion, and tear resistance as well as being the most lightweight high-performance fabric of its class.

### Suitable for:

- Glass handling and manufacturing
- Paper/Pulp processing
- Industrial manufacturing
- Automotive
- Recycling

| Standard  | Level     |
|---|-----------|
| EN388:2016  |           |
| <b>Abrasion</b> resistance                              | <b>3</b>  |
| <b>Circular blade cut</b> resistance                    | <b>X</b>  |
| <b>Tear</b> resistance                                  | <b>4</b>  |
| <b>Puncture</b> resistance                              | <b>4</b>  |
| <b>Straight blade Cut</b> resistance (EN ISO 3997:1999) | <b>F</b>  |
| ANSI ASTM F2992-15                                      | <b>A8</b> |

### CARE INSTRUCTIONS



Tumble dry at max 40 °C.



# KOZANE 702-13



## CUT-RESISTANT SHORT APRON

Offering maximum protection on the front upper thigh and abdomen. Featuring adjustable straps for a great fit and increased comfort.

### SIZES

One Size

### COLOURS

Black.

ART. 702-13

Manufactured using our Kozane® Extreme high-performance fabric, offering the optimum combination between outstanding levels of protection and comfortability.

Featuring high levels of cut, puncture, abrasion, and tear resistance as well as being the most lightweight high-performance fabric of its class.

### Suitable for:

- Glass handling and manufacturing
- Paper/Pulp processing
- Industrial manufacturing
- Automotive
- Recycling

| Standard  | Level     |
|---|-----------|
| EN388:2016  |           |
| <b>Abrasion</b> resistance                              | <b>3</b>  |
| <b>Circular blade cut</b> resistance                    | <b>X</b>  |
| <b>Tear</b> resistance                                  | <b>4</b>  |
| <b>Puncture</b> resistance                              | <b>4</b>  |
| <b>Straight blade Cut</b> resistance (EN ISO 3997:1999) | <b>F</b>  |
| ANSI ASTM F2992-15                                      | <b>A8</b> |

### CARE INSTRUCTIONS



Tumble dry at max 40 °C.



# KOZANE 703-21



## CUT-RESISTANT LONG ARMGUARDS

Offering maximum protection on arms.  
Featuring thumb loops and adjustable straps  
for a great fit and increased comfort.

### SIZES

One Size

### COLOURS

Black.

ART. 703-21

Manufactured using our Kozane® Extreme high-performance fabric, offering the optimum combination between outstanding levels of protection and comfortability.

Featuring high levels of cut, puncture, abrasion, and tear resistance as well as being the most lightweight high-performance fabric of its class.

### Suitable for:

- Glass handling and manufacturing
- Paper/Pulp processing
- Industrial manufacturing
- Automotive
- Recycling

| Standard  | Level     |
|---|-----------|
| EN388:2016  |           |
| <b>Abrasion</b> resistance                              | <b>3</b>  |
| <b>Circular blade cut</b> resistance                    | <b>X</b>  |
| <b>Tear</b> resistance                                  | <b>4</b>  |
| <b>Puncture</b> resistance                              | <b>4</b>  |
| <b>Straight blade Cut</b> resistance (EN ISO 3997:1999) | <b>F</b>  |
| ANSI ASTM F2992-15                                      | <b>A8</b> |

### CARE INSTRUCTIONS



Tumble dry at max 40 °C.



**KOZANE® PROTECTIVE GARMENTS**  
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