

# HAND PROTECTION

Safety fits like a glove; try it on !

www.spectrumtechnicals.com

# Spectrum

Spectrum Technical's is a pioneered manufacturer of safety hand gloves and garments The company was established in year 2010 Located in Maharashtra (India). Focused on product innovation and customized product development; Spectrum designs, develops and manufacture glove and garments that enhance the performance of the person in working area and provide required protection.

Spectrum stands on three pillared structure - **Quality, Value** and Service. A complete customized product approach help us to stay connected with the needs at the processes, customers and development needed in future. A spirited and passionate team, which is differentiated by imagination, knowledge and experience is ever ready to offer customer based safety solutions.

> We recognize the importance of nurturing relationships that reflect our culture of unwavering ethics and mutual respect. It will come as no surprise, then, that 90% of our sales revenue comes from existing clients. At spectrum, we believe our responsibilities extend beyond business

## VISION :

We aim to...

Emerge as a largest manufacturer & supplier of protective gloves and garments... Preferred by every industry... Serve with passion... Grow at speed... Innovate with quality... Excel with ethics... Delighting all customers... We are... **Spectrum.** 

## **QUALITY POLICY** :

Our goal is to provide and deliver customers with highest quality products by assuring product's performance, consistency, safety and value. In order to achieve this we are continually improving process, products and service. Meeting and exceeding customer satisfaction at all times.



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## Protecting People at work

Spectrum is a leading manufacturer of hand and body protection products, providing the very best solutions for a wide range of hazards and industry safety application.

# Spectrum gloves are approved for a specific use and meet the following standards:

## EN 420 - General Requirement for Glove

All gloves must comply with EN 420 - General requirements. This general standard regulates the minimum requirements for a glove.

- The requirements can be summarized as follows:
- The construction of the glove and its materials must safe for the user.
- Sizes and measurements of the glove must fulfill the standard norms of hand sizes.
- Ensure that the gloves will be comfortable, will fit, and will not damage the wearer.
- The pH value should be between 3.5 and 9.5 and chromium content should be less than 3 mg / kg.

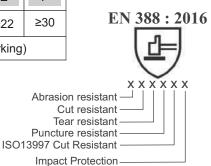


## EN 388 - Protection Against Mechanical Risk

Protection against mechanical risks Tests to determine levels of protection are carried out in accordance with EN 388 by an approved authority. The test results are presented with numbers describing the level of protection.

#### **EN388 - Level Of Performance**

Performance level	1	2	3	4	5	
Abrasion Resistant (Cycles)	≥100	≥500	≥2000	≥8000	-	-
Cut Resistant (Index)	≥1.2	≥2.5	≥5.0	≥10.0	≥20.0	-
Tear Resistant (Newton)	≥10	≥25	≥50	≥75	-	-
Puncture Resistant(Newton)	≥20	≥60	≥100	≥150	-	-
Performance level	А	В	С	D	E	F
ISO13997 Cut Resistant	≥2	≥5	≥10	≥15	≥22	≥30
Impact Protection	Pass (P) or Fail (F) (no marking)					

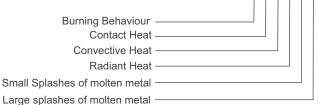


## **EN 407 - Protection Against Thermal Risk**

Tests to determine the level of protection against thermal risks are carried out in six different parts: Resistance to flammability, Resistance to contact heat, Resistance to convective heat, Resistance to radiant heat, Resistance to small splashes of molten metal and Resistance to large splashes of molten metal. The test results are presented with numbers describing the level of protection.

#### EN407 - Level Of Performance

PERFORMANCE LEVEL1234
Burning Behavior
After Flame Time(s) ≤20 ≤10 ≤3 ≤2
After Glow Time(s) ∞ ≤120 ≤25 ≤5
Contact Heat
Contact Temperature(°C) 100 250 350 500
Threshold Time(s) ≥15 ≥15 ≥15 >20
Convective Heat
Heat Transfer Index(s) $\geq 4$ $\geq 7$ $\geq 10$ $\geq 18$
Radiant Heat
Heat Transfer(s) ≥7 ≥20 ≥50 ≥95
Small Splashes of Molten Metal
Number of Droplets $\geq 10$ $\geq 15$ $\geq 25$ $\geq 35$
Large Splashes of Molten Metal
Molten Iron 30 60 120 200



## How to choose right type of glove ?

GLOVES	USES
Cotton	Light duty material handing and cleanup work
Leather	Equipment handling, general construction, heavy cleanup,welding, moderately hot or cold material handling.
Shock absorbing	Operating rotary hammers & other vibrating equipment.
Para Aramid or Steel wire reinforced glove	Work with sheet metal, glass or heavy cutting.
Rubber, nitrile & other synthetic	Chemical gloves must be chosen for the specific chemical being used.
Insulating	Extreme high and low temperature.

## How to choose the correct Size of glove ?

#### The proper size of glove Provide the best protection and performance.

It's better to order gloves in the size you normally wear. Most (but not all gloves are pretty consistent in size from one another, so if you have bought size "Large" in the past, then you'd have a pretty safe bet in ordering a large. If you have no idea what size glove to buy and have no past experience in buying gloves, you can measure your hand. We suggest you use a cloth tape measure like the one shown below. You can get a range of measurements depending upon how much you try to make your hand wide and flat. We get the best fit by using the largest measurement you can get (by making your palm as wide and flat as possible with the thumb sticking straight out). After getting a measurement, use the chart to convert.

ACTUAL HAND MEASUREMENT	SPECTRUM GLOVE SIZE
6"- 6.5"	XS
6.5" - 7.5"	Small
7.5" - 8.5"	Medium
8.5" - 9.5"	Large
9.5" - 10.5"	XL
10.5" - 11"	XXL
11" - 12"	XXXL

# **Evergreen** Daily Work Wear Glove & Arm

Seamless knitted gloves, made of cotton are used in a wide range of applications, from heavy industrial work to assembly and even as liners underneath other gloves. The knit construction provides good dexterity and excellent abrasion resistance, while cotton helps keep the hands dry and comfortable. These gloves are available in different weight & thickness for various requirements & different cuff length depending on application. The Gloves can be offered in 7,10 & 13 Gauge Knitting.

#### **Cotton Knitted Gloves**







COTTON KTD RW 23CM 7G

COTTON KTD RW 23CM 10G

COTTON KTD RW 35CM 10G

- Cotton is a comfortable to skin and gives no irritation during long working hours.
- Cotton wicks away the oils and moisture from your skin to prevent contamination from parts.
- Seamless knit construction and Close to fit.
- Good Abrasion Resistance.
- Breathable, High Comfort & Durable

#### **Poly-Cotton Knitted Gloves**



PC BLUE 23CM 7G



PC MELANGE 23CM 10G



PC BLUE 35CM 10G

- Poly-cotton gloves are made from recycled cotton and polyester fiber yarn.
- Polyester increase strength and hence **enhance abrasion resistance** of glove.
- The dexterity and fitting as good as cotton seamless glove.
- Soft and Comfortable to wear.

### **PVC Dotted Cotton Knitted Gloves**







DOTTED COTTON RW 23CM 7G

DS DOTTED COTTON RW 23CM 7G

DOTTED COTTON RW 23CM 10G

- Used cotton natural fibre is cool and comfortable to wearer in all climates.
- Eliminates irritation despite long period of wear and allows the circulation of air reducing perspiration.
- Seamless knit construction and Close to fit.
- · PVC dots provide extra gripping power and slip resistance
- High Durable
- Soft and comfortable to wear

#### **PVC Dotted Poly-Cotton Knitted Gloves**



DOTTED PC BLUE 23CM 7G



DS DOTTED PC BLUE 23CM 7G

DOTTED PC MIX & MATCH 23CM 10G

- The liner are made up of polyester blended cotton yarns.
- Polyester increase strength and hence enhance abrasion resistance of glove.
- The dexterity and fitting as good as cotton seamless glove.
- PVC Dots on plam ensure perfect grip.
- · Soft and Comfortable to wear.

## **Arm Covers**



Double Layer PC ARM COVER NB 35CM 7G

COTTON KTD ARM COVER RW SL TC 45CM 7G



COTTON KTD ARM COVER RW SL 40CM 7G

- Knit construction allows breathability with less hand fatigue.
- Thumb Hole holds Arm Cover securely in place.
- Seamless pattern increases comfort to hand.
- Flexible And Comfortable.
- High Durable
- Available in single and double layer.

#### **Applications :**

- Automobile Industries
- Mining
- Packaging
- Material Handling
- Auto Stamping Industry
- Oily Tool Operation

## Resha R Series (Lint Free)

We are as eminent entity engaged in offering an attractive range of polyester knitted seamless gloves. This gloves are made from 100% polyester textured filament yarn which gives comfort to hand. The gloves make no lint or contamination and are generally used for lint free application.

We also offer nylon (polyamide) gloves made from 100% nylon filament crimped yarn. Nylon provide Excellent abrasion resistant and good elasticity.

## **Resha R Polyester Lint Free Glove**



- 100% polyester crimped filament yarn which give comfort to hand.
- Lint Free in nature.
- Good Abrasion Resistant
- High Comfort & Durable

## **Resha R Polyester Dotted Lint Free Glove**







RESHA R/CP001/60/23/RW/10/2.8DSD (Double Side Dotted)

- 100% polyester crimped filament yarn which give comfort to hand.
- PVC dots provide extra gripping power and beneficial for slip resistance.
- Lint Free in nature.
- Good Abrasion Resistant
- High Comfort & Durable

## **Resha R Polyester Cotton Platted Glove**



RESHA R/TP001/70/23/RW/7

- Cotton Platted Glove.
- Lint Free in nature.
- Good Abrasion Resistant
- High Comfort & Durable



EN 420

RESHA R/CP003/95/30/NB/7





- Cotton Platted Glove.
- PVC dots provide extra gripping power and beneficial for slip resistance.
- Lint Free in nature.
- Good Abrasion Resistant
- High Comfort & Durable

## **Resha R Polyester Cotton Platted Arm Cover**



RESHA R/TP001/165/45/RW/7/SL/TC/FE

- //SL/TC/FE RESHAR/
- Made up of 100% Polyester
- Fully Elasticated Arm Cover.
- Good Abrasion Resistant.
- Lint Free in nature.
- Light Weight.

## **Resha R Polyamide Lint Free Glove**



RESHA R/CN001/35/23/RW/10



RESHA R/CN001/25/23/RW/13





- Made up of 100% Polyamide
- Polyamide gives comfort and soft feel to hand.
- Lint Free in nature.
- Excellent Abrasion Resistant
- High Comfort & Durable
- Light weight





## Resha R Polyamide Lint Free Arm Cover



- Made up of 100% Crimped Polyamide
- Crimped Nylon gives comfort and soft feel to hand.
- Lint Free in nature.
- Excellent Abrasion Resistant
- Light Weight

#### **Applications :**

- Material Handling
- Automotive Industries
- Packing
- Food processing
- Light Fabrication
- Shipping & Port Handling
- Drilling Rigs & Offshore companies

## **Cut and Slash Resistantce**

## Krupal R Series (Para Aramid Based)

Para Aramid is an organic fiber in the aromatic polyamide family. It has a unique combination of high strength, toughness & thermal strength. It provides excellent resistance to cuts, abrasion, sparks and heat. The Para-Aramid Yarn is 2.5 times more cut resistant than leather and up to 60% more cut resistant than cotton and it will not melt or burn. These Para-Aramid gloves and sleeves can be produced in different form according to the dexterity, comfort and cut protection.

## **KRUPAL R Para Aramid CR3 Knitted Glove**



- Excellent Cut Resistant
- Heat resistant, high tenacity and high tensile modulus fibers.
- High integrity at elevated temperature. Protects contact with sharp edges such as glass, metal, ceramics and other material.



## KRUPAL R Steel Aramid CR5 Knitted Glove

- Excellent Cut Resistant
- Steel acts as reinforcement fiber for strength and Para Aramid offers comfort and dexterity.
- High Comfortable & Durable

## KRUPAL R Glass Para Aramid CR5 Knitted Glove



- Excellent Cut Resistant against sharp object.
- Cheaper alternative to 100% para aramid glove
- High Comfortable & Durable

## **KRUPAL R Para Aramid Dotted Knitted Glove**



KRUPAL R/PA001/45/23/N/10/2.8D



- Excellent Cut Resistant against sharp object.
- PVC dots provide extra gripping power and beneficial for slip resistance.
- High integrity at elevated temperature.
- Protects contact with sharp edges such as glass, metal, ceramics and other material.

## KRUPAL R Para Aramid CR4 Knitted Glove with Web Leather Reinforcement



- Excellent Cut Resistant
- Heat resistant, high tenacity and high tensile . modulus fibers.
- Web is reinforced by Leather.
- High Comfortable & Durable •

## KRUPAL R Steel Aramid CR5 Knitted Glove with Web Leather Reinforcement



KRUPAL R/PA003/5545/24/N/10WLR001 EN 420

- Excellent Cut Resistant
- Web is reinforced by Leather. .
- · Steel wire act as reinforcement fiber for strength and para aramid offers comfort and dexterity.

## KRUPAL R Para Aramid CR5 Knitted Glove with Palm Leather Reinforcement



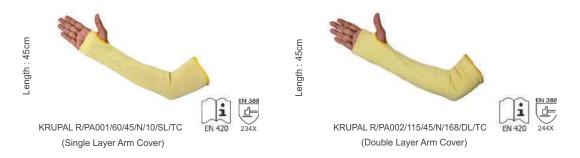
- Excellent Cut Resistant against sharp object.
- Leather reinforcement for enhanced puncture and slash resistance.
- High integrity at elevated temperature.
- Act As Fire Retardant Glove

## **KRUPAL R Steel Aramid CR5 Knitted Glove with Palm Leather Reforcement**



- Excellent Cut Resistant
- Leather reinforcement for enhanced puncture and slash resistance.
- Extra Leather patch for Knuckles.
- · Steel acts as reinforcement fiber for strength and Para Aramid offers comfort and dexterity.

## **KRUPAL R Para Aramid Arm Cover**



- It provide good resistance to cuts, abrasion and sparks.
- Arm Cover come with thumb hole option to avoid slippage while working.

## **Applications :**

- Metal Sheet /handling & Fabrication
- Glass Handling, Manufacturing
- Canning & Bottling
- Automotive Manufacturing
- Ceramic Industries
- Handling Sharp Edged Objects
- Cut Protection
- Handling of Hot Objects (Upto 100 Degree)

## **Cut and Slash Resistantce**

## Asi R Series (Polyamide Based)

Polyamide is a high tenacity yarn provide excellent abrasion resistance and moderate cut resistance. Asi R gloves are made from Nylon 6,6 offer good resistance against cut making them suitable for metal sheet handling, scrap collection and material handling in industry.

## ASI R Polyamide CR2 Knitted Glove



- Good Cut Resistant
- Excellent Abrasion Resistant
- High Comfort & Durable

## ASI R Steel Polyamide CR4 Knitted Glove



- The core-sheath yarn structure of steel polyamide provide protection against sharp edges.
- Good Cut Resistant
- Excellent Abrasion Resistant
- High Comfort & Durable
- · Cheap alternative to steel aramid glove.

### ASI R Polyamide CR3 Glove with Palm Leather Reinforcement





ASI R/Y001/50/25/SG/10/CC/PLR001

ASI R/Y001/50/25/SG/10/CC/PLR002



N 388

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• Leather reinforcement for enhanced Puncture and Slash resistance.

-ength: 25cm

- Good Cut Resistant
- Excellent Abrasion Resistant
- High Comfort & Durable

## ASI R Polyamide CR2 Single Layer Arm Cover





Good Cut Resistant

- Excellent Abrasion Resistant
- High Comfort & Durable
- Arm Cover come with thumb cut option to avoid slippage while working

## **Applications :**

- Metal Sheet /handling & Fabrication
- Glass Handling, Manufacturing
- Canning & Bottling
- Automotive Manufacturing

## **Cut and Slash Resistantce**

## Karval R Series (HPPE Based)

High Performance Polyethylene gloves that are specially designed to protect the hands from cuts and abrasions. HPPE fiber provide superior cut resistance and are ideal for such applications as machining, scrap metal, glass handling, automotive and recycling, among many others. HPPE gloves with added steel and/or glass fibers offer an increased cut resistance over gloves made with HPPE only. The strength of HPPE remains same even when wet. Hence it is useful product for food processing and meat industry. It is lint free cut resistant glove.

## Karval R HPPE CR3 Knitted Glove



- · High cut resistance, even when wet.
- Proved dexterity along with longevity as compared to any other synthetic fiber.
- High Comfortable & Durable

## Karval R HPPE CR4 Knitted Glove with Palm Leather Reinforecment





- High cut resistance, even when wet.
- · Leather reinforcement for enhanced puncture and slash resistance.
- High Comfortable & Durable

## Karval R HPPE Cut Resistant Arm Cover





Karval R/HP001/120/40/SG/10/SL/TC/V (Single laver with velcro)





Karval R/HP002/65/45/SG/144/SL/TC (Single layer with elastic)





Karval R/HP002/120/40/SG/168/DL (Double layer with elastic)



- High cut resistance
- Thumb Hole holds Arm Cover securely in place.
- Good Abrasion Resistant.
- High Comfortable & Durable
- Available with : Elastic, Overlock, Velcro

## **Applications :**

- Metal Sheet /handling & Fabrication
- Glass Handling, Manufacturing
- Canning & Bottling
- Automotive Manufacturing
- Ceramic Industries
- Handling Sharp Edged Objects
- Cut Protection
- Food Processing & Meat Industry

(Available in customized size.)

Karval R Cut Resistant Series | 24

## **TESTIMONIALS**

"Thinking about safety can be difficult task for a small company, and legal requirements seem to come at a time when business is busier than ever so it's the last thing on your mind. Spectrum Technicals took all the stress out of the situation. Coming into the company and understanding our needs perfectly, producing customized safely gloves and garments which answers all the requirements. One would highly recommend spectrum technicals."

- Valiant Alucast Technology Pvt.Ltd.

"I would just like to say that I have been impressed by the professionalism and politeness of your employees. The persons that inspected the process and provided safety solutions were to our requirements and we are fully satisfied with it."

- Thermax, Satara.

## **Heat Resistant**

# **Ushn R Series**

(Woven Para-aramid Based)

Woven Para-aramid, a strong synthetic fiber used to protect workers from cuts, abrasions and heat. The gloves are also lightweight, flexible and comfortable. Para-aramid gloves with heavy insulating felt are most suitable against open flame and hot metal splashes and can with stand temperature up to 250°C . These gloves provide excellent hand protection without sacrificing manual dexterity or comfort and offering exception to cut.

> The split leather has a better behavior in damp environment and is suited to heavier work. It offers greater resistance to abrasion.

## Ushn R Full Para Aramid Heat Resistant Glove



- The glove can be used for continuous operating temperature of 150°C 250°C.
- Excellent Heat Resistant and Cut Resistant
- Excellent Fire Retardant.
- Heavy Protection from Large Molten Metal Splash

### Ushn R Palm Para Aramid Heat Resistant Glove





- The glove can be used for continuous operating temperature of 150°C 250°C.
- Palm aramid rest leather glove
- Excellent Heat Resistant and Cut Resistant
- Excellent Fire Retardant.

Length : 35cm

Heavy Protection from Large Molten Metal Splash

#### Ushn R Palm Front and Back Para Aramid Heat Resistant Glove



- The glove can be used for continuous operating temperature of 250°C.
- Para aramide glove with leather cuff
- Excellent Heat Resistant and Cut Resistant
- Excellent Fire Retardant.
- Heavy Protection from Large Molten Metal Splash

#### Ushn R Palm Para Aramid Glove with Palm Leather Reinforcement



- The glove can be used for continuous operating temperature of 250°C.
- Leather patch at palm gives extra protection to palm.
- Excellent Heat Resistant and Cut Resistant
- Excellent Fire Retardant.
- Heavy Protection from Large Molten Metal Splash

#### Ushn R Palm Para Aramid Rest HR Leather Glove



- The glove can be used for continuous operating temperature of 250°C.
- Palm aramid rest HR leather glove
- Excellent Heat Resistant and Cut Resistant
- Excellent Fire Retardant.
- Heavy Protection from Large Molten Metal Splash

#### Ushn R Heat Resistant Leather Glove with FR Liner



- The glove can be used for continuous operating temperature of 300°C.
- Excellent Heat Resistant and Cut Resistant
- Excellent Fire Retardant.
- Heavy Protection from Large Molten Metal Splash

#### Ushn R Para Aramid Leather Clute Heat Resistant Glove



• The glove can be used for continuous operating temperature of 250°C.

N 388

- Meet EN388 Level3 Cut Resistant Standard
- Para aramid knitted cuff for perfect ffitting.
- Protection area : Palm, Index finger, Thumb
- Excellent Heat Resistant and Cut Resistant and Durable.
- Moderate Fire Retardant.

#### Ushn R Para Aramid Knitted Heat Resistant Glove



- It is constructed with two types of gloves.
- The outer glove is made up of 100 % Aramid yarn and inner glove is made up of fine quality cotton yarn.
- The glove provides protection against cut, slash, abrasion, fire spark and tear in addition to handling of hot objects.

#### Ushn R Full Para Aramid Heat Resistant Glove



- The glove can be used for continuous operating temperature of 250°C.
- Heavy Protection from Large Molten Metal Splash
- Excellent Heat Resistant.
- Excellent Cut Resistant.
- Excellent Fire Retardant.

## **Applications :**

- Aluminum and copper smelting
- Gold refining
- Steel manufacturing industry
- Automotive Manufacturing
- Glass manufacturing industry
- Casting manufacturing
- Microwavable Foods Industry
- Handling of Hot Objects

## **Radiant Heat Resistant**

# **Ushn Kiran Series**

(Aluminized Para-aramid Based)

Ushn kiran R hand gloves are made of best quality woven para-aramid fabric laminated with aluminized foil and stitched using finest para-aramid threads. An aluminized-back safety glove designed to be worn in environments where there is large amount of radiant heat. These aluminized gloves could be used in very high temperature application such as fire proximity and molten metal splashes. Suitable for fire proximity and molten metal splashes, the gloves are lightweight, flexible and comfortable. Ushn Kiran R Palm Para Aramid Rest Aluminized Glove





Ushn Kiran R/35GL/3L/APA/CF/IFR/P001

- Stitched with high tenacity Para Aramid Stitching Thread.
- Highly aluminized surface reflect up to 90% of radiant heat.
- Woven palm offers excellent cut, slash and abrasion resistance.

## Ushn Kiran R Front Side Para Aramid Rest Aluminized Glove





Ushn Kiran R/35GL/3LFPA/BAPA/CF/IFR/P001

- Stitched with high tenacity Para Aramid Stitching Thread.
- Highly aluminized surface reflect up to 90% of radiant heat.
- Woven palm offers excellent cut, slash and abrasion resistance.

## **Applications :**

- Aluminum and copper smelting
- Gold refining
- Steel manufacturing industry
- Automotive Manufacturing
- Glass manufacturing industry
- Casting manufacturing
- Handling of Hot Objects

## VALUE

Our customer choose us because we deliver best quality, provide unmatched service and offers some of the best value in industry.

You simply won't find another vendor that can match our value proposition. Our customer often tell us the same thing. We make every effort to provide our customer with great products and services and we work just as hard to make sure they are getting the right products that fits their needs. We promise the same to you their needs.





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