

COG
Shanghai C\&G Safety Co., Ltd.

cgprotection.co

2024-25

## CONTENTS

Arc Flash Suit ..... 01
Electrical Insulating PPE ..... 09
Conductive Suit ..... 13
Firefighting Suit ..... 14
Military Clothing ..... 19
Flame Resistant Clothing ..... 23
Aluminized Clothing ..... 27
Metaltech Clothing ..... 30
Chemical Protection Clothing ..... 31
Stormwalker Clothing ..... 34
Cooling Vest ..... 35
High-Visibility Clothing ..... 36
Hand Protection ..... 37

## COMPANY PROFILE

## Shanghai C\&G Safety Co., Ltd.

Shanghai C\&G Safety Co., Ltd. (hereinafter referred to as "Shanghai C\&G") was established in 2005 and is headquartered in shanghai, the innovation capital of China. It focuses on the safety and emer gency industry, dedicating to R\&D, production and sales of emergency rescue equipment, persona
safety protective equipment, special functional protective clothing, safety tools and new materials of electrical fire protection and safety emergency. It is also an integrator of MRO products and services related to the safety emergency industry, providing professional one-stop solutions for various emergencies and operating personnel who may be exposed to different high-risk environments such as arcs, electric fields, high temperatures, flash fires, explosions, chemicals, and viruses. At present, its main services cover domestic and international power energy, emergency fire protection, petroleum and petrochemical, and production-oriented industrial and mining enterprises.
Shanghai C\&G adheres to the spirit of innovation, continuously invests in new technology research and new product development, and has successively won the title of "Specialized in special new" in Pudong Shanghai and long-term strategic cooperation with many professional colleges and scientific research institutions, it has continuously launched many innovative products and safety emergency solutions for various high-risk industries such as electric power, emergency, fire protection, petroleum and petrochemical industries. In addition, it also has a strong sales and service network covering the whole country. With offices or contracted authorized service providers in all provinces, it provides international market and sell products widely in more than 110 countries around the world.
As the vice-chairman unit of the China Textile Business Association Safety and Health Protection Products Committee and the vice-chairman unit of the Shanghai Labor Protection Products Industry China Certification Center for Fire Products Ministry of Public Security (CCCF). While complying with hational standards, many products have passed the certification of American Standard or European Standard, and obtained ISO9001, ISO14001 and ISO45001 management system certification.
Shanghai C\&G is committed to building a leading brand in the safety emergency industry with technoogical innovation as the core and sustainable development, providing customers with one-stop safety emergency solutions, escorts for every worker and makes the world safer!


## Arc Flash Protection - $\mathrm{C} \& \mathrm{G}^{\circledR}$ Arcpro ${ }^{\circledR}$

What is electric arc?

An electric arc is a visible plasma discharge caused by electrical current ionizing gases in the air. Electric emit high radiant energy which can light and even melt daily clothes. The core temperature of electric arc can reach $20,000^{\circ}$. Electric arc may induce many secondary hazards such as hot gases, molten
metal splash, pressure waves, and even high decibel noise and electric shock.

Even though there is a fraction of a second, the harm Even though there is a fraction of a second, the harm
may last lifelong. Every day, hundreds of thousands of electric workers are exposed to electric arc hazards, including electricians, wire maintenance inspectors, power plant workers, substation and
transformer operators, maintenance technicians, etc.

Hazards related to electric arc

## 01

Electrocution
When contacting electric arc directly, it will cause electrocution or severe burns. And even flame resistant garments cannot protect from the hazard of electrocution.

2 Severe burns caused by electric arc
A worker may get injured even without contacting electric arc. Electric arc will generate extreme radiant heat which
may melt tools and light daily clothes. And once the clothes are lighted, they will continue to burn and increase the injury.

03 $\qquad$ burst of clothing

The explosion or impulse caused by electric arc can blast apart daily clothes and expose the body to heat, flame and melted equipment.

04
Severe burns caused by
melted underwear mad
from synthetic fiber

Heat caused by electric arc will melt underwear made from synthetic fiber even the outerwear is not burning.

the secondary flame
The intense heat of electric arc can cause fire disaster and additional explosions. For example, electric arc can nerns or explode nearby constructions.

Generally, the incident energy is affected by different fault current, time duration and working environments
(opened air or sealed air) the time duration of electric arc is critical to burn degree. Since the energy caused by electric arc is affected by time duration and current, the burn degree caused by lower fault current and longer time duration will be severer than it caused by higher fault current and short
time duration. And even a relatively lower voltage system ( $480 / 227 \mathrm{~V}$ ) will form an electric arc of 3 to inches and will last a long time. There are many variables for electric arc explosion.
Therefore, although statistical method could be used to analyze hazards caused by arc current, the real hazar may be different. Det elosion, electrical workers will definitably need protective clothing in the workplace where electric arc
energy can affect. energy can affect.


## Arc Flash Protection - $\mathrm{C} \& \mathrm{G}^{\circledR}$ Arcpro ${ }^{\circledR}$

Why should we choose C\&G ${ }^{\circledR}$ arc flash protective garments?
$C \& G^{\circledR}$ arc flash protective garments are made of $\mathrm{C} \& \mathrm{G}^{\circledR}$ Arcpro ${ }^{\oplus}$ inherent flame resistant fabric, which is designed to protect from electric arc.

## 01

Excellent protection

Thermal protection performance, Crack resistance, Antistatic performance

Inherent flame resistance comes from the molecular structure of fiber
Arcpro ${ }^{\circledR}$ fiber is inherently flame resistant. Its flame treatment on the surface Ther itself instead of chemical flash protective garments provide permanent protection, and the performance will not be washed out or worn

C\&G Arcpro ${ }^{\otimes}$ arc flash protective garments neither melt nor burn or support combustion. When exposed to fire, he garments will form a protective barrier between more time to escape.
Prevent garments from burst caused by explosion of electric arc
As being blended with C\&G Arcpro® high-strength fiber C\&G Arcpro® arc flash protective garments provides etter anti-burst performance compared with chemica

Prevent fiber from electrostatic accumulation
Static may bring inconvenience or threat to Power Industry, so C\&G Arcpro® is mixed with anti-static fiber.
Thus, C\&G Arcpro ${ }^{\oplus}$ arc flash protective garments can reduce static coming from the friction between fiber and fiber, or fiber and skin. Meanwhile, it helps to reduce static even in low temperature or low humidity condition, which makes it more comfortable to wear and tion in explosive environments.

Besides, proper grounding procedures are necessary to remove the static in explosive environments.

02
Outstanding durability

With built-in electric arc protection and longer lifecycle. High value, light weight, more comfort, safety comes first.
C\&G Arcpro is compliant with NFPA 7OE requirements. This means when used properly, the wearers are protected against the heat of electric arc exposure.

No need to sacrifice protection for comfort
With durability for a longer lifecycle and better value, C\&G Arcpro® ${ }^{\text {arc flash garments stand up to more washes and }}$ are more durable than FR cotton nylon blend garments of similar weight. They are also designed to retain their appearance throughout extended on-the-- ob use and
repeated laundering. Your customers will see the difference. And you'll get more cycles out of every garment.

Could stand up to tough laundry conditions
Built-in protection you expect from C\&G Arcpro ${ }^{\oplus}$. The protection cac Arcro cannot be washed out or wor It's also good to know, this innovative, new fabric require no special laundering processing and provides excellent protection wash after wash.

Strength and tear resistance, wash after was
A garment's first job is protecting workers from electric arc incidents - rips and tears aren't an option. In fact, a single rip or tear can mean replacing the entire garment. But C\&G Arcpro® helps minimize that risk and the life expectancy of the garment. Because it is twice as strong even after 100 washing or UV exposure.

Laundering can be as hard on a fabric as wearing it. That's why C\&G ArcPro was created to stand up to repeated washes. It starts off stronger and stays stronger than $F R$
cotton nylon blends after repeated washes C\&G Arcpro provides better tear resistance than FR cotton nylon blends whether the fabric is tested when new or after it has gone through 100 washes.

## Arc Flash Protective Clothing

CAT 4 65CAL Arc Flash Suit
Model: ArcPro-Suit-65
ATPV: $65 \mathrm{cal} / \mathrm{cm}^{2}$
Material: C\&G Arcpro ${ }^{\circledR}$ Inherently flame resistant fabric Description: Inherently flame resistant and its protection cannot be washed out or worn away, multilayer combination is lighter than FR cotton-nylon blend garments, reducing the hazards of electric arc. Flame retardant reflective tapes can be added to make it highly visible. And the cooling system can be installed on the hood to keep the user cool.
Color: Navy blue, Orange
Standard: ASTM F1959, ASTM F2621,NFPA 70E, IEC 61482-2, DL/T 320-2019, GB 8965.1-2020

| Model | Description |
| :---: | :---: |
| ArcPro-J-65 | $65{\mathrm{cal} / \mathrm{cm}^{2} \text { arc flash protective jacket }}^{\text {ArcPro-Bib-65 }}$ |
| ArcPro-Hood-65 | $65 \mathrm{cal}^{2} \mathrm{~cm}^{2}$ arc flash protective bib-overall |
| ArcPro-GLV-65 | $65 \mathrm{cal}^{2} \mathrm{~cm}^{2}$ arc flash protective hood |
| $65 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective gloves |  |



CAT 4 55CAL Arc Flash Suit

## Model: ArcPro-Suit-55

ATPV: $55 \mathrm{cal} / \mathrm{cm}^{2}$
Material: C\&G Arcpro® Inherently flame resistant fabric
Description: Inherently flame resistant and its protection cannot be washed out or worn away, multilayer combination is lighter than flame resistant cotton-nylon blended garments, reducing the hazards of electric arc.
Flame
Flame retardant reflective tapes can be added to make it highly visible And the cooling system can be installed on the hood to keep the user cool.
Color: Navy blue, Orange
Standard: ASTM F1959, ASTM F2621,NFPA 70E, IEC 61482-2 DL/T 320-2019, GB 8965.1-2020

| Model | Description |
| :---: | :---: |
| ArcPro-Robe-55 | $55 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective robe |
| ArcPro-J-55 | $55 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective jacket |
| ArcPro-P-55 | $55 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective pants |
| ArcPro-Bib-55 | $55 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective bib-overall |
| ArcPro-Hood-55 | $55 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective hood |
| ArcPro-GLV-55 | $55 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective gloves |
| ArcPro-Leg-55 | $55 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective leggings |

## Arc Flash Protective Clothing

CAT4 45CAL Arc Flash Suit
Model: ArcPro-Suit-45
ATPV: 45 cal/cm ${ }^{2}$
Material: C\&G Arcpro® Inherently flame resistant fabric
Description: Inherently flame resistant and its protection cannot be washed out or worn away, multilayer combination is lighter than flame retardant cotton-nylon blended garments, reducing the hazards of electric arc.
Flame retardant reflective tapes can be added to make it highly visible.
And the cooling system can be installed on the hood to keep the user cool.
Color: Dark blue, Medium blue, Grey, Orange
Standard: ASTM F1959, ASTM F2621,NFPA 70E, IEC 61482-2,
DLIT 320-2019, GB 8965.1-2020

| Model | Description |
| :---: | :---: |
| ArcPro-Robe-45 | $45 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective robe |
| ArcPro-J-45 | $45 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective jacket |
| ArcPro-P-45 | $45 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective pants |
| ArcPro-Bib-45 | $45 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective bib-overall |
| ArcPro-Hood-45 | $45 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective hood |
| ArcPro-LHood-45 | $45 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective Lift-Front hood |
| ArcPro-GLV-45 | $45 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective gloves |
| ArcPro-Leg-45 | $45 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective leggings |



CAT 4 45CAL Arc Flash Lift-Front Hood
Model: ArcPro-LHood-45
ATPV: $45 \mathrm{cal} / \mathrm{cm}^{2}$
Material: C\&G Arcpro ${ }^{\circledR}$ inherently flame resistant fabric Shield-Polycarbonate, Bracket- Nylon
Description: Lift-front technology allows for enhanced breathability and communication. Toric lens design and nanoparticle grey color provide excellent field of view, enhanced color recognition and reduced internal glare. Premium anti-fog \& anti-abrasion coated. It is used in association with dielectric head protection and accessories to provide protection from the hazards of electric arc. Color: Fabric- Dark blue, Medium blue, Grey, Orange Shield- Grey, Bracket- Blue
Standard: ASTM F2178, ASTM F1959, DL/T 320-2019

## Arc Flash Protective Clothing

CAT 3 33CAL Arc Flash Suit
Model: ArcPro-Suit-33
a
Description: Inherently flame resistant and its protection cannot be washed out or worn away, multilayer combination is lighter than flame retardant cotton-nylon blended garments, reducing the
hazards of electric arc.
Flame retardant reflective tapes can be added to make it highly
And the cooling system can be installed on the hood to keep the user cool.
Color: Dark blue, Medium blue, Grey, Orange
Standard: ASTM F1959, ASTM F2621,NFPA 70E, IEC 61482-2, DL/T 320-2019, GB 8965.1-2020

| Model | Description |
| :---: | :---: |
| ArcPro-Robe-33 | $33 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective robe |
| ArcPro-J-33 | $33 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective jacket |
| ArcPro-P-33 | $33 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective pants |
| ArcPro-Bib-33 | $33 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective bib-overall |
| ArcPro-Hood-33 | $33 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective hood |
| ArcPro-GLV-33 | $33 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective gloves |
| ArcPro-Leg-33 | $33 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective leggings |

CAT 3 25CAL Arc Flash Suit
Model: ArcPro-Suit-25
ATPV: $25 \mathrm{cal}^{2} / \mathrm{cm}^{2}$
Material: C\&G Arcpro ${ }^{\circledR}$ Inherently flame resistant fabric
Description: Inherently flame resistant and its protection cannot be washed out or worn away, multilayer combination is lighter than flame retardant cotton-nylon blended garments, reducing the hazards of electric arc.
Flame retardant reflective tapes can be added to make it highly visible. Color: Medium blue
Standard: ASTM F1959, ASTM F2621,NFPA 70E, IEC 61482-2, DL/T 320-2019, GB 8965.1-2020

| Model | Description |
| :---: | :---: |
| ArcPro-Robe-25 | $25 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective robe |
| ArcPro-J-25 | $25 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective jacket |
| ArcPro-P-25 | $25 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective pants |
| ArcPro-Bib-25 | $25 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective bib-overall |
| ArcPro-C-25 | $25 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective coverall |
| ArcPro-Hood-25 | $25 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective hood |
| ArcPro-LHood-25 | $25{\mathrm{cal} / \mathrm{cm}^{2} \text { arc flash protective Lift-Front hood }}_{\text {d }}$ |
| ArcPro-GLV-25 | $25 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective gloves |
| ArcPro-Leg-25 | $25 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective leggings |



Arc Flash Protective Clothing


CAT 2 12CAL Arc Flash Suit

CAT 3 25CAL Arc Flash Lift-Front Arc Hood

Model: ArcPro-LHood-25
ATPV: $25 \mathrm{cal} / \mathrm{m}^{2}$
Material: C\&G Arcpro® inherently flame resistant fabric Shield-Polycarbonate, Bracket- Nylon
Description: Lift-front technology allows for enhanced breathability and communication. Toric lens design and nanoparticle grey color provide excellent field of view, enhanced color recognition, and reduced internal glare. Premium anti-fog \& anti-abrasion coated. It is used in association with dielectric head protection and accessories to provide protection from the hazards of electric arc. Color: Fabric- Medium blue, Shield- Grey, Bracket- Blue Standard: ASTM F2178, ASTM F1959, DL/T 320-2019

Model: ArcPro-Suit-12
ATPV: $12 \mathrm{cal} / \mathrm{cm}^{2}$
Material: C\&G Arcpro ${ }^{\circledR}$ Inherently flame resistant fabric Description: Inherently flame resistant and its protection cannot be washed out or worn away.
Flame retardant reflective tapes can be added to make it highly visible Color: Navy blue, Orange
Standard: ASTM F1959, ASTM F2621,NFPA 70E, IEC 61482-2, DLI 320-2019, GB 8965.1-2020

| Model | Description |
| :--- | :--- |
| ArcPro-Robe-12 | $12 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective robe |
| ArcPro-J-12 | $12 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective jacket |
| ArcPro-P-12 | $12 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective pants |
| ArcPro-S-12 | $12 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective shirt |
| ArcPro-C-12 | $12 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective coverall |
| ArcPro-FS-12 | $12 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective face shield |
| ArcPro-LHood-12 | $12 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective Lift-Front hood |
| ArcPro-GLV-12 | $12 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective gloves |
| ArcPro-Leg-12 | $12{\mathrm{cal} / \mathrm{cm}^{2} \text { arc flash protective leggings }}$ |



## Arc Flash Protective Clothing



## CAT 2 12CAL Arc Flash Lift-Front Hood

## Model: ArcPro-LHood-12

ATPV: $12 \mathrm{cal} / \mathrm{m}^{2}$
Material: C\&G Arcpro ${ }^{\circledR}$ inherently flame resistant fabric
Shield-Polycarbonate, Bracket- Nylon
Description: Lift-front technology allows for enhanced breathability and communication Toric lens design and nanoparticle grey color provide excellent field of view, enhanced colo recognition, and reduced internal glare. Premium anti-fog \& anti-abrasion coated. It is used in association with dielectric head protection and accessories to provide protection from the hazards of electric arc.
Color: Fabric- Navy blue, Orange, Shield- Grey, Bracket- Blue Standard: ASTM F2178, ASTM F1959, DL/T 320-2019

## CAT 2 14CAL Arc Flash Face Shield

## Model: ArcPro-Shield-14GS

ATPV: $14 \mathrm{cal} / \mathrm{cm}^{2}$
Description: Nanoparticle grey color provides excellent field of view and
enhanced color recognition. Excellent downward vision with transparent chin
protector. It is used in association with dielectric head protection and accesso-
ries to provide protection from the hazards of electric arc
Standard: ASTM F2178, NFPA70E

| Model | Description |
| :---: | :---: |
| ArcPro-Shield-14GS | $14{\mathrm{cal} / \mathrm{cm}^{2} \text { arc flash protective face shield, grey }}^{2}$ |



## Model: EcoArc-2

ATPV: $11 \mathrm{cal} / \mathrm{cm}^{2}$
Description: Nanoparticle grey color provides excellent field of view and enhanced color recognition. Excellent downward vision with transparent chin protector. It is used in association with dielectric head protection and accessories to provide protection from the hazards of electric arc. Standard: ASTM F2178, NFPA70E

## Arc Flash Protective Clothing

CAT 2 8CAL Arc Flash Suit

Model: ArcPro-Suit-8
ATPV: $8 \mathrm{cal} / \mathrm{cm}^{2}$
Material: C\&G Arcpro ${ }^{\circledR}$ Inherently flame resistant fabric Description: Inherently flame resistant and its protection cannot be washed out or worn away.
Flame retardant reflective tapes can be added to make it highly visible
Color: Dark blue Medium blue Grev, Orange Standard: ASTM F1959, ASTM F2621 NFPA 70 IEC 61482-2, DL/T 320-2019 GB 8965.1-2020


| Model | Description |
| :---: | :---: |
| Arcpro-J-8 | $8 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective jacket |
| Arcpro-P-8 | $8 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective pants |
| Arcpro-S-8 | $8 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective shirt |
| Arcpro-C-8 | $8 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective coverall |
| Arcpro-FS-10 | $10 \mathrm{cal}^{\mathbf{c m}}{ }^{2}$ arc flash protective face shield |
| Arcpro-GLV-8 | $8 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective gloves |



CAT 1 6CAL Arc Flash Suit

## Model: ArcPro-Suit-6

ATPV: 6 cal/cm ${ }^{2}$
Material: C\&G Arcpro ${ }^{\circledR}$ Inherently flame resistant fabric
Description: Inherently flame resistant and its protection cannot be washed out or worn away.
Flame retardant reflective tapes can be added to make it highly
visible
Color: Medium blue
Standard: ASTM F1959, ASTM F2621,NFPA 70E,
IEC 61482-2, DL/T 320-2019, GB 8965.1-2020

| Model | Description |
| :---: | :---: |
| Arcpro-J-6 | $6{\mathrm{cal} / \mathrm{cm}^{2} \text { arc flash protective jacket }}^{\text {Arcpro-P-6 }}$ |
| Arcpro-S-6 | $6 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective pants |
| Arcpro-C-6 | $6 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective shirt |
| Arcpro-GLV-6 | $6 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective coverall |
| $6 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective gloves |  |

## Electrical Insulating PPE

## Electrical Insulating PPE

$\underline{\text { Leather Protective Gloves }}$
Model: Live-GL10
Material: Goat Skin
Description: Soft, deft, comfortable, adjustable tightness Standard: EN 388

| Grade | Length | Thickness | Color |
| :---: | :---: | :---: | :---: |
| Live-GL10 | 25 mm | 0.7 mm | White |
| Live-GL11.5 | 29 mm | 0.7 mm | White |
| Live-GL12.5 | 31 mm | 0.7 mm | White |

Insulating Sleeves
Model: Live-Slv1-2
Material: Natural Latex
Description: Curved elbow sleeves, Protect workers from
electrical shock. These sleeves are intended to use exclusively
for electrical purposes
Standard: EN 60984/ASTM D1051-14a

Model: DBS4
Voltage grade: Test Voltage: 20KV ESR: 18 KV
Description: Waterproof, abrasion resistant, durability, steel toe cap, steel shank,
chemical resistance.
Application: For working environment with high voltage hazards
Power stations operations
Substation (step-up/step-down/distribution) operations
Electrical hazards with wet condition / water exposure
High current leakage hazards
Electrical installations.
Standard: EN 20345/EN 5032/CSA Z 195/ASTM-1117 ASTM F 2413/GB 12011


| EURO | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UK | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| US | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |

## Multifunctional Kit Bag

| Model: | Description |
| :---: | :---: |
| CG-X502 | 600D orange nylon oxford, waterproof and wear-resistant <br> With shoulder straps detachabele and bottom antisid and <br> wear-resistant. Dimension: $42 * 23 * 31 \mathrm{~cm}$ and $60 * 35 * 31 \mathrm{~cm}$ |



$25 \mathrm{cal} / \mathrm{cm}^{2}$ Arc Flash Protective Clothing Kit
Model: ArcPro-Kit-25
$1.25 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective Jacket
$2.25 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective pants
3. $25 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective Hood
4. $25 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective gloves
5. Safety helmet-ABS material
6. Insulating gloves
7. Multifunctional kit bag

$12 \mathrm{cal} / \mathrm{cm}^{2}$ Arc Flash Protective Clothing Kit Model: ArcPro-Kit-12

1. $12 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective jacket
2. $12 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective pants
3. $14 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective face shield
4. $12 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective gloves
5. Safety helmet-ABS materia
6. Insulating gloves
7. Multifunctional kit bag

8cal/ $\mathrm{cm}^{2}$ Arc Flash Protective Clothing Kit Model: ArcPro-Kit-8

1. $8 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective jacket
$8 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective pants
2. $11 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective face shield
3. $8 \mathrm{cal} / \mathrm{cm}^{2}$ arc flash protective gloves
4. Safety helmet-ABS material
5. Insulating gloves
6. Multifunctional kit bag


## Conductive Suit

500kV Conductive Suit
Model: SC-JP-500kV
Description: Made of metal fiber and high-performance flame resistant fiber.
With excellent and stable performance, it can be applied to equipotential 500 kV and below live work
The whole set includes jacket \& pants, conductive gloves,
conductive socks, conductive shoes and kit bag.
Standard: GB/T6568-2008
Application: Accessories including gloves, socks, shoes used with conductive suit.


1000kV Conductive Suit


Model: SC-C-1000kV
Description:

1. Made of metal fiber and high-performance flame resistant fiber.
2. Through the genetic arrangement of metal fibers, improving the resistance value of the fabric diversion parts to avoid serious scorching and carbonization of fabrics. With excellent and stable performance, it not only can be used in 1000 kv live work,
but also can be applied to live work on UHV electrical equipment with a voltage higher but also can
than 1000 kv .
3. The whole set includes coverall, conductive gloves, conductive socks, conductive
4. The whole set in
shoes and kit bag.

Standard: GB/T25726-2020, DL/T 392-2015

500kV AC High Voltage Electrostatic Protective Clothing

## Model: HVS-JP-500kV

Description:Blended interweaving of metal fiber and textile fiber Suitable for AC transmission lines with rated voltages of 750 kv , 500 kv and below Road and substation inspectors and ground potential workers wear
The fabric has excellent performance, which can effectively protect the line and substation inspection and ground potential workers Protected from high voltage electric fields
The whole set includes jacket, trousers, conductive gloves, conductive socks, conductive travel shoes, suit bag Standard: GB/T18136-2008


## Firefighting Suit



Firefighter Turnout Gear
Model: ZFMH-CG A(DRD)
Material: Outer layer: Nomex ${ }^{\circledR}$ and Kevlar ${ }^{\circledR}$ inter-weaved fabric Heat insulation: Aramid felt covered by FR PTFE film, waterproof and breathable
Comfort layer: Nomex ${ }^{\oplus}$ and FR Viscose blend
Description: Overall structure: composed of three layers: outer layer, waterproof and breathable layer, and comfortable layer; Configure life-saving towing belt
Function: the outer layer fabric is carbonized and thickened under high temperature, increasing the protection between the heat source and the skin
Barrier, no molten dripping, four-layer structure has good overall thermal protection performance, has extremely
Excellent wear resistance and tear resistance, as well as water and oil repellency, chemical corrosion resistance, etc.
Combined with the waterproof and breathable layer and heat insulation layer in the middle, water droplets cannot penetrate, and it has excellent comprehensive performance.
Protective performance, comfortable to wear, durable, ergonomic design, suitable for firefighters
Body Protection in Fire Fighting Work
Standard: XF 10-2014

## Firefighting Suit



## Firefighter Turnout Gear

Model: ZFMH-CG G (DRD)
Description: Composed of four layers including outer layer, waterproof and breathable layer, heat insulation layer and comfort layer, equipeed and breathable layer, heat insulation layer and comfort layer, equipped with Drag Rescue Device (DRD)
Waterproof and breathable layer: Aramid felt with FR PTFE film Heat insulation layer: Aramid felt
Comfort layer: Aramid and FR Viscose blend
Feature: The outer fabric is carbonized and thickened at high temperature, increasing the protective barrier between the heat source and the skin without melting and dripping. The four-layer structure has good overall thermal protection performance, excellent wear resistance and ear resistance, and meanwhile it is waterproof, oil-repellent and chemically resistant. With the middle waterproof and breathable layer and heat insulation layer, water droplets cannot penetrate. It is comfortable to wear, durable and ergonomically designed. Suitable for the body protec tion by firefighters in firefighting work.
Standard: XF 10-2014

Type 20 Firefighting Emergecy Rescue Suit

Model: RJF-F-1C
Materia: Made of single-layer fabric, double tissue interwoven with Nomex and flame-retardant viscose fibers.
Descriptionc: Anti-static, flame retardant, lightweight, strong tensile strength and other properties Flame retardant performance: afterburning time 0s, no melting or dripping phenomenon
Surface anti-moisture performance: after washing 5 times, the water stain level shall not be lower than level 3
Mechanical properties: breaking strength $>900 \mathrm{~N}$, tearing strength $>200 \mathrm{~N}$, seam strength $>600 \mathrm{~N}$
Thermal stability: After thermal stability test at $(180 \pm 5)^{\circ} \mathrm{C}$, dimensional change rate of fabrics and reinforcement materials at shoulders, knees, hips, elbows, etc. along the warp and weft directions is 0 , and there is no obvious change in the product surface
Application: Suitable for firefighters to wear during emergency rescue operations, such as earthquakes, mudslides, and mass, Used in situations such as distress and road traffic accidents Standard: XF 633-2006


## Firefighting Suit

Firefighting Covering

Model: FGR-L/A
Material: 3 layers laminated aluminized fabric
Description: Soft and comfortable
Light weight to carry, only 0.6 KG and easy to don and doff
Special mirror reflective technic, suitable for proximity fire rescue under industrial radiant heat up to $900^{\circ} \mathrm{C}$ for 15 minutes.
Application: Proximity fire rescue
Searching after fire accident and do cutting operation
Fire extinguishing in narrow space like tunnel, underground
tunnel, etc.
Rescue in high temperature
Standard: EN 11612 : 2015, GB 8965. 1-2020


| Fabric Property | Value | Testing Method |
| :---: | :---: | :---: |
| Breaking Force(warp) | $\geqslant 1050 \mathrm{~N}$ | ISO 1421-1 |
| Breaking Force(weft) | $\geqslant 800 \mathrm{~N}$ | ISO 1421-1 |
| Tearing Force(warp) | $\geqslant 20 \mathrm{~N}$ | ISO 4674-2 |


| Fabric Property | Value | Testing Method |
| :---: | :---: | :---: |
| Tearing Force( weft) | $\geqslant 30 \mathrm{~N}$ | ISO 4674-2 |
| Flame retardation | Afterglow $\leqslant 2 \mathrm{~s}$ | ISO 15025 |
| Flame retardation | Afterflame $\leqslant 2 \mathrm{~s}$ | ISO 15025 |

Thermal Insulation Clothing
: FGR-F/A
Material: Imported heat-insulating aluminum-clad fabric
Description: The fabric feels soft
Fabric composite innovation technology makes it extremely difficult to peel off the aluminum film and the substrate, and the fabric is resistant to 4000 times
The heat-insulating hood screen is made of imported gold-plate polycarbonate material; it can resist $120 \mathrm{~m} / \mathrm{s}$
High-speed particle impact; reflect high-temperature radiation
More than $95 \%$ radiation
Application: Fire fig
Standard: XF 634-2015, EN 11612: 2015

## Fire Protection-Dupont ${ }^{\circledR}$ Nomex ${ }^{\circledR}$ IIIA

Fire Protection-Dupont ${ }^{\oplus}$ Nomex ${ }^{\oplus}$ IIIA
Dupont ${ }^{\oplus}$ Nomex ${ }^{\oplus}$ IIIA is composed of $93 \% 1.7$ decitex Dupont ${ }^{\ominus}$ Nomex ${ }^{\oplus}$ meta-aramid, $5 \%$ Dupont ${ }^{\oplus}$ Kevlar ${ }^{\ominus}$ para-aramid and $2 \%$ antistatic fiber. This innovative solution expands to form a stable and inert barrier between the fire and skin, which gives
wearers the valuable seconds they need to help them escape from the hazard.

It is one of the best products for flame retardant and heat resistant protection. It is widely used all over the world, specially for Petroleum, Oil \& Gas, Chemical industry, Paint and ther environments where flash fire may occur. Many of astronauts wear protective garments made of Nomex ${ }^{\oplus}$ III fabric.

Why do we choose C\&G® ${ }^{\circledR}$ Nomex ${ }^{\circledR}$ IIIA flame retardant garments?

Nome ${ }^{\circledR}$ is inherently flame retardant. The fiber cannot be burned itself, so the protection is permanent. Since the protection comes from the fiber itself, it will not get weak after mes of washing and usage. When exposed to fire, Nomex ${ }^{\oplus}$ fiber will get swelled and thicker to form a protective barrier between heat source and body. The protective barrier will last ant harment cools down so that people will have valuable seconds to escape.

For the flame retardant fabric treated by chemicals, its FR performance comes from the chemicals on the surface of the fabric. When exposed to flash explosion, the chemicals will react o extinguish fire. The reaction depends on the fire energy and he time of the fabric exposed to the fire.

With the increasing of time and energy, the flame retardant chemical will be induced to react, and the burned degree will be obviously increased. The chemicals and fabric will cause vigorous slash fire, hot gas, smoke and tar, which will hazard e body seriously.

01
Unique protective barrier to high temperature and flame

When exposed to high temperature continuously, Dupont ${ }^{\oplus}$ Nomex ${ }^{\oplus}$ IIIA fiber will carbonize and get thicker to prevent heat conduction between heat source and body to increase protection and reduce burn injury (See Pic.1). The strong protective barrier will keep soft and tough until the garmen cools down. It will provide time for the user to escape.




## 02

Excellent performances in
Vertical Burning Test
Dupont ${ }^{\oplus}$ Nomex ${ }^{\oplus}$ IIIA flame retardant fabric can easily pass Vertical Burning Test (A basic flame retardant test which tests if he fabric will be lighted and burned after being exposed to fire Test, but $100 \%$ Cotton, CVC and TC fabric will be lighted and cannot pass the test (See Pic.2).


FTMS 191 A; 5903.1. All fabrics were washed one time
03
Outstanding performances in Therma Protective Performances (TPP) Test
tests the protective performance of the fabric in deflagration. The higher

PP test shows that Dupont ${ }^{\oplus}$ Nomex ${ }^{\circledR}$ IIIA fabric performs muc better than chemical-treated $F R$ fabric, and even lighter Dupont ${ }^{\bullet}$ Nomex ${ }^{\ominus}$ IIA A fabric performs betreated FR fabric (See Pic.3).


## Fire Protection-Dupont ${ }^{\circledR}$ Nomex ${ }^{\circledR}$ IIIA

04 Excellent wear-resistant, tear-resistant
Nomex ${ }^{\oplus}$ IIIA fabric performs much better than $100 \%$ Cotton, CVC nd TC fabric in wear-resistance and tear-resistance, and it will make the garments with a longer life.

Besides, Nomex ${ }^{\circledR}$ IIIA fabric is chemical-resistant, it resists mos inorganic chemicals and organic solvent, thus it is anti-corro sion and aging-resistant. In different industrial area, the hemical-resistant performance enhances the durability of the sarments, and the garments could be washed by organic Ivent to remove the flammable contaminants without afecting the life span of the garments.

The chemical-resistant performance refers that the fiber can esist the degradation instead of the penetration of chemicals. The fabric of Dupont ${ }^{\oplus}$ Nomex ${ }^{\oplus}$ IIIA which is covered or coated y certain materials could be used to prevent the penetration of hemicals.
Originated from STP1133 of ASTM

Unique economyand durability
Generally, the durability of Dupont ${ }^{\oplus}$ Nomex ${ }^{\oplus} \|$ IIA fabric is 3 to 5 times better than other protective fabrics (including $100 \%$ Cotton, CVC, TC and FR Cotton fabric). Besides, the flame esistance of Dupont ${ }^{\oplus}$ Nomex ${ }^{\oplus}$ IIIA fabric is permanent and $w$ not get weak after times of washing and usage.

| Chart1 lists the durability of different FR garments. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Chart1 Durability Parameters of FR Protective Garments |  |  |  |  |
| The higher the value is, the better the durability is. |  |  |  |  |
| Fabric |  |  |  | $\begin{gathered} \text { TABER } \\ \substack{\text { TAACEIOM} \\ \text { FAABEM }} \end{gathered}$ |
| 1509mn ${ }^{\text {Nomex }}$ \\||Afabic | 143 | 30 | 6 | 688 |
| $200 \mathrm{gm} \mathrm{m}^{2}$ NOMEX ${ }^{\text {a }}$ A fabic | 212 | 38 | 10 | 1213 |
| $200 \mathrm{gm} \mathrm{m}^{2}$ ertain brand fr Cotoon | 88 | 5 | 4 | 595 |
| $300 \mathrm{gm} \mathrm{m}^{\text {certain brand fR Cotoon }}$ | 124 | 8 | 7 | 688 |
| $188 \mathrm{~g} / \mathrm{m}$ certain brand PR Cotoon | 58 | 8 | 5 | 330 |
| $300 \mathrm{gm} \mathrm{m}^{2}$ certain brand FR C |  |  |  |  |

The fabric is light and comfortable
As per trying experiment, the weight of garments affects the As per trying experiment, the weight of garments affects the strength, good durability and fine breathability. And light fabric could be used to make more comfortable garments.
Dupont ${ }^{\oplus}$ Nomex ${ }^{\oplus}$ IIIA garments are with good breathability. It will promote air flow so that the energy of body could scatter fast. here is a special moisture-absorbing component which is widely used in sportswear used by top tennis sportsmen. This kind of component will absorb the moisture on the surface of skin and
transfer it to larger surface areas by
fibe to make it comfortable

07 Professional static control

Dupont ${ }^{\star}$ Nomex ${ }^{\oplus}$ IIIA fabric integrates P-140-a kind of static-elim nated fiber with patent, which could reduce the static caused by he friction between two garments or garments and the surface o ther objects (See Pic. 4). P-140 is used to reduce harmful static and make garments more comfortable to wear. Meanwhile, it also

$08 \begin{aligned} & \text { Good protection under the condition } \\ & \text { of low temperature }\end{aligned}$
Water can eliminate static by conducting electricity, so many of natural or synthetic fiber are anti-static by absorbing moist gas But the natural fiber like wool, cotton and synthetic fiber will lose However, Dupont ${ }^{\oplus}$ Nomex ${ }^{\oplus}$ III fa performance even under the condition of low tine anti-static mainly because of P-140 fiber in Dupont ${ }^{\oplus}$ Nomex ${ }^{\oplus}$ IIIA fabric, which keeps the fabric anti-static even under the humidity $20 \%$. The excellent anti-static performance has been proved in Electric Charge Decay Test and in the process of wearing.

| Chart2 The resulis of anti-static decay test |  |  |  |
| :---: | :---: | :---: | :---: |
| Fabric | \#Washing Times | K A Acopapable | Time to achieve $10 \%$ initial accepiable voliaeelseconds |
| $150 \mathrm{~g} / \mathrm{m}^{2}$ NOMEX ${ }^{\text {IIIA }}$ | 0 | 3.95 | 0.01 |
|  | ${ }^{25}$ | 3.75 | ${ }^{0.02}$ |
|  | 50 75 | 3.45 3.5 | 0.01 0.02 |
|  | 75 100 | 3.15 3.10 | 0.02 0.01 |
|  | 150 | 3.10 | 0.02 |
| 100\% FR Cotton | 0 | 3.25 | >10 |
|  | ${ }^{25}$ | 2.00 | >10 |
|  | 50 | 1.60 | >10 |
| 100\% Cotton | 0 | ${ }^{4.31}$ | 2.2 |
|  | ${ }^{25}$ | 2.50 | 210 |
|  | 50 | 2.33 | >10 |
| 65\% Cotton | 0 | 4.90 |  |
|  | ${ }^{25}$ | 2.20 | 210 |
|  | 50 | 2.25 | $>10$ |



The real case shows that it will produce enough static energy on the surface of body when taking off the outer wear. The spark in the process of static release is strong enough to ligh flammable steam or air mixture.

## Flight Suit (CWU-27/P)

Model: NM-F150-S, NM-F200-S
Material: $150 / 200 \mathrm{~g} / \mathrm{m}^{2}$ (4.5/6.0 oz/yd ${ }^{2}$ ) Dupont ${ }^{\circledR}$ Nomex ${ }^{\oplus}$ IIIA / Aramid IIIA fabric
Description: Inherently and permanently flame resistant
Do not melt, burn, drip or support combustion in air.
Front opening with two-way FR metal zipper Gusseted back for convenient action
Adjustable cuffs and waist belt with Velcro fastener
Ankle opening by zipper to adjust width of leg $5^{*} 10 \mathrm{~cm}$ Velcro on left chest used to fasten name tag 8 FR zippered pockets: 2 slant chest pockets, 1 pen pocket ( 3 compartments) on left sleeve, 2 pockets on upper legs, 1 knife pocket on left leg, 2 pockets on lower legs Application: Air force and aviation (to protect aircrew from any flash fires and its anti-static fiber is used to minimize electrostatic accumulation).
lation). etc. Standard: NFPA 2112, EN11612 : 2015, EN1149-5 : 2018

## Tanker Suit

Model: NM-TK150-S, NM-TK200-S
Material: $150 / 200 \mathrm{~g} / \mathrm{m}^{2}\left(4.5 / 6.0 \mathrm{oz} / \mathrm{yd}^{2}\right)$
Dupont ${ }^{\oplus}$ Nomex ${ }^{\oplus}$ IIIA / Aramid IIIA fabric
Description: Two way full front FR metal zipper with puller
Two slash chest pockets fastened by Velcro
One pen pocket fastened by Velcro on left sleeve
Two pockets on upper legs
Adjustable cuffs, waist belt and leg opening with Velcro fastene
DRD (Drag Rescue Device) strap concealed by Velcro fastener on the
back
Two side zippers and Velcro closure across back for easy access in
emergency
Ranker holder on shoulders
Self-fabric reinforced elbows and rump
Application: Used as the protective clothing during tank driving.
Color: Sage green
Standard: NFPA 2112, EN11612 : 2015, EN1149-5 : 2018


Flight Jacket \& Pants
Model: NM-FJ/P150-S, NM-FJ/P200-S
Material: 150/200 g/m² (4.5/6.0 oz/yd²) Dupont ${ }^{\oplus}$ Nomex ${ }^{\circledR}$ IIIA / Aramid IIIA fabric
Description: Inherently and permanently flame resistant
Do not melt, burn, drip or support combustion in air
action
Adjustable cuffs and waist belt with Velcro fast
Ankle opening by zipper to adjust width of leg
$5 * 10 \mathrm{~cm}$ Velcro on left chest used to fasten name tag
8 FR zippered pockets: 2 slant chest pockets, 1 pen pocket ( 3 compartments)
on left sleeve, 2 pockets on upper legs, 1 knife pocket on left leg, 2 pockets on lower legs
Application: Air force and aviation (to protect aircrew from any flash fires
and its anti-static fiber is used to minimize electrostatic accumulation).
Color: Sage green, Navy blue, Royal blue, Orange, Black, Khaki, Red, etc. Standard: NFPA 2112, EN11612 : 2015, EN1149-5 : 2018


Nomex Flight Winter Jacket (CWU-45/P)
Model: NM-WJ150-S, NM-WJ200-S
Material: Outer Shell Material Nomex IIIA ${ }^{\circledR}$ by DuPont ${ }^{\oplus}, 60 z$ 200gsm or 4.50 z 150 gsm

Description: Two fully-lined front cargo pockets with Velcro-closure Descri
flaps
Quilted
Quilted lining with fiber fill insulation for warmth
Quilted lining with fiber fill insulation for warm
Heavy-duty Mil-Spec zipper over a storm flap
Heavy-duty Mil-Spec zipper over a storm flap
Velcro chest plaque for attaching a military name plate Velcro chest plaque
One inside pocket
One inside pocket
Pencil pocket on left sleeve.
Application: Air force and aviation in cold weather.
Application: Air force and aviation in cold weather. Standard: NFPA 2112, EN11612 : 2015, EN1149-5: 2018

Nomex Flight Summer Jacket (CWU-36/P)

Model: NM-J150-S, NM-J200-S
Material: Outer Shell Material Nomex IIIA ${ }^{\oplus}$ by DuPont ${ }^{\oplus}, 4.50 z$ 150 gsm or 60 z 200 gsm
Description: Two fully-lined front cargo pockets with Velcro-closure flaps
Heavy-duty Mil-Spec zipper over a storm flap
Velcro chest plaque for attaching a military name plate One inside pocket
Pencil pocket on left sleeve
Application: Air force and aviation (to protect aircrew from any
flash fires and its anti-static).
Color: Sage green, Navy blue, Royal blue, Orange, etc. Standard: NFPA 2112, EN11612 : 2015, EN1149-5 : 2018


Flight Gloves


Model: NM-GLV-001, NM-GLV-002
Material: $260 \mathrm{~g} / \mathrm{m}^{2}\left(7.6 \mathrm{oz} / \mathrm{yd}^{2}\right)$
Dupont ${ }^{\oplus}$ Nomex ${ }^{\circledast} /$ Aramid fabric
Description: Goat skin leather, Nomex Knitting fabric
Length: 32 cm
Net weight: 90 gsm
Application: Air force and aviation
To protect aircrew from any flash fires and its anti-static fiber is used to minimize electrostatic accumulation
Color: Sage green, Black, Beige, etc
Standard: EN11612 : 2015, EN1149-5:2018

Military Clothing


MA-1 Flight Jacket

Model: BP-J-180
Material: Outer Fabric: $100 \%$ Nylon, sage green
Lining: 100\% Polyester, orange
nner shell: Polyester Fiberfill, 150g
Description: Fully reversible with rescue orange color inner shell Nylon knitted collar, waistband and cuffs
\#8 heavy duty metal zipper with reversible puller on front opening Two slant insert pockets on hem and one pen pocket on left arm polication: Aviation in cold weather, reversible with highly visible pplication: Aviation in cold wer, reversible with highly visible orange color for emergency.
Color: Sage green, Black, Navy blue, etc.
Standard: EN136888:2013

Classic B-15 Winter Jacket

Model: BP-J-200
Material: Outshell $100 \%$ Nylon twill fabric
Padding $100 \%$ Polyester with wool fiber
Description: Detachable wool collar
Two slant insert pockets on hem and one pen pocket on left arm Elastic hem and cuffs High quality zipper
Knitted cuffs and hem for wind protection and warmth
Soft and comfortable, keeping warm
High strength nylon fabric, good wear resistance, windproof and
waterproof, comfortable and keeping warm.
waterproof, comfortable and keeping warm. Application: Air force and aviation in cold weather.
Color: Navy blue, Black, etc.
Standard: EN13688:2013


G-1 Flight Jacket
Model: BP-FJ550-D
Material: Brown goatskin
Brown mouton fur collar YKK Zipper
$00 \%$ Bemberg rayon lining
$00 \%$ wool rib rack knit cuffs and waistband Description: Bi-swing pleated back, Gusset sleeve
arge front pockets, Mouton fur collar
on-removable genuine mouton fur collar with button closure A convenient hidden pencil pocket and underarm gussets with vent holes elastic waistband and a bi-swing back design
Application: Air force and aviation in cold weather.
Color: Dark Brown
Standard: GB18401-2010

## Flame Resistant Clothing

## Nomex ${ }^{\circledR}$ IIIA Coverall

Model: NM-C-150, NM-C-200
Material: Nomex ${ }^{\oplus}$ IIIA / Aramid IIIA fabric
Fabric Weight: $150 \mathrm{~g} / \mathrm{m}^{2}\left(4.50 \mathrm{z} / \mathrm{yd}^{2}\right), 200 \mathrm{~g} / \mathrm{m}^{2}\left(60 \mathrm{z} / \mathrm{yd}{ }^{2}\right)$
Description: Concealed two-way, heavy duty metal FR zippers and Metal buttons.
Nomex FR thread; Two chest pockets and two back pockets; Elasticized waistband; $2.5 \mathrm{~cm} / 5 \mathrm{~cm}$ FR Reflective tapes on arms and legs.
Color: Red, Yellow, Orange, Royal Blue, Tan, Navy Blue, etc. Standard: NFPA 2112, CE, EN11612 : 2015, EN1149-5 : 2018


Nomex ${ }^{\circledR}$ IIIA Shirt and Pants
Model: NM-S/P-150, NM-S/P-200
Material: Nomex ${ }^{\oplus}$ III / Aramid IIIA fabric
Fabric weight: $150 \mathrm{~g} / \mathrm{m}^{2}\left(4.50 \mathrm{z} / \mathrm{yd}^{2}\right), 200 \mathrm{~g} / \mathrm{m}^{2}\left(60 \mathrm{z} / \mathrm{yd}^{2}\right)$
Description: Inherently and permanently flame resistant Anti-static, neither melts nor drips
Soft, comfort and easy to maintain
Application: Oil and Gas, Petroleum, Chemical, Paint, etc. Remark: With or without FR reflective tapes, YKK or FR metal zippe Color: Orange, Royal blue, Navy blue, Red, Yellow, etc. Standard: NFPA 2112, EN11612 : 2015, EN1149-5 : 2018

## Model: NM-J/P-200

Material: Nomex ${ }^{\circledR}$ III / Aramid IIIA fabric
Fabric weight: $200 \mathrm{~g} / \mathrm{m}^{2}\left(60 \mathrm{z} / \mathrm{yd} \mathrm{C}^{2}\right)$
Description: Inherently and permanently flame resistant
Anti-static, neither melts nor drips
Soft comfort and easy to maintain
Application: Oil and Gas, Petroleum, Chemical, Paint, etc.
Remark: With or without FR reflective tapes, YKK or FR metal zipper Color: Orange, Royal blue, Navy blue, Red, Yellow, etc. Standard: NFPA 2112, EN11612 : 2015, EN1149-5 - 2018


Flame Resistant Clothing


## Nomex ${ }^{\circledR}$ IIIA Winter Jacket

Model: NM-WJ-200
Material: Nomex ${ }^{\circledR}$ IIIA for outshell and 3M Thinsulate for Innershe
Fabric weight: $200 \mathrm{~g} / \mathrm{m}^{2}$ (6 oz/yd²)
Description: Inherently and permanently flame resistant
Anti-static, neither melts nor drips
Soft, comfort and easy to maintain
Application: Oil and Gas, Petroleum, Chemical, Paint, etc.
Remark: With or without FR reflective tapes, YKK or FR metal zipper Color: Orange, Royal blue, Navy blue, Red, Yellow, etc.

Nomex ${ }^{\circledR}$ Balaclava
Model: NM-Hood-1
Material: $200 \mathrm{~g} / \mathrm{m}^{2} 100 \%$ Nomex
Description: Inherently and permanently flame resistan
Anti-static, neither melts nor drips
Soft, comfort and easy to maintain
Application: Oil and Gas, Petroleum, Chemica,
Military, Police, Rescue, etc.
Remark: Single layer or double layers
Color: White, Black
Standard: NFPA 2112, EN11612 : 2015


Standard: NFPA 2112, EN11612 : 2015, EN1149-5 : 2018


Model: NM-NG-1
Material: $200 \mathrm{~g} / \mathrm{m}^{2} 100 \%$ Nomex
Feature: Inherently and permanently flame resista
Anti-static, neither melts nor drips
Soft, comfort and easy to maintain
Application: Oil and Gas, Petroleum, Chemical, Paint
Military, Police, Rescue, etc.
Remark: Single layer or double layers
Color: White, Black
Standard: NFPA 2112, EN11612 : 2015

## Flame Resistant Clothing

## Nomex ${ }^{\circledR}$ Gloves

## Model: NM-GLV-200

Material: $200 \mathrm{~g} / \mathrm{m}^{2} 100 \%$ Nomex
Description: Inherently and permanently flame resistant
Anti-static, neither melts nor drips
Soft, comfort and easy to maintain , Military, Police, Rescue, etc.
Remark: Single layer or double layers
Color: White, Black
Standard: EN407: 2020


Flame Resistant Raincoat
Model: FRP-CT/P-235
Material: 98\%polyester 2\%anti-static fiber, PU Coated
Fabric Weight: $235 \mathrm{~g} / \mathrm{m}^{2}$
Accessories: FR Zipper, FR Thread, with 5 cm FR refelective tapes on waist, shoulder, sleeves
Description: Flame resistant, Waterproo
Color: Fluorescent Yellow/Navy
Standard: NFPA 2112, EN11612: 2015, EN1149-5 : 2018, EN343:2003

Flame Resistant Clothing


## 100\% FR Cotton Jacket and Pants

Model: FRC-C-220
Material: Flame retardant $100 \%$ Cotton
abric weight: $220 \mathrm{~g} / \mathrm{m}^{2}$
Description: Moisture-absorbing, breathable, comfortable and durable
Application: Oil and Gas, Petroleum, Chemical, Paint, etc
Remark: With or without reflective tapes
Color: Orange, Royal blue, Navy blue, Red, etc.
Standard: NFPA 2112, EN11612 : 201

100\% FR Cotton/nylon-coverall

Model: FRC-C-330
Material: Flame retardant 100\% Cotton
Fabric weight: $330 \mathrm{~g} / \mathrm{m}^{2}$
Description: Moisture-absorbing, breathable, comfortable and durable
Application: Oil and Gas, Petroleum, Chemical, Paint, etc.
Remark: With or without reflective tapes
Color: Orange, Royal blue, Navy blue, Red, etc.
Standard: NFPA 2112, EN11612 : 2015


00\% FR Cotton Anti-Static covera
Model: FRC-C-330
Material: Flame retardant 98\% Cotton, 2\% Anti-static fiber
Fabric weight: $330 \mathrm{~g} / \mathrm{m}^{2}$
Description: Moisture-absorbing, breathable, comfortable and durable
Application: Oil and Gas, Petroleum, Chemical, Paint, etc.
Remark: With or without reflective tapes
Color: Orange, Royal blue, Navy blue, Red, etc.
Standard: NFPA 2112, EN11612 : 2015

## Aluminized Clothing



Mirror Suit 3H
Model: MirPro-Kit-500
Material: $500 \mathrm{~g} / \mathrm{m}^{2}$ aluminized glass fiber base materia
Description: Can withstand the degree of $1200^{\circ} \mathrm{C}$
Can stand up to more than 95 seconds radiant heat as per EN ISO 6942 test
The aluminized material is not easily peeled from the base material Application: The industrial environment where workers contact heat indirectly
Standard: EN11612 : 2015, EN407 : 2020

## Model: MirPro-Kit-580

Material: $580 \mathrm{~g} / \mathrm{m}^{2}$ aluminized Viscose base material
Description: Can withstand the degree of $1200^{\circ} \mathrm{C}$
Can resist thermal contact and hot molten metal splash
The aluminized material is not easily peeled from the base mater
Application: Steel and aluminum factory or other heat dangerous
ndustrial environment
Standard: EN11612 : 2015, EN407 : 2020

## Aluminized Clothing

Mirror Suit 4HK

Model: MirPro-Kit-515
Material: $515 \mathrm{~g} / \mathrm{m}^{2}$ aluminized with Kevlar base materia
Description: Can withstand the degree of $1200^{\circ} \mathrm{C}$
Can resist thermal contact and hot molten metal splash
More wear-resistant and durable usage
The aluminized material is not easily peeled from the base material Application: Steel and aluminum factory or other heat dangerous industrial environment
Standard: EN11612 : 2015, EN407 : 2020


Mirror Suit 5H

Model: MirPro-Kit-710
$10 \mathrm{~g} / \mathrm{m}^{2}$ FR woven fabric substrate with aluminum membrane
Description: Withstand high-heat up to $1200^{\circ} \mathrm{C}$
Superior protective performance on high pressure and moisture
apor, superheated vapor and high temperature liquid
The aluminized materiar is not easily peeled from the base
material
Application: Proximity fire rescue
mergency rescue
Not suitable for entering or passing through fire ground
Accessory: Self-contained breathing apparatus (SCBA)
G60415210
Standard: EN11612 : 2015, EN407 : 2020

Model: MirPro-Kit-770
Material: Outer shell: $770 \mathrm{~g} / \mathrm{m}^{2}$ FR woven fabric substrate with aluminum membrane
Thermal lining: Meta/para-aramid felt quilted to $50 \%$ meta-aramid / $50 \%$ FR viscose woven fabric
Description: Withstand high-heat up to $1200{ }^{\circ} \mathrm{C}$
The shield is made of polycarbonate with gold coating ( 24 carat), which reflects electromagnetic radiation of more than $1000^{\circ} \mathrm{C}$
The aluminized material is not easily peeled from the base materia Application: Proximity fire rescue
Application: Proxin
Not suitable for entering or passing through fire ground
Accessory: Self-contained breathing apparatus (SCBA) CG60415210 Standard: EN11612 : 2015, EN407 : 2020


Accessories


MirPro-Apron-580


MirPro-GLV-580


MirPro-Sleeve-580


MirPro-Leg-580


Metaltech garment is an innovative product to prevent injuries from the molten metal splash. It is inherently flame-retardant and the protection can not be washed out or worn away.
Metaltech, with its special blend of fibers, can protect skins from metal or iron splash. Metaltech garments apply in welding, smelting, casting and molten metal splash or radiant heat industrial condition

Metaltech Clothing
Model: MeT-J/P-350
Color: Navy Blue
Weight: 350gsm
Function: Used to protect from heat and flame, molten aluminum splash, and molten iron splash Fabric: Woven Fabric, lenzing FR blended (Viscose FR Blended) Standard: EN 11612 : 2015, D3 E3


## Chemical Protection Clothing



Disposable Hooded Protective Coverall
Model: CG500B/CG501B
Material: Non-woven fabric with microporous laminate $65 \mathrm{~g} / \mathrm{m}^{2} \pm 2 / 55 \mathrm{~g} / \mathrm{m}^{2} \pm 2$
Description:
Durability, Anti-static propertie
Application:
Spraying, cleaning operations, food processing, painting
Color: White
Certificate: CE, GB/T 29511-2013


$\underline{\text { Disposable Hooded Protective Coverall }}$
Model: CG400B
Material: Non-woven fabric with microporous laminate, $65 \mathrm{~g} / \mathrm{m}^{2} \pm 2$
Description:
Durability, Anti-static properties
Application:
It provides barrier and protection from hazardous substances or
radioactive particles in the nuclear industry, pharmaceutical manufac-
turing or in research and biosecurity laboratories.
Color: White
Certificate: C
Standards:
Standards:
Optional:
Optional:

 $8 \stackrel{\text { enars }}{80}$ $\int_{\square}^{126} \underbrace{\text { ENO73.2 }}$

## Chemical Protection Clothing

Disposable Hooded Protective Coverall
Model: Dupont ${ }^{\text {m" }}$ Tyvek ${ }^{\circledR 1} 500$ Xpert
Material: Tyvek ${ }^{\circledR} 41 \mathrm{~g} / \mathrm{m}^{2}$
Package: 25pc/box
Standards: EN ISO 13982-1:2004+A1:2010 (Type 5), EN 13034: 2005+A1: 2009 (Type 6), EN 14126:2003 (Type 5-B, 6-B), EN 1149-5: 2008
Certificate: CE
Color: White
Package:


## Disposable Hooded Protective Coverall

Model: Dupont ${ }^{\text {Tw }}$ Tyvek ${ }^{\circledR} 600$ Plus
Material: Tyvek ${ }^{\oplus} 41 \mathrm{~g} / \mathrm{m}^{2}$
Package: 100pc/box
Standards: EN 14605:2005+A1:2009 (Type 4); EN ISO 13982-1:2004+A1:2010 (Type
5), EN 13034:2005 +A1:2009 (Type 6), EN 14126:2003, EN 1149-5:2008

Certificate: CE
Color: White, blue tape seamed
Package:

Liquid-tight Chemical Protective Clothing

## Model: CG300B

Material: Microporous film coated non-woven fabric, $89 \mathrm{~g} / \mathrm{m} 2 \pm 2$
Description: Made with microporous film coated non-woven material.
Application: Protects from harmful dry particles; Protects from chemical substance, acid and alkali chemicals treatment;
Protects from hazardous substances or radioactive particles in the nuclear industry Color: Yellow
Standards: EN 14605 : 2005+A1 : 2009, EN ISO 13982-1 : 2004+A1 : 2010, EN 13034: 2005+A1: 2009, EN 14126: 2003, EN 1073-2, EN 1149-5 : 2008


## Chemical Protection Clothing

## Stormwalker Clothing

Liquid-Tight Chemical Protective Clothing
Model: ChemPro-6000
Description: 1.Made of proprietary materials, including protective film structure
2.Resistant to a variety of organic substances, such as stupid, diformaldehyde and other substances
3.Passed the European standard EN14126:2003 biological protection test with the highest performance level
4.Pass the European standard protective clothing type 3/4/5/6 test requirements, the inner layer has been treated with anti-static
5. High level of protection combined with light weight and softness

Application: Protection of a variety of organic chemicals and biological assay, it can be used in chemical industry, industrial cleaning and mainte nance, dangerous goods disposal and disaster control and other fields. Standard: EN 14605 : 2005+A1 : 2009, EN ISO 13982-1: 2004+A1 : 2010, EN 13034: 2005+A1: 2009, EN 14126: 2003, EN 1073-2, EN 1149-5 : 2008


Gas-Tight Chemical Protective Clothing

## Model: ChemPro-10000

Description:
1.Fully enclosed air tight protective clothing with protruding back to accommodate self-contained air breathing apparatus;
2.Detachable double layer gloves;
3.Velcro double-layer placket zipper, the zipper is covered with the zipper placket to avoid leakage at the zipper;
4.Double exhaust valve, double-layer adhesive strip, socks, and placket with trousers
5.The widened panel is adopted, and the widened panel is of 3 -laye structure
6.Positive pressure air tightness test completed (ASTMF 1052) Application:
It is used to protect from dangerous chemical goods handing, chemica accident emergency rescue etc.
Color: Hi-vis Green
Standards: Type 1-B, Type 2-B, Type 3-B, Type 4-B. Type 5-B, EN 14126 EN 1073-2, EN 1149-5


Outdoor Jacket With Hood And Detachable Interior

## Model: STW-J-P100

Brand: Stormwalker ${ }^{\circledR}$
Product: Agate blue detachable jacket
Overall structure: The shell of the lightweight waterproof and breathable jacket and the detachable inner liner of Stormwalkere high-efficiency thermal insulation flake are used.
Material: Outer layer-polyester TPU coated fabric
Inner liner-made of Stormwalker ${ }^{\circledR}$ high-efficiency thermal insulation flake.
Description: 1. The outer layer is made of polyester TPU coated fabric, which has good wear resistance, waterproof and breathable performance
2. The inner liner Stormwalker® high-efficiency thermal insulation flake is prepared from special aerospace fibers, and the thermal insulation effect is better than the high-end thermal insulation flake insulation effect
on the market.
3. The whole body of the garment is treated with glue, and the placket is a waterproof zipper with multiple protections to provide better waterproof performance
Application: Daily life and also suitable for outdoor sports such as heavy-duty hiking, camping, and crossing Agate blue color matching detachable jacket
Color: Agate blue
Standard: EN13688 : 2013, GB/T 32614-2016

## Cooling Vest

Bionic Cooling Vest
Model: TemPro-CV-02, Ecool-OH-A
Material: Outer shell: Functional fiber fabric Inner layer: Waterproof breathable material Description: Cooling method that mimics the evaporation of body sweat
Unique high-tech cool 3 -layer structure, better wate locking performance
Physical water absorption locking mechanism and reusable Upper body design to avoid intestinal irritation due to low temperature
Durable and machine washable. No spin dehydration, dryer drying
Easy to use, only need a bottle of water
Keep cooling for 3-8 hours
Application: Hot weather or heated environment
Color: Navy blue
Standard: EN13688: 2013



Biobased Cooling Vest

Model: TemPro-CV-01
Material: Polyester/cotton fabric
Description: Cool storage cooling method
The special structure and design adopted in the cold storage bag ensure the bag stiff and not deformed, and storage bag ensure the bag stiff and not deformed, and make the cold agent not flow or fall.
With to 4 recyclable hard gel packs.
The shoulder and waist are designed with Velcro, which can be adjusted.
Use after refrigerating and keep cooling no less than 3 hours
Application: Hot weather or heated environment
Color: Blue
Standard: EN13688 : 2013

## High-Visibility Clothing



High-Visibility Shirt and Pants
Model: HV-S/P-190
Material: 100\% Cotton twill
Fabric weight: $190 \mathrm{~g} / \mathrm{m}^{2}$
Fabric weight: $190 \mathrm{~g} / \mathrm{m}^{2}$.
Color: Orange / Navy blue, Yellow / Navy blue Standard: EN20471 : 2013

## Model: HV-V-120

Material: 100\% polyester low elastic fabric
Description: Highly visible, comfortable and moisture-absorbing
Application: Road workers, police, emergency rescue, etc.
Color: Orange, Yellow, Blue, etc
Standard: EN20471: 2013


High-Visibility Rainwear
Model: HV-Rain-1
Material: $100 \%$ Polyester Oxford waterproof PU
Description: 5 cm reflective tape, All seam taped to prevent heavy rain, Detachable hood
Standard: EN20471: 2013, EN343 : 2019

## Hand Protection

Cut-Resistant and Arc Flash Work Gloves

## Model: Arc-CRPro-GLV-12

ATPV: $12.7 \mathrm{CAL} / \mathrm{CM}^{2}$
Material: Aramid Nitrile Chlorine Fiber Blending
Description: Inherently flame resistant,Excellent combined protection from flame, heat and cut, Liner has comparable heat qualities to aramid fibers, Neoprene bi-polymer dip provides superior grip plus great abrasion qualities Application: Power grid industry, industrial enterprise substations, engaged in power generation, transmission, transformation, distribution and power consumption processes, Operation, commissioning, overhaul and maintenance positions Standard: ASTM F2675 EN388


50cal Leather Arc Flash Gloves

Model: ArcPro-GLV-LEA50
ATPV: 50.5CAL/CM ${ }^{2}$
Material: Cowhide and aramid blended
Description: Strong thermal stability, soft and comfortable, High arc resistance 3D three-dimensional design, high flexibility
Application: Power grid industry, industrial enterprise substation Standard: ASTM F2675

Model: StcPro-GLV-001
Material: Polyester and carbon fiber material, polyurethane coating on the fingertips
Description: With anti-slip, dust-proof, wear-resistant, breathable anti-static functions The fingertip coating also prevents perspir ation from penetrating and transferring to productcontacting parts Using 13-needle technology, no seams, fully automatic computer knitting Elastic cuffs, elastic and comfortable, fit the shape of the hand
Application: Automotive, Electronics, Machinery and Equipment Electrical Operations.
Standard: EN16350:2014

Anti-static Conductive Gloves

igh Temperature Resistant Glove

Model: HRPro-GLV-001
Material: Good heat, cut and abrasion resistance, heat resistance: $500^{\circ} \mathrm{C}$, flexible, comformable and durable Application: Mainly suitable for casting, smelting, forging glass processing, blow molding, etc Standard: EN407:2020

## Model: StcPro-GLV-002

Material: Carbon fiber material, polyurethane coating on the palm Description: With anti-slip, dust-proof, wear-resistant, breathable and anti-static functions.Using 13-needle technology, no seams
fully automatic computer knitting Elastic cuffs, elastic and
comfortable, fit the shape of the hand
Application: Automotive, Electronics, Machinery and Equipment Electrical Operations.
Standard: EN16350:2014




## Hand Protection

High Temperature Resistant Gloves

## Model: CG-NGW-01

Material: The main material has an outer layer of aramid and an inner layer of polyester-cotton
Description: Thermal contact performance level $350^{\circ} \mathrm{C}$,
avoid or reduce hazards to hands and wrists
Application: Wear-resistant, anti-skid and anti-cut Standard: EN407:2020


Material: HPPE, Palm polyurethane (PU) coating Description: Has good anti-slip and wear resistance, Using 3 -needle knitting, it is seamless and has good breathability and flexibility. Wear resistance level 4, cut resistance level 4, ear resistance level 4, puncture resistance level 4 Application: Glass industry, mechanical assembly and maintenance, logistics and warehousing, gardening work, emergency rescue, engraving work,sharp object processing Standard: EN388:2016

Aramid Cut-resistant Gloves


