



Workwear Uniform Footwear

Personal Protective Equipment

CATALOGUE 2015

# Content



Company profile



**Business Class** collection



Uniforms





Aviation clothing



Hi-Vis



Workwear

24

Professional workwear



Fireproof

Chemical

protective

Protective

footwear

protection

Welding

protection

clothing

clothing

64



Respiratoric







Eye protection



Ear protection



Head Protection



Fall protection



Hand protection

# Overview

**Technoavia Middle East is regional** subsidiary of Russian-based Technoavia Company, Technoavia is the leading manufacturer and distributor of work safety products, such as workwear, footwear and personal protective equipment. Our company was established in 1992 and ever since has always been regarded as quality benchmark for the entire workwear and PPE industry of the Russian Federation. In 2013. the company's factories produced 4,500,000 working apparels (including 5,000 special orders for corporate styled clothing) and over 800,000 pairs of shoes.

Each year we expand production capacities, increase product release, procure and install modern equipment.

Each year new company's representative offices are opened in cities all around Russia. In 2013 company has commenced its international expansion by establishing representative office in United Arab Emirates. Our company, amongst many others, recognizes great potential of MENA region and looking to bring modern complex safety solutions our clients.

Our philosophy is to produce comfortable, functional, and presentable workwear and footwear of the highest quality to facilitate your daily work.

Modern human spends most of his time at work, therefore comfort and safety have great importance for everyone.. Nothing shall distract workers from the working process or, especially, interfere



Andrey Popov, General Director of Technoavia

with it. Properly selected clothing, shoes, and protective equipment ensure comfortable and safe work. If a worker feels himself protected, provided with comfortable clothing, shoes, and suitable protective equipment, he can completely focus on the workflow, thus, increasing work performance and employee's loyalty to his company.

What do we do to achieve our quality:

- Our factories are equipped with modern equipment, and we apply modern production technologies to ensure steady output quality.
- Our garments are produced from the best materials and insulation to provide maximum protection.
- We develop ergonomic and functional design for all of our garments and footwear.

Technoavia's specialists are constantly generating new ideas and aware of all major modern trends and technologies.

- All of our primary suppliers are worldrenowned manufactures with impeccable reputation.
- To make our garments we use accessories from top brands on the market, we strongly believe that small things do make difference.
- All the materials used in our production are consistently tested in Russian and International laboratories.
- We understand how important is to provide employees with clothing and shoes suitable for their work. We test our products before releasing under actual production conditions, and ender clothing, shoes, and protective

equipment for trial purposes if necessary. We understand the importance of equipping workers with workwear and footwear which functionality corresponds to real working conditions. That is why we test all of our products in real working conditions and offering samples to our clients for trial testing.

- We appreciate your feedback and will always provide you with immediately respond
- Close cooperation with experts and customers allows us to create new models that meet the most sophisticated demands.
- We monitor the output quality at each lenge. stage of production.



Technoavia Middle East at Intersec 2014

Today, employees of over 40,000 enterprises throughout Russia and former Soviet Union work in our garments.

All the products represented in the Technoavia Middle East catalogue are certified in accordance with the requirements of the Regulations of the Customs Union and Russian or International Standards.

We also offer additional service such as: development and introduction of corporate style, consultancy, product delivery and specialist visit to your production.

We are team of professionals dedicated to our work and ready to find solutions to any complicated and interesting challenge













# Workwear production

Every year, our production capacity increases. In 2013, 4,5 million garments and 800,000 pairs of footwear were produced under the Technoavia trademark. All products conform to international standards and meet the highest industrial safety requirements.

Our production capabilities in Russia include 8 clothing factories and 1 shoe factory equipped with the most modern equipment. The clothing factories use high-production stitching machines manufactured by Juki of Japan, while Assyst CAD



 Garment designer at work in Assyst, an automated designing system

software is used for pattern and layout construction. The shoe factory is equipped with four German-made Desma injection-molding machines. All this combined with professionalism of the staff gives us a host of possibilities for further strategic developments.

We will transmit this experience to GCC region by establishing production facilities in Sharjah in the near future under the Technoavia ME brand. All our regional outsourcing partners have passed tough selection to match our standards.

We constantly invest in production modernization and personnel training to be able to offer high quality products and services to our customers. We are always in search of something new, whether



 Clothing is fabricated on sewing machines by Juki by highly qualified tailors

a new collection of work wear and footwear or a new storage/office management system. Today, the Technoavia workforce numbers 3500 employees, many have been loyal to the company for more than 15 years.

All materials used and manufactured products produced undergo several stages quality control in all Technoavia factories. Random quality control is also preformed at all warehousing facilities.

We work only with the most credible producers of

▲ Bullmer, automated cloth spreading and cutting complex at the Vyazma clothing factory

fabrics, fittings and accessories including: Klopman (Italy), Concordia (Belgium), 3M (USA), YKK (Japan), Barnet (USA), Amann (Germany) and Prym (Germany).

We strive to manufacture the most comfortable and aesthetically pleasing work wear of the highest quality. Moreover, all design work, materials and process features used in production of our products wear are strictly in accordance with its intended function.

 Operator of the automated cloth spreading and cutting complex (ACSCC) at work



Quality control at each stage of production

# Company profile

# **Protective Footwear Production**

Over the last six years we have significantly modernized our shoe factory by installing new equipment, by embracing highly efficient manufacturing processes and constantly improving our operators' professional skills and training.

In 2014, we will open a new workshop at the shoe facility, where we recently installed a fourth injection-molding machine Germany's Desma. The installation of this new machine will enable us to hoist the production of our modern safety footwear and expand our model range.

In order to improve footwear fabrication process and increase labor efficiency, factory was equipped with modern sewing automatic machines by Pfaff (Germany) that permit to increase output of high quality shoe uppers with minimum number of employees involved. As well, clothcutting and lasting equipment by Schoen (Ger-

New machines by Desma for fabricating shoes using direct

many) has been put in operation, and sewing

and fabrication workshops are strengthened with

sewing machines by Duerkoop-Alder (Germany)

High performance molding machines by Desma

installed at the factory allow producing modern

polyurethane sole construction method with

thermoplastic polyurethane and nitrile rubber

protective footwear made by using direct binding

patch, what ensures protection from petrochemi-

cals, oils, aggressive substances, mechanical im-

sole attach construction method





 New series of protective footwear with composite toe cap, Neogard-Lite®



 Sewing automatic machines by Pfaff allowing fabricating high-quality shoe upper

pacts, and contact with heated surfaces.

In our specialized footwear production we use thermostable and water-repellent leather material, breathable lining material, anti-puncture metallic liner and non-metallic insole made out of anti-puncture material, special shields that ensure insteps impact protection – all of above listed facts allow to significantly increase protective properties of our footwear.

Our production volume ranges from single samples to batches numbering in the tens of thousands. Long-term cooperation with large companies allows us to study footwear requirements and meet the individual corporate style shoes demands of our customers. Footwear can be made in various colors, with the use of colored accessories such as threads and laces as well as the customer's logo.

Protective footwear fabricated in a corporate style







# Company profile

# Warehousing facilities

Our warehouse facility is equipped with efficient handling machinery and can accommodate the handling of heavy freight. In 2013, we shipped 8 million sets of working clothes, more than 2 million pairs of shoes and 30 million units of personal protection equipment to our customers.

Our total warehouse space is over 9,000 square meters. In the UAE, we also have warehouse facilities for our customers' convenience. Efficient cooperation with carrier companies enables us to effectively ship and deliver products to 75 cities across Russia, the Commonwealth of Independent States and other key global markets.

At the moment our main warehouse is located Sharjah Airport International Free (SAIF) - Zone. We are ready to deliver your products to any location within MENA region or any other convenient location.



# **Additional services**

#### Technoavia's specialists:

• Assist in proper selection and usage of personal protective equipment, their storage and maintenance, preform calculations of economic efficiency.



- Carry out labour safety workshops and seminars both in Technoavia office as well as in our customers facilities. Our new service – organization of on-line seminars with specialists, representing PPE manufacturers, where our clients can address any relative topics.
- Constant testing new fabrics, materials and insulation for footwear and workwear production.



### Logo

For all our products we offer following services

- embroidery
- screen printing



11

# **Corporate style clothing**

If your company wants to reflect its corporate image (style) in employees clothing, than our experienced designers are at your service, they will develop original clothing style with attention to your material, functionality and color requirements. We guarantee quality protective clothing for nice and comfortable wear!

If your company has already embraced corporate

design, we are ready to produce clothing for you.

ters) or use our catalogue models made in your

corporate colors.

We can either use your technical requirements (pat-

How this works:

The experts go to an enterprise for studying labor specifics, working conditions and list of occupations

Design office makes work wear sketches and submits them to the Customer for approval

> Preparation of paperwork

Workwear sample production is given to a customer for trial and approval

Certification of work wear collection



Production of corporate work wear



6



### Офисы авиакомпаний Airline offices

airlines

Бизнес зал Business lounge

Business Class is a corporate clothing line for employees of:

airports

and airlines



railway





marine and river transport

banks

and offices





service sector





Business class range is aimed at civil aviation, railways, marine transport and at office and bank workers, as well as, at HoReCa sector. The collection consists of formal dresses, blouses, shirts and knitwear.

Modern design, comfort cut and quality materials are the basis of this collection. For Business Class clothing production we use especially developed fabrics and high quality fittings from the most reliable producers.

Our specialists are ready to provide all necessary information and advice for appropriate selection.

The Business Class suits are fabricated from soft half-woolen fabric with stretching effect imported from Portugal. Garments produced from this fabric are elegant due to volume reduction effect and does not hamper motions.

The fabric finished with Teflon by DuPont protects from water and oil: drops roll down from the fabric without leaving any traces. The clothing made out of this fabric is easy to maintain, has presentable appearance, and ensures comfort during the whole day.

Slim-fit women's blouses are produced from elastic poly-cotton fabric, they extremely comfortable and nice to touch.

Knitwear under "Milan" brand is produced of Italian yarn, which consists by 50% of highquality Australian Merino yarn. Balanced yarn composition ensures improved functional properties: wear does not deform, bleach or shrink.

All the models in Business Class range are available separately, so you can compile suit according to your requirements. **Business Class collection** 





Women's Business class suits are fabricated using soft crease-resistant fabric with stretch effect. The Teflon® finish ensures water and oil repellency. The clothing longer looks like new.

#### 1.034

#### Elongated women's vest

The elongated vest with the half-adherent silhouette and central fastener. Slash side and breast pockets. **Upper fabric:** semi-woolen costume fabric (44% wool, 54% polyester, 2% lycra), density of 220 gsm, made in Portugal. **Color:** dark blue. **Lining:** 100% polyester with antistatic finishing. **Size:** 80 to 124. **Height:** 158 to 176.\* **GOST 25295-2003, TR CU 017/2011** 

#### 1.124

Women's vest Half-adherent vest with central fastener. Slash side and breast pockets. Upper fabric: semi-woolen costume fabric (44% wool, 54% polyester, 2% lycra), density of 220 gsm, made in Portugal. Color: dark blue. Lining: 100% polyester with antistatic finishing. Size: 80 to 128. Height: 158 to 176.\* GOST 25295-2003, TR CU 017/2011

#### 1.055 YKK

#### Women's trousers

Straight leg lined trousers with a wide coquette belt with loops. Upper fabric: semi-woolen costume fabric (44% wool, 54% polyester, 2% lycra), density of 220 gsm, made in Portugal. Color: dark blue. Lining: 100% polyester with antistatic finishing. Size: 80 to 128. Height: 158 to 176.\* GOST 25295-2003, TR CU 017/2011

#### 1.123 Women's vest

Half-adherent vest with central fastener. Soft silhouette lines and right proportions impart elegancy to the garment. The central plugging, English collar, slash side flap pockets.

Teflon

Upper fabric: semi-woolen costume fabric (44% wool, 54% polyester, 2% lycra), density of 220 gsm, made in Portugal. Color: dark blue. Lining: 100% polyester with antistatic finishing. Size: 80 to 128. Height: 158 to 176.\* GOST 25295-2003, TR CU 017/2011

#### 1.092 YKK Women's skirt

Lined straight skirt with a vent and a wide coquette belt. Blind zipper fastener. Upper fabric: semi-woolen costume fabric (44% wool, 54% polyester, 2% lycra), density of 220 gsm, made in Portugal. Color: dark blue. Lining: 100% polyester with antistatic finishing. Size: 80 to 128. Height: 158 to 176.\* GOST 25295-2003, TR CU 017/2011

Quality and elegant clothing, which is nice and comfortable to wear

1.123

(1.092)

Slim-Fit blouses fit tightly with no motion discomfort

# Corporate clothing line Business class

Elastic soft fabric 1.076

1.077 Slim-Fit women's long sleeve blouse Fitting blouse with button fasteners, turn-back collar, and back yoke. **Fabric:** blended (60% cotton, 35% polyester, 5% lycra), density of 125 gsm. Color: white. Size: 80 to 128. Height: 158 to 176.\* GOCT 25294-2003, TS CU 017/2011

1.076 Slim-Fit women's short sleeve blouse Fitting blouse with button fasteners, turn-back collar, and back yoke. **Fabric:** blended (60% cotton, 35% polyester, 5% lycra), density of 125 gsm. Color: white. Size: 80 to 128. Height: 158 to 176.\* GOCT 25294-2003, TS CU 017/2011

www.technoavia.com www.technoavia.ru

1.077

\* The clothing sizes and height range are indicated. Please specify possible combinations by the manager or on the website.

**Business Class collection** 



**Composition:** 50% merino wool, 50% polyacryl; 14 knitting class. Balanced composition and technologies applied when producing yarn ensure improved operating features. Size: 92 to 116. Height: 170-176 to 182-188.\* TR CU 017/2011, GOST R 31410-2009

#### 4.097 Milan women's jumper

Composition: 50% Merinos wool, 50% polyacryl; 14 knitting class. Balanced composition and technologies applied when producing yarn ensure improved operating features. Size: 84 to 116. Height: 158-164 to 170-176.\* TR CU 017/2011, GOST R 31409-2009

knitting class. Balanced composition and technologies

applied when producing yarn ensure improved operating features. Size: 84 to 116. Height: 158-164 to 170-176.\* TR CU 017/2011, GOST R 31409-2009

# 4.096

Milan men's jumper

**Composition:** 50% merino wool, 50% polyacryl; 14 knitting class. Balanced composition and technologies applied when producing yarn ensure improved operating features. Size: 92 to 116.

Height: 170-176 to 182-188.\* TR CU 017/2011, GOST R 31410-2009

\* The clothing sizes and height range are indicated. Please specify possible combinations by the manager or on the website.



www.technoavia.com www.technoavia.ru \* The clothing sizes and height range are indicated. Please specify possible combinations by the manager or on the website.

**D** *Recommended for managers, aviators, and engineers* 



#### 1.026 Thinsulate" Son Aero men's insulated jacket

It combines a lined wind stopper and a warm jacket with detachable zip lining. The length of the jacket allows wearing it over a suit jacket, and buttons on the cuff (when unbuttoned) also ensure comfort in wearing over a suit jacket. The fastener is represented by a twin metal zipper and blind buttons. The collar is stand up. The detachable hood is shrinked by an elastic cord. The waistband serves for adjusting the side volume. Pockets with flaps on buttons and slash pockets, a format A4 inside pocket, and pockets in the jacket lining and insulation. Additional comfort is ensured by a band for writing in names for identifying affiliation after washing and dry cleaning. The jacket is equipped with a zipper from a world's famous manufacturer, YKK. Each tooth of the zipper is fabricated and polished individually ensuring soft slip when opening and closing, and nice appearance.

Upper fabric: 100% polyester, membrane (water resistance of 10,000 mm w.c., steam permeability of 10,000 gsm per 24 hours), frost-resistant, breathable, windproof, water-resistant, density of 110 gsm. Lining: 100% printed polyester fabric. Insulation: Thinsulate® CS150, 1 layer. Color: black and blue. Size: 92 to 132.

Height: 170 to 188.\* GOST 25295-2003, TR CU 017/2011 1.036

Uniform available in the warehouse

Teflon

# 1.036 Men's uniform single-breasted suit

Suit jacket + trousers

Semi-adjacent single-breasted suit jacket with three buttons. Trousers with side pockets, one slash pocket on the right rear half, and a zip fastener. **Upper fabric:** imported half-woolen

(45% wool, 55% polyester) crease-resistant, piling-resistant fabric with the Teflon® finish for preventing from oil and water ingress. Density of 300 gsm. Lining: polyester with antistatic finish. Color: dark blue. Size: 92 to 124.

Height: 170 to 188.\* GOST 25295-2003, TR CU 017/2011

# 1.054 🧇

Men's uniform trousers Trousers with one pleat in the waist line, side pockets, one slash pocket on the right rear half, and a zip fastener. Upper fabric: imported half-woolen (45% wool, 55% polyester) crease-resistant, piling-resistant fabric with the Teflon® finish for preventing from oil and water ingress. Density of 300 gsm. Lining: polyester with antistatic finish. Color: dark blue. Size: 92 to 124. Height: 170 to 188.\* GOST 25295-2003, TR CU 017/2011

#### 1.031 Men's uniform double-breasted suit Suit jacket + trousers Customized delivery

Double-breasted suit jacket with two buttons. Slash flap pockets, and a breast pocket. Trousers with side pockets, one slash pocket on the right rear half, and a zip fastener.

4.094

1.031

Upper fabric: imported half-woolen (45% wool, 55% polyester) crease-resistant, piling-resistant fabric. Lining: polyester with antistatic finish. Color: dark blue. Size: 92 to 120. Height: 170 to 188.\* GOST 25295-2003, TR CU 017/2011



Protective pads

composition and fragment polyamide fabric prevent from deformation and fraying in the area of elbows. Color: black. Neckline: V-shaped. Size: 92 to 128, Height: 158-164 to 182-188.\* GOST 31410-2009 TR CU 017/2011

#### 4.092 Men's uniform jumper with pads

Composition: 30% wool, 70% polyester. Pads made of strength polyamide fabric prevent from deformation and fraying in the area of elbows. Color: dark blue. Neckline: round. Size: 92 to 128, Height: 158-164 to 182-188.\* GOST 31410-2009 TR CU 017/2011

4.092

Protective pads

www.technoavia.com www.technoavia.ru \* The clothing sizes and height range are indicated. Please specify possible combinations by the manager or on the website.



1.054



1.066 Color: white. 1.061 Color: light blue.

Buttoned shirt-jacket with a belt and elastic band from sides. Breast slip pockets with a buttoned flap. Loops for fixing boards on the shoulders. Turnback collar. Fabric: for shirts (33% viscose, 67% polyester), density of 170 gsm. Size: 38 to 48. Height: 170 to 188.\* GOST R 50504-2009, TR CU 017/2011

Uniform tie Color: black. TR 858-5642-2004

TR CU 017/2011 Customized deliverv

#### 8.171 High-crowned service cap 8.175 Service cap

1.065 Color: white.



Buttoned shirt-jacket with a belt and elastic band from sides. Breast slip pockets with a buttoned flap. Loops for fixing boards on the shoulders. Turnback collar. Fabric: for shirts (33% viscose, 67% polyester), density of 170 gsm. Size: 38 to 48. Height: 170 to 188.\* GOST R 50504-2009, TR CU 017/2011

## Men's long sleeve white shirt

Buttoned fastener. Breast strap pockets with a buttoned flap. Buttoned board on the shoulders. Turnback collar. Fabric: blended (35% cotton, 65% polyester), density of 105 gsm. Size: 38 to 48. Height: 170 to 188.\* GOST R 50504-2009, TR CU 017/2011

# Men's short sleeve white shirt

Buttoned fastener. Breast strap pockets with a buttoned flap. Buttoned board on the shoulders. Turnback collar. Fabric: blended (35% cotton, 65% polyester), density of 105 gsm. Size: 38 to 48. Height: 170 to 188.\* GOST R 50504-2009, TR CU 017/2011

www.technoavia.com www.technoavia.ru

\* The clothing sizes and height range are indicated. Please specify possible combinations by the manager or on the website.

3.104

# 9.140

1.067

#### 9.140 Omon leather belt

Belt is made of reinforced leather leather with a metal buckle. Figured stitching imparts additional strength and durability to the garment. **Color:** black. **Width:** 5 cm. **Size:** 100-110 cm, 110-120 cm, 120-130 cm, 130-140 cm, 140-150 cm (belt length from buckle to the end).

#### 3.104 Security men's suit Jacket + trousers

Zipped jacket with boards on the shoulders. Side slash pockets, breast slip pockets, and a pocket for ID card and telephone. Folds on the back for free movement. Airholes in the underarm area. Bottom of the jacket with a belt and elastic gore inserts. Pinched trousers with pockets.

3.110

Fabric: blended with water-repellent finish (35% cotton, 65% polyester), density of 250 gsm. Color: black. Size: 88-92 to 128-132, Height: 158-164 to 182-188.\* GOST 27575-87, TR CU 019/2011

#### 3.110 🕑 Security men's camou-

flage suit Jacket + trousers

Fabric: blended with water-repellent finish (35% cotton, 65% polyester), density of 210 gsm. Color: camouflage grey. Size: 88-92 to 128-132, Height: 158-164 to 182-188.\* GOST 27575-87, TR CU 019/2011

#### 1.067 Security men's long sleeve shirt

Button fastener. Breast slip pockets with a button flap. Buttoned strap on the shoulder. Turnback collar.

Fabric: blended (65% polyester, 35% cotton), density of 105 gsm. Color: light blue with blue finish. Size: 38 to 48, Height: 170 to 188.\* GOST R 50504-2009 TR CU 017/2011

#### 1.068 Security men's short sleeve shirt Button fastener. Breast slip pockets with

1.068

Button fastener. Breast slip pockets with a button flap. Buttoned strap on the shoulder. Turnback collar. Fabric: blended (65% polyester, 35% cotton), density of 105 gsm. Color: light blue with blue finish. Size: 38 to 48, Height: 170 to 188.\* GOST R 50504-2009 TR CU 017/2011

www.technoavia.com www.technoavia.ru \* The clothing sizes and height range are indicated. Please specify possible combinations by the manager or on the website.

3.001



# 3.002 Type A men's flight suit Dark blue color Jacket + trousers

Jacket + trousers Jacket with a metal zipper fastener, and breast zipped pockets. Airholes and folds on the back to ensure free motion. Trousers with detachable shoulders straps, and zipped pockets. The width of the trousers bottom is adjusted with buttons. Fabric: serge with water-repellent finish (100% cotton), extra-resist dyeing, density of 260 gsm.

Color: dark blue. Size: 88 to 132. Height: 170 to 188.\* TR 8572-010-01132732-99 TR CU 019/2011

# 3.001 Type A men's camouflage flight suit Jacket + trousers

Jacket with a metal zipper fastener, and breast zipped pockets. Airholes and folds on the back to ensure free motion. Trousers with detachable shoulders straps and zipped pockets. The width of the trousers bottom is adjusted with buttons. Fabric: serge with water-repellent finish (100% cotton), density

of 260 gsm. Color: camouflage. Size: 88 to 132. Height: 170 to 188.\* TR 8572-010-01132732-99 TR CU 019/2011

www.technoavia.com www.technoavia.ru

10

3.002



#### 3.021 🖱 Men's aircraft technician suit Jacket + trousers

Jacket with blind fastener and button catcher to prevent button ingress into mechanisms. Slip pockets. Comfortable sleeve design: when raising hands, jacket does not lift staying static. Elastic gore on the sleeve bottom. 2.5 cm reflective bands on the breast and back ensure good visibility of the worker in hours of darkness. Trousers with strengthened knee support-ers and pockets, hip pocket for tools. **Fabric:** Serge with water-repellent finish (100% cotton), density of 250 gsm. **Reflective material:** 2.5 cm wide band. Color: dark blue. Size: 88-92 to 128-132, Height: 158-164 to 194-200.\* GOST 27575-87, TR CU 019/2011

3.021

# 3.004 Type B men's flight suit Jacket + bib overall

This model of a conventional flight suit is designed by experts of Technoavia for maximum comfort of the wearer. Jacket with a metal zipper fastener with breast zipped pockets, additional side pockets and a sleeve pocket. Airholes and folds on the back to ensure free motion. Bib overall with pockets. Reflective bands ensure good visibility of the worker in hours of darkness.

**Reflective material:** 5 cm wide band. Color: dark blue. Size: 88 to 128, Height: 164 to 194.\* TR 8572-010-01132732-99 TR CU 019/2011

www.technoavia.com www.technoavia.ru

\* The clothing sizes and height range are indicated. Please specify possible combinations by the manager or on the website.

## **Starmaster** fabric

Fabric by

#### Manufactured by Klopman (Italy)

60% cotton and 40% polyester blend fabric with 210 g/m2 density. Crease resistant.

#### Stretch fabric with natural fibers

Modern spinning and interweaving technologies have enabled Klopman<sup>™</sup> to develop fabrics that precisely replicate body movements increasing both comfort and freedom of motion for the wearer, especially in conditions when the wearer is seated, kneels down, bends forward, or stretches arms.

#### High cotton fiber content

With the optimal combination of 210g/m2 density and high cotton fiber content Starmaster fabric absorbs and withdraws excessive moisture providing more comfort when working in high temperatures and during intensive activities. Pleasant touch, lesser skin friction, and extra softness are achieved by special spinning and interweaving techniques.

#### Air permeability

Starmaster fabric texture provides enough air permeation needed to cool body temperature and foster moisture evaporation, increasing comfort during wear.

#### Strength and durability

Thanks to polyester blend the fabric is highly robust, durable and great looking. Clothing made of this fabric serves longer and looks better during its whole life.

Low crease and easy ironing under low temperature mode.

Fabric blend and high air permeability reduce drying time.



#### 3.120 STRETCH **Pilot-2** men's flight coveralls

Strength twin zipper. Elastic gore belt on the waistline for much comfort. Strengthened shoulder pads. Fold on the back for free motion. Airholes in the underarms. Numerous zipped pockets. Hip reinforced knife pocket with a buttoned flap and rope with a swiveling hook. Trousers bottom is reinforced with band: inseam zipper for width adiustment.

Fabric: Starmaster blended with increased cotton content (60% cotton, 40% polyester), with stretching effect (natural stretching effect

without elastane resulted from special hosiery twist), density of 210 gsm. Made by Klopman (Italy). Color: beige olive.

Blue colored model as customized delivery.

Size: 88 to 132, Height: 170 to 188.\* GOST 12.4.100-80 TR CU 019/2011

#### Pilot-2 men's suit Jacket + trousers

Jacket with IDEAL twin zipper as a central fastener.

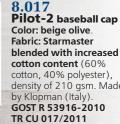
Strengthened should pads protect from abrasion. Belt with side elastic inserts ensures comfortable fitting. Vertical folds on the back with knitted fabric impart comfort in wearing. Double knitted fabric in the underarms. Numerous zipped pockets, Trousers with detachable shoulder straps. Hip reinforced knife pocket with a buttoned flap and rope with a swiveling hook. Trousers bottom is reinforced with band; inseam zipper for width adiustment.

**IDEAL** zippers

# **IDEAI**

Established in 1936 in New York City, IDEAL Fastener Corporation is the second largest zipper manufacturer in the world.

> IDEAL zippers guarantee guality and durability.



blended with increased density of 210 gsm. Made

Fabric: Starmaster blended with increased cotton content (60% cotton, 40% polyester), with stretching effect (natural stretching effect without elastane resulted from special hosiery twist), density of 210 gsm. Made by Klopman (Italy). Color: beige olive. Size: 88 to 132. Height: 170 to 188. TR 8572-010-01132732-99 TR CU 019/2011

www.technoavia.com www.technoavia.ru

17



# **Hi-Vis Workwear**

Airport, road service and public utilities workers, builders, railway and oil & gas sector employees often work outdoors, under the rain, or in conditions of low visibility. They represent a risk group and require special protection against accidents related to poor visibility.

High Visibility wear is designed to ensure detection of a worker due to reflective tapes and florescent color of the fabric.

By selecting quality certified high visibility wear employer provides safe and comfortable working conditions for his employees

www.technoavia.com www.technoavia.ru 

# Highest class of Hi-Vis Workwear!





2=

Pocket for

3.069

Jacket + trousers

#### Suit corresponds to Class 3 high visibility warning clothing.

Jacket with blind zipper preventing accessories from contacting equipment. Detachable zipped sleeves. Jacket is transformable into vest to work under hot weather conditions. Numerous pockets: for documents, telephone, and pen. Sleeve cuffs allow operating moving mechanisms since fabric cannot get into equipment. Belt is equipped with strings for adjusting volume. Inside band for writing in names. Trousers with pockets, kneepads with pockets for

shock-absorbing liners. Strengthened pads on sleeves of the jacket and trousers protect from rubbing. Spots subject to staining are made of dark fabric.

Fabric: Vigor-Nega with antistatic fiber thread, Nega-Stat®, cotton rich, oil and water-repellent finish (67% cotton, 33% polyester), density of 240 gsm.

Made in the EU. Complies with EN 471, European standard for high visibility warning clothing. Reflective material: 5 cm wide band ensures maximum visibility.

Color: fluorescent orange with blue. Size: 88-92 to 128-132. Height: 170-176 to 182-188.\* GOST R 12.4.219-99 'Special high visibility warning clothing' GOST 27575-87, TR CU 019/2011

www.technoavia.com www.technoavia.ru

and a state of the

\* The clothing sizes and height range are indicated. Please specify possible combinations by the manager or on the website.

### Class 2 high visibility Hi-Vis Workwear

#### **Recommended for aircrew**



#### **Operator High Vis men's hi-vis jacket from antistatic fabric**

Jacket corresponds to Class 2 high visibility warning clothing.

Blind zipper prevents accessories from contacting equipment, and sleeve cuffs allow operating moving mechanisms since fabric cannot get into equipment. Numerous pockets: for documents, ID card, telephone, pencil, and tools. Sleeves with reinforced elbow pads protecting from rubbing. Airholes in the underarm are made of double-woven mosquito-resistant fabric. Inside name tag. Spots subject to stain-

Main fabric: Soyuz Antistat with antistatic fiber thread, Nega-Stat®, oil and water-repellent finish (70% cotton, 30% polyester), density of 250 asm.

Color: dark blue. Background fabric: Vigor-Nega with antistatic fiber thread, Nega-Stat®, with increased content of cotton, oil and water-repellent finish (67% cotton, 33% polyester), density of 240 gsm. Made in the EU.

ing are made of dark blue fabric. Complies with EN 471, European standard for high visibility warning clothing. Color: fluorescent yellow. Size: 88-92 to 128-132. Height: 158-164 to 194-200.\* Reflective material: 5 cm wide band

GOST R 12.4.219-99 'Special high visibility warning clothina'

GOST 27575-87 'Men's suits for manufacturing staining and mechanical impacts' TR CU 019/2011

# **Operator** men's trousers

Trousers with kneepads and pockets for shock-absorbing liners. Hip slip pockets and pocket for tools. Belt with elastic gore. Fabric: Soyuz Antistat with Nega-Stat® antistatic fiber thread, oil and water-repellent finish (70% cotton, 30% polyester), density of 250 g/sg.m. Reflective material: 5 cm wide band. Color: blue. Size: 88-92 to 128-132,

Height: 158-164 to 194-200.\* GOST 27575-87, TR CU 019/2011

#### 3.126 🗁 🖉 Nega-Stat\* **Operator** men's bib overall

Bib overall with pockets has kneepads with space for shockabsorbing liners. Elastic gore in the waistline.

Fabric: Soyuz Antistat with Nega-Stat® antistatic fiber thread, oil and water-repellent finish (70% cotton, 30% polyester), density of 250 g/sq.m. Reflective material: 5 cm wide band. Color: blue.

Size: 88-92 to 128-132, Height: 158-164 to 194-200.\* GOŠT 27575-87, TR CU 019/2011

# Hi-Vis Workwear

#### Class 3 high visibility warning clothing



#### 3.086 Magistral men's high visibility suit Jacket + bib overall

# Suit corresponds to Class 3 high visibility warning clothing.

Jacket with a blind buttoned fastener with button arrester to prevent buttons from ingress into mechanisms. Slip and side pockets, pocket for telephone. Sleeves with cuffs allow operating with the equipment with moving mechanisms since fabric cannot get into equipment. Airholes on the back.

Bib overall with breast, side, and rear pockets and a pocket for tools. Reinforced pads on the jacket sleeves and trousers protect from abrasion. Spots subject to staining are made of dark fabric. Upper fabric: blended with water-repellent finish (50% cotton, 50% polyester) complies with EN 471, European standard for special high visibility warning clothing, density of 210 gsm. **Reflective material:** 5 cm wide band. **Color:** fluorescent orange with dark blue. **Size:** 88-92 to 128-132. **Height:** 158-164 to 194-200.\* **GOST R 12.4.219-99 'Special high visibility warning clothing' GOST 27575-87, TR CU 019/2011** 

#### High Visibility Vests



#### Class 3 high visibility Hi-Vis Workwear

Taped seams to

protect raincoat . from soaking even in case of heavy rain shower

Drawstring on the

Sleeve drawstrings for water and

wind protection

hood for water

3.199

Unique clothing, which simultaneously ensures comfort, rain protection, and good visibility of the worker!

3.189

fabric

Absolut

Fabric composition: 100% polvester. density of 150 gsm

#### Fabric's advantages:

- Fabric is made using a newest technology, which combines all necessary parameters of international standards for fabrication of warning moisture resistant breathable workwear (water resistance: 10,000 mm w.c., steam resistance: 8,000 gsm per 24 hours)
- Availability of LT-membrane makes fabric waterproof, wind impermeable and breathable
- ensures maximum protection from rain, snow, and wind
- without losing properties after multiple washes
- preserves softness at low temperatures



#### **3.199 Color:** fluorescent vellow with dark blue.

#### Raincoat corresponds to Class 3 high visibility warning clothing.

Raincoat's water impermeability is ensured by the special design, waterproof fabric, and taped airtight seams. Raincoat applies thermoactive reflective band, which is made using thermal transfer printing to exclude fabric puncture by a sewing needle. Raincoat has optimal size, and may be worn above both summer and insulated clothing. Airholes on the back and in the underarms. Hood with a drawstring in the front cut-away with reflective band in the form of an arrow, which allows seeing a worker from above (relevant for airport engineering services). Sleeves

with drawstrings protect from moisture ingress. Main fabric: for jackets, 100% nylon, membrane (water resistance: 10,000 mm w.c., steam resistance: 8,000 gsm per 24 hours), breathable, wind impermeable, waterproof (LT-membrane™), density of 150 asm.

Background material: Absolut, 100% polyester, membrane (water resistance: 10,000 mm w.c., steam resistance: 8,000 gsm per 24 hours), frostresistant, breathable, wind impermeable, waterproof, density of 150 gsm. Complies with EN 471, European standard for high visibility warning clothina.

**3.189** Color: fluorescent orange with dark blue.

Reflective material: 5 cm wide band ensures maximum visibility in the hours of darkness and insufficient visibility. Size: 88-92 to 128-132, Height: 170-176 to 182-188.\* GOST R 12.4.219-99 'Special high visibility warning clothing' GOST 12.4.134-83 'Men's raincoats with water protection' TR CU 019/2011



Raincoat

Reflective band

on the hood en-

sures visibility

Airholes

of a human fron above

#### Class 3 high visibility warning clothing

3.233

Wind stopper Storm control



# Storm Control men's insulated high visibility wind stopper 🚆 🗇 🔺 POLARIEC

**3.234** Color: fluorescent yellow with dark blue.

**3.233 Color:** fluorescent orange with dark blue.

#### Jacket corresponds to Class 3 high visibility clothing.

Jacket's water impermeability is ensured by the special design, waterproof fabric, and taped airtight seams. Jacket applies thermoactive reflective band, which is made using thermal transfer printing to exclude fabric puncture by a sewing needle. Jacket with detachable insulation as a zipped vest. Strong twin zipper as a central fastener and windproof flap. Comfortable pockets. Detachable hood. Jacket bottom is strapped down with elastic cord.

Detachable insulation: High-quality fleece (made in Italy)

> Main fabric: for jackets, 100% nylon, membrane (water resistance: 10,000 mm w.c., steam resistance: 8,000 gsm per 24 hours), breathable, wind impermeable, waterproof, density of 150 gsm. Background material: Absolut, 100% polyester, membrane (water resistance: 10,000 mm w.c., steam resistance: 8,000 gsm per 24 hours), frost-resistant, breathable, wind impermeable, waterproof, density of 150 asm. Complies with EN 471, European standard for high visibility warning clothing. Reflective material: 5 cm wide band.

Lining: 100% polyester. Detachable insulant: Polartec® (100%) polyester). Density of 250 gsm. Size: 88-92 to 128-132. Height: 170-176 to 182-188.\* GOST R 12.4.219-99 'Special high visibility warning clothing' GOST 27643-88 'Men's suits for water protection' TR CU 019/2011

www.technoavia.com www.technoavia.ru

\* The clothing sizes and height range are indicated. Please specify possible combinations by the manager or on the website.

23

#### 100% cotton Men's coverall



#### 12224 Men's coverall with long sleeves (451-44)

Coverall protects from general industrial hazards. This coverall has classic look and great fit. It features eight pockets and only YKK non-sparking zippers are used. Major seams are triple-stitched and stress points are bar – tracked for strength. Model consists of two angled chest pockets with concealed zip fastener along with pen pocket on the left sleeve. Two back pockets and a tool pocket on the right leg. Two-way concealed front zipper.

Concealed Velcro on cuffs to allow size adjustment. **Fabric:** 20s x 16s, 100 %cotton, 3/1 drill, 230 gsm. Non shrink (less than 2%) non colour fading or bleeding.

**Color:** any color can be done on demand. Following models can be manufacturing with short sleeves.

#### 12223 Men's coverall with long sleeves (451-45)

Coverall protects from general industrial hazards. This coverall has classic look and great fit. It features eight pockets and only YKK non-sparking zippers are used. Major seams are triple-stitched and stress points are bar – tracked for strength. Model consists of two chest pockets with flap ( Velcro closure) , pen pocket on the left sleeve, two back pockets and toll pocket on the right leg. Large pleats in the back for freedom of movement and comfort. Two-way concealed front zip and concealed Velcro on cuffs for additional comfprt **Fabric:** 20s x 16s, 100% cotton, 3/1 drill, 230 gsm. Non shrink (less than 2%) non colour fading or bleeding.

**Color:** any color can be done on demand. Following models can be manufacturing with short sleeves.



# Technoavia's workwear is manufactured using specialized fabrics by world-leading producer - KLOPMAN INTERNATIONAL

94D

UKAS

MANAGEMENT

Klopman is a leading European producer of polyester-cotton and cotton-rich fabrics for modern work wear with over 40 years of history.





Klopman is a pioneer in producing blended fabrics with the ecological accreditation mark **Ecolabel represents** products and process for environmentally responsible fabrication processes. Products, processes, and services with the Ecolabel certificate are thoroughly and independently checked in accordance with environmental criteria, which take into account all aspects of the life cycle from production and operation to potential disposal.

ISO 9001 Registered Quality Management

IN TEXTILES

Geprüft auf Schadstoffe

Testé substances nocives

Testato per sostanze nocive

Control de sustancias nocivas

Tested for harmful substances

Zbadane na substancje szkodliwe Проверен на вредные вещества nach/d'après/secondo/según/according to/według согласно Oeko-Tex® Standard 100

93.0.4408

Klopman is completely certified by ISO 9001:2008, Quality management and quality control: certification by International Standardization Organization (ISO), and accordingly adheres highest quality standards.

naa

ISO 14001

Registered

Environmental

GAT

1.11

UKAS

MANAGEMENT

HOHENSTEIN

Klopman is also certified by BS EN ISO 14001:2004 – Environment protection management system, and BS OHSAS 18001:2007 – Labour protection and safety management system.

nga

**OHSAS 1800** 

Registered

Health & Safety

Management

Klopman was also one of the pioneers in fabric production, which gained the right to apply Oeko-Tex® 100 Confidence in Textile label on polyester-cotton fabrics / Responsible textile production. This standard regulates and monitors application of hazardous substances in textile industry.

Certification as per this standard guarantees that the fabric represents no risk for human's health, and ensures clothing safety for the skin. All fabrics made by Klopman correspond to Oeko-Tex® 100, second class standard, which covers fabrics suitable for skin contact.



Hohenstein



# New Arena fabric

Manufactured by Klopman (Italy) Composition: 60% cotton and 40% polyester blend with 245 gsm density



Benefits:

3.147

- Increased cotton fiber content ensures wearer's comfort.
- Great air permeability fosters moisture evaporation from skin surface.
- Abrasion resistant.
- Crease resistant.
- Presentable looking.
- Easy care fabric (stains are easily washed away).
- Persistent dyeing (low fading).



8.015 Skymaster baseball cap

#### 3.147 DEAL Skymaster men's trousers

Zipper and button as a central fastener. Belt with loops and straps for adjusting volume. Multifunctional pockets. Strengthened voluminous kneepads prevent from rubbing and act as pockets for shockabsorbing pads.

**Fabric:** New Arena blended with increased cotton content (60% cotton, 40% polyester), crease-resistant, density of 245 gsm, made by Klopman, Italy. **Color:** dark blue with orange finish.

**High visibility elements:** inserts and piping made of reflective fabric.

Size: 88-92 to 128-132. Height: 170-176 to 182-188.\* GOST 27575-87, TR CU 019/2011

\* The clothing sizes and height range are indicated. Please specify possible combinations by the manager or on the website.

www.technoavia.ru



## LT-membrane



Excellent protection against extreme weather conditions such as snow, rain and wind. Freeze resistant.



LT-membrane is a new generation membrane which is applied over a fabric to achieve great benefits:

- Impermeability: 10,000 mm/1 m<sup>2</sup> per 24 hrs.
- Wind-proof.
- Low-temperature stability: retains strength and flexibility at -55°C.
- Steam-permeability: 8,000 g/m<sup>2</sup> per 24 hrs.

Professional workwear

#### Bavaria workwear line - creative design, well-thought functionality and fashionable coloristic combination



#### 3.183 🕑 Bavaria men's jacket

Fastener is represented as metal zipper and blind buttoned windproof flap. Numerous functional breast pockets with open-lap bottom with compartment of telephone and pens; hip voluminous pockets with slash pockets on the left side for small objects, which may be fixed with a semi-ring. Sleeves with cuffs with strengthened elbow pads. Jacket bottom in the waistline is width adjustable.

**Fabric:** New Arena blended with cotton content (60% cotton, 40% polyester), crease-resistant, density of 245 gsm, made by Klopman, Italy.

Color: combination of light brown and dark brown. Reflective material: 5 cm wide band. Size: 88-92 to 128-132. Height: 170-176 to 182-188.\* GOST 27575-87, TR CU 019/2011

#### 3.184 🔄 Bavaria men's bib overall

Side buttoned fastener, and a zipper in the middle seam for comfort. Shoulder straps with elastic gore inserts. Multifunctional pockets. Strengthened voluminous kneepads prevent from rubbing and represent pockets for shock-absorbing pads Elastic gore in the waistline to ensure comfort in wearing.

**Fabric:** New Arena blended with increased cotton content (60% cotton, 40% polyester), crease-resistant, density of 245 gsm, made by Klopman, Italy.

Color: combination of light brown and dark brown. Reflective material: 5 cm wide band. Size: 88-92 to 128-132. Height: 158-164 to 182-188.\* GOST 27575-87, TR CU 019/2011

#### 3.185 Bavaria men's trousers

Zipper and button as a central fastener. Straps in the waistline for volume adjustment. Multifunctional pockets. Strengthened voluminous kneepads prevent from rubbing and represent pockets for shock-absorbing pads.

Fabric: New Arena blended with increased cotton content (60% cotton, 40% polyester), crease-resistant, density of 245 gsm, made by Klopman, Italy.

Color: combination of light brown and dark brown. Reflective material: 5 cm wide band. Size: 88-92 to 128-132, Height: 170-176 to 182-188.\* GOST 27575-87, TR CU 019/2011



## 3.040 Chelsea men's suit Jacket + trousers

Jacket is fastened with a twin IDEAL blind zipper to exclude accessories contact with equipment. Side zipped pockets, breast pocket for telephone. Sleeves with volume in the elbow zone for comfortable movement. Zipped airholes in the underarms. Jacket and sleeves width is adjusted with Velcro straps. Trousers with pockets and additional volume in the knee zone for comfortable movement. Reflective suit finish increases worker's visibility. **Fabric:** Starfield blended with stretch ef-

Fabric: Starfield blended with stretch effect (mechanical stretch effect without elastane is achieved due to the special yarn twist; 65% polyester, 35% cotton), density of 235 gsm. Made by Klopman (ltaly). High visibility elements: figured reflective fabric inserts. Color: khaki. Size: 88-92 to 128-132, Height: 158-164 to 182-188.\* GOST 27575-87 TR CU 019/2011



# Starfield <sub>fabric</sub>

#### Manufactured

**by Klopman (Italy)** 65% polyester and 35% cotton blend with 235 g/m2 density.



Crease-resistant, soft touch stretch fabric

Perfect for making good looking reputable corporate workwear

#### Strength

Starfield fabric's level of robustness is extremely high. In accordance with ISO 13934-1, warp strength is 1,500 N, and weft strength is 650 N. Martindale test results ensure the fabric withstands 35,000 cycles of abrasion – an extremely high result.

#### **Crease resistance**

Crease resistance factor has a highest point as per ETSA standard (examination was done after 3 washes in compliance with ISO 15797).

#### Stretch effect

The mechanical stretch effect is achieved by unique yarn twist with no addition of elastane.

#### Low shrinkage

Shrinkage level complies with Klopman standards for fabrics with similar composition and has 3 points as per ETSA standard (according to ISO 15797 standard after a series of 5 wash cycles warp and weft shrinkage allow a maximum of 2% shrink).

#### Color fastness

The fabric has great color fastness in compliance with the highest standards, which is retained after numerous washes thanks to polyether's color fastness qualities and a special dyeing formula by Klopman.

www.technoavia.com www.technoavia.ru \* The clothing sizes and height range are indicated. Please specify possible combinations by the manager or on the website.

29



# **Megapolis** men's jacket

Blind YKK zipper prevents accessories from contacting with equipment. Multifunctional pockets, special pocket for telephone. Airholes with zipped mesh in the underarms. Jacket width is adjusted at the bottom.

Reflective finish ensures good worker's visibility. Upper fabric: Indestructible blended (65% polyester, 35% cotton), density of 245 gsm. Made by Klopman (Italy). High visibility elements: figured reflective fabric inserts. Color: grey, finish: red, black. Size: 88-92 to 128-132. Height: 170-176 to 182-188.\* GOST 27575-87, TR CU 019/2011

# Megapolis men's bib overall

Multifunctional pockets. Kneepads with pockets for shock-absorbing liners. Strengthened pads at the trousers bottom for protection from rubbing. Elastic gore in the waistline. Upper fabric: Indestructible blended (65% polyester, 35% cotton), density of 245 gsm. Made by Klopman (Italy).

High visibility elements: figured reflective fabric inserts.

**Color:** grey, finish: red, black. Size: 88-92 to 128-132, Height: 170-176 to 182-188.\* GOST 27575-87, TR CU 019/2011

# Megapolis men's trousers

Numerous pockets. Kneepads with pockets for shock-absorbing liners. Strengthened pads at the trousers bottom for protection from rubbing. Straps in the waistline for volume adjustment. **Upper fabric:** Indestructible blended (65% polyester, 35% cotton), density of 245 gsm. Made by Klopman (Italy).

High visibility elements: figured reflective fabric inserts.

**Color:** grey, finish: red, black. Size: 88-92 to 128-132, Height: 170-176 to 182-188.\* GOST 27575-87, TR CU 019/2011

www.technoavia.ru



www.technoavia.ru

31

Maximum comfort in «City» series ensured by usage of fabric by Klopman, Italy



#### 3.066 City-Master men's jacket

Zipper and Velcro fastener. Folds on the back for free motion. Multifunctional pockets, special pocket for telephone. Sleeves with strengthened elbow pads protecting from rubbing. Jacket width is adjusted at the bottom.

**Fabric:** Indestructible blended (65% polyester, 35% cotton), density of 245 gsm. Made by Klopman (Italy).

Color: cornflower blue, finish: orange Size: 88-92 to 128-132, Height: 158-164 to 182-188.\* GOST 27575-87, TR CU 019/2011

#### 3.067 🔄 City-Master men's bib overall

Reinforced twin zipper. Kneepads with holes for shock-absorbing pads. Slip and floating pockets.

Fabric: Indestructible blended (65% polyester, 35% cotton), density of 245 gsm. Made by Klopman (Italy).

Color: cornflower blue, finish: orange Size: 88-92 to 128-132, Height: 170-176 to 182-188.\* GOST 27575-87, TR CU 019/2011

#### 3.054 ⊕ City men's jacket

Elongated jacket with a central blind button fastener. Multifunctional pockets, special pocket for telephone. Sleeves with cuffs, strengthened elbow pads protecting from rubbing. Additional volume in the elbow zone ensures free motion. Drawstring on the back in the waistline for width adjustment. Airholes in the underarms.

Fabric: Indestructible blended (65% polyester, 35% cotton), density of 245 gsm. Made by Klopman (Italy). Color: cornflower blue, finish: orange Size: 88-92 to 128-132, Height: 158-164 to 182-188.\* GOST 27575-87, TR CU 019/2011

#### 3.068 City men's bib overall

Multifunctional pockets and special pocket for tools, strengthened kneepads to protect from rubbing. Shoulder straps are length adjustable. **Fabric:** Indestructible blended (65% polyester, 35% cotton), density of 245 gsm. Made by Klopman (Italy).

Color: cornflower blue, finish: orange Size: 88-92 to 128-132, Height: 170-176 to 182-188.\* GOST 27575-87, TR CU 019/2011

Professional workwear



# 3.057 3.058 Elbow pads for protection from rubbing Pocket for Airhole Compartments for tools and pen 3.055 3.056 Kneepads for Kneepads for Kneepads for protection from protection from protection from rubbina ubbing rubbing

#### 3.058 🖲 **City** women's jacket

Zipper and Velcro fastener. Multifunctional pockets, and special pocket for telephone. Sleeves with strengthened elbow pads protecting from rubbing, and additional volume in the elbow zone to ensure free motion. Airholes in the underarms. Jacket width is adjusted at the bottom. Fabric: Indestructible blended (65% polyester, 35% cotton), density of 245 gsm. Made by Klopman (Italy). Color: cornflower blue, finish: bright green Size: 80-84 to 128-132, Height: 158-164 to 170-176.\* GOST 27574-87, TR CU 019/2011 ГОСТ 27574-87, TP TC 019/2011

City collection

#### 3.057 🖳 City women's bib overall

Multifunctional pockets and strengthened kneepads protecting from rubbing. Fabric: Indestructible blended (65% polyester, 35% cotton), density of 245 gsm. Made by Klopman (Italy). **Color:** cornflower blue, finish: bright green Size: 80-84 to 128-132, Height: 158-164 to 170-176.\* GOST 27574-87, TR CU 019/2011

#### 3.055 🗢 City men's trousers

Slip and side pockets, special pocket for tools, strengthened kneepads protecting from rubbing. Belt straps for volume adjustment. Fabric: Indestructible blended (65% polyester, 35% cotton), density of 245 gsm. Made by Klopman (Italy). Color: cornflower blue. Size: 88-92 to 128-132, Height: 158-164 to 182-188.\* GOST 27575-87, TR CU 019/2011

#### 3.056 🔄 **City** women's trousers

Slip and side pockets, special pocket for tools, strengthened kneepads protecting from rubbing. Fabric: Indestructible blended (65% polyester, 35% cotton), density of 245 gsm. Made by Klopman (Italy).

Color: cornflower blue. Size: 80-84 to 128-132, Height: 158-164 to 170-176.\* GOST 27574-87, TR CU 019/2011



# **City** men's jacket

Elongated jacket with a central blind button fastener. Multifunctional pockets, special pocket for telephone. Sleeves with cuffs, strengthened elbow pads protecting from rubbing. Drawstring on the back in the waistline for width adjustment.

Fabric: Indestructible blended (65% polyester, 35% cotton), density of 245 gsm. Made by Klopman (Italy). Size: 88-92 to 128-132,

Height: 158-164 to 194-200.\* Color: grey, finish: red GOST 27575-87, TR CU 019/2011

#### 3.099 🖱 **City** men's bib overall

Multifunctional pockets and special pocket for tools, strengthened kneepads to protect from rubbing. Fabric: Indestructible blended (65% polyester, 35% cotton), density of 245 gsm. Made by Klopman (Italy). Size: 88-92 to 128-132, Height: 158-164 to 194-200.\* Color: grey, finish: red GOST 27575-87, TR CU 019/2011

# City-Master men's jacket

Zipper and Velcro fastener. Folds on the back for free motion. Multifunctional pockets, special pocket for telephone. Sleeves with strengthened elbow pads protecting from rubbing, and additional volume in the elbow zone to ensure free motion. Airholes in the underarms. Jacket width is adjusted at the bottom. Fabric: Indestructible blended (65% polyester, 35% cotton), density of 245 gsm. Made by Klopman (Italy). Color: grey, finish: red Size: 88-92 to 128-132, Height: 158-164 to 194-200.\* GOST 27575-87, TR CU 019/2011

www.technoavia.com www.technoavia.ru



# City-Master men's bib overall

Strength twin zipper as a fastener. Kneepads with holes for shock-absorbing liners. Slip and floating pockets, compartments for tools. Fabric: Indestructible blended (65% polyester, 35% cotton), density of 245 gsm. Made by Klopman (Italy). Color: grey, finish: red. Size: 88-92 to 128-132,

Height: 158-164 to 194-200.\* GOST 27575-87, TR CU 019/2011

# City vest

Zipper as a central fastener. Multifunctional pockets, special compartments and loop for hanging tools, inside pocket for documents. Fabric: Indestructible blended (65% polyester, 35% cotton), density of 245 gsm. Made by Klopman (Italy). Color: grey, finish: red. Size: 88-92 to 128-132. Height: 170-176 to 182-188.\* GOST 25295-2003, TR CU 017/2011

#### 3.302 🖱 **City** men's lab coat

Central blind button fastener, slip pockets, special pocket for telephone, compartment for pencil. Fabric: Indestructible blended (65% polyester, 35% cotton), density of 245 gsm. Made by Klopman (Italy). Color: grey, finish: red. Size: 88-92 to 128-132, Height: 170-176 to 182-188.\* GOST 12.4.132-83, TR CU 019/2011



This certificate confirms that the Indestructible fabric corresponds to European standards in environmental safety for human

# Indestructible fabric

#### Manufactured by Klopman (Italy)

65% polyester and 35% cotton blend with 245 g/m<sup>2</sup> density.

Crease-resistant. Twill weave.

#### Robustness

The fabric's robustness is achieved by high content of polyester fiber, which provides additional benefits compared to 100% cotton fabrics. This fabric has a 2% shrinkage maximum, high-level crease-resistivity and superb afterwash color stability. Numerous washes do not affect the way the Indestructible fabric workwear looks.

#### Comfort

High level of comfort is achieved by the sufficient content of cotton fibers in the fabric. which absorb excessive moisture. The 2/1 twill weave allows enough air permeation to cool body temperature and foster moisture evaporation for the skin surface.

#### Industrial cleaning

The European Textile Service Association (ESTA) has developed a new set of strict requlations and requirements for fabrics subject to industrial washing in regard to shrinkage, pilling, extension stiffness and crease recovery. The Indestructible fabric complies with ESTA's requirements that prove the highest qualities of the fabric.

The Indestructible fabric is the most popular and common fabric for workwear in Europe today. This workwear is used in many industries, such as health care, food industry, light and heavy industry, equipment assembly, power engineering, mining, transportation and trade.

Fabric by

3.096

Elbow pads to protect from rub-bing

www.technoavia.com

www.technoavia.ru



rubbing, and additional volume in the elbow zone to ensure free motion. Jacket width is adjusted on the bottom. Fabric: Indestructible blended (65% polyester,

35% cotton), density of 245 gsm. Made by Klopman (Italy).

Color: grey, finish: yellow Size: 80-84 to 128-132, Height: 158-164 to 170-176.\* GOST 27574-87, TR CU 019/2011 Fabric: Indestructible blended (65% polyester, 35% cotton), density of 245 gsm. Made by Klopman (Italy). Color: grey, finish: yellow. Size: 80-84 to 128-132. Height: 158-164 to 170-176.\* GOST 27574-87, TR CU 019/2011

Belt drawstrings for volume adjustment. Fabric: Indestructible blended

(65% polyester, 35% cotton), density of 245 gsm. Made by Klopman (Ítaly). Color: grey. Size: 88-92 to 128-132. Height: 158-164 to 194-200.\* GOST 27575-87, TR CU 019/2011

Slip and side pockets, special pocket for tools, strengthened kneepads protecting from rubbing. Belt elastic gore for volume adjustment.

Fabric: Indestructible blended (65% polyester, 35% cotton), density of 245 gsm. Made by Klopman (Italy). Color: grey. Size: 80-84 to 128-132. Height: 158-164 to 170-176.\* GOST 27574-87, TR CU 019/2011

8.022

Static electricity on clothing may cause explosion. Clothing made of antistatic fabric prevents emergency risk due to accumulation of static electricity



#### 3.128 🔄 🔄 Nega-Stat Operator men's jacket

Blind button fastener prevents accessories from contacting with equipment. Numerous comfortable pockets. Airholes in the underarms. Sleeves with cuffs with strengthened elbow pads protecting from rubbing. Fabric: Soyuz Antistat with Nega-Stat® antistatic fiber thread, oil and water-repellent finish (70% cotton, 30% polyester), density of 250 gsm. Reflective material: 5 cm wide band ensures maximum visibility. Color: blue, finish: cornflower blue. Size: 88-92 to 128-132. Height: 158-164 to 194-200.\* GOST 27575-87, TR CU 019/2011

#### 3.129 🔄 🔄 Nega-Stat' Operator men's trousers

Trousers with kneepads and pockets for shockabsorbing liners. Hip slip pockets and pocket for tools. Belt with elastic gore. **Fabric:** Soyuz Antistat with Nega-Stat® antistatic fiber thread, oil and water-repellent finish (70% cotton, 30% polyester), density of 250 gsm.

Reflective material: 5 cm wide band. Color: blue. Size: 88-92 to 128-132, Height: 158-164 to 194-200.\* GOST 27575-87, TR CU 019/2011

#### **3.126 Operator** men's bib overall

Bib overall with pockets has kneepads with space for shock-absorbing liners. Elastic gore in the waistline. Fabric: Soyuz Antistat with Nega-Stat® antistatic fiber thread, oil and water-repellent finish (70% cotton, 30% polyester), density of 250 gsm. Reflective material: 5 cm wide band. Color: blue. Size: 88-92 to 128-132, Height: 158-164 to 194-200.\* GOST 27575-87, TR CU 019/2011

# Soyuz Antistat fabric with antistatic thread Nega-Stat®

#### Fabric composition:

70% cotton and 30% polyester blend with 250 g/m<sup>2</sup> density. Antistatic yarn.

#### Fabric's benefits:

- The unique Nega-Stat® yarn's core qualities allow static charges to disseminate, preventing from explosion triggered by accumulation of static electricity.
- Workwear from this fabric is not required to be earthed.
- The thread is weaved into the fabric, eliminating checked fabric pattern.
- The optimal blend of 70% cotton and 30% polyester provides the best balance of soft touch, comfort, and robustness.
- High-quality oil- and water-repellent finish provides protection against industrial workplace pollution.



#### **3.127 Operator High Vis** men's warning jacket made of antistatic fabric See page 20

www.technoavia.com www.technoavia.ru Universal model is recommended for the use in workshops with general hazards, since «Indestructible» fabric was specially created for rental purpose - very durable, easy to care, excellent color fading properties and comfortable in wearing.



38

\* The clothing sizes and height range are indicated. Please specify possible combinations by the manager or on the website.

GOST 27575-87, TR CU 019/2011



# Leader men's suit Jacket + bib overall

jacket with a central zipped fastener with a flap. Folds on the back for free motion. Sleeve design ensures comfort in wearing. Sleeves with cuffs and inserts of elastic gore. Bib overall with multifunctional pockets. Waistline is drawn with elastic gore.

Upper fabric: blended (35% cotton, 65% polyester) with water-repellent finish, density of 250 gsm.

Reflective material: 5 cm wide reflective band. Color: cornflower blue, finish: yellow and dark blue. Size: 88-92 to 128-132. Height: 158-164 to 194-200.\* GOST 27575-87, TR CU 019/2011

Куртка + полукомбинезон

**3.071** Color: blue, finish: orange.

**3.072 Color:** cornflower blue, finish: orange.

Jacket with buttoned fastener. Many comfortable pockets. Folds on the back for free motion and airholes. Sleeves with cuffs. Bib overall with strengthened knee pads protecting from rubbing. Slip pocket with compartments for pens on the breast, slip pockets on the back, and pockets for tools. Elastic gore in the waistline. Upper fabric: blended with water-repellent finish (65% polyester, 35% cotton), density of 250 gsm. Size: 88-92 to 128-132. Height: 158-164 to 182-188.\* GOST 27575-87, TR CU 019/2011

**3.031** Color: blue, finish: orange.

**3.033** Color: cornflower blue, finish: orange.

Bib overall with strengthened knee pads protecting from rubbing. Slip pocket with compartments for pens on the breast, slip pockets on the back, and a pocket for tools. Elastic gore in the waistline. Upper fabric: blended with water-repellent finish (65% polyester, 35% cotton), density of 250 gsm. Size: 88-92 to 128-132. Height: 170-176 to 182-188.\* GOST 27575-87, TR CU 019/2011



#### 3.169 Golf men's suit Jacket + bib overall

Jacket with blind button fastener. Multifunctional pockets, special pocket for telephone with compartment for pen. Airholes in the underarms. Jacket width is adjusted by drawstrings at the bottom. Folds on the back for free motion. Sleeves with cuffs.

Bib overall with pockets, hip slip pockets, and pocket for tools. Elastic gore in the waistline.

Fabric: blended (65% polyester, 35% cotton) with water-repellent finish, density of 250 gsm.

Color: green, finish: bright green. Reflective material: 5 cm wide reflective band. Size: 88-92 to 128-132. Height: 158-164 to 182-188.\* GOST 27575-87, TR CU 019/2011

# 3.081 Technic men's suit

# Recommended for employees of repair and technical services, and car-care centers

Jacket with blind button fastener. Comfortable pockets, and slip pocket on the left sleeve. Folds on the back for free motion and airholes. Sleeves with cuffs. Drawstrings in the waistline for volume adjustment.

Bib overall with strengthening kneepads protecting from rubbing. Breast slip pocket with compartments for pens. Hip slip pockets and pocket for tools. Elastic gore in the waistline.

Fabric: blended with water-repellent finish (65% polyester, 35% cotton), density of 250 gsm.

Color: dark blue, finish: cornflower blue. Size: 88-92 to 136-140. Height: 158-164 to 194-200.\* GOST 27575-87, TR CU 019/2011



#### 3.079 Technic men's suit Jacket + bib overall Fabric: blended with water-repellent finish (65% polyester, 35% cotton), density of 250 gsm. Color: bordeaux, finish: grey. Size: 88-92 to 128-132. Height: 170-176 to 182-188.\* GOST 27575-87 TR CU 019/2011





Elongated jacket with blind button fastener preventing accessories from con-tacting with equipment. Comfortable pockets, inside pocket for documents. Drawstring in the waistline on the back for volume adjustment. Airholes in the underarms. Sleeves with cuffs. Bib overall with pockets, hip clip pockets, and pocket for tools, elastic gore in the waist-İine.

Fabric: blended with water-repellent finish (65% polyester, 35% cotton), density of 210 gsm. **Reflective material:** 5 cm wide band ensures good visibility. **Color: dark grey**, finish: orange. Size: 88-92 to 128-132, Height: 158-164 to 182-188.\* GOST 27575-87, TR CU 019/2011

3.049

Suit Build Hi-Vis Elements



Airholes

Recommended for construction industry

ment



#### 3.085 Leto men's suit Jacket + trousers

Jacket with blind button fastener with drawstring in the waistline for volume adjustment. Sleeves with elbow pads with buttoned cuffs to prevent fabric from getting into mechanisms. Airholes in the underarms. Trousers with elastic gore with pockets and strengthened kneepads protecting from rubbing. **Fabric:** blended with water-repellent finish (65% polyester, 35% cotton), density of 210 gsm. **Reflective material:** 5 cm wide band. **Color:** dark blue, finish: cornflower blue. **Size:** 88-92 to 136-140, **Height:** 158-164 to 194-200.\* **GOST 27575-87, TR CU 019/2011** 

#### 3.117 ⊕ Leto women's jacket

Elongated jacket with blind button fastener. Side slip pockets with flap. Drawstring in the waistline on the back for volume adjustment. Sleeves with buttoned cuffs to prevent fabric from getting into mechanisms. Airholes in the underarms. **Fabric:** blended with water-repellent finish (65% polyester, 35% cotton), density of

210 gsm. **Reflective material:** 5 cm wide band. **Color:** dark blue, finish: cornflower blue. **Size:** 80-84 to 128-132, **Height:** 158-164 to 170-176.\* **GOST 27574-87, TR CU 019/2011** 

#### 3.116 🔄 Leto women's bib overall

Bib overall with multifunctional breast and side pockets. Elastic gore on the back in the waistline, slip pockets, and pocket for tools. Shoulder straps are lenoth adiustable.

**Fabric:** blended with water-repellent finish (65% polyester, 35% cotton), density of 210 gsm.

**Reflective material:** 5 cm wide band.

**Color:** dark blue, finish: cornflower blue.

Size: 80-84 to 128-132, Height: 158-164 to 170-176.\* GOST 27574-87, TR CU 019/2011

#### 3.087 Women's working suit Jacket + trousers

Jacket with blind button fastener. Slip pockets. Trousers with elastic gore belt and pockets. Strengthened elbow and kneepads protect from rubbing. Fabric: twill with water-repellent finish (100% cotton), density of 250 gsm. Color: cornflower blue, finish: bordeaux. Size: 80-84 to 128-132. Height: 158-164 to 182-188.\* GOST 27574-87 TR CU 019/2011

# 3.102 Energy men's suit Jacket + bib overall

Jacket with blind button fastener with button arrester preventing buttons from getting into mechanisms. Comfortable pockets. Drawstrings in the belt for width adjustment. Sleeves with cuffs. Bib overall with breast pocket, hip slip pockets, and pocket for tools. Strengthened elbow and kneepads to protect from rubbing.

Fabric: twill (100% cotton), density of 250 gsm.

Color: cornflower blue. Size: 88-92 to 128-132, Height: 158-164 to 182-188.\* GOST 27575-87, TR CU 019/2011



#### 3.111 Energy-2 men's suit with reflective bands Jacket + bib overall

Jacket with blind button fastener with button arrester. Slip pockets. Bib overall with side button fastener. Elastic gore straps. Slip breast and side pockets. Hip slip pockets and pocket for tools, elastic gore in the waistline. Reflective bands on the jacket back, bottom of the jacket and bib overall sleeves.

Fabric: blended (65% polyester, 35% cotton), density of 210 gsm.

Color: dark blue, finish: orange. Reflective material: 5 cm wide band. Size: 88-92 to 128-132. Height: 158-164 to 182-188.\* GOST 27575-87, TR CU 019/2011

#### 3.103 Energy-2 men's suit Jacket + bib overall

Jacket with blind button fastener with button arrester. Slip pockets. Bib overall with side button fastener. Elastic gore straps. Hip slip pockets and pocket for tools, elastic gore in the waistline.

Fabric: blended (65% polyester, 35% cotton), density of 210 gsm. Color: green, finish: yellow. Size: 88-92 to 128-132, Height: 158-164 to 182-188.\* GOST 27575-87, TR CU 019/2011

#### 3.022 🔄 Mechanic men's suit

Jacket with blind button fastener with button arrester preventing buttons from getting into mechanisms. Slip pockets. Comfortable design: jacket does not raise, staying up when hands up. Sleeves with cuffs. Trousers with pockets. Strengthened elbow and kneepads to protect from rubbing.

**Fabric:** blended with water-repellent finish (65% polyester, 35% cotton), density of 210 gsm. **Color: dark blue**.

Size: 80-84 to 128-132, Height: 158-164 to 182-188.\* GOST 27575-87, TR CU 019/2011

#### Motor men's suit Куртка + полукомбинезон

**3.107 Color:** blue, piping: orange.

**3.108 Color:** cornflower blue, finish: orange.

Jacket with blind button fastener. Slip pockets. Breast slip pocket with compartments for pencil on the left front.

Bib overall with side button fastener and frontal zipper. Breast slip pocket with compartment for pencil. Shoulder straps with elastic gore.

Fabric: blended (65% polyester, 35% cotton), density of 210 gsm.

Size: 88-92 to 128-132, Height: 158-164 to 194-200.\* GOST 27575-87, TR CU 019/2011



#### 3.173 Type B anti-encephalitic men's suit Jacket + trousers

Jacket with drawstring at the bottom. Hood with peak, zipper, and drawstring in the front edge, with anti-mosquito mesh. Two slip pockets with buttoned flaps on the breast. Folds in the breast line to prevent encephalitic forest fly from ingress under clothing. Sleeves with knitted wristlets with latex thread to prevent from extension. Trousers with pockets, kneepads preventing from rubbing, knitted wristlets at the bottom. **Fabric:** 100% cotton, density of 250 gsm. **Size:** 88-92 to 136-140, **Height:** 170-176 to 182-188.\*

TR 17 RSFSR 5109240-5584-90, TR CU 019/2011

# 3.100 ⊕ suit Men's suit made of

blended fabric Jacket + trousers

Jacket with central button fastener with pockets. Trousers with pockets.

Fabric: blended with waterrepellent finish (65% polyester, 35% cotton), density of 210 gsm. Color: dark blue, finish: cornflower blue. Size: 88-92 to 128-132.

Height: 158-164 to 194-200.\* GOST 27575-87 TR CU 019/2011

# 3.093 🔄

#### Men's suit made of cotton with elbow and kneepads Jacket + trousers

Jacket with central button fastener with slip pockets. Trousers with slip pockets. Strengthened elbow and kneepads.

Fabric: twill with water-repellent finish (100% cotton), density of 250 gsm. Size: 88-92 to 128-132. Height: 158-164 to 182-188.\* GOST 27575-87 TR CU 019/2011

#### 3.065 Women's suit for dog expert

#### Jacket + trousers + vest + beret Tailor-made

Many voluminous pockets: for radio sets, for animal feed; pocket for format A documents on the back. Folds on the back for free motion. Airholes on the back and in the underarms.

Trousers with special pockets for knife, with semi-rings to fix dog lead. Vest with zipper with numerous pockets as on the jacket. Beret is drawn in on the back with elastic gore. **Fabric:** blended with water-repellent finish (53% cotton, 47% polyester), density of 214 gsm.

Reflective material: 5 cm wide high-quality reflective band. GOST 27574-87, TR CU 019/2011

# 3.064 🔄

Men's suit for dog expert Jacket + trousers + vest + beret Tailor-made

**Fabric:** blended with water-repellent finish (53% cotton, 47% polyester), density of 214 gsm.

Reflective material: 5 cm wide highquality reflective band. GOST 27575-87, TR CU 019/2011



# 3.290 3

Men's lab coat made of coarse calico Lab coat with central button fastener and slip pockets. Fabric: coarse calico (100% cotton), density of 142 gsm. Color: blue. Size: 80-84 to 128-132. Height: 158-164 to 182-188.\* GOST 12.4.132-83

# 3.291 3

Women's lab coat made of coarse calico Fabric: coarse calico (100% cotton), density of 142 gsm. Color: blue. Size: 88-92 to 128-132. Height: 158-164 to 170-176.\* GOST 12.4.131-83

# 3.321 🖶

#### Men's lab coat made of blended fabric

Bathrobe with central button fastener and slip pockets.

Fabric: blended with water-repellent finish (65% polyester, 35% cotton), density of 210 gsm. Color: blue. Size: 80-84 to 128-132, Height: 170-176 to 182-188.\* GOST 12.4.132-83

# 3.322 🕀

**Women's lab coat made of blended fabric** Bathrobe with central button fastener, side slip pock-

ets, and buttoned drawstring on the back. **Fabric:** blended with water-repellent finish (65% polyester, 35% cotton), density of 210 gsm. **Color:** cornflower blue. **Size:** 80-84 to 136-140, **Height:** 158-164 to 170-176.\* **GOST 12.4.131-83** 



#### Colored women's lab coat Short sleeve

**3.281** Color: turquoise.

3.284 Color: bordeaux. Lab coat with central button fastener, belt, and slip pockets. Fabric: blended with water-repellent finish (65% polyester, 35% cotton), density of 130 gsm. Size: 80-84 to 136-140, Height: 158-164 to 170-176.\* GOST 12.4.131-83 Colored women's lab coat Long sleeve

**3.282** Color: turquoise.

3.286 Color: bordeaux. Lab coat with central button fastener, belt, and slip pockets. Fabric: blended with water-repellent finish (65% polyester, 35% cotton), density of 130 gsm. Size: 80-84 to 136-140, Height: 158-164 to 170-176.\* GOST 12.4.131-83

#### 3.287 Safari women's lab coat

Central button fastener. Breast slip and side pockets. Sleeves with cuffs, length 3/4. Finish details: furniture with button fastener. **Fabric:** blended with water-repellent finish (65% polyester, 35% cotton), density of 130 gsm. **Color:** beige, finish: light beige and orange. **Size:** 80-84 to 128-132. **Height:** 158-164 to 170-176.\* **GOST 12.4.131-83**  3.287



3.263

- **3.262** Color: bordeaux.
- **3.263 Color:** cornflower blue.
- 3.264 Цвет: темно-зеленый.

V-shape neckline, slip pockets. **Fabric:** blended with water-repellent finish (65% polyester, 35% cotton), density of 210 gsm. Size: 80-84 to 128-132. Height: 170-176.\* GOST 25294-2003, TR CU 017/2011



Garrison cap made of blended fabric (8.058, 8.059, 8.060, 8.062) See page 131

Service women's suit 3 Jacket + trousers

3.382



**3.384 Color:** cornflower blue. Semi-adjacent jacket with central button fastener, with side vents and spline on the back with slip pockets. 3/4 long sleeve is length adjusted with buttoned drawstring. Trousers with belt. Fabric: blended (65% polyester, 35% cotton), density of 210 gsm. Size: 80-84 to 128-132, Height: 158-164 to 170-176.\* GOST 9896-88



3.384

8.232 Peak Fabric: blended. **Color:** turquoise or cornflower blue. GOST R 53916-2010 TR CU 017/2011

3.264

3.262

# Collection for service and cleaning agencies



GOŠT 9896-88

Height: 158-164 to 170-176.\*

GOST 9896-88

\* The clothing sizes and height range are indicated. Please specify possible combinations by the manager or on the website.

GOST 9896-88

Size: 80-84 to 128-132.

Height: 158-164 to 170-176.\*

www.technoavia.com

www.technoavia.ru



# **Spoons** apron

Apron with one-piece breast part and belt tied on the back. Flap compartment for telephone on the right of the slip pocket. Fabric: Teredo Print, blended (67% polyester, 33% cotton), low-creasing, with easy care finish, density of 195 gsm. Made by Carrington (England). Size: waist width of 100 cm, length of 80 cm. GOST 25294-2003 TR CU 017/2011





Apron with breast part and belt tied on the back. Slip pockets separated by a seam in the center into two parts. Fabric: Teredo Print, blended (67% polyester, 33% cotton), density of 195 gsm. Made by Carrington (England). Size: 88-100 to 120-132. Height: 158-164 to 170-176.\* GOST 25294-2003, TR CU 017/2011

# Chef's men's

jacket Single-breasted buttoned fastener. Breast slip pocket. Fabric: bleached coarse calico (100% cotton), density of 142 gsm. Size: 88-92 to 128-132. Height: 170-176 to 182-188.\* GOST 9897-88

# White apron Fabric: coarse calico

(100% cotton). Size: 92-104. Height: 170-176.\* GOŠT 9897-88 GOST 9896-88 3.251

Dark apron Fabric: coarse calico (100% cotton). Size: 92-104. Height: 170-176.\* GOST 12.4.029-76 GOST 9897-88 GOST 9896-88

Chef's women's jacket Single-breasted buttoned fastener. Breast slip pocket. **Fabric:** bleached coarse calico (100% cotton), density of 142 gsm. **Size:** 88-92 to 136-140, Height: 158-164 to 170-176.\* GOST 9896-88

# 3.361

Chef's trousers Trousers with elastic gore in the waistline. Fabric: bleached coarse calico (100% cotton), density of 142 gsm. Size: 88-92 to 128-132, Height: 158-164 to 182-188.\* GOŠT 9897-88

8.071 Chef's hat Fabric: coarse calico (100% cotton). Color: white.

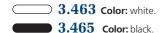
GOST 9897-88

www.technoavia.com www.technoavia.ru

\* The clothing sizes and height range are indicated. Please specify possible combinations by the manager or on the website.



# Class chef's apron 3



Apron without breast part with wrapover belt and slip pocket. **Fabric:** blended with water-repellent finish (65% polyester, 35% cotton), density of 210 gsm. **Size:** waistline width of 111 cm, length of 85 cm. **GOST 9897-88** 

# 3.372

Baker's men's jacket V-shaped neckline jacket with breast slip pocket. Fabric: bleached coarse calico (100% cotton), density of 142 gsm. Size: 88-92 to 128-132, Height: 170-176 to 182-188.\* GOST 9897-88

#### 3.361 Chef's trousers

#### 3.371 Class chef's men's suit Jacket + trousers

Jacket with double-breasted pin fastener and slip pocket. Stand up collar. Sleeves with bottom venthole, easily length adjustable, with mesh in the underarms for air ventilation.

Classic trousers with zipper and straps in the belt. Airholes in the side seams at the pocket level with loop and button as fastener. **Fabric:** blended with water-repellent finish (65% polyester, 35% cotton), density of 210 gsm. Trousers with side pockets and hip slip pocket.

Trousers fabric: blended (50% polyester, 50% viscose), density of 240 gsm. Size: 88-92 to 128-132, Height: 170-176 to 182-188.\* GOST 9897-88

# Collection «Food»







12207

#### 12204 Coverall for food production (451-19)

Coverall was especially created food production workers, consists of central zip fastener, collar band for tight fit on the neck. Wrists and trousers bottoms are with elastic bands for additional comfort while wearing gloves and footwear. Ventilation holes on armpit area. Waist elastic band. **Fabric:** polycotton, 170 gsm. **Color:** white.

#### 12202 Full cover hat (451-16)

Full cover hat – to be used in food production, protects head and neck, does not constrain movement and visibility. Cotton rich fabric – ensures breathability and comfort. Coulisse with neckline cord allows to adjust size.

Fabric: polycotton, 150 gsm. Color: white.

#### 12207 Sweater for food production (451-22)

Fabric: Fleece, 100% polyester, 260 gsm.

#### 12208

Insulated Vest (451-23)

Vest, insulated, with zipper, with side pockets, fleece collar band, elastic waist band. **Fabric:** 100% polyester. **Insulation:** 100% polyester, 150 gsm. **Lining:** 100% polyester.

#### 12203 Jacket with collar band (451-18)

Jacket with collar band – for tight fit to the neck, ventilation holes in armpits area, wrist area can be adjusted what adds comforts while wearing gloves. Trousers with elastic bands – what creates additional comfort, waistband cord helps to adjust. Buttons on the bottom of trousers allow to adjust length, comfortable while wearing specialized footwear. **Fabric:** polycotton, 170 gsm. **Color:** white.



Collection «Food» 12220 12210 12215 12214

#### 12220 Suit «Chef's aid», collar band (451-36)

Fabric: « Bravo Super White», **Color:** white, Klopman (Italy), 200 gsm, 60% cotton 40% polyester Suit was designed for chef's helpers. Jacket with chest and side sleeve pockets, collar band – tight fit to the neck. Reserve in side seam – for additional comfort. Trousers with elastic band and waist cord to regulate size. Buttons at the bottom for additional size and length adjustment to provide comfort while wearing specialized footwear.

#### 12210 Suit Chef's aid (451-26)

Fabric: «Bravo Super White», **Color:** white, Klopman. cotton rich (60% cotton, 40% polyester) 200 gsm, Cotton rich fabric, universal fastener, sleeve side pocket. Reserve in side seam. Jacket has no fittings. Trousers with elastic waist band – additional comfort. Waistband cord – allows to adjust size, side pockets, buttons at the end bottoms allow to adjust length what provides additional comfort while wearing specialized footwear.

Various colors and patterns can be used in accordance with client's requirements.

#### 12215 Chef's jacket black (451-31)

Jacket fabric: «Bravo Super White», Color: white, Klopman, 200 gsm, 60% cotton, 40% polyester Patches fabric: "Starmaster" – Klopman (Italy), 200 gsm, 60% cotton, 40% polyester

Trousers trousers: 230 gsm, 40% cotton, 30% viscose, 30% polyester

Universal fastener (male, female), front chest pocket, ventilation holes in armpits area. Cuffs on the sleeves allow to wear long as well as sleeve <sup>3</sup>/<sub>4</sub>.

Trousers with classic cut, with buttons on the waist to regulate width (size), side pockets with ventilation. Back pocket and pocket for tools.

Depending on customer's requirements various fabric colors can be applied.

#### 12214 Chef's suit with short sleeves (451-30)

Jacket fabric: "Bravo Super White", **Color:** white, Klopman, 200 gsm, 60% cotton 40% polyester Patches fabric: "Indestructible", **Color:** black, Klopman, 245 gsm, 35% cotton, 65% polyester Trousers fabric: 230 gsm, 40% cotton, 30% viscose, 30% polyester

Universal fastener (male, female), tool pocket, ventilation in armpits area.

Trousers with classic cut, bottoms on the waist allow to adjust size, side pockets with ventilation. Back pocket and pocket for tools.

Depending on customer's requirements various fabric colors can be applied.



#### 12221 Apron elongated without bib, black (451-37)

**Fabric:** Starmaster, Klopman (Italy), 200 gsm, 60% cotton 40% polyester Apron, straight, elongated without bib, lower than knees, recommended with chef's suit (451-30)

#### 12217

Apron straight without bib (451-33) Fabric: «Bravo Super White», Color: white, Klopman (Italy), 200 gsm, 60% cotton, 40% polyester

Patches fabric: "Indestructible", Color: black, Klopman (Italy), 245 gsm, 35% cotton, 40% polyester. Apron, straight, elongated without bib, lower than knees, recommended with chef's suit (451-30)

#### 12200

#### Apron with chest part size can be adjustable with neck belt (451-07) Apron with chest part, size can be adjustable with neck belt Fabric: polycotton, 210 gsm.



#### 6.171 Ansell Moisture resistant vinyl oversleeves

VSB-8-HS (blue color). Protection from acids and alkalis with concentration of up to 50%, oil derivatives, oils and fats. PVC thickness: 0.203 mm. Length: 460 mm.



#### Acid-resistant vinyl apron PV 45G

Apron made of compacted vinyl (PVC). For medium and heavy works. Protection from acid and alkali splashes with concentration of up to 80%, oil derivatives, oils, fats, lacquers, and oil paints. Size: 84×112 cm. PVC thickness: 0.508 mm. Color: green. TR CU 019/2011 GOST 12.4.029-76



12206 Cap (barret) 451-21 Berret with inner mesh for ventelation Fabric: polycotton, 170 gsm. Color: white.

Food collection

12197 Forage-cap (451-09) Fabric: polycotton, 170 170 gsm Color: white. 12205 Kepi (451-20) Cap with visor with inner mesh for hair Fabric: 100% cotton.

54



# 3.341 3

Men's surgeon suit Jacket + trousers + cap V-shaped neckline jacket. Slip pockets. Fabric: blended low-creasing with water-repellent finish (65% polyester, 35% cotton), density of 130 gsm. Color: green. Size: 88-92 to 128-132. Height: 170-176 to 182-188.\* GOST 9897-88

# 3.112 3

Men's medical lab coat Buttons as central fastener. Sleeves with cuffs. Fabric: blended (65% polyester, 35% cotton), low-creasing with water-repellent finish, density of 130 gsm. Color: white. Size: 88-92 to 136-140. Height: 170-176 to 182-188.\* GOST 12.4.132-83

# 3.292 3

Women's white lab coat made of coarse calico Buttons as central fastener. Slip pockets. Fabric: bleached coarse calico (100% cotton), density of 142 gsm. Size: 80-84 to 128-132. Height: 158-164 to 170-176.\* GOST 12.4.131-83

# 3.293 🕄

#### Men's white lab coat made of coarse calico

Buttons as central fastener. Slip pockets. Fabric: bleached coarse calico (100% cotton), density of 142 gsm. Size: 88-92 to 128-132. Height: 170-176 to 182-188.\*

GOST 12.4.132-83

# 3.113 3

Women's medical lab coat

Semi-adherent silhouette, buttons as central fastener. Edges made of barred fabric in side pockets, frontal yokes and on the back, strap details on the back. **Fabric:** blended (65% polyester, 35% cotton), low-creasing with water-repellent finish, density of 130 gsm. **Color:** white. **Size:** 80-84 to 136-140, **Height:** 158-164 to 170-176.\* **GOST 12.4.131-83** 

#### Medical clothing

# Series

Professional workwear

# Bianca

# 3.345 Bianca 2 women's jacket

Soft elastic fabric ensures comfort, free motion that is essential for medical personnel. Semi-adherent jacket with buttoned fastener. Side ventholes. Stand up collar. Slip side and breast pockets. Short sleeves with cuffs. Low waistline with imitation of belt loops. **Fabric:** with increased cotton content (89% cotton, 11% Lycra®T400® fiber), density of 144 gsm, made in South Korea. **Color:** white. **Finish:** pink-grey band. **Size:** 80 to 120. **Height:** 158-164 to 170-176.\* **GOST 9896-88** 

# 3.346 3

#### Bianca 2 women's trousers Trousers with frontal and back pockets, belt loops and elastic gore inserts. Fabric: with increased cotton content (89% cotton, 11% Lycra®T400® fiber), density of 144 gsm, made in South Korea. Color: white. Size: 80 to 120. Height: 158-164 to 170-176.\* GOST 9896-88

#### 3.347 <sup>3</sup> Bianca 2 women's lab coat

Semi-adherent lab coat with longitudinal relief, buttoned fastener, English collar, slip side and breast pockets, 3/4 long sleeves with cuffs, and back vents. Low waistline with imitation of belt loops. **Fabric:** with increased cotton content (89%

Fabric: With increased cotton content (89% cotton, 11% Lycra®T400® fiber), density of 144 gsm, made in South Korea. Color: white. Finish: pink-grey band. Size: 80 to 120. Height: 158-164 to 170-176.\* GOST 12.4.131-83 Modern clothing for medical personnel. Comfortable and functional design, quality fabrics, presentable appearance

3.345

3.346

# 3.347

#### **Composition:**

89% cotton and 11% Lycra®T400® fiber blend with 144 g/m<sup>2</sup> density.

**Cotton rich** 

fabric

- Increased cotton fiber content offers good level of comfort during the whole work day.
- Twin-component fiber Lycra®T400® (produced by INVISTA™) weaved into the fabric provides stretch-effect with good crease-recovery properties. The fabric has thermo regulating properties that enable the moisture to pass to the fabric's outer surface.



 DreamCare fabric's ecofriendly finish gives the fabric that gentle and silk touch, impedes stain formation, and allows the stains to be easily washed away.
 Workwear made with DreamCare fabric do not shrink after wash and retain the original shape.

# Medical clothing

Series



#### 3.355 Oskar men's jacket

Semi-adherent jacket with buttoned fastener. Stand up collar with finishing fabric inside. Breast and slip side pockets. Back with two ventholes at the bottom; belt-imitating detail in the waistline. Short sleeves with cuffs. **Fabric:** with increased cotton content (89% cotton, 11% Lycra® T400® fiber), finish, Dream Care, density of 144 gsm, made in South Korea. **Color:** white.

Finish fabric: for skirts (60% cotton, 40% polyester), density of 110 gsm. Color: grey blue Size: 88 to 128. Height: 170-176 to 182-188\*. GOST 9897-88

#### 3.356 Oskar men's trousers

Trousers with zipper fastener, loops and straps on the belt for volume adjustment. Front and back pockets. **Fabric:** with increased cotton content (89% cotton, 11% Lycra® T400® fiber), finish, Dream Care, density of 144 gsm, made in South Korea. **Size:** 88 to 128.

Height: 170-176 to 182-188\*. GOST 9897-88

# 3.357 3

Oskar men's lab coat

Shortened semi-adherent lab coat with button fastener and English collar. Slip side and breast pockets. Back with the bottom venthole; belt-imitating detail in the waistline. Long sleeves with cuffs. **Fabric:** with increased cotton content (89% cotton, 11% Lycra® T400® fiber), finish, Dream Care, density of 144 gsm, made in South Korea. **Finish:** grey blue ribbon. **Size:** 88 to 128. **Height:** 170-176 to 182-188\*. **GOST 12.4.132-83** 



# 3.039 3.038 3.035 3.036 3.037 3.036 🖲 3.035 👻 3.034 🖱 **Ultra** women's jacket Ultra men's jacket Ultra **Ultra** men's trousers

Trousers with side pockets. Fabric: blended (65% polyester, 35% viscose), density of 175 gsm. Color: white. Size: 88-92 to 128-132, Height: 170-176 to 182-188.\* GOST 27575-87, TR CU 019/2011

# 3.039 🖻 Ultra women's lab coat

Shortened semi-adherent overall with central blind buttoned fastener and pockets. Strap detail on the back for volume adjustment. Fabric: blended (65% polyester, 35% viscose), density of 175 gsm. Color: white. Size: 80-84 to 128-132. Height: 158-164 to 170-176.\* GOST 12.4.131-83

#### 3.038 🔄 Ultra men's lab coat

Overall with central blind buttoned fastener and pockets. Sleeves with buttoned width adjustment. Strap detail on the back for volume adjustment.

Fabric: blended (65% polyester, 35% viscose), density of 175 gsm. Color: white. Size: 88-92 to 128-132. Height: 170-176 to 182-188.\* GOST 12.4.132-83

#### 3.037 🖱 Ultra women's trousers

Trousers with side pockets. Fabric: blended (65% polyester, 35% viscose), density of 175 asm. Color: white. Size: 80-84 to 128-132. Height: 158-164 to 170-176.\* GOST 27574-87, TR CU 019/2011

Jacket with central blind buttoned fastener. Sleeves with buttoned width adjustment. Fabric: blended (65% polyester, 35%

viscose), density of 175 gsm. Color: white. Size: 80-84 to 128-132,

Height: 158-164 to 170-176.\* GOST 27574-87, TR CU 019/2011

Jacket with central blind buttoned fastener. Sleeves with buttoned width adiustment. Fabric: blended (65% polyester, 35%

viscose), density of 175 gsm. Color: white. Size: 88-92 to 128-132, Height: 170-176 to 182-188.\* GOST 27575-87, TR CU 019/2011



#### 2.270 Fleece vest Snegir

Double-sided vest: red side: knitted fleece, black side: jacket fabric. Zipper with reversing lock as central fastener for wearing both on this or that side. Stand up collar. Elongated back and drawstring on the bottom for additional wind protection.

Fabric: red color: knitted fabric (fleece), made in Italy, 100% polyester, density of 200 gsm; **black color:** fabric with polyurethane coating, 100% polyester, density of 100 gsm. Size: 80-84 to 128-132. Height: 158-164 to 182-188.\* GOST 25295-2003 TR CU 017/2011

# 2.271 feelgood

#### Insulated vest for white-collar workers

Zipper fastener. Side insulated pockets, inside pockets. Elongated back. Stand up collar is insulated with soft knitted fabric (fleece) by Pontetorto (Italy). Finish: reflective piping. **Upper fabric:** blended with water-repellent finish (65% polyester, 35% cotton), density of 210 gsm. Insulant: Feelgood, 150 gsm, 1 layer. Color: cornflower blue. Size: 88-92 to 128-132. Height: 170-176 to 182-188.\* GOST 25295-2003 TR CU 017/2011

#### 2.262 Thinsulate" and Insulated vest Nord

Zipper fastener and windproof flap. Slash zipped pockets and slip voluminous pockets with flaps, inside pocket. Elongated back.

**Upper fabric:** blended with oil- and water-repellent finish (65% polyester, 35% cotton). **Lining:** 100% polyester.

Insulant: Thinsulate ® P100, 1 layer. Size: 88-92 to 128-132. Height: 170-176 to 182-188.\* GOST 25295-2003 TR CU 017/2011 Integrated solutions for welders' protection



# New generation welder's suits

Assurance that fabric's fireproof properties will remain throughout the whole suit's usage period is the key to your peace of mind. Suits fabricated out of Mars and

Mercury (Klopman, Italy) with durable FR treatment Proban®, resistant to washes and industrial laundry.

FR indicators of Mars and Mercury fabrics in several times exceed Rhodia requirements – developer and manufacturer of Proban® FR technology.

Company Rhodia imposes strict requirements to quality control, mandatorily and independently tests each sample of fabric for FR properties after 50 washes in accordance with ISO 17025 method in an accredited laboratory.

In compliance with stricter requirements of ISO 15797 (article 8A), Klopman has tested the fabric for FR properties after 100 washes at a temperature of 75°C. These tests have confirmed that the FR properties of the Mars and Mercury fabric are maintained after multiple industrial washes. In order to guarantee high quality and safety standards as per ISO 15025 Part A, Klopman constantly monitors each stage of treatment application by Proban®, and executes some additional tests.



Proban® technology

# PROBAN

Proban® is a technology for imparting fireproof properties, which retain after long-term wearing and multiple washes to cotton and cotton-containing fabrics.

#### How does fire affect fabrics treated with Proban®?

When fire affects fabric treated with Proban®, a permanent insulated layer forms to help protecting the user of this clothing. Fabrics treated with Proban® do not smolder, melt, and fire does not spread beyond the insulating layer.



Certification of the fabric manufacturer under this standard guarantees that the fabric represents no risk for human's health and ensures clothing safety.

### Integrated solutions for welder's protection



#### Welder's suit



#### 6.212 🔮 Mars men's welder's suit

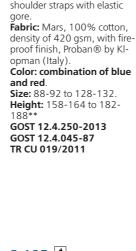
Jacket + trousers 2 class of protection from sparks, molten metal splashes, oxide scales \*

Special suit design with maximum amount of protective pads (jacket: at the front, sides, shoulder area, and sleeves; trousers: at the front, on the side, leg seams, and on the back) to ensure maximum protection from burning and high temperatures. Jacket with blind rightsided button fastener, additional inside protective flap preventing from sparks getting inside. Sleeve design resembles main welder's hand position during work, reduces Height: 158-164 to 182fatigue. Airholes in the underarms and blade bones to ensure air exchange. Pocket design excludes oxide scales from getting into the pocket. Inside pocket for documents.

8.105

Trousers with side button fasteners, right slip pocket, inside pockets for shock-absorbing pads if worker needs to stay in a limited space on the knees for a long time. For comfort, trousers are equipped with shoulder straps with elastic

Eabric h KLOPMAN



#### 8.105 Mars under-helmet for welders

Elastic gore ensures good fitting in the face framing. Cape ensures additional protection in the nape and shoulder area, fastened at the front with adhesive tape. Main fabric: Mars, 100% cotton, density of 420 gsm with fireproof finish, Proban® by Klopman (Italv). Color: blue Lining fabric: coarse calico, 100% cotton.

Color: grey. Size: 54-56, 57-60, 61-64. GOST 12.4.250-2013 TR CU 019/2011



#### 3.133 🔮 **Mercury** men's fireproof suit 1 protection from sparks, molten metal splashes, oxide scales \*

Recommended for operations related to cutting and treating metal, works in hot and forge & press shops, and auxiliary welding works in the oil & gas industry, machine engineering, and construction. Front jacket, sleeves, and trousers front pads ensure high degree of protection from heat radiation, metal splashes, and oxide scales (at a distance from the source of min. 2 m). Special design jacket ensuring free motion with blind fastener. Airholes in the underarms and on the back ensures air exchange. Pocket design on the jacket excludes metal splashes and oxide scales from getting into the pocket. Trousers with inside pockets for shock-absorbing pads in the worker need to stay in a limited space on the knees for a long time. Fabric: Meteor, 100% cotton, density of 335 gsm, with fireproof finish, Proban® by Klopman (Italy). Color: blue, finish: red. Size: 88-92 to 128-132. Height: 158-164 to 182-188 \*\* GOST 12.4.250-2013 'Special clothing for protection from sparks and splashes of molten metal'

GOST 12.4.045-87 "Men's suits for protection from increased temperatures. Technical requirements'. TR CU 019/2011

www.technoavia.com www.technoavia.ru

5.107



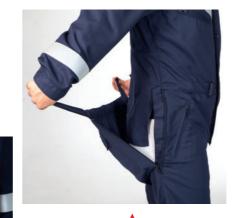


Coverall for oil companies, with storm flap with concealed brass snaps

- 12225 Megatec 250 fabric (Klopman, Italy), 250 gsm
- **12226** Sungraizer fabric (Klopman, Italy), 260 gsm, 180 gsm
- 12227 Alexandra fabric (Textil Santanderina, Spain), 250 gsm, 200 gsm

#### Features:

- · Central long closure with two way brass zipper for comfortable use and storm flap with concealed brass snaps;
- Upper folded back part of back trousers for comfortable use; with elongated tucked in back bodice; two zip closures in side seams; elastic waistband with adjustable straps in front with hooks and loop FR tape closure to make coverall tighter.
- Two breast pocket with brass zippers;
- Pen pockets on the left sleeve;
- Large pleats in the back for freedom of movement;
- Two side pocket with brass zippers;
- Two rear pockets with flaps with concealed brass snaps;
- Pocket with Telephone pocket on the left leg; with flaps and concealed brass snaps;
- · Concealed brass snaps on the cuffs;
- · Brass snaps on the leg bottom to make trousers leas tighter:
- Reflective tape on the chest, back voke; sleeves and legs.



Elastic waistband with Flap with concealed brass snaps

Manufactured by: Klopman (Italy)

75% cotton, 24% polyester and 1% anti-static Nega-Stat® fiber blend with 245 g/m2 density.

KLOPMA

Hydrofoil and flame retardant fabric with a 2x2 twill demonstrates a high level of robustness, proven by ISO 13934-1 test results with warp strength of 1,100 N and weft strength of 450 N.

Megatec 250N

fabric

A mid-weight cotton-rich anti-static blend, Megatec 250N is accredited for anti-staticity, flame retardancy and liquid chemical repellency, as well as electric arc.

Offering superior FR performance achieved by integrating the advantages of Klopman's continuous processing technology with the most up-to-date PROBAN® FR finishing plant - Megatec 250N also takes advantage of the exceptional static-dissipative performance of Nega-Stat® fibers, which work by inducing charges into a unique encapsulated conductive carbon core, as well as the innovative Klopman Hydrofoil finish for limited chemical splash.

Ideal for use in a range of industries including petro-chemicals, refineries, energy supply and utilities, Megatec 250N is extremely hard-wearing and durable, with a soft hand and excellent drape providing exceptional comfort for the wearer. It has been designed to perform to the highest levels, and can be industrially laundered to 85°C.

# Sungrazer fabric

#### Manufactured by: Klopman (Italy)

59% cotton with 40.5% PPS (polyphenylene sulphide) Fortron® blend and 0.5% anti-static grid. Fabric by KLOPMAN

An advanced fabric for multi risk areas, combining flame retardancy and anti-staticity, and incorporating the use of Fortron® PPS, an inherently flame retardant and chemical resistant fiber by Ticona.

Fortron® PPS was designed for use in extremely high temperature conditions and apart from being extremely resistant to heat, Fortron® PPS provides superior resistance against sulphuric and hydrochloric acid and offers higher levels of protection to workers potentially exposed to industrial liquids, such as break fluids, coolants, fuels or similar substances.

Sungrazer fabric has good tear and tensile strength, superior dimensional stability for good shape retention of garments, low shrinkage in washing and a high abrasion resistance which is particularly important in harsh working environments. The specific characteristics of PPS fiber, together with the high quality associated with all Klopman fabrics, contribute to superior wearer comfort which also remains after repeated laundering.

An ideal combination of protection, comfort and performance, Sungrazer can be used in a range of industries, including petro-chemicals, refineries, oil and gas industry, or public administration, and also offers a straightforward aftercare, being industrially launderable at temperatures as low as 60°C but up to 85°C.



# Alexandra fabric

Developed and produced by Textil Santanderia (Spain)



Fabric composition: 63% Lenzing FR, 22% Meta Aramid, 13% PA, 2% Antistatic.

Fabric demonstrated great performance results in various states in comparison to the most commonly used alternatives on the market.

Comfort of fabrics is directly linked to the materials used Some comfort parameter are very much in line with weight and construction

Alexandra Blend feature the following performance characteristics:

Cool touch High air permeability/breathability Excellent moisture management fast moisture transport Less heat stress, efficient body heat transfer Fast water vapor transfer through the garment High short time water vapor absorbency.

Coverall for oil companies				
12228	Megatec 250 fabric (Klopman, Italy),			
	250 gsm			
12229	Sungraizer fabric (Klopman, Italy), 260 gsm,			
	180 gsm			
12230	Alexandra fabric (Textil Santanderina,			
	Spain), 250 gsm, 200 gsm			
<b>12260</b>	Jupiter FR ( Klopman, Italy), 235 gsm, with			
	flame retardant PROBAN finish			
Features:				

# Central long closure with two way brass zipper for comfor-

- table use and storm flap with concealed brass snaps;
- Elasticized waistline of the back bodice;
- Two breast pocket with flaps and concealed brass snaps;
- Pen pockets on the left sleeve;
- Large pleats in the back for freedom of movement;
  Two side pocket;
- Iwo side pocket;
- Two rear pockets with flaps with concealed brass snaps;
- Tool pocket on the right leg;
- Pocket with Telephone pocket on the left leg; with flaps and concealed brass snaps;
- Concealed brass snaps on the cuffs;
- Brass snaps on the leg bottom to make trousers legs tighter;
- Reflective tape on the shoulders; sleeves and legs.



# 3.164

Chemosafe men's acid-proof suit Jacket + trousers + beret For protection from acids with concentration of 50 to 80 % (in terms of sulfuric acid)

Jacket with blind button fastener. Breast and side pockets. Folds on the back for free motion. Sleeves with buttoned cuffs. Trousers with pockets.

Hi-Vis elements: bright orange fabric and finish lines. Fabric: Chemosafe acid-proof with finish, Teflon® by DuPont (100% polyester), density of 230 gsm, made by Concordia (Bel-

Color: blue, finish: orange. Size: 88-92 to 128-132. Height: 170-176 to 182-188.\*

GOST R 12.4.251-2013, TR CU 019/2011

3 class, K80 for protection from acids with concentration of 50% to 80%

Beret



#### Made by:

Concordia, Belgium Complies with EN 368, CONCORE a European standard



#### Fabric composition:

100% polyester, density of 230 gsm, with finish, Teflon®

#### Advantages:

- protection from highly concentrated acid solutions (up to 80%)
- ensures safety as per HSE norms
- due to the use of unique polyether fiber, fabric gives nice and comfortable feelings in wearing
- high-quality treatment does not vanish after multiple washes

# Acid solutions outfit protection class (GOST 12.4.251-2013)

**1 class,** K20 for protection from acids with concentration of up to 20%

2 class, K50 for protection from acids with concentration of 20% to 50%

3 class. K80 for protection from acids with concentration of 50% to 80%

4 class, Kk for protection from acids with concentration of up to 80%

\* The clothing sizes and height range are indicated. Please specify possible combinations by the manager or on the website.

International industrial standarts accept non-woven disposable garments as PPE for hazardous and health-risk labour conditions.

# Chemical protection coveralls

**VVek**<sup>®</sup>

Tyvek® coveralls are made of nonwoven high density polyethylene and designed to protect humans from hazardous substances and dust particles. Tyvek® coveralls also serve to protect clean environments from human contamination.

- High degree of barrier protection from dangerous dry dust and aqueous-based chemicals.
- Protection from the impact of acid and alkali aqueous solutions with concentration of up to 30–40% and pressure of up to 1.2 bar.
- Protection from up to 1 μm solid particles.
- CAT III Type 5/6 CE classification.
- Protection from penetration of radioactive particles in accordance with EN 1073-2.
- Electrostatic protection in accordance with EN 1149-1.
- Smooth external side (low fluff separation): may be used in clean rooms.
- Stable to rubbing.
- Contains no silicon.
- Air and steam-permeable.

#### Tyvek® Classic is replaced with new, improved model, Tyvek® Classic Expert!

Tyvek® Classic Expert ensures better comfort and high level of protection from dust and liquid additive

Tyvek. Classic Xpert

**OUPONE** 

splashes, Type 5/6 in accordance with the EU classification. High level of protection for humans and processes.

New coverall embodies all advantages of Tyvek® Classic and outperforms it in terms of protection and comfort level.

#### The following has changed:

- new seams design ensures high protection degree
- protection from liquids is 3 times better. Complies with new more stricter testing requirements, Type 6
- protection from solid particle is 6 times better
- improved ergonomic cutting ensures better fitting and free motion
- new sleeve design: sleeves do not hike up
- advanced hood fit more precisely replicates head motion and ensures tighter face fitting
- elongated holder of the zipper fastener allows easier close and open the coverall in gloves
- new packaging desing with pictograms shows the proper way for donning and doffing

Chemical Protective Clothing

#### Tyvek®/Tychem® coverall donning and doffing

Safety is a core-value for DuPont®. It is also a philosopy for Tyvek® and Tychem® products.

Proper coverall donning and doffing technique is also an important safety aspect.

#### Correct technique ensures the following:

- highest safety level
- optimal combination with various PPE (respiratory organs, hand and eye protection)
- integrity and cleanliness of internal space
- easiness of the worker's motions, and, thus,
- advanced labour efficiency
- PPE economy

## DOFFING

While doffing it is highly important not to contaminate the garment's internal surface. We advise to take the garment off with the help of an experienced colleague.





#### 

#### The following has changed:

- new seams design ensures high protection degree
- protection from liquids is 3 times better. Complies with new more stricter testing requirements, Type 6
- protection from solid particle is 6 times better
- improved ergonomic cutting ensures better fitting and free motion
  new sleeve design: sleeves do not
- hike up

- advanced hood fit more precisely replicates head motion and ensures tighter face fitting
- enlarged zip-holder makes zip closing and openning easier when wearing gloves
- new design package with pictograms show the proper way for donning and doffing technique

Color: white. Size: S to XXXL.\* 6.014 Chemical protection coverall Tyvek® Classic blue Color: blue. Size: M to XXL.\*

6.010 🕡 🥮 🔄 🦉 🦃 Chemical protection coverall Tyvek® Classic green Color: green. Size: M to XXL.\*

#### 12257 DuPont™ Tyvek® Dual, model CHF5a

Type 5/6 hooded disposable coverall with external seams, elasticated wrists, ankles and waist.

The Tyvek® Dual garment combines Tyvek® on the front with an SMS nonwoven on the back panel. The Tyvek® front provides an ideal balance of protection, durability and comfort. It is permeable to both air and water vapor, yet repels water-based liquids and aerosols. It offers an excellent barrier against fine particles and fibers down to 1 micron in size. The large, breathable SMS back panel offers lower protection against particles (down to 3 microns in size) and light waterbased splashes, yet high levels of comfort. Ultra low-linting. Silicon-free. Antistatically treated.

Materials: front - DuPont™ Tyvek® (high density polyethylene, 41.5 gsm); back – SMS (spanbonded polypropylene, 60 gsm). Size: S to 3XL. Weight: < 200 g. EN 1073-2. EN1149-5

t.



\* The clothing sizes and height range are indicated. Please specify possible combinations by the manager or on the website.

# 6.018 Chemical protection coverall Tyvek® Classic Plus with socks

- Higher protection level as compared to Tyvek® Classic when working with toxic dry dust particles and / or under the conditions 6.018 where it is necessary to avoid liquid infiltration through seams.
- The only suit with tight seams made of nonwoven fabric for Type 4, 5, 6 of the protective clothing classification.
- · Optimally combined with respirators and masks.
- Protection from ingress of radioactive particles in accordance with EN 1073-2.
- · Electrostatic protection in accordance with EN 1149-1.
- · Smooth external side.

Color: white

Size: M to XXXL.\*

# **Pictogram explanation**



Chemical protection category III



Protection from liquid additives under pressure (Type 3)

Protection from aerosols (Type 4)



Protection from solid particles (Type 5)



Protection from liquid additives splashes (Type 6)



Protection from biological risk factors



8

Antistatic protection

Protection from radioactive particles



# Main fields of applicatio for coveralls Tyvek® Clas **Xpert and Tyvek® Classi**

- Aviation industry
- Airfield services
- Fuel refill complexes
- Production, transportation, and pro cessing of oil and gas
- · Cleaning of vessels from non-toxic material residuals
- Chemical industry
- Aariculture
- Repair, construction, and decoration works
- Production of building materials
- Painting works
- Car-building industry
- Precision machining industry
- Food industry
- Flour-milling industry
- Waste disposal
- Nuclear industry
- Transportation of hazardous cargos
- Electronic industry
- Clean rooms and sterile premises
- Production related to the asbestos e richment and processing
- · Housing and public utilities
- Units of EMERCOM and MIA
- Polygraphic industry
- Glass industry
- Production of heat-insulating mater
- Steam-power and energy utilities (TPP)
- Polishing of various surfaces
- Protection of processes from humar contamination



### Barrier properties of Tyvek® materials

	<u> </u>	-	
	Tyvek®	Tychem®C	Tychem®F
	Тучеко	lychemec	rychemor
Surface density	41.5 gsm	84.6 gsm	117.5 gsm
Barrier against particles	100% particles with a size of over 1 µm	100% particles of any size	100% particles of any size
Barrier against chemical sub- stances in liq- uid form	Inorganic water- based acids and alkalis up to 30%	Inorganic and some organic acids and alkalis	Inorganic and or- ganic acids and alkalis
Hydrohead resistance	120 cm	over 300 cm	over 300 cm
Barrier against blood	Partial	100%	100%
Barrier against bacteria	High	100%	100%
Lint-free	Yes	Yes	Yes
Antistatic treatment	Both sides	Inside surface	Inside surface
Resistance to low and high temperatures	Preserves flexibility down to –73°C. Melts at t° +135°C	Preserves flexibility down to -73°C. Seams of the clothing open at t° +98°C	Preserves flexibility down to -73°C. Seams of the clothing open at t° +98°C

Operation with many toxic and aggressive substances requires higher degree of protection than coveralls Tyvek® Classic and Tyvek® Classic Plus. Such protection is ensured by coveralls Tychem®C and Tychem®F

#### Tychem®C Tychem®C is a fabric

Ivenem@C is a fabric designed for application in chemical protection suits.

It consists of the Tyvek® fabric as a basis and polymer coating, which is applied atop and covers pores in the Tyvek® fabric making it absolutely impermeable for ultrathin hazardous dust particles, powders, certain chemicals as aerosols and spray, concentrated acids and bases, and saline water-base solutions. Sustains head of up to 2 bar. In addition, it protects from blood and blood-driven pathogens.

Tychem ®C has elasticity and light weight. Antistatic treatment applied to Tychem ®C significantly limits appearance of electrostatic charges on the fabric. In case of need, it is recommended to additionally earth coveralls in order to avoid accumulation of electrostatic charges.

#### 

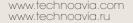
• sewed-in socks.

С

- more reliable protection under extreme operating conditions.
- best solution for protection from inorganic highly concentrated acids and alkalis at a pressure of up to 2 bar.
- impermeable for solid particles of any sizes.
- alternative anti-acid suits.
- antistatic treatment from inside, electrostatic protection in accordance with EN 1149-1.
- applied for cleaning various vessels.
- applied at oil industry facilities for producing and processing oils, at chemical and pharmaceutical facilities, when eliminating emergency consequences.

Size: M to XXXL.\*









# Tychem®F

Tychem®F is a barrier material with high performance properties designed for application in chemical protection coveralls.

It is fabricated through laminating Tyvek® over barrier film with polymer coating. Combination of film and polymer makes the material impermeable for solid particles (hazardous dust and powders) and quite stable to infiltration of many liquids (concentrated inorganic acids and bases, many organic chemicals, blood and blood-driven pathogens), some chemicals as aerosols, and many commonly used gases.

Tychem ®F is resistant to emissions of liquids at a pressure of up to 5 bar.

Antistatic treatment applied to Tychem®F significantly limits appearance of electrostatic charges on the fabric. In case of need, it is recommended to additionally earth coveralls in order to avoid accumulation of electrostatic charges.

#### 6.017 I S S S S S S S Chemical protection coverall Tychem@F with socks

- sewed-in socks.
- best solution for protection from organic solvents and biological factors.
- reliable protection from liquid inorganic chemicals with extremely high concentration at a pressure of up to 5 bar.
- impermeable for solid particles of any sizes.
- good compatibility with other PPE.
- antistatic treatment from inside, electrostatic protection in accordance with EN 1149-1.
- applied at oil industry facilities for producing and processing oils, at chemical and pharmaceutical facilities, as protection from the impact of chemical warfare agents, when eliminating emergency consequences.
   Size: M to XXXL.\*

Removal of chemical warfare agents



# **NEOGARD-LITE**

# Neogard-Lite® range footwear with composite toe cap

Neogard-Lite® footwear is designed for use during summer and springautumn seasons. This contemporary looking footwear with enhanced boot tree is made of light breathable materials, thus making it comfortable and low weight.

# Comparative features of protective toe capes made of various materials applied during the production of shoes by the molded construction method

Technical feature	Protective aluminum toe cap	Composite toe cap	Steel toe
Compliance with standards	EN ISO 20345	EN ISO 20345	EN ISO 20345
Protection from toe cap impacts	Protects from impacts of 200 J (200 Mun)	Protects from impacts of 200 J (200 Mun)	Protects from impacts of 200 J (200 Mun)
Form stability	Deforms to a 20 mm gap after impact, complies with standard require- ments	Retains the original form after impact	Deforms to a 20 mm gap after impact, complies with standard require- ments
Toe cap weight (1 ea), grams	58	54	98
High/low tem- perature protec- tion	Partial foot overheating when exposed to high temperatures, and partial foot overcooling when ex- posed to low tempera- tures.	Heat and frost resistant	Partial foot overheating when exposed to high temperatures, and partial foot overcooling when ex- posed to low tempera- tures.
Metal detector passing	Is detected by safety metal detectors, alarm is trig- gered	Is not detected by safety metal detector, alarm is not triggered	Is detected by safety metal detectors, alarm is trig-gered



3 Desma units are installed at the Yoshkar-Ola Shoes Factory to fabricate shoes by the molded construction method

#### **Neogard-Lite® shoe structure:**

- Internal protective composite (or aluminum) toe cap offers the toe cap area protection from impacts of up to 200J (Mun 200).
- 4 Sole pattern with better surface grip.
- Geniune leather upper.
- 2 Protective toe cap edge that prevents the foot from possible jamming.
- Ouble-layered sole with shock-absorbing polyurethane midsole and thermoplastic polyurethane sole with wear-resistant properties.

- O Abrasion-resistant ON STEAM lining fabric that removes moisture and provides comfort.
- 6 DERMODRY COOLMAX lining removes Insertable molded BIOTEC insole made of moisture and offers superb foot comfort. DERMODRY COOLMAX® and polyurethane releases moisture from foot and ensures
  - Onwoven midsole.

comfort during wear.

- Thermoplastic heel counter that preserves its form.
- **1** Water-resistant breathable RETOR polyamide fabric used in soft collar, tongue, and upper inserts.

_				
Pictog	ram	exn	lana	tion
Theory		CAP		

Pr
pe
m

ÍX

4

rotection from impacts in the forepart eriod with metal, composite, or aluninum toe capes with shock resistance of 200 J

Protection from punctures with punc-1 yr ture-safe pad (1200 H)

Protection from fuel, petrochemicals, oils

Protection from acid and alkali solutions

Improved protection from moisture

Protection from static electricity (in accordance with the requirements EN ISO 20345:2007, EN ISO 20345:2011)

Protection from general production con-ОПЗ tamination

Rubber sole on the basis of nitrile rubber, NITRIL resistant to short-term (60 sec) contact with surface heated up to a temperature of +300°C

PU **Double-layer sole** NITRIL (polyurethane + nitrile rubber)

Polyurethane sole PUR

**Double-layer sole** PU TPU (polyurethane + thermopolyurethane)

Natural fur

METAL FREE Absence of metal accessories

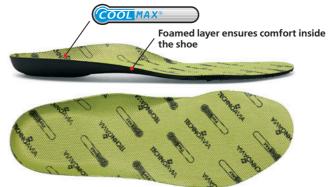


#### Neogard-Lite® range characteristics:

- All Neogard-Lite® range models are assembled using the technology of direct polyurethane and thermoplastic polyurethane injection molding to an upper shoe part. Neogard-Lite® range footwear provides protection against oils, petrochemicals, impacts and contamination in strict accordance with protective properties labels and picking.
- The upper is made of 1.6–1.8 mm thick genuine leather with contemporary finish materials to ensure the required protective properties and significant weight reduction.
- The double-layered sole is oil and fuel resistant (stable to the chemical action, e.g. fuel, petrochemicals):
- the polyurethane midsole is shock-absorbing and impact-damping, providing lightness, comfort, and improved heat-protective properties;
- the thermoplastic polyurethane outsole is wear-, thermal-, and frost-resistant (from – 40°C to +100°C), offering better slip, deformation, and abrasion resistivity.
- The sporty patterned sole is designed with respect to the current requirements imposed to special footwear in terms of its appearance and functionality. The sole pattern ensures good cohesion with surfaces. The self-cleaning sole pattern is 4.5 mm deep.

- A composite (or aluminum) toe cap with a polyurethane pad withstanding 200J is used in the toe cap area to provide protection against impacts from falling objects
- A tongue made of RETOR fabric prevents from tiny objects, splashes, and contamination getting inside the shoe.
- Soft welt protects from side impacts and provides additional comfort.
- DERMODRY COOLMAX and ON STEAM lining removes moisture and offers additional comfort.
- Insertable molded BIOTEC insole made of DERMODRY COOLMAX and polyurethane releases moisture from foot and ensures comfort during wear.
- The boot tree has optimal dimensions required by protective footwear standards to ensure comfortable wear in the summer, spring and autumn season, thus preventing the wearer from any discomfort or fatigue the entire working day.
- The shoe is designed to be used in oil&gas, mining, power engineering, chemical, transportation, and agriculture industries.

All Neogard-Lite® range models can be supplied with a special anti-puncture footbed (insole) that provides protection against puncture risk with a comprehensive puncture-resistivity sole of up to 1200 N.



Insertable molded BIOTEC insole with foot-shape memory feature

DERMODRY COOLMAX is the top-quality fabric with efficient moisture absorption fiber system. The system absorbs moisture and provides cooling relief and comfort during wear thanks to the fibers that remove the moisture.

# Comparative description of the physical and mechanical figures of the lining DER-MODRY COOLMAX cloth

Title of figures		Requirements of EN ISO 20345	Actual figures DERMODRY COOLMAX
Rip load, N		15	34
Steam-permeability, mg/sq.cm per hour, min.		2,0	72,5
Resistance to rubbing without fabric decom- positions, cycles	Dry medium	25 600	76 800
	Wet medium	12 800	34 100

# Comparative description of the physical and mechanical figures of the lining ON STEAM fabric

Title of figures		Requirements of	Actual figures		
		EN ISO 20345	Skin-like ON STEAM fabric	Lining pig skin	
Rip load, N		30	50	28	
Steam-permeability, mg/sq.cm per hour, min		2,0	13,5	2,1	
Penetration (absorption) of a water drop		-	2,0 sec	33 min	
Resistance to rub- bing without fabric decompositions, cycles	Dry medium	25 600	300 000	26 500	
	Wet medium	12 800	150 000	5 000 (with decomposition)	



#### 5.147

Men's leather boots **Neogard-Light®** Upper: natural leather and RETOR fabric. Lining: DERMODRY COOLMAX and ON STEAM cloth. Toe cap: composite material (200J). **Sole:** double-laver, polyurethane, and thermoplastic polyurethane. Attaching method: injection. Color: black. Size: 40 - 47. TR CU 019/2011 GOST 12.4.137-84 GOST 28507-90 GOST R 12.4.187-97





#### **5.148** Men's lea

#### Men's leather shoes **Neog**ard-Light® with perforation

Shoes are fabricated without metal accessories to allow applying this model in the energy industry and when works require passing through the metal detectors. Perforation ensures air exchange and comfort in wearing. The shoes are fixed on the feet using straps with contact Velcro closure. **Upper:** natural leather and RETOR

fabric. Lining: DERMODRY COOLMAX and ON STEAM cloth.

**Toe cap:** composite material (200J).

**Sole:** double-layer, polyurethane, and thermoplastic polyurethane.

Attaching method: injection. Color: black. Size: 40 – 47. TR CU 019/2011 GOST 12.4.137-84

GOST 28507-90 GOST R 12.4.187-97





#### 5.149

Men's leather shoes Neogard-Light® Upper: natural leather and RETOR fabric. Lining: DERMODRY COOLMAX and ON STEAM cloth. Toe cap: composite material (200J). Sole: double-layer, polyurethane, and thermoplastic polyurethane. Attaching method: injection. Color: black. Size: 40 – 47. TR CU 019/2011

GOST 12.4.137-84 GOST 28507-90 GOST R 12.4.187-97





#### 5.150

Men's leather shoes Athletic-Light Upper: nubuck and RETOR fabric

Lining: DERMODRY COOLMAX and ON STEAM cloth. Toe cap: composite material (200J).

Sole: double-layer, polyurethane, and thermoplastic polyurethane. Attaching method: injection. Color: black. Size: 40 – 47.

Size: 40 – 47. TR CU 019/2011 GOST 12.4.137-84 GOST 28507-90 GOST R 12.4.187-97



**Protective Footwear** 

#### *Neogard-Lite* **(R** *- range protective footwear with composite toe cap*





#### **5.180**

Men's leather high boots Neogard-Light® Upper: natural leather. Lining: DERMODRY COOLMAX and ON STEAM cloth. Toe cap: composite material (200J). Sole: double-layer, polyurethane, and thermoplastic polyurethane. Attaching method: injection. Color: black. Size: 40 – 47. TR CU 019/2011 GOST 12.4.137-84 GOST 28507-90

GOST R 12.4.187-97 🔀 者 опз 🖭



#### 5.189 Women's leather shoes Neogard-Light®

Upper: natural leather and RETOR fabric. Lining: DERMODRY COOLMAX and ON STEAM cloth. Toe cap: aluminum (200J). Sole: double-layer, polyurethane, and thermoplastic polyurethane. Attaching method: injection. Color: black. Size: 35 – 40.

ard-Light® TR CU 019/2011 GOST 12.4.137-84 GOST 28507-90 GOST R 12.4.187-97





#### Women's leather shoes **Neogard-Light**® with perforation

Upper: nubuck and RETOR fabric. Lining: DERMODRY COOLMAX and ON STEAM cloth. Toe cap: aluminum (200J). Sole: double-layer, polyurethane, and thermoplastic polyurethane. Attaching method: injection. Color: black. Size: 35 - 40. TR CU 019/2011 GOST 12.4.137-84 GOST 28507-90 GOST R 12.4.187-97



5.187

#### 5.187

Women's leather boots Neogard-Light®

Upper: natural leather and RETOR fabric. Lining: DERMODRY COOLMAX and ON STEAM cloth. Toe cap: aluminum (200J). Sole: double-layer, polyurethane, and thermoplastic polyurethane. Attaching method: injection. Color: black. Size: 35 – 40. TR CU 019/2011 GOST 12.4.137-84 GOST 28507-90 GOST R 12.4.187-97





#### 5.183 Women's leather shoes Athletic-Light

Upper: natural leather and RETOR fabric. Lining: DERMODRY COOLMAX and ON STEAM cloth. Toe cap: aluminum (200J). Sole: double-layer, polyurethane, and thermoplastic polyurethane. Attaching method: injection. Color: black. Size: 35 - 40. TR CU 019/2011 GOST 12.4.137-84 GOST 28507-90 GOST R 12.4.187-97



www.technoavia.com www.technoavia.ru

#### Corporate style protective shoes

Our company has extensive experience in designing customized shoe models from single samples to batches counting up to thousands of pairs. Long-term cooperation with great number of industrial clients has allowed us to learn and incorporate in our models requirements of our customers from various fields.

Thus, shoes may be fabricated of variously colored materials with the application of colored accessories (strings, threads), company's label, and can be packed in accordance with client's wishes.



#### Standards applicable to the shoes fabrication

All shoes represented in the Technoavia's catalogue are certified for the compliance to the requirements of the Technical Regulations of the Customs Union, fabricated in accordance with the Russian standards, and some models of the shoes correspond to a European standard.

#### EN ISO 20345

The standard defines main and additional requirements for safe shoes with marking Category S. Protective toe cap with shock strength of 200 J.

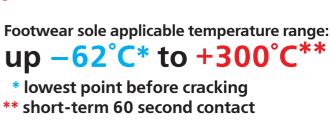
Protective properties Category marking	Protective properties EN ISO 20345 (EN 345-1)
SB	General basic requirements to shoes and protective toe cap (MUN 200)
S1	SB + closed counter + A + FO + E
S1P	SB + closed counter + A + FO + E + P
S2	SB + closed counter + A + FO + E + WRU
\$3	SB + closed counter + A + FO + E + WRU + P
Symbol marking	Description of protective properties
А	Shoes antistaticity
E	Shock energy absorption in the heel seat region
FO	Oil and fuel resistant sole
Р	Resistance to penetration and fastness to punctures in the shoes bottom part
HRO	Sole resistance to increased temperatures (+300°C/min)
CI	Resistance to lowered temperatures
HI	Sole resistance to increased temperatures
WR	Water resistivity of the whole shoes
WRU	Water resistivity of the upper shoes
М	Forefoot protection
CR	Upper shoe protection from cuts
SRC	Sliding protection

Neogard ® range protective footwear with composite toe cap

#### Neogard <sup>®</sup> shoe structure:

- Internal protective composite (or aluminum) toe cap offers the toe cap area protection from impacts of up to 200J (200J).
- Protective lining on toe cap edge that prevents foot from possible jamming.
- Double-layered sole with shock-absorbing polyurethane midsole and nitrile rubber sole with wear-resistant properties.
- Polyurethane toe cap cover protects from possible front impacts.
- **5** Sole pattern with better surface traction.
- 6 Thermal resistant and water repellent genuine leather.
- Ø Abrasion-resistant split leather lining.

- 8 Perforated fabric lining releases moisture and ensure comfort during wear.
- Insertable footbed for better comfort.
- 0 Nonwoven strobel lasted midsole
- **1** Thermoplastic heel counter that preserves its form.
- Soft welt and RETOR polyamide fabric tongue with an intervening layer made of polyurethane.



**NEOGARD**<sup>®</sup>

*Neogard*® *footwear series with* 

polyurethane and nitrile rubber.

double layered sole made of



Composite toe-box with increased inward space.

#### **Neogard® series characteristics:**

- All Neogard® range models are assembled using the technology of direct injection molding of a shoe's upper polyurethane layer to a nitrile rubber sole. Neogard® range footwear provides protection against oils, petrochemicals, impacts, 20% concentration alkali solutions, short-term (60 sec.) contact with hot surfaces (up to +300°C), and contamination in strict accordance with protective properties labels and picking.
- The upper layer is made of 1.8-2.0 mm thick thermo and water repellent genuine leather.
- The double-layered sole is oil and fuel resistant (stable to the chemical action, e.g. fuel, petrochemicals):
- the polyurethane midsole is shock-absorbing and impact-damping, providing lightness, comfort, and improved heat-protective properties;
- the nitrile rubber sole is wear-, frost- (up to -62°C) and heatresistant (up to +300°C/60 sec.), offering better slip, deformation, and abrasion resistivity.
- extra layer of TPU protection in toe cap area to prevent from frontal impacts and inward cold inflow.

- The sole pattern ensures good traction with icy and slippery surfaces. The self-cleaning sole pattern is 5.0 mm deep.
- A composite (or aluminum) toe cap with a polyurethane pad withstanding 200J (200J) is used in the toe cap area to provide protection against impacts from falling objects
- Abrasion resistant genuine leather tongue is made of RETOR fabric and prevents from tiny particles, splashes, and contamination getting inside the shoe
- Soft welt protects from side impacts and provides additional comfort.
- · Split leather lining and abrasion resistant breathable footwear fabric with large cell pattern.

Insertable molded footbed ensures comfort during wear.

- The unique boot tree has optimal dimensions preventing the wearer from any discomfort or fatigue for the entire working day.
- The shoe is designed to be used in oil&gas, mining, power engineering, chemical, transportation, and agriculture industries.

Footwear models with insulation are furnished with 12-14 mm thick "Alaska" genuine fur.

• All Neogard® range models can be supplied with a special anti-puncture footbed (insole) that provides protection against puncture risk with a comprehensive puncture-resistivity sole of up to 1200 N.



#### 5.263Men's leather boots Neogard®

Upper: natural leather and RETOR material. Lining: lining spit leather, knitted voluminous fabric. Toe cap: composite material (200J). Sole: double-layer, polyurethane, and nirtile rubber. Sustains short-term impact of high temperatures (300°C / 60 sec). Attaching method: injection.

Color: black. Size: 41 - 47. TR CU 019/2011, GOST 12.4.137-84, GOST 28507-90 GOST R 12.4.187-97, GOST R EN ISO 20345-2011 (p. 6.4)







#### 5.264

Women's leather boots Neogard® Upper: natural leather and RETOR material. Lining: lining split leather, knitted voluminous fabric. Toe cap: composite material (200J). **Sole:** double-layer, polyurethane, and nirtile rubber. Sustains short-term impact of high temperatures (300°C / 60 sec). Attaching method: injection. Color: black. Size: 36 - 40. TR CU 019/2011, GOST 12.4.137-84 GOST 28507-90, GOST R 12.4.187-97 GOST R EN ISO 20345-2011 (p. 6.4)



5.266

#### Men's leather shoes Neogard® for welding operations

Additional natural leather pad is covered by full bellows tongue, thus, preventing ingress of oxide scalps and molten metal splashes into the shoes. When manufacturing shoes, thermalresistant sewing threads made of meta-armid fiber, Nomex® (DuPont<sup>™</sup>) are used.

#### Upper: natural leather.

Protective flap: natural leather. Lining: lining split leather, voluminous knitted fabric. Toe cap: composite fabric (200J). Sole: double-layer, polyurethane, and nirtile rubber. Sustains short-term impact of high temperatures

(300°C / 60 sec). Attaching method: injection.

Color: black. Size: 40 - 47. TR CU 019/2011, GOST 12.4.137-84 GOST 28507-90, GOST R 12.4.187-97 GOST R EN ISO 20345-2011 (p. 6.4)



#### Footwear by Cofra



The company was established in 1938 as a hand-made shoe making family-owned business.

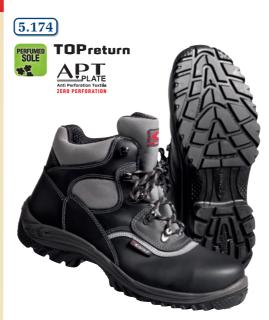
In 1983 the company was named Cofra.

Cofra's wise and innovation-driven management's willingness to strive for constant development and improvement has brought it to a leading position in protective footwear manufacturing industry. In 1997 Cofra was the first Italian protective and special footwear manufacturing company that received UNI EN ISO 9001 certification in recognition of its technologically and technically equipped production facilities to be the best in Italy.

In 2005 Cofra was additionally granted an important UNI EN ISO 14001 certificate in recognition for its dedication to environmental protection and waste-free production achieved by waste recycling.

Cofra's highly experienced experts are very profound in designing and manufacturing top-quality protective footwear. Cofra continuously invests in research and development of new manufacturing technologies and assortment promotion, creating footwear with unique level of reliability and comfort.

Technoavia has been the official distributor of Cofra footwear since 2007. Together with Cofra's marketing experts we study the market of protective footwear and work shoes. Our specialists regularly collect customers' feedback in order to analyze their needs and wants that enables us to launch and offer new product models every season.



#### 5.174 Leather boots Drammen

The AIR insock made of EVA has anatomic shape and ensures comfort in wearing. Shoes protect from fuels, petrochemicals, acids, and alkalis with a concentration of up to 20%, mechanical impacts, general production contamination, and corresponds to the requirements of EN ISO 20345:2004 in terms of antistatic properties.

Upper: natural water-repellent leather. Lining: air-permeable antibacterial textile cloth, SANY-DRY.

**Toe cap:** composite material, TOP return (200J).

**Puncture-proof sole:** non-metal APT Plate (1,200 N).

Sole: double-layer, polyurethane. Attaching method: injection. Color: black. Size: 39 – 47. TR CU 019/2011 (GOST 12.4.137-84 GOST 28507-90 GOST R 12.4.187-97 EN ISO 20345:2004 S3 SRC)

# СПЗ PUR



5.173

SANY-DRY.

(1.200 N).

Color: black.

Size: 39 - 47.

TR CU 019/2011

GOST 28507-90

OTI3 PUR

(GOST 12.4.137-84

GOST R 12.4.187-97

(200J).

Leather shoes **Gjovik** 

The AIR insock made of EVA has anatomic

corresponds to the requirements of EN ISO

Upper: natural water-repellent leather.

Toe cap: composite material, TOP return

Sole: double-layer, polyurethane.

Attaching method: injection.

EN ISO 20345:2004 S3 SRC)

Puncture-proof sole: non-metal APT Plate

20345:2004 in terms of antistatic properties.

Lining: air-permeable antibacterial textile cloth,

shape and ensures comfort in wearing. Shoes

protect from petrochemicals, acids, and alkalis

with a concentration of up to 20%, mechanical

impacts, general production contamination, and







#### 5.206 Women's leather boots **Evilyne**

Boots are fabricated by the direct polyurethane to the upper injection method. Half bellows tongue made of natural leather excludes ingress of small items, splashes, and dust inside. Soft piping protects from side impacts and ensures comfort. The AIR absorbing insock made of EVA has anatomic shape to efficiently distribute load for the whole foot surface, damps the impact energy, and covered with moistureabsorbing fabric. Shoes protect from oil, petrochemicals, acids and alkalis with a concentration of up to 20%, mechani-

centration of up to 20%, mechanical impacts, and general production contamination, and correspond to the requirements of EN ISO 20345:2004 in terms of antistatic properties. Boots are intended for the application in the oil and gas industry, logistics, agriculture, etc. **Important!** Shoes are manufactured using metal free philosophy that allows their application at the production facilities, where workers pass through the metal detector. **Upper:** natural water-repellent leather.

Lining: air-permeable antibacterial textile cloth, SANY-DRY. Toe cap: composite material, TOP return (200J).

**Puncture-proof sole:** non-metal APT Plate (1,200 N).

**Sole:** double-layer, polyurethane. **Attaching method:** injection.

**Color:** black. **Size:** 36 – 42.

SIZE: 30 - 42. TR CU 019/2011 (GOST 12.4.137-84 GOST 28507-90 GOST R 12.4.187-97 EN ISO 20345:2004 S3 SRC)

www.technoavia.com www.technoavia.ru

#### Footwear by Cofra





#### 5.207 Women's leather shoes Eleonoire

Shoes are fabricated by the direct polyurethane to the upper injection method. Half bellows tongue made of natural leather excludes ingress of small items, splashes, and dust inside. Soft piping protects from side impacts and ensures comfort. The AIR absorbing insock made of EVA has anatomic shape to efficiently distribute load for the whole foot surface, damps the impact energy, and covered with moisture-absorbing fabric.

Shoes protect from petrochemicals, acids and alkalis with a concentration of up to 20%, mechanical impacts, and general production contamination, and correspond to the requirements of EN ISO 20345:2004 in terms of antistatic properties. Shoes are intended for the application in the oil and gas industry, logistics, agriculture, etc.

Important! Shoes are manufactured using metal free philosophy that allows their application at the production facilities, where workers pass

Upper: natural water-repellent leather.

textile cloth, SANY-DRY. Toe cap: composite material, TOP re-

Puncture-proof sole: non-metal

Attaching method: injection.

Size: 36 - 42 TR CU 019/2011 (GOST 12.4.137-84 GOST 28507-90 GOST R 12.4.187-97 EN ISO 20345:2004 S3 SRC)





100%

COLD

PROTECTION

\*

HEAT

RESISTANT

Ö

CHEMICAL

RESISTANCE

ITALIAN

LEATHER

Footwear with 100% metal free accessories designed for use in security check zones with metal detecting equipment

Footwear specifically de-

for use in extremely low

Footwear specifically de-

signed and manufactured

for use in high ambient tem-

perature environments and

with extremely hot surfaces.

Footwear designed for pro-

sive chemicals such as sol-

vents, greases, and deter-

Top quality genuine leather

bination of Italian leather-

ity materials.

footwear achieved by a com-

craft traditions and top-qual-

gents.

tection against liquid aggres-

exposure to short contact

temperatures.

signed and manufactured



PERFUMED

SOLE

HEAT

odor.

Slip-resistant sole with unique composition and structure. Footwear designed to provide better traction in environments with slippery surfaces.

Sole material with pleasant

Footwear with heat-protec-

tive polyurethane layer de-

signed to protect against in-

ward heat flow. Provides pro-

tection against high temper-

ature (up to 180°C) for 30

min contact with no affect

chemical properties.

COLD

barrier

Anatomic insertable footbed provides pro-

tection against low temperatures. Unique

polyurethane composition retains com-

fortable inward temperature thanks to

special cold-insulating system.

on foootwear's physical and

Cofra footwear pictogram definitions:

### **TOP**return

#### **TOP RETURN composite toe cap**

- Protection against impacts up to 200 J within a temperature range of  $-40^{\circ}$ C to +60°C.
- Non-magnetic (100% metal free).
- Reduced thickness.
- Low and high temperature insulation.
- Lightweight: 50g vs 90g steel toe cap.
- Elasticity effect: the toe cap retains its original shape after impact.



Anti-Perforation Textile midsole protects the foot from puncture by sharp objects

- 100% protection.
- Lighter than steel midsole: weight of 50g vs. 65g steel midsole.
- Higher level of protection against high and low temperatures compared to steel midsole
- Full cover of the whole inward sole surface.
- The material has a 15% higher level of protection against penetration by sharp objects



APT-Plate midsole protects the foot from puncture by sharp objects

- 100% protection.
- Lighter than steel midsole: weight of 50g vs. 65g steel midsole.
- Higher level of protection against high and low temperatures compared to steel midsole
- Full cover of the whole inward sole surface.
- Complies with 10.067 recommendation by the EEC, dated March 16, 2007.
- Complies with EN 12568:2010 to protect against penetration of up to 1,100 N force.

through the metal detector.

Lining: air-permeable antibacterial

turn (200J).

APT Plate (1,200 N). Sole: double-layer, polyurethane.

Color: black.



PUR FREE



0

Water repellent footwear designed for use in wet environments.



Anatomic insertable footbed provides protection against high temperatures. Unique polyurethane composition retains comfortable inward temperature thanks to special heat-insulating system.







#### 12125 FREEPORT safety boots (S3 HRO SRC)

Safety boots with ultra-light PU/nitrile rubber sole designed to enhance wearer's comfort by having softer compound in the three plantar contact points. The soft support gel inset in the metatarsal area guarantees stability and comfort on the most uneven surfaces. Fiberglass sole support provides protection of the plantar arch preventing it from harmful bending. Non-metallic toe cap withstands up to 200J impact. The boots' sole provides short-term protection from high temperatures on surfaces heated up over  $+300^{\circ}$ C. Cold and heat insulated.

Upper: water repellent grain leather.

**Lining:** CAMBRELLE® 100% polyamide, breathable, absorbing and releasing moisture.

Footbed: METATARSAL SUPPORT GEL made of soft PU, full piece, antistatic, anatomic, removable, covered with cloth scented footbed. Toe cap: non-metallic TOP RETURN.

**MidSole:** non-metallic APT Plate – Zero Perforation.

Sole: PU/nitrile rubber resistant to +300°C (up to 60 sec. contact) Color: black.

Size: 39 – 47. Width: 11 Mondopoint



#### 12134 ROSWELL safety shoes (S3 HRO SRC)

Safety shoes with ultra-light PU/nitrile rubber sole designed to enhance wearer's comfort by having softer compound in the three plantar contact points. The soft support gel inset in the metatarsal area guarantees stability and comfort on the most uneven surfaces. Fiberglass sole support provides protection of the plantar arch preventing it from harmful bending. Non-metallic toe cap withstands up to 200J impact. The shoes' sole provides short-term protection from high temperatures on surfaces heated up over +300°C. Cold and heat insulated.

Upper: water repellent grain leather.

**Lining:** CAMBRELLE® 100% polyamide, breathable, absorbing and releasing moisture.

Footbed: METATARSAL SUPPORT GEL made of soft PU, full piece, antistatic, anatomic, removable, covered with cloth scented footbed. Toe cap: non-metallic TOP RETURN.

**MidSole:** non-metallic APT Plate – Zero Perforation.

Sole: PU/nitrile rubber resistant to +300°C (up to 60 sec. contact). Color: black.

**Size:** 39 – 47.

Width: 11 Mondopoint



#### 12126 MAIELLA leather shoes (S3 HRO SRC)

12126

The shoe's heel part is strengthened with a pad to ensure stability of the foot during wearing. The anatomically shaped footbed is made of extremely soft foam polyurethane, which distributes the body weight evenly and smoothly absorbs shock energy. The footbed is covered with moisture-absorbing fabric to remove excessive moisture.

The shoes provide protection against fuel, petrochemicals, acids and alkalis (up to 20% concentration), mechanical impacts, short-term contact (up to 60 sec.) with surfaces heated up to  $+300^{\circ}$ C, and general production contamination.

Upper: natural water-repellent leather.

Lining: SANY-DRY® breathable, antibacterial, abrasion resistant fabric Footbed: SOFD-BED® - extremely soft polyurethane, anatomic, removable, covered with cloth. Specifically perfumed sole eliminates odors. Toe cap: non metallic composite material, TOP RETURN (200J). MidSole: non-metallic APT Plate (up to 1,100 N). Sole: double-layered polyurethane + nitrile rubber resistant to +300°C (up to 60 sec. contact).

Attaching method: injection.

Color: black. Size: 39 – 47. Width: 11 Mondopoint EN ISO 20345:2011











#### 12129 ORTLES leather boots (S3 HRO SRC)

The boots' heel part is strengthened with a pad to ensure stability of the foot during wearing. The anatomically shaped footbed is made of extremely soft foam polyurethane, which distributes the body weight evenly and smoothly absorbs shock energy. The footbed is covered with moisture-absorbing fabric to remove excessive moisture.

The boots provide protection against fuel, petrochemicals, acids and alkalis (up to 20% concentration), mechanical impacts, short-term contact (up to 60 sec.) with surfaces heated up to  $+300^{\circ}$ C, and general production contamination.

Upper: natural water-repellent leather.

Lining: SANY-DRY® breathable, antibacterial, abrasion resistant fabric Footbed: SOFD-BED® - extremely soft polyurethane, anatomic, removable, covered with cloth. Specifically perfumed sole eliminates odors. Toe cap: non metallic composite material TOP RETURN. MidSole: non-metallic APT Plate (up to 1,100 N).

**Sole:** double-layered polyurethane + nitrile rubber resistant to +300°C (up to 60 sec. contact).

Attaching method: injection. Color: black. Size: 36 - 47.

Width: 11 Mondopoint EN ISO 20345:2011



#### 12133 RIGA safety boots (S3 SRC)

Safety boots made of water repellent printed leather provide limited protection against fuel, petrochemicals, acids and alkalis (up to 20% concentration), mechanical impacts and general production contamination. Steel toe cap withstands up to 200J impact.

Upper: water repellent printed leather

Lining: breathable abrasion resistant textile, absorbs and releases moisture.

**Footbed:** full piece, removable, antistatic, holed and covered with cloth. **Toe cap:** steel (up to 200J).

#### MidSole: steel plate

**Sole:** double density polyurethane provides excellent slip resistance. **Color:** black.

**Size:** 36 – 48.

Width: 11 Mondopoint EN ISO 20345:2011



#### 12135 TALLIN safety shoes (S3 SRC)

Safety shoes made of water repellent printed leather provide limited protection against fuel, petrochemicals, acids and alkalis (up to 20% concentration), mechanical impacts and general production contamination. Steel toe cap withstands up to 200J impact.

Upper: water repellent printed leather

Lining: breathable abrasion resistant textile, absorbs and releases moisture.

**Footbed:** full piece, removable, antistatic, holed and covered with cloth. **Toe cap:** steel (up to 200J).

MidSole: steel plate

**Sole:** double density polyurethane provides excellent slip resistance. **Color:** black.

Size: 36 - 48.

Width: 11 Mondopoint

EN ISO 20345:2011

OII3 PUR



# Te cap



#### 12130 PIRENEI nubuck boots (S3 WR HRO SRC)

The boot's heel part is strengthened with a pad to ensure stability of the foot during wearing. The anatomically shaped footbed is made of extremely soft foam polyurethane, which distributes the body weight evenly and smoothly absorbs shock energy. The footbed is both cold and heat insulated. It is covered with moisture-absorbing fabric to remove excessive moisture.

The boots provide protection against fuel, petrochemicals, acids and alkalis (up to 20% concentration), mechanical impacts, short-term contact (up to 60 sec.) with surfaces heated up to  $+300^{\circ}$ C, and general production contamination.

**Upper:** water repellent Pull-up nubuck (1000 steps in 3cm deep water for 20 minutes).

Lining: SANY-DRY® breathable, antibacterial, abrasion resistant fabric Footbed: SOFD-BED® - extremely soft polyurethane, anatomic, removable, covered with cloth. Specifically perfumed sole eliminates odors. Toe cap: non metallic composite material, TOP RETURN (200J). MidSole: non-metallic APT Plate (up to 1,100 N).

**Sole:** double-layered polyurethane + nitrile rubber resistant to +300°C (up to 60 sec. contact).

Attaching method: injection.

**Color:** brown. **Size:** 39 – 47.

Width: 11 Mondopoint.



#### 12132 RIACE safety sandals (S1 P SRC)

Perforated punched suede safety sandals designed for high temperature environments. Laces closure piece for manual open/closure of the sandal. Metal midsole plate for proper protection against punctures. Steel toe cap withstands up to 200J impact.

Upper: punched suede leather.

Lining: breathable abrasion resistant textile, absorbs and releases moisture.

**Footbed:** full piece, removable, antistatic, holed and covered with cloth. **Toe cap:** steel (op to 200J).

MidSole: metal plate.

**Sole:** double density polyurethane provides excellent slip resistance. **Color:** black.

Size: 36 - 48.

12132

Width: 11 Mondopoint EN ISO 20345:2011



#### 12121 AMMAN safety shoes (S1 P SRC)

Perforated punched suede safety sandals designed for better ventilation in high temperature environments. Velcro closure piece for easy open/closure of the sandal. Metal midsole plate for proper protection against punctures. Steel toe cap withstands up to 200J impact.

Upper: punched suede leather.

Lining: breathable abrasion resistant textile, absorbs and releases moisture.

**Footbed:** full piece, removable, antistatic, holed and covered with cloth. **Toe cap:** steel (up to 200J).

MidSole: steel plate.

**Sole:** double density polyurethane provides excellent slip resistance.

Color: black.

12121

**Size:** 39 – 48.

Width: 11 Mondopoint.

EN ISO 20345:2011







#### 12123 CARAVAGGIO safety shoes (S3 SRC)

These safety shoes are designed to enhance wearer's comfort by reducing overall shoe weight and increase slip resistance performance, thus assuring higher stability. Footbed fully holed, soft, and anatomic, guarantees high stability thanks to its different thicknesses in the plantar area. Non-metallic toe cap withstands up to 200J impact. Fiberglass sole support provides protection of the plantar arch, thus preventing harmful bending. Extra layer of TPU protection in toe cap area. 100% metal free. Upper: water repellent grain leather.

Lining: 100% polyamide textile, antibacterial, abrasion resistant, and bre-

athable, perfumed sole. Footbed: anatomic antistatic AIR footbed made of EVA and holed fabric.

**Toe cap:** non-metallic TOP RETURN.

Midsole: non-metallic APT Plate – Zero Perforation.

**Sole:** PU/TPU (Polyurethane/Thermoplastic Polyurethane) – better slip and abrasion resistance.

Color: black. Size: 39 – 47. Width: 11 Mondopoint. EN ISO 20345:2011





#### 12127 MINDANAO safety high boots (S3 HRO SRC)

Safety high boots with light PU/nitrile rubber sole designed to enhance wearer's comfort and protection by weighing less but at the same time providing enough protection against chemicals and high temperatures. Fully holed, soft, and anatomic footbed guarantees high stability thanks to its different thicknesses in the plantar area. Fiberglass sole support provides protection of the plantar arch preventing it from harmful bending. Non-metallic toe cap withstands up to 200J impact. The boots' sole provides short-term protection from high temperatures on surfaces heated up to +300°C. 100% metal free. Anti-torsion support.

**Upper:** water repellent grain leather.

Lining: unlined.

**Footbed:** anatomic antistatic footbed made of EVA and holed fabric. **Toe cap:** non-metallic TOP RETURN.

Midsole: non-metallic APT Plate – Zero Perforation. Sole: PU/nitrile rubber resistant to +300°C (up to 60 sec. contact) Color: beige.

Size: 40 – 47.

Width: 11 Mondopoint. EN ISO 20345:2011



12238 SANDSTORM suede leather boots (S1 P HRO SRC)

High ankle boots made of 1.6/1.8 mm thick beige suede leather combined with Cordura® nylon inserts. Padded collar and internal side zip installed for easier donning & doffing. Abrasion resistant and breathable vamp and quarter lining provides extra comfort for wearer. The anatomically shaped footbed is made of extremely soft foam polyurethane, which distributes the body weight evenly and smoothly absorbs shock energy. The footbed is covered with moisture-absorbing fabric to

12238

Toe cap 200J

remove excessive moisture.

The boots provide protection against industrial production contamination such as sand, dirt, dust, mechanical impacts, short-term contact (up to 60 sec.) with surfaces heated up to +300oC.

Upper: suede leather with nylon inserts.

Lining: SANY-DRY® breathable, antibacterial, abrasion resistant fabric Footbed: SOFD-BED® - extremely soft polyurethane, anatomic, removable, covered with cloth. Specifically perfumed sole eliminates odors. Toe cap: non metallic composite material TOP RETURN.

Midsole: non-metallic APT Plate (up to 1,100 N).

**Sole:** double-layered polyurethane + nitrile rubber resistant to +300oC (up to 60 sec. contact).

Attaching method: injection.

Color: black. Size: 36 – 48. Width: 11 Mondopoint EN ISO 20345:2011





#### 12124 FLAVIUS safety shoes (S2 SRC)

Safety shoes designed for food and agricultural industry and are made of water repellent Microtech® polyurethane layered minifiber. The shoes are well resistant to chemical agents, breathable and waterproof. They maintain these features throughout their life time. Unique footbed guarantees high stability thanks to its different thicknesses in the plantar area. 100% metal free. Excellent slip resistance. Non-metallic toe cap withstands up to 200J impact.

**Upper:** water repellent Microtech® fiber.

Lining: antibacterial breathable SANY-DRY® fabric.

**Footbed:** AIR anatomic antistatic footbed made of EVA and holed fabric. **Toe cap:** non-metallic TOP RETURN.

**Sole:** double density polyurethane provides excellent slip resistance. **Color:** black.

Size: 36 – 47. Width: 11 Mondopoint. EN ISO 20345:2011



12128



#### 12128 NEW NERONE safety shoes (S1 SRC)

Safety shoes designed for food and agricultural industry and are made of water repellent Microtech® polyurethane layered minifiber. The shoes are well resistant to chemical agents, breathable and waterproof. Poly-Bed footbed evenly absorbs the pressure of body weight. Good slip resistance. Steel toe cap withstands up to 200J impact. Complies with **EN ISO 20345:2011** for antistatic properties.

Upper: water repellent Microtech® fiber.

Lining: antibacterial breathable SANY-DRY® fabric with perfumed sole. Footbed: Poly-Bed style, removable, antistatic, covered with SANY-DRY® cloth.

Toe cap: non-metallic TOP RETURN.

**Sole:** single density polyurethane Core Plus® sole provides excellent slip resistance.

Color: white. Size: 35 - 47. Width: 11 Mondopoint EN ISO 20345:2011





**Solutions for** *experts* 



#### 5.135 Shoes Tullus

The AIR insock made of EVA has anatomic shape to ensure comfort in wearing. Shoes protect from petrochemicals, acids and alkalis with a concentration of up to 20%, mechanical impacts, and general production contamination, and correspond to the requirements of EN ISO 20345:2004 in terms of antistatic properties. Shoes are manufactured using metal free philosophy.

The shoes are intended for the application in power nuclear industry and food production. Upper: synthetic leather, LORICA, flexible, strength, breathable. Lining: air-permeable antibacterial textile cloth, SANY-DRY. Toe cap: composite material, TOP return (2001). Sole: double-layer, polyurethane. Attaching method: injection. Color: white. Size: 36 - 48. TR CU 019/2011 (GOST R 12.4.187-97 GOST 12.4.137-84 GOST 28507-90 EN ISO 20345:2007 S2 SRC)



www.technoavia.com www.technoavia.ru





## 5.115 Shoes Sanitary

**Upper:** synthetic leather. Lining: polyamide cloth. Toe cap: metal (200J). Sole: single-layer polyurethane. Attaching method: injection. Color: white. Size: 35 – 48. TR CU 019/2011



5.162 Shoes Sanitary with thermoplastic toe cap TR CU 019/2011

5.168 **Shoes Sanitary** with perforation and thermoplastic toe cap TR CU 019/2011

#### Leather sabot shoes Vidar

5.276 Color: white.

#### 5.376 Color: black.

Instep and heel straps coated with wearproof material, metal buckle fas-tener allow reliably fixing shoes on the foot. Insock is fabricated of natural leather with increased thickness. Sole has special profile ensuring good cohesion with various surfaces, and heel and foot amortization. Sabot is treated with antibacterial agent, Sanitised (Germany). **Upper:** natural leather with coating (Italy).

Lining: innovative non-woven fabric, Viledon (Germany) ensuring better air exchange and moisture removal from the foot.

Toe cap: molded Berlen-Plast (Germany) to preserve shoes appearance. **Sole:** polyurethane. Attaching method: injection.

Size: 36 – 47. TR CU 019/2011



#### 5.200

Shoes (sandals) Sanitary with perforation **Upper:** synthetic leather. Lining: polyamide cloth. Toe cap: metal (200J). **Sole:** single-layer polyurethane. Attaching method: injection. Color: white. **Size:** 35 - 48. TR CU 019/2011





#### 6.614 High-boots **DEVON safety** with metal toe cap and metal sole

Sole layer has increased resistance to rubbing. Antistatic, oiland-fuel-resistant, and acid-and-alkalis-resistant sole has prominent self-cleaning cleat ensuring good cohesion with various surfaces for safe work. Rear shaft height is 28.5 cm, and front is 35.5 cm.

Recommended for workers of the coal mining industry, pit works, oil producing and refinery industries, construction, mechanical and loading sectors. Upper: PVC with addition of nitrile rubber. Lining: knitted fabric. Tor box: metal (200J). Puncture-proof sole: metal (1,200 N). Sole: PVC with addition of nitrile rubber. Attaching method: injection. Color: olive, yellow as customized delivery. Size: 36 – 47. TR CU 019/2011 (GOST 12265-78, GOST 28507-90, GOST 29182-91)





#### **NordMan Active** -30°C Multipurpose tall boots made of EVA material.

Robust and light weight water-proof boots (4x times lighter than PVC boots) offering protection against liquids and can be equipped with insulation to protect against low temperatures. EVA cell structure provides additional comfort during wear thanks to its shock absorbing features.

Suitable for use inside refrigerators and in cold environments due to EVA material withstanding low temperatures up to -30°C. Can be equipped with fur layer insulation. Suggested for use in food applications. Material: EVA (ethylene vinyl acetate). Boot height: 38 cm. Pair weight: 0.6 kg. Size: 41-47. Color: olive black.



#### **Critical importance of Respiratory Protection**

Prior to using filtering equipment for respiratory protection the following conditions are critical to be checked: composition, type, and properties of the harmful substances in the production area combined with oxygen concentration of the inhaled air and work environment conditions.

Basic types of hazards affecting respiratory system organs include:

- Aerosols;
- Gases and vapors;
- Lack of adequate oxygen supply.

The difference between PPE for respiratory protection is defined by the difference in physical characteristics of various substances and by the ways these substances affect human's health.



#### Aerosols can be described as particles weighed in

the air. These can be fine dust particles, liquid drops, and suspensions. The particles are electrified by the Earth's magnetic field, thus the respiratory PPE against solid dust particles and mists is based on electrostatic filtering.

Filtering equipment can ranges from a light **single use half-masks** (respirators) and **half-masks/full face masks** with isolated face area and replaceable cartridge filters to



fully supplied air respirator systems.

**Gases and vapors** are both gaseous substances that are

distinguished only by the way how the molecules of each substance are formed. Gas and vapor filtration is based on sorption. Gases are chemically bonded. Some of the respiratory PPE include coal filters impregnated with relevant sorbents.

# Lack of adequate oxygen supply is the condition when environment's oxygen concentration is less than 17.5%.

Relatively small decrease in oxygen concentration can cause somnolence while significant decrease in oxygen concentration can lead to loss of consciousness or fatality.

Filtering PPE is prohibited from use when there is a risk of significant decrease of oxygen concentration. Instead, only full face masks and air supplied respirator systems are allowed to be used in such environments.

#### Failure to use or improper use of respiratory PPE in hazardous environment may lead to generation of professional chronic diseases.

It is important to keep in mind that antiaerosol PPE does not protect against gases and vapors, and PPE designed for protection against gases and vapors does not protect against aerosols.

# Respiratory PPE's lifetime is defined by the following criteria:

- Anti-aerosol filtering half-masks can be worn until the shortness of breath occurs;
- Anti-gas filters can be used until nuisance and odors begin permeating through.

#### Key and necessary factors of reliable respiratory protection:

- Technoavia's technical experts can assist you with proper selection of respiratory PPE relevant to the type and concentration of harmful substances.
- PPE's quality is proven by the manufacturer's expertise and reputation.

- All PPE range products offered by Technoavia are properly certified.
- Face-fitting is one of the key factors of proper respiratory protection. A person can inhale up to 100% of the unfiltered air if there is a gap between face and a filtering device.

#### How to achieve the best fit when wearing protective respirators?

Employee should never underestimate the importance of use of good quality and high reliability respiratory PPE against environmental risk factors.

Employees need to be trained on PPE donning and doffing and correct fit check.

A respirator should have a nose clip, nose clip liner, and adjustable head straps.

Respirator's comfort is achieved by lower resistance to breathing, good quality lining material, and an exhalation valve.

Instructions for use materials should be easily accessible at an employee's work place and in changing rooms.

Suction should never be experience while a respirator is on.

#### These factors should never be neglected:

Check for authenticity of the compliance certificate.

Check for packaging quality. Damaged packaging or non-authentic packaging can indicate that a PPE has possibly been contaminated with risky substances.



#### **Respiratoric protection**

#### Innovative design, exclusive comfort, and easy breathing. Light molded respirator series with soft inside layer.

- One size for any face types.
- Pre-molded nose band requires no adjustment and customized fitting for the user, ensures easy application even for untrained users.
- Low breathing resistance even in case of clogged outside filtering part (respirators are tested for clogging with dolomite).
- Perfect visual field and compatibility with any protective glasses and face shields.
- Respirator sustains temperature of -30 to +70 °C.

7.335

#### **Recommended** areas of application:

7.334

- automotive car and parts production
- construction
- chemical industry
- food industry
- metallurgy
- machinery engineering
- glass production

- steel foundry production
  - laboratories
  - agriculture
  - pharmacy
  - mining
  - oil production
  - petrochemical industry

#### Honeywell **Safety Products**

# Honeywell

Honeywell Safety Products is one of the leading PPE manufacturers. It is a globally diversified and its strategy is focused on provision of complex safety solutions for a wide variety of professional workers exposed to hazards within their working environments.

More than 10 000 people are employed at HSP 40 production facilities, 30 research labs, 25 warehouse terminals and in 69 global wide offices. Honeywell International Company's unique flawless technologies and potential for innovation are found at the core of HSP work principles.



#### 7.333 Filtering half-mask (respirator) SuperOne 3203 for dust and mist protection Weight: 7 g. It ensures protection FFP1 (up to 4 MPC) TR CU 019/2011

7.335 Filtering half-mask (respirator) SuperOne 3205 for dust and mist protection Weight: 7 q. It ensures protection FFP2 (up to 12 MPC) TR CU 019/2011

7.334 Filtering half-mask (respirator) SuperOne 3204 with exhalation valve for dust and mist protection

Weight: 11 g. It ensures protection FFP1 (up to 4 MPC) TR CU 019/2011



7.336 Filtering half-mask (respirator) SuperOne 3206 with exhalation valve for dust and mist protection Weight: 12 g. It ensures protection FFP2 (up to 12 MPC) TR CU 019/2011





#### 12106 SAT-T-FIT™ Plus N1105 respirator

Single use filtering half-mask designed to filter particles 0.1-0.3 micron diameter in size with a filter efficiency of at least 95 percent (N95).

Economical, latex-free molded cup with no nose-seal design with supple and resistant twin elastics, stapled on ear tabs. Used for protection against aerosols free of oil, such as dusts, fumes, mists and microbial agents such as tuberculosis bacteria & flu virus. Ideal for grinding, sanding, sweeping, woodworking, dusty operations, and health care works. Compatible with spectacles.

3 nose bridge colors indicate size: Red = S, Green = M/L, Blue = XL. Complies with NIOSH 42 CFR 82 requirements



#### 12107 SAT-T-FIT™ Plus N1115 respirator

Single use filtering half-mask designed to filter particles 0.1-0.3 micron diameter in size with a filter efficiency of at least 95 percent (N95).

Economical, latex-free molded cup with PVC nose-seal design with supple and resistant twin elastics, stapled on ear tabs. Used for protection against aerosols free of oil, such as dusts, fumes, mists and microbial agents such as tuberculosis bacteria & flu virus. Ideal for grinding, sanding, sweeping, woodworking, dusty operations, and health care works. Compatible with spectacles.

**3 nose bridge colors indicate size:** Red = S, Green = M/L, Blue = XL **Complies with NIOSH 42 CFR 82 requirements** 



#### 12108 SAT-T-FIT™ Plus N1125 respirator

Single use filtering half-mask designed to filter particles 0.1-0.3 micron diameter in size with a filter efficiency of at least 95 percent (N95).

Respirator features an adjustable boomerang PVC nose seal for a secure fit and added comfort. Equipped with an exhalation valve for ease of breathing and exceptional comfort during extended wear. Used for protection against aerosols free of oil, such as dusts, fumes, mists and microbial agents such as tuberculosis bacteria & flu virus. Ideal for grinding, sanding, sweeping, woodworking, dusty operations, and health care works. Compatible with spectacles.

**3 nose bridge colors indicate size:** Red = S, Green = M/L, Blue = XL. **Complies with NIOSH 42 CFR 82 reauirements** 





#### 12109 SAT-T-FIT™ Plus N1125OV respirator

Single use filtering half-mask designed to filter Organic Vapor (OV) nuisance and particles 0.1-0.3 micron diameter in size with a filter efficiency of at least 95 percent (N95).

Respirator features an adjustable boomerang PVC nose seal for a secure fit and added comfort. Equipped with an exhalation valve for ease of breathing and exceptional comfort during extended wear. Compatible with spectacles. Used for filtering organic vapor nuisance and for protection against aerosols free of oil, such as dusts, fumes, mists and microbial agents such as tuberculosis bacteria & flu virus. Ideal for grinding, sanding, sweeping, woodworking, dusty operations, and health care works. **3 nose bridge colors indicate size:** Red =

S, Green = M/L, Blue = XL. Complies with NIOSH 42 CFR 82 requirements





#### 12113 N5400 Class 1 full face mask

Lightweight soft and flexible full-face mask with four strap harness and twin connection for Class 1 series filters. Easy to use design provides excellent fit thanks to chin cup that helps to position the mask properly. Robust polycarbonate anti-scratch visor is impact resistant treated, offering wide panoramic 200° field of view.

Highly chemical resistant latex free non-allergic thermoplastic elastomer material used to provide wide sealing area that fits most facial types. Advanced nose cup provides less dead air space and channels exhaled breath out. Each facepiece comes with three peel-away windows, six respirator wipes and a storage bag.

Two overlapping sizes, small and medium/large, to comfortably fit most users.

CE certified to EN 136

#### 12115

#### N5500 Class 1 half mask

Flexible and durable economic half mask: comfortable and non-allergic made of thermoplastic and elastomer material that avoids latex allergens common to economy masks.

Single unit four-point harness with neck strap. Easy to use ergonomic design and improved suspension system fits perfectly on top of the head providing a high level of comfort.

Superior exhalation valve allows more breath to be exhaled leaving workers feeling cooler and more comfortable. Less dead air space meaning less exhaled air is re-breathed. Variable thickness in sealing area conforms to nose-bridge for improved comfort and fit. Double connection Class 1 filters applicable.

Quick to dismantle and clean, with replaceable parts. **Sizes:** S, M, L

CE certified to EN 140





North® 75FFP100NL pancake particulate

Pancake filter with odor relief designed to pro-

vide protection against all particulates (99.97%

minimum filter efficiency) and against nuisance

levels of organic vapors, acid gases and ozone.

#### **12119**

#### North® 75FFP100 pancake particulate filter

Pancake filter designed to provide protection against all particulates (99.97% minimum filter efficiency).

Color coded for quick and easy identification: Magenta Complies with NIOSH requirements.

Color coded for quick and easy identification: Magenta

Complies with NIOSH requirements.

12120

filter

12261



#### 12261 North® 75SLC Gas and Vapor respirator cartridge

Multi-purpose Defender® cartridge designed to protect against Organic Vapor, Ammonia, Methylamine, Formaldehyde and Acid Gas (Chlorine, Hydrogen Chloride, Sulfur Dioxide, Hydrogen Sulfide, Hydrogen Fluoride, Chlorine Dioxide).

Color coded for quick and easy identification. Label color: Olive

Complies with NIOSH requirements. North® 7580P100 particulate filter

Interchangeable filter fitting any North® mask. Designed to provide protection against all particulates (99.97% mini-

mum filter efficiency). Color coded for quick and easy identification: Magenta Complies with NIOSH requirements.



#### 12262

#### North® 7583P100L combined Gas/Vapor cartridge with particulate filter.

Organic Vapor & Acid Gas cartridge protects against Organic Vapors, Chlorine, Hydrogen Chloride, Sulfur Dioxide, Hydrogren Sulfide (escape only), Hydrogen Fluoride and Chlorine Dioxide. The addition of a P100 prefilter adds protection against all particulates.

P100 prefilters are 99.97% minimum filter efficiency in removing particulates and oil proof. They may be used without restrictions in atmospheres that contain oil based aerosols. Color coded for quick and easy identification: Yellow/Magenta

Complies with NIOSH requirements.

#### (12116)



#### 12116 North® N75001L Organic Vapor respirator car-

#### tridge

Low profile Organic Vapor cartridge is an economical choice that can be used with all North® air-purifying half masks and full-piece respirators.

Color coded for quick and easy identification. Label color: Black

Complies with NIOSH requirements.



12117

#### 12117

#### North® N75003L Organic Vapor and Acid Gas respirator cartridge

Cartridge for Organic Vapor, Chlorine, Hydrogen Chloride, Sulfur Dioxide, Hydrogen Fluoride, Chlorine Dioxide. Color coded for quick and easy identification. Label color: Yellow

Complies with NIOSH requirements.

 $3M^{\text{TM}} S$  peedglas  $^{\text{TM}}$  welding helmets

# **3M** *■Speedglas*<sup>™</sup>

3M<sup>™</sup> Speedglas<sup>™</sup> range offers welding helmets with active color filtering, supplied air respirators Adflo, and various accessories used for protection against haz-ardous industrial factors.

#### Active self-darkening welding filters



optimal applicable not recommended	3M™ Speedglas™ 9100	3M™ Speedglas™ 9100 FX	3M™ Speedglas™ 100	
	9100V (5, 8 and 9 – 13 DIN) 9100X (5, 8 and 9 – 13 DIN) 9100XX (5, 8 and 9 – 13 DIN)		100V (8 – 12 DIN)	100S (10 DIN) 100S (11 DIN)
MMAW / covered-electrode welding				
MIG / MAG / semi-automatic gas- shielded welding				
TIG (>20 A) / tungsten electrode argon- shielded welding				
TIG (1 A – 20 A) / tungsten electrode argon-shielded welding				
Plasma welding and cutting				
Submerged arc welding				
Tick welding				
Stripping / polishing				

www.technoavia.com www.technoavia.ru

#### $3M^{\text{TM}}$ Speedglas<sup>TM</sup> welding helmets



#### Welder's shield 3M<sup>™</sup> Speedglas<sup>™</sup> 9100

The helmet offers non-stop protection against harmful ultraviolet and infrared ratiation irespective of whether the welding filter is on, off, or in active mode. Simple to use helmet is easily maintainable and can be used for various welding activities. Unique design enables the hellmet, head harness, and welding filter to be used in multiple convenient positions. The helmet can be used with 3M(TM) 9925 welding half-mask.

#### Advantages of the shield 3M<sup>™</sup> Speedglas<sup>™</sup> 9100

- increased side surface covers ears and neck
- Helmet's increased widht together with large side windows surface improve welder's view
- Reusable plastic plates can be equipped to close side windows
- balanced shield reduces neck muscle load
- Comfortable and adjustable headband reduces pressure on the head. Adjustments are as follows: shield inclination, distance to face, head sizes
- Front silver suface reflects heat ratiation and prevents from overheating
- exhaust vents with patented design direct air out of the helmet and reduce the likelihood of a foggy welding filter
- additional solar battery increases service life
- requires 2 batteries to operate

 5.01805
 3M™ Speedglas™ 9100 equipped with welding filter Speedglas™ 9100V

 5.01815
 3M™ Speedglas™ 9100V

 5.01825
 3M™ Speedglas™ 9100X

 5.01825
 3M™ Speedglas™ 9100X

 5.01825
 3M™ Speedglas™ 9100X

External protective plates to Speedglas<sup>™</sup> 9100

- 5.26000 External protective plate for 3M<sup>™</sup> Speedglas<sup>™</sup> 9100 (526000) standard (1 set with 10 pcs.)
- 5.27000 External protective plate to 3M<sup>™</sup> Speedglas<sup>™</sup> 9100 (527000) scratchproof (1 set with 10 pcs.)
- 5.27070 External protective plate to 3M<sup>™</sup> Speedglas<sup>™</sup> 9100 (527070) heat-resistant (1 set with 10 pcs.)

Internal protective plates to 3M<sup>™</sup> Speedglas<sup>™</sup> 9100

5.28005 Internal protective plate (528005) to 3M™ Speedglas™ 9100V (1 set with 5 pcs.)



- 2 sets of 7 preset shade modes: 5,8 and 9–13.
- 5 selectable presets for sensitivity adjustment and shadowing speed.
- 3 optic sensors on the light filter.
- equipped with solar battery panel.

#### *3M*<sup>™</sup> Speedglas<sup>™</sup> welding helmets



# **■** Speedglas<sup>™</sup>

#### 3M<sup>™</sup> Speedglas<sup>™</sup> 100 welding helmets

Easy-to-use Speedglas<sup>™</sup> 100 helmet designed for use by constraction workers and service maintenance crews. Designed for occasional welding and non-professional welders. The helmet can also be used in various welding-related maintenance works. The helmet offers non-stop protection against harmful ultraviolet and infrared ratiation irespective of whether the welding filter is on, off, or in active mode. Compatible with 3M<sup>™</sup> 9925 welding half-mask.

#### Complies with EN 175 Class B, EN 379 Class 1/1/1/2

#### 3M<sup>™</sup> Speedglas<sup>™</sup> 100 advantages:

- increased side surface
- increased shield width

7.51120 3M<sup>™</sup> Speedglas<sup>™</sup> 100 equipped with welding filter Speedglas™ 100V

**External protective plates** to 3M<sup>™</sup> Speedglas<sup>™</sup> 100

- 7.76000 External protective plate to the shield 3M™ Speedglas™ 100 (776000) standard (1 set for 10 pcs.)
- 7.77000 External protective plate to the shield 3M<sup>™</sup> Speedglas<sup>™</sup> 100 (777000) scratchproof (1 set for 10 pcs.)
- 7.77070 External protective plate to the shield 3M<sup>™</sup> Speedglas<sup>™</sup> 100 (777070) heat-resistant (1 set for 10 pcs.)

Internal protective plates for 3M<sup>™</sup> Speedglas<sup>™</sup> 100 helmet

4.28000 Internal protection plate 3M<sup>™</sup> Speedalas<sup>™</sup> 100. 3M<sup>™</sup> Speedglas<sup>™</sup> 9002V, scratchproof (1 set for 5 pcs.)



#### Light filter 100V

- Light filter size 44×93 mm.
- 2 sets of 7 preset shade modes: 8-12 DIN.
- Arc detector has 3 selectable levels of arc detection.
- Adjustable dark-to-light delay time 100-250 ms.

www.technoavia.com www.technoavia.ru





#### 3M<sup>™</sup> Speedglas<sup>™</sup> 9100 FX welding helmets

#### Welding helmet with Flip-Up front and active welding filter

It is intended for executing most welding operations using manual arc welding, argon welding/gas welding, tungsten electrode argon welding, plasma welding and acetyleneoxygen welding/cutting. The helmet's design combines a flip-up front welding filter and a protective polycarbonate mask making it ideal for such preparatory works as polishing and stripping.

TR CU 019/2011

# Complete welder's shield with side small windows

541805	3M™ Speedglas™ 9100 FX complete with light filter Speedglas™ 9100V
541815	3M™ Speedglas™ 9100 FX complete with light filter Speedglas™ 9100X
5/1025	3M™ Speedalas™ 9100 FX complete

541825 3M<sup>™</sup> Speedglas<sup>™</sup> 9100 FX complete with light filter Speedglas<sup>™</sup> 9100XX



# 3M<sup>™</sup> Speedyloop<sup>™</sup> adaptor for connecting 3M<sup>™</sup> Speedglas<sup>™</sup> welding helmet to a head protective helmet

3M<sup>™</sup> Speedglas<sup>™</sup> 9100 can be attached to protective helmets by unique 3M<sup>™</sup> Speedyloop<sup>™</sup>9100. These adaptors are universally installed into 3M<sup>™</sup> protective helmets to replace standard headbands.

**197134** 3M<sup>™</sup> Speedyloop<sup>™</sup> adaptor for attachment to 3M<sup>™</sup> Speedglas<sup>™</sup> 100 welding helmet.

197135 3M<sup>™</sup> Speedyloop<sup>™</sup> adaptor for attachment to 3M<sup>™</sup> Speedglas<sup>™</sup> 9100 welding helmet.



Protective helmet with shaper wheel Adaptor 3M<sup>™</sup> Speedyloop<sup>™</sup> 100 or 3M<sup>™</sup> Speedyloop<sup>™</sup> 9100 Welder's mask 3M<sup>™</sup> Speedglas<sup>™</sup> 9100 or 3M<sup>™</sup> Speedglas<sup>™</sup> 100





www.technoavia.com www.technoavia.ru





#### 12136 HW100 welding helmet with ADF technology

HW100 welding helmets provide excellent performance with ADF (auto darkening filter) technology, a lightweight shell and sleek design. ADF technology can help increase worker production and weld quality and can help to eliminate strain caused by constant "lifting and nodding" to check a weld. With a light state of Shade 3 this welding helmet offers a clear view of the work area during set-up as well as pre- and post-fabrication activities. Immediately upon arc strike, the ADF will darken to Shade 10 allowing for a consistently clear view of the welds, without repeated lifting of the welding helmet. Designed to accommodate many safety eyewear and respiratory products. Light state of shade 3. Solar powered Shade 10 ADF. An easy ratchet adjustment system. Replaceable, padded sweatband. Polycarbonate cover plate.

**Viewing Area:** 6.5" (3.8" x 1.7" / 96mm x 42mm) **Operating temperature range:** -5° C to +55° C (+23° F to +131° F)

Color: Black Complies with ANSI Z87.1-2010, CSA Z94.3, and EN379 standards.

# Honeywell



#### 12137 HW200 welding helmet

HW200 helmet with a light state of Shade 4 features solar-powered, adjustable Shade 9-13 ADF technology, as well as sensitivity and delay adjustments for customizable filter settings. Ideal for more experienced welders requiring a wider shade selection, the HW200 helmet offers more comprehensive features and benefits including: Grind Mode functionality that ensures the ADF will not

darken when used during clean-up work. Sensitivity adjustment to avoid unwanted darkening from ambient light conditions.

Easy ratchet adjustment system for personalized fit and total comfort.

Replaceable, padded sweatband.

A design that accommodates many safety eyewear and respiratory products.

#### Polycarbonate cover plate.

Viewing Area: 7.2" (3.8" x 1.9" / 97mm x 47mm) Operating temperature range: -10° C to +55° C (+14° F to +131° F)

Complies with ANSI Z87.1-2010, CSA Z94.3, and EN379 standards.

# Honeywell



#### 12237

#### North™ Tigerhood® Welding Helmet ADF DIN4/9-13 (812920)

Thermoplastic welding helmet with slip-up filter lens. Lightweight thermoplastic propionate helmet provides greater heat resistance and a higher melting point, making it ideal for demanding tasks such as overhead welding, torch cutting or brazing. **Glass receptacles size:** 110 x 90 mm. **Color:** Gray. **Weight:** 0.425 kg (without filter). **Complies with EN175** 

#### 12235 North™ Tigerhood® Welding Helmet ADF DIN 3-10 (812924)

Thermoplastic welding helmet with flip filter lens. Lightweight thermoplastic propionate helmet provides greater heat resistance and a higher melting point, making it ideal for demanding tasks such as overhead welding, torch cutting or brazing. **Glass receptacles size:** 108 x 51 mm.

Color: Gray. Weight: 0.425 kg (without filter). Complies with EN175

#### 12236

North™ Tigerhood® Welding Helmet fixed 90x110 DIN 3-10 (812922) North<sup>™</sup> Lamador<sup>®</sup> Welding Helmet

#### 12231

Glass receptacles size 108 x 51 mm (810500)

#### 12232

Glass receptacles size 110 x 90 mm (810550)

#### 12233

With helmet binding, lens: 108x51mm (810550.2)

Lightweight, comfortable, and very ergonomic welding helmet with flip-up glass holder lens designed for all welding application except for welding above the head. Unique straight shell, impact resistant and durable. Ratchet adjustment type suspension ensuring a quick and easy fit.

Shell made of polyamide (PA6) with flame retarding and reinforced additives. Excellent dimensional stability under heat. No dripping off or residual burning of shell in contact with heat. Radiation heat resistance up to 180°C. Mineral glass cover lens. Shade 10 mineral glass welding lens. Polycarbonate chipping lens. **Color:** Gray. **Weight:** 0.469 kg. **Complies with EN175** 

#### 12255 North™ Gamador® Welding Helmet

Lightweight, comfortable, and very ergonomic welding helmet with flip-up glass holder lens. Unique straight shell, impact resistant and durable. Ratchet adjustment type suspension ensuring a quick and easy fit.

Shell made of polyamide (PA6) with flame retarding and reinforced additives. Excellent dimensional stability under heat. No dripping off or residual burning of shell in contact with heat. Radiation heat resistance up to 180°C. Mineral glass cover lens. Shade 10 mineral glass welding lens. Polycarbonate chipping lens. **Glass receptacles size:** 90 x 110 mm.

Color: Gray. Weight: 0.530 kg. Complies with EN175

#### 12037 Gamador 51x108 unassembled x10 (810404.74)

#### 12234

With helmet binding , lens: 110x90mm (810450.2)

Δ

# Honeywell







#### 12039 A700 - CLEAR HARD COAT

Light weight design with sport temples and soft temple tip pads moulded universal nose bridge. Provide a secure, wrap around fit and all day comfort.

**Protective Properties:** General use and protection against impact (45m/s). Eye and face protection.

**Lens coating:** Clear single lens, 8-base poly carbonated abrasion resistance lenses, Anti-Scratch.

#### Materials:

Frame: polycarbonate. Weight: 23 g / 0.05 lbs.

#### 12040 A700 – GREY FRAME TSR GREY HARD COAT

Light weight design with sport temples and soft temple tip pads moulded universal nose bridge. Provide a secure, wrap around fit and all day comfort.

**Protective Properties:** General use and protection against impact (45m/s). Eye and face protection.

**Lens coating:** TSR Grey single lens, 8-base poly carbonated abrasion resistance lenses, Anti-Scratch.

#### Materials:

12055

Frame: polycarbonate. Weight: 23 g / 0.05 lbs.

#### 12041 A700 – AMBER TEMPLES AMBER HARD COAT LENS

Light weight design with sport temples and soft temple tip pads moulded universal nose bridge. Provide a secure, wrap around fit and all day comfort.

**Protective Properties:** General use and protection against impact (45m/s). Eye and face protection.

**Lens coating:** Amber single lens, 8-base poly carbonated abrasion resistance lenses, Anti-Scratch.

Materials: Frame: polycarbonate. Weight: 23 g / 0.05 lbs.

12056



N-Vision™ T5650 Series

#### **12054** N-Vision T5650, Black Clear Lens

#### **12055** N-Vision T5650, Black Smoke Lens

Modern ergonomic design for comfort and fit with easy lens replacement system. Provide protection against airborne particles and impact. Frame made of new Elasto LT chemical resistant material. Comfortable straight and curved temple ends supplied with all N-Vision 5600 Series eyewear. The lenses are protected with North's exclusive 4A coating. Prescription insert available. Replaceable nose piece. **4A coating:** Anti-Scratch, 99.9% Anti-UV, Anti-Static 4Acoating. **Compliant with ANSI Z87.1 and CSA Z94.3.**  N-Vision™ T5655 Series

12057 N-Vision T5655, Flex Fit Black Clear lens.

12056 N-Vision T5655, Flex Fit Black Smoke lens.

Modern ergonomic design for comfort and fit with easy lens replacement system. The glasses are provided with two Flexi-Fit soft nose-pieces (regular and nar-

row) for comfort and adaptability. Provide protection against airborne particles and impact. Frame made of new Elasto LT chemical resistant material. Comfortable straight and curved temple ends supplied with all N-Vision 5600 Series eyewear. The lenses are protected with North's exclusive 4A coating. Optional RX Insert available (65RX).

4A coating: Anti-Fog, Anti-Scratch, 99.9% Anti-UV, Anti-Static 4Acoating.

Compliant with ANSI Z87.1 and CSA Z94.3.

# Honeywell



#### 12049 A800 Clear Anti-Fog (1015369)

#### 12050 A800 Grey TSR Anti-Fog (1015367)

Slim profile provide an ideal fit for worker with smaller faces. Sporty styling provides a fashionable fit.

Protective Properties: General use and protection against impact (45m/s). Lens coating: Clear anti-fog single lens, 9-base poly carbonated abrasion resistance lenses. Materials: Frame: polycarbonate Weight: 24 g / 0.054 lbs.

#### 12045

#### Armamax ax clear polyfort uncoated lens (1002224)

The overspec that really fits practical and durable eye shield frosted side panels and browguard section reduce glare/reflections curved temples and raised nose bridge offer a precise fit. Protective Properties: General use and protection against impact (45m/s). Lens coating: Clear lens, no coating. Materials: Frame: Transparent Weight: 26 g / 0.057 lbs.



#### 12047 Tactile T2400 (908730), clear lens (compliant with EN166 1F)

12256 Tactile T2400 (908731), blue mirror smoke lens (EN172 UV5-3, 1N 1F)

12048 Tactile T2400 (908736), for indoor/outdoor use (EN170 UV2-2, 1N 1F). Square shaped lightweight spectacle designed with face-fitting base 8 curve polycarbonate monolens. The straight astronaut temples are equipped with Soft-Touch pads to ensure a comfortable and anti-slip fit. Black soft PVC nose pads. Provides protection against impacts from flying particles of increased robustness (45 m/s). Withstands heat resistance of up to 80°C. **3A coating:** Anti-Fog, 99.9% Anti-UV, Anti-Static coating. **Weight:** 22 g / 0.048 lbs.

#### 12058 HONEYWELL SP1000<sup>™</sup> (1028640) Black frame with clear polycarbonate lens 12059 HONEYWELL SP1000<sup>™</sup> (1028643) Black frame with grey

12058

polycarbonate lens Contemporary style that can be worn with headband or temples. Provides protection against impact, sun, wind, and debris. Ideal for high-particulate environments such as grinding, chipping and sanding. Coupled with durable performance and minimized fogging thanks to Dura-streme technology, which combines two best lens coatings for anti-fog on interior and anti-scratch on exterior for 3X longer lens life. Soft and flexible nasal pads conform to a variety of facial profiles and minimize slippage. Soft, high quality face cushioning and padded temple tips offer all day-long comfort. Adjustable flame-resistant head band provides excellent fit. **EN 166, 170, 172:2002** 



#### 12066 V-Maxx Indirect Ventilation

**Eye Protection** 

Sporty style for increased wearer acceptance 180° field of vision for distortion free peripheral vision. Rotating strap attachments. Passes impact grade B for medium energy and also meet certification for molten metal. **Protective Properties:** General use and protection against impact (120m/s). Protection against fogging,

liquids, large dust practices and molten metals an hot solids. Lens coating: Clear Fog ban lens.

Materials: Elastic handband. Indirect ventelation. Weight: 93 g/ 0.21 lbs.

#### 12065 V-Maxx Chemistry

Sporty style for increased wearer acceptance 180° field of vision for distortion free peripheral vision. Rotating strap attachments. It fits a wide variety of workers and can be worn over prescription eyewear and with half mask respirators. The strap attachment system provides easier use with hard hats.

Protective Properties: General use and protection against impact (45m/s). Protection against fogging. Lens coating: Clear Fog ban lens. Materials: Frame: Ventilation indirect. Weight: 93 g/ 0.21 lbs.



#### 12064 Amigo Focar

Flip-up welding goggle with clear focar polycarbonate lens, 50mm round green shade 5 Xanthos front lens and soft flexible PVC vinyl frame. Can switch from welding to chipping for easy inspection. Polycarbonate chipping lens. Welding lens made of 50 mm Xanthos glass shade 5. Protective Properties: Welding and protection against impact (120 m/s). Weight: 125 g / 0.27 lbs. Complies with EN166

Honeywell

band fit a wide variety of workers. Large field of

vision. Also available a chemistry version fig Fog-

Ban acetate lens.

Weight: 0.075 kg

Color: transparent. EN166

#### **Eye Protection**



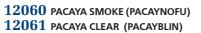




12060

# 12042Brava Smoke (BRAVAFU)12043Brava Yellow (BRAVAJA)12044Brava Clean (BRAVAIN100)

Single lens polycarbonate glasses, soft flats patula type arms. **Protective Properties:** Integrated poly carbonate nosepiece. Easy to use with safety helmet and ear defender Lateral protection. Lens coating: Scratch – resistance. Yellow version, polycarbonate complies with EN170 (UV Standards) Materials: Frame: polycarbonate Weight: 25 g / 0.055 lbs Sizes: Single



Smoke polycarbonate single lens spectacles, integrated nose piece, tilting nylon arms. **Protective Properties:** Side protection, removable foam for shock and dust protection. Lens coating: Polycarbonate, welder's version, anti-mist, anti-scratch, comply with EN169 (Welder's protection) Standards. Materials: Frame: Nylon Weight: 36 g / 0.079 lbs. Sizes: Single



12062 FUJI2 GRADIENT (FUJI2NOOR) Black frame version, Orange lens. 12063 FUJI2 CLEAR (FUJI2NOIN) Black frame version, Clear lens, Anti fog.



Design: Gradient twin lens polycarbonate glasses, soft PVC nosepiese. Protective Properties: Lateral protection soft tips. Lens coating: Scratch – resistance. Materials: Frame: polycarbonate/Nylon. Weight: 29 g / 0.063 lbs. Sizes: Single.



#### 12046 Piton2 Clear (LUCER-NEIN100)

Very light clear polycarbonate single lens glasses. Modern and sport design. Protective Properties: Side protection, open arm for lateral ventilation.

#### Lens coating:

Polycarbonate, scratch-reistance, comply with EN166 &170 (UV) Standards. Materials: Frame: Polycarbonate Weight: 30 g / 0.066 lbs. Sizes: Single Colour: Colourless

#### Eye Protection



- 12051 KILIMANDJARO SMOKE, black/yellow (KILIMNOFU100) 12052 KILIMANDJARO CLEAR, blue/yellow (KILIMBLIN100)
- 12053 KILIMANDJARO AB, blue/orange (KILIMBINAB)

Single lens poly carbonate glasses, adjustable temple. **Protective Properties:** Adjustable in clinaison, lateral protection.

Lens coating: Smoke lens version, scratch-resistant comply with EN 172(Solar protection) Standards. Materials: Poly carbonate. Weight: 32 g / 0.070 lbs. Sizes: Single.







#### 12067 GALERAS INDIRECT VENTI-LATION (GALERVI)

Clear poly carbonate goggle. Indirect ventilation.

**Protective Properties:** Wide screen with non-reflecting effect. Lens coating: Anti – mist. Anti – scratch.

Color: gray. Materials: Frame: polycarbonate/PVC Weight: 104 g / 0.23 lbs. Sizes: Adjustable

#### 12070

MURIA -1 – DIRECT VENTILA-TION (MURIA1VD) Clear poly carbonate goggles, direct ventilation, textile elastic strap.

**Protective Properties:** Protect against medium energy shocks (120m/s). Lens coating: Color: gray. Materials: Flexible PVC Frame. Weight: 60 g / 0.13 lbs . Sizes: Single.

#### 12069

RUIZ1 (RUIZ1VI) Clear polycarbonate goggles – indirect ventilation. Protective Properties: Protect form medium energy shocks. Lens coating: Clear Polycarbonate.

#### Materials: Frame: Flexible PVC, woven elastic strap. Weight: 68 g / 0.15 lbs. Sizes: Adjustable Colour: Colourless Materials: Flexible PVC Frame. Weight: 60 g / 0.13 lbs. Sizes: Single.



CP5005 Face shield plastic brackets made from nylon

Nylon brackets. Designed to fit all North and Fibre-Metal hard-

hats, as well as many competitive hardhats (fits A29, A59,

A69, A79, A89, A99 hard hats). Accepts windows with uni-

#### 12240

## CP5004 Face shield aluminum brackets "High heat resistant"

Aluminum Cap Style

Aluminum brackets. Designed to fit all North and Fibre-Metal hardhats, as well as many competitive hardhats (fits A29, A59, A69, A79, A89 hard hats). Accepts windows with universal mounting patterns.



#### 12244

#### KHG5001 Headgear SmoothLok Ratchet w CrossStrap

Non-slip SmoothLok™ ratchet system is easy to use and offers precise size adjustments.

Universal mounting pattern accepts a wide range of available windows. Large crown protector offers outstanding spark and debris protection. Available in SmoothLok™ ratcheting headgear designed with protected mounting system, preventing liquids from entering behind the window. **Color:** black



#### 12242

#### A8150/40 Face shield Windows polyethylene PETG

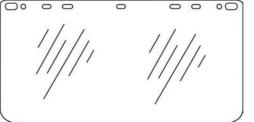
12241

Plastic Dielectric Cap Style

versal mounting patterns.

0.04 inch thick window fits any headgear that accepts the universal slot design – 7 slots strategically located to fit a wide variety of headgear and brackets. **Materials:** Pet-G, copolyester **Dimensions:** flat 8 inch x 15 inch (20.3 cm x 38.1 cm) **Color:** clear **ANSI 287.1** 

## 



#### 12243

#### A8152/40 Face shield Windows polycarbonate

Honeywell

Universal fit faceshield visor designed to protect face and eyes from flying debris, particles, and chemical splashes. Fits any headgear that accepts the universal slot design – 7 slots strategically located to fit a wide variety of headgear and brackets.

#### Materials: Polycarbonate

Dimensions: flat 8 inch x 15 inch (20.3 cm x 38.1 cm) Visor thickness: 0.04 inch Color: clear

ANSI Z87.1

#### **PPE for Hearing Protection**

# Ear personal protective equipment is divided into:

#### Earplugs

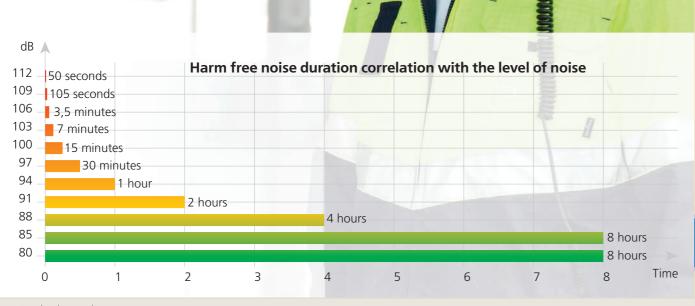
- disposable
- reusable

#### Ear muffs

- passive protection
- communication with active protection function
- communication accessories
- communication headphones with built-in radio set

Hearing PPE efficiency level indicator is SNR

SNR is an indicator of average noise level reduction at low, medium, and high frequencies, and is required to be indicated on all Hearing PPE products and in packaging.



#### Instructions for earplug use



**1.** Use your fingers to twist and rotat the earplug.

**2.** Tilt your head and softly pull ear aside and upwards to straighten the ear channel.

**3.** Push the earplug inside your ear channel and hold it for a while with your finger to let it settle correctly.

30 seconds



Efficiency checl When in a noisy environment, apply earplugs and cover both ears with your hands. The earplugs are selected and applied correctly if you can't hear any difference when your ears are uncovered.

When selecting earplugs, it is very important to consider the following:

- noise reduction level (avoid excessive protection)
- external factors at the workplace (contamination level, humidity)
- work specific nature (frequent change of workplace from noise to silence, work in the food industry)

Failure to or improper use of hearing PPE can result in permanent hearing loss and chronic illness.

# Honeywell

# 12102

#### 12102 **Bilsom® Foamplug 303L**

Noise blocking uncorded disposable earplug Soft polyurethane foam delivers superior long-wearing comfort and solid performance. Smooth soil-resistant skin prevents dirt or other substances from accumulating on skin or entering ear canal. **SNR:** 33 dB Material: polyurethane foam Color: vellow and white Weight: 48 g / 0.10 lbs. EN352-2



#### 12101 **Bilsom® Foamplug 304L**

Noise blocking corded disposable earplug Soft polyurethane foam delivers superior long-wearing comfort and solid performance. Smooth soil-resistant skin prevents dirt or other substances from accumulating on skin or entering ear canal. **SNR:** 33 dB

Material: polyurethane foam **Color:** yellow and white Weight: 48 g / 0.10 lbs. EN352-2



#### 12103 Laser Lite Single Use Earplug (uncorded)

Noise blocking uncorded disposable earplug Vibrant colors make protection fun and highly visible. Selfadjusting foam polyurethane foam adjusts to fit virtually every wearer. Contoured T-shape aids in easy insertion, removal from ear canal. High visibility magenta and yellow colors make compliance checks guick and easy. Available with special packaging and dispenser options. **SNR:** 35 dB

Material: polyurethane foam Color: yellow and magenta Weight: 48 g / 0.10 lbs. EN352-2





#### 12104

#### Laser Lite Single Use Earplug (corded)

Noise blocking corded disposable earplug Vibrant colors make protection fun and highly visible. Selfadjusting foam polyurethane foam adjusts to fit virtually every wearer. Contoured T-shape aids in easy insertion, removal from ear canal. High visibility magenta and yellow colors make compliance checks guick and easy. Available with special packaging and dispenser options. **SNR:** 35 dB

Material: polyurethane foam Color: yellow and magenta Weight: 48 g / 0.10 lbs. EN352-2

#### 12105 SmartFit Earplug

Noise blocking corder/uncorded multi-use earplug The only multiple-use earplug with Conforming Material Technology<sup>™</sup>. SmartFit uses body heat to adapt to the shape of the ear canal for a comfortable, personalized fit. Flanged handle for easy handling. Detachable cord allowed for corded or uncorded wear choice. Hearpack storage case. **SNR:** 30 dB

Material: TPE (thermoplastic elastomer) Color: orange Weight: 89 g / 0.20 lbs. EN352-2

#### Hearing protection

# 

#### 12075

#### Thunder T1s Headband Earmuff (1010928)

Noise blocking earmuff with Air Flow Control<sup>™</sup> technology delivers optimal attenuation across all frequencies without increasing earcup size or weight. Baseplate chamber and high-tech non-woven layer manages the flow of air inside the earmuff to control how sound reaches the ear. Nondeforming outer headband provides better comfort and withstands rough treatment in toughest workplaces. Robust dielectric construction provides protection in electrical environments. Snap-in ear cushions make replacement quick and easy.

#### **SNR:** 30 dB

Earmuff construction material: plastic (or dielectric) Other material: POM, PC/PBT, PP, PUR-E, PVC

Color: black and green Weight: 186 g / 0.41 lbs. EN352-1



Noise blocking earmuff with Air Flow Control<sup>™</sup> technology delivers op-

weight. Baseplate chamber and high-tech non-woven layer manages

the flow of air inside the earmuff to control how sound reaches the ear.

Robust dielectric construction provides protection in electrical environ-

ments. Snap-in ear cushions make replacement guick and easy. Ear-

Earmuff construction material: plastic (or dielectric).

Other material: POM, TPE, PP, PUR-E, PVC/Polyether.

timal attenuation across all frequencies without increasing earcup size or

12073

**SNR:** 29 dB

EN352-3

**Thunder T1Hs Helmet Earmuff** 

muffs are helmet mounted.

Color: black and green .

Weight: 198 g / 0.43 lbs.

#### 12077 Thunder T2HV

Noise blocking earmuff with Air Flow Control™ technology delivers optimal attenuation across all frequencies without increasing earcup size or weight. Baseplate chamber and high-tech non-woven layer manages the flow of air inside the earmuff to control how sound reaches the ear. Robust dielectric construction provides protection in electrical environments. Inner ventilated head-band contact surface breathes easier in warm/humid climates. Snap-in ear cushions make replacement quick and easy. Quick click height adjustment remains fixed during wearing. High visibility earcups are ideal at night and under inclement weather conditions. Reflective headband illuminates under light for better safety. **SNR:** 33 dB.

Honeywell

Earmuff construction material: plastic (or dielectric). Other material: POM, LDPE, PC/PBT, PP, PUR-E, PVC. Color: black and bright green. Weight: 231 g / 0.50 lbs. EN352-1

### Hearing protection



### 12071 Mach 1 (1010421)

Noise blocking earmuff Mach 1 is an economical choice for basic hearing protection in short-term work situations. Extremely lightweight construction provides for all-day comfort. Dielectric construction suitable for all workplaces, especially electrical environments. Adjustable headband fits any size.

### **SNR:** 23 dB.

Earmuff construction material: plastic (or dielectric). Other material: POM, PP, PUR-E, PVC. Weight: 141 g / 0.31 lbs. Color: black and red. EN352-1

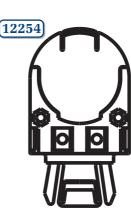


### 12078 Leightning L3s (1010924)

Noise blocking earmuff with Air Flow Control<sup>™</sup> technology provides high performance and robust durability. Leightning series delivers the highest level of comfort available, featuring an exclusive padded foam headband and super soft ear cushions that eliminate excessive pressure on the head. Steel wire headband construction withstands demanding use. Snap-in ear cushions make replacement guick and easy.

**SNR:** 34 dB.

Earmuff construction material: metal. Other material: steel wire, PUR-E, PVC, textile, PC/ABT, ABS, PP. Weight: 302 g / 0.66 lbs. EN352-1



12253

### Honeywell

### 12253 Hygiene Kit – Thun-

der T2s/T2H Honeywell Includes one pair of

Includes one pair of replacement ear cushions and one pair of foam inserts. Extends performance and lifetime of earmuff. Recommended replacement every 6 months. **Material:** dielectric PA. **Color:** black

12254 Adaptor 3718 HoneywellСтраница 115, 11

### wellСтраница 115, 116 DELTA PLUS ALLSAFE (защита падения с высоты)

Earmuff adaptor fits nearly all available hard hats - AO, Bullard, Jackson, MSA, North, Willson Alpha. Durable plastic and metal styles to withstand the most demanding conditions. Easy to snap into slots or mount onto hard hats. **Material:** dielectric PA. **Color:** black



### 12072 SPA3( SPA3BL)

Ear defender with polystyrene (PS) and synthetic foam cups for use as hearing protection in noisy environments. ABS headband, adjustable in height. Low pressure.

### SNR: 28 dB. Materials:

Weight: 158 g / 0.35 lbs. Size: Adjustable. Color: Blue/black. EN352-1.

### 12074 SUZUKA2 ( SUZUKNO)

Ear defender for safety helmets. Adjustable in height. High flexibility ABS arm and cups. PVC cups padded with synthetic foam. To use alone or with VISOR HOLDER faceshield holder. Suitable for QUARTZ, ZIRCON, GRAN-ITE PEAK and BASEBALL DIAMOND safety helmets.

### SNR: 27 dB. Materials:

Cupk headband: ABS. Cushion: Foam & PVC. Weight: 0.257 kg. Color: Black/Size: Single. Color: Fluorescent Yellow/Size: Adjustable. EN352-3

### 12076 YAS MARINA (YASMAGJ)

Foldable ear defender with ABS cups. Pads filled with synthetic foam. Double plastic headband (POM), adjustable in height, with soft and ventilated reinforcement for better comfort.

SNR: 32 dB. Materials: Cup: ABS. Cushion: Foam. Headband: POM. Weight: 314 g / 0.69 lbs. Size: One size fits all. Color: Grey/Yellow. EN352-1

PELTOR



### Peltor Tactical XP Headset Electronic Level Dependent Hearing

### Protector

Anti-noise headphones with the active protection function with possible settings adjustment for the user to adapt hearing perception to various conditions and needs.

Headset are equipped with stereophonic microphones, which allow hearing external sounds. In case of exceeding tolerable external sound level, the headphones automatically damp there to an admitted hearing level, with slightly hearable sounds under the conditions of heavy noise (human's speech, approaching vehicles sounds, etc.) being enhanced up to the necessary level.

**Battery:** 2 AA batteries, service life: 1,000 hours.

Weight: 400 g / 0.88 lbs. TR CU 019/2011 (GOST R 12.4.208-99)



**Tactical XP** with foldable headband (MT1H7F2)

6.406

\* SNR=31 H=32 M=25 L=20

### Peltor SportTac Electronic Level Dependent Hearing Protector

Shooting headphones protect the user from loud impulsive noise, but allow hearing surrounding sounds. Weak sounds are enhanced, and loud impulsive noise is efficiently cut out. Active protection function smoothly regulated volume ensuring reproduction of comfortable sound, and reducing irritation. Digital sound preproduction diagram removes sharp flips. Preservation of the last setting in the memory when shutting down. Automatic shutdown function ensures battery power saving in two hours of inactivity. Auxiliary input allows connecting a cell phone or radio communication device.

Fields of application: shooting sport, hunting. Battery: 2 AAA battery: 600 hours. Weight: 318 g / 0.70 lbs. TR CU 019/2011, TR CU 020/2011



6.862 SportTac with foldable headband (MT16H210F-478-RD) (\* SNR=26 H=29 M=23 L=16)



6.142

(\* SNR=26 H=29 M=23 L=16)

SportTac with foldable

### Peltor Pro-Tac II

**Electronic Level Dependent Hearing Protector** 

These protect from dangerous noise, but allow hearing surrounding sounds. Weak sounds are enhanced, and loud impulsive noise is efficiently cut out. Active protection function smoothly regulated volume ensuring reproduction of comfortable sound, reducing irritation, and allows distinguishing surrounding sounds (speech, car transport noise, and warning signals) in the stereophonic mode. Digital sound preproduction diagram removes sharp flips. Preservation of the last setting in the memory when shutting down. Automatic shutdown function ensures battery power saving in two hours of inactivity. In case of reducing battery change level, warning signal appears before final shutdown. Auxiliary input allows connecting a cell phone or radio communication device.

Fields of application: civil airports, timber works, road works, construction, handling, and pneumatic hammering operations, concrete production. Battery: 2 AA batteries: 1,000 hours. Weight: 370 g / 0.82 lbs. TR CU 019/2011, TR CU 020/2011 (GOST R 12.4.208-99, GOST R 12.4.210-99)



6.147 Protac II with standard headband (MT15H7A2 SV), black (\* SNR=32 H=31 M=29 L=24)



ment (MT15H7P3E2) (\* SNR=31 H=32 M=29 L=23)

### **Peltor Lite-Com Basic** Built-in Two-way Communication Headset

This headset series represents highly efficient ear protector with built-in transceiver.

quipment

ш

**Protective** 

ersonal

ň

It allows radio communication at a medium distance in the handsfree mode with other users of the headphones and portable radio sets operating in the same frequency range. All settings of the device are made using only three buttons. The adjustment is accompanied with comments of the electronic voice readout unit to allow settings without taking the headphones off the head. Radio communication occurs at the frequency PMR 446 MHz (8 channels / 38 subchannels). Function of selective tone alarm when receiving and transmitting allows several users talk at the same channel without hindering

each other. Voice microphone installed in the headphones has noise compensation function, and ensures maximum quality communication in the radio air (not transmitting surrounding noise to the air). All settings are automatically saved after the accessories shutdown. At low battery charge level, voice warning engages automatically 'Low battery'. Battery: 2 AA batteries: 60 hours, or rechargeable accumulator batteries Peltor ACK: 40 hours. Package: standard head strap;

strap. Range of action: up to 3 km. Weight: 418 g / 0.92 lbs. TR CU 019/2011

above helmet; occipital head



Lite-Com with helmet attachment (MT53H7P3E4400)

(\* SNR=33 H=34 M=30 L=23)

6.119



7.067

Lite-Com with standard headband (MT53H7A4400-EU)

(\* SNR=32 H=33 M=30 L=23)

### **Peltor High Attenuation Headset Ground Mechanics**

Special headset accessories for ensuring communication between the earth and aircraft crew cabin. The headphones cups have increased hollow to ensure maximum comfort and sound quality.

Headset with core fasteners reduce resonance and distortions down to minimum possible level, ensuring good sound quality even in noisiest places. Microphone with good compensation of external noise and integrated amplifier. Fluorescent cup coating is suitable for the application under the conditions of limited visibility and represents additional safety factor. Used together with adaptor FL5006-02 GB (Boeing, AirBus). Weight: 400 g /0.88 lbs. TR CU 019/2011, TR CU 020/2011

(GOST R 12.4.208-99)



### 7.000

### Adaptor FL5006-02 GB to headset Ground Mechanics

6.119

**Ground Mechanics** 

with standard headband

(\* SNR=33 H=34 M=31 L=23)

Adaptor to headphones Ground Mechanics for ensuring communication with the cabin of various aircrafts. It has waterproof strength case without protruding parts made to resemble the hand size and shape. Strength clamp allows turning for 360° for simplicity of fastening in any conditions. PTT is easily pressed even in thick gloves. Tightness class IP65. Cable length: 6 m. Weight: 150 g /0.33 lbs.

(MT7H79F01GB)

### PELTOR

### Peltor Tactical XP J11 Headset Electronic Level Dependent **Hearing Protector**

These reliably protect from dangerous noise, but allow hearing surrounding sounds. Active protection function enhances weak sounds, and cuts out loud impulsive noise. Automatic shutdown in two hours of inactivity, and preservation of last setting when shutting down. Integrated equalizer and balance adjustment function allow selecting optimal sound reproduction diagram. Selected settings are confirmed by the voice message or sound signal.

Standard cord with slot J11 integrated into the headphones case allows connection to most of the radio stations.

Battery: 2 AA batteries; service life: 1,000 hours.

Connection to the radio station is effected through adaptor series FL50. Adaptor model is selected separately for the radio station model.

TR CU 019/2011, TR CU 020/2011 (GOST R 12.4.208-99, GOST R 12.4.210-99)

### Peltor Tactical XP Headset EX 'Intrinsically Safe' (ATEX) Headset

Headset Peltor Tactical XP are intended for ensuring clear and reliable communication, protect the user from hazardous noise and impulsive sounds, but allow both hearing and amplifying sounds from the environment such as human's speech, mechanisms noise, and warning signals. Integrated functions of headphones Tactical XP highly differ from other active Ear protectors. The user may control and change volume adjustment with due regard to current situation. When necessary, external sounds may be amplified to a larger extent than any other protective headphones Peltor. Headphones Tactical XP allows hearing what you like to hear, and block all unnecessarv noise. Each function and setting is accompanied with voice message. Standard spiral expandable

cord with slot J11 integrated to the headphones case allows connection of most radio stations through adaptor FL Atex. Battery: 2 AA batteries, service life: 1,000 hours. Weight: 390 g / 0.86 lbs. TR CU 019/2011, TR CU 020/2011



# 6.146

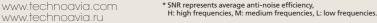
6.146 **Tactical XP J11** with foldable headband (MT1H7F2-07) Weiaht: 400 g /0.88 lbs.

(\* SNR=31 H=33 M=29 L=21)



6.446 Tactical XP J11 with helmet attachment (MT1H7P3-E2-07) Weiaht: 400 g / 0.88 lbs.

(\* SNR=30 H=33 M=28 L=20)



### Peltor High Attenuation, Standard Headset

Universal headset for connecting to various types of communication devices. Headphones cups ensure high sound insulation. Microphone with efficient noise compensation for clear and reliable communication.

Integrated core microphone holder with fast adjustment of position for comfort in handling.

Integrated cord with slot J11 (Nexus TP-120). Connection to the radio set is effected through adaptor series FL50. Adaptor model is selected separately for the radio set model. **Weight:** 315 g / 0.69 lbs.

TR CU 019/2011, TR CU 020/2011 (GOST R 12.4.208-99 GOST R 12.4.210-99)



6.384 Headset with standard headband (MT7H79A)

(\* SNR=33 H=33 M=32 L=24)



6.864 Headset with helmet attachment (MT7H79P3E)

(\* SNR=32 H=33 M=31 L=23)

### Peltor High Attenuation Headset ATEX

Universal spark proof headset may be used in explosion hazardous environments. These are intended for ensuring clear, reliable communication, and simultaneous ear protection even in extremely noisy environment. Voice microphone with efficient noise compensation function allows excluding transfer of external noise to the air. Standard spiral extendable cord with slot J11 integrated into the headphones case allows connecting to the most of radio stations through adaptor FL Atex.

Weight: 335 g ./ 0.75 lbs. TR CU 019/2011 (GOST R 12.4.208-99, GOST R 12.4.210-99)



Headset Atex foldable headband (MT7H79F-50) (\* SNR=33 H=33 M=32 L=24)

\* SNR=33 H=33 M=32 L=22



### 3M<sup>™</sup> Peltor<sup>™</sup> LiteCom Pro II Programmable Wireless Communication Headset

3M<sup>™</sup> Peltor<sup>™</sup> LiteCom Pro II is an intrinsically safe hearing protector with built in programmable 2-way communication radio 403-470 MHz (max. 30 channels), a level dependent function and an external audio input. It is approved for use in potentially explosive areas according to ATEX/ICECX regulations.

Active protection system allows all the vital sounds such as conversation, vehicle noise, and alarming signals to be received without compromising the quality. All programmable settings are adjusted with the use of only 3 buttons and accompanied by voice comments that enable settings to be changed without taking the headset off. The built-in microphone compensates the surrounding noises filtering all unwanted sounds. All settings are saved into memory and restored when the headset is ON. Automatic low battery indication.



7.046 3M<sup>™</sup> Peltor<sup>™</sup> LiteCom Pro II headset (MT7H7F4010-EU-50)

(\* SNR=31 H=32 M=28 L=21)

Designed for oil & gas industry, underground coal mining, and industries where intrinsic safety is required.

PELTOR

### Materials:

Headband: Stainless steel with leather covered headband

**Neckband:** Stainless steel with POE cover Helmet attachment: Stainless steel supporting arms

Cups: ABS Ear cushions: Foam/fluid-filled ear cushions (PVC/PUR) Powered by ACK08 rechargeable Li-Ion battery (included) – up to 20 hrs. Working distance: up to 3 km. Weight: 540 g / 1.19 lbs. EX class, I M1 Ex ia I Ma, II 1G Ex ia IIC T4 -20°C  $\leq$  Ta  $\leq$  +50°C Ga II 1D Ex ia IIIC T130°C Da



7.048 3M<sup>™</sup> Peltor<sup>™</sup> LiteCom Pro II headset with helmet attachment (MT7H7P3E4010-EU-50)

(\* SNR=31 H=32 M=28 L=21)

### Honeywell



### A59 safety helmet 12000 Color: white (A59010000) 12001 Color: yellow (A59020000)

Multipurpose design helmet with grooved HDPE outer shell, rain trough accessory slots and 4 point plastic suspension.

High density polyethylene (HDPE) outer shell protects from head traumas caused by small falling objects. Rain trough design protects the head and avoids being wet. Pin-lock/ratchet suspensions with 4 point nylon web guarantees comfort for the wearer.

Size adjustment: 4-point chin strap anchorage with 3-level height adjustment.

Weight: 306 g / 0.67 lbs. EN397 – DIN VDE 0680 ANSI Z89.1-2009 Type 1 Class E



### A79R safety helmet 12002 Color: white (A79R010000) 12003 Color: yellow (A79R020000)

Multipurpose design helmet with ribbed ABS outer shell, 4 point nylon web suspension and ratchet adjustment.

ABS outer shell – hard, tough and rigid material provides good chemical resistance and very hard impact resistance. Rain through design protects the head and avoids being wet. Ratchet suspensions with 4 point nylon web guarantees comfort for the wearer. Easy sweatband replacement systems make the helmet more hygienic. Slots to fit faceshield and earmuff ranges ensure proper protection of the wearer & comfort with multiple PPE products.

**Performance operating temperature:** -30°C to +50°C Weight: 425 g /0.93 lbs. EN 50365





QUARTZ III safety helmet 12010 Color: red (QUAR3RO) 12011 Color: blue (QUAR3BL) 12012 Color: yellow (QUAR3JA) 12013 Color: orange (QUAR3OR) 12014 Color: white (QUAR3BC) 12015 Color: green (QUAR3VE)

Multipurpose safety helmet with UV-resistant high density polyethylene (HDPE) outer shell protects from head traumas caused by small falling objects. Polyamide harness lining has 3 textile bands with 8 fixing points and a sweat band. The helmet has 2 possible positions of the headband (top/low) for better comfort. This helmet can be used with accessories: JUGALPHA or DYNAMIC JUGALHPA MENTALPHA. **Ratchet size adjustment**: 53/63 cm.

Colors: Blue, Green, Orange, Red, White, Yellow. Weight: 351 g /0.77 lbs. EN397





(PP) ventilated outer shell protects from head traumas caused by small falling objects. Polyamide harness lining has 3 textile bands with 8 fixing points and a foam sweat band. The helmet has 2 possible positions of the headband (top/low) for better comfort. This helmet can be used with accessories: JUGALPHA or DYNAMIC JUGALHPA MENTALPHA. Ratchet size adjustment: 53/63 cm. **Colors:** Blue, Green, Orange, Red, White, Yellow **Weight:** 360 g / 0.79 lbs. Adjustable ventilation shell **EN397** 



12021

Multipurpose safety helmet with UV-resistant high density polyethylene (HDPE) outer shell protects from head traumas caused by small falling objects, low density polyethylene (LDPE) harness lining with 8 fixing points and a sweat band. This helmet is validated with the following accessories: JUGALPHA or DYNAMIC JUGALHPA MENTALPHA

**Manual size adjustment:** 4-point chin strap anchorage with 3-level height adjustment.

Color: Blue, Green, Grey, Orange, Red, White, Yellow Weight: 370 g / 0.81 lbs. EN397









**12024** Color: Navy Blue/Black (COLTAAIBM)



12025 Color: Beige/Dark Grey (COLTAAIBE)

Highly ventilated polyester/cotton with mesh fabric. Lined with polyethylene and comfortable EVA foam shell to absorb shocks. Adjustable single size by buckle 55/62 cm.

### Material:

Exterior: Polyester/cotton. Inside loop: High density polyethylene. Reinforcement of loop: foam. Weight: 200 g / 0.44 lbs. EN812

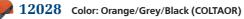




12026 Color: black/red (COLTAGR)



27 Color: navy blue/royal blue (COLTABL)



Bump cap made of polyamide with polyurethane cover, baseball-cap type, fitted with an internal polyethylene frame and comfortable neoprene foam to absorb shocks. Adjustable single size. **Material:** 

Exterior: Polyurethane-coated polyamide. Inside loop: High density polyethylene. Reinforcement of loop: foam. EN812

### 12029 COLTAN SH. PEAK Short peak bump cap (COLSHBM )

Impact-resistant baseball type bump cap. Polyurethane-coated polyamide. Lined with polyethylene and comfortable neoprene foam shell to absorb shocks. Adjustable single size by Velcro band from 58 to 62 cm. Short peak model.

### Material:

Exterior: Polyurethane-coated polyamide. Inside loop: polyethylene high density. Reinforcement of loop: foam. Color: Navy Blue. EN812





### 12245

### **Load fall protector AN510 Delta Plus** 100 kg load fall arrester in cable

Load fall arrester with 10m galvanized steel cable Ø4 mm used to secure all moving loads under 100 kg. Corrosion free steel case with an integrated carrying handle. Weight: 6 kg.

EN 358

### 12246 Sliding fall arrester AN06320 Delta Plus

Sliding fall arrester Sliding non opening stainless steel fall arrester

equipped with fall and wear indicators on braided polyamide rope anchorage line Ø 12 mm and with a zinc-coated steel carabiner. 1 loop spliced on high end. Suggested for use for long vertical movement or movement on inclined surface, long horizontal movement on horizontal surface, long horizontal movement on horizontal surface, long horizontal movement on lifeline. Length: 20 m Weight: 2.2 kg EN 353-2

### 12247 Energy absorbing fall arrester, single 2m rope AN211200AD Delta Plus

Energy absorbing fall arrester, single 2m rope Fall arrester with polyester energy absorber with 1 stranded polyamide rope (Y) Ø12 mm each. When attached to an anchor point above user the single shock absorber enables limited vertical and horizontal movements by successive clashes and stalls of the hook with various anchor points. Comprises of a folded and sewn tear strap protected by thermoplastic film. Thimble loops. 1 screw lock galvanized steel carabiner, opening (AM010). 1 automatic hook lock in galvanized steel, large opening 55 mm (AM022). Single 2 meter length rope. **Weight:** 1.2 kg.

### 12248

### Energy absorbing fall arrester, twin 2m ropes AN211200ADD Delta Plus

DELTAPLUS

12248

Energy absorbing fall arrester, twin 2m ropes Fall arrester with polyester energy absorber with 2 stranded polyamide ropes (Y) Ø12 mm each. When attached to an anchor point above user the dual shock absorber enables large vertical and horizontal movements by successive clashes and stalls of the hook with various anchor points. Comprises of a folded and sewn tear strap protected by thermoplastic film. Thimble loops. 1 screw lock galvanized steel carabiner, opening (AM010). 2 automatic hooks lock in galvanized steel, large opening 55 mm (AM022). Twin 2 meter length ropes.

Weight: 2 kg.



### 12251 Full body harness HAR 12 Delta Plus Full body harness

Full body fall arrester harness with back and chest attachments combines 45mm wide orange polyester straps and 2 corrosion resistant parachute buckles at the thigh level for opening and easy harness adjustment. 2 adjustment loops and 2 adjustable lateral plates used to position the webbing crossover comfortably. Recommended for occasional height works (frames, cranes, scaffoldings, and roofs).

Adjustable sizes: L, XXL Weight: 0.7 kg Color: orange with black Complies with EN 361

### 12252

### Full body harness with belt HAR 14 Delta Plus Fall body harness with belt

Full body fall arrester harness with 2 anchorage points (back - front), 2 adjustment loops and 2 adjustable lateral plates used to position the webbing crossover comfortably. Combines a work positioning belt with broad thermoformed back panel and 2 anchorage points for better positioning. Flat buckles that provide further adjustment to the sub pelvic strap. Polyester straps and a sponge lining in belt. Breaking strength – 5000 lbs.

Adjustable sizes: L, XXL Weight: 1.1 kg Color: orange with black Complies with EN 358, EN 361

### 12250 Positioning belt EX120 Delta Plus Thermo comfort positioning belt

A positioning seatbelt with thermoformed back used as partial fall arrest system. Light and easy to position belt comprises a backrest and two lateral "D"-shape anchorage points. . Suggested for use to linesmen and any personnel working at heights on poles and other structures. Provides protection against slip without compressing the abdomen.

Material: polyester belt with sponge lining back Weight: 0.5 kg. Adjustable sizes. EN 358

### 12249 Positioning lanyard EX118 Delta Plus Adjustable positioning lanyard

Adjustable work positioning lanyard with stainless steel tensioner. Stranded rope Ø 14 mm equipped with a wear indicator. Protective sheath protects the rope from abrasive contact and favors smooth rope glide. Thimble loop. Splice protection. 1 hook. Adjustable length: EX118200A : 0,20 to 2 m. EX118400A : 0,20 to 4 m. Materials : Lanyard: Polyester. Tensioner: Stainless steel. Weight: EX118200A - 0,9 kg EX118400A - 1,1 kg. EN 358

### Hand protectors

Application of hand protectors is necessary for preventing unfavorable impact of hazardous factors on worker's hands.

Wide assortment of PPEs represented in our catalogue provide you with efficient protection from most various risks at workplaces: mechanical impacts, contact with aggressive media, operation under extreme climatic conditions or special works.

Our partners lead the market in the field of designing and manufacturing protective gloves.

Technoavia is an official distributor of such companies as Ansell, Delta Plus, Technoavia, Jokamuovi, which offer items manufactured in accordance with modern technologies and made of high-quality material, and, thus, ensuring reliable hand protection.

**EN 421** Protection from radioactive substances

and/or ionizing radiation.

EN 420 General requirements.

### European standards regulating requirements to personal hand protection equipment for workers

**EN 388** Protection from hazardous mechanical factors.

EN 374 Protection from ingress of chemicals and EN 1149 Antistaticity. microorganisms.

**EN 407** Protection from increased temperatures and/or open fire.

EN 511 Protection from lower temperatures.

### **Gloves size selection chart**

Ordering right-size gloves guarantees comfort when working. One of the ways to identify right size is to use tape measure to find the hand circumference. Measure the circumference as shown in Figure, and compare the result with the size in the table. When measuring hands in such way, all the possible hand size deviations are not considered. For example, some workers have long fingers, and some short. Workers may chose, which gloves one size smaller or bigger than the measured one fit the hand more comfortably.

Actual gloves size is identified by the manufacturer with due regard to the specifics of the material, and assumed purpose, for example, if gloves have sewn-in cuff, or they are made of elastic material, size is shown for the non-extended gloves.

In accordance with the anthropometric research executed in various countries, 6 hand types have been identified

Sizes	6	7 (S)	8 (M)	9 (L)	10 (XL)	11
Circumference (mm)	152	178	203	229	254	279
Length (mm)	160	171	182	192	204	215

www.technoavia.com www.technoavia.ru

Circumference

### Hand protectors

### European standards for protective gloves

### **EN420** General requirements

This pictogram means that the user shall learn the operating instruction.

### Protection from mechanical impact EN388

ABC

7

XYZ

00	Protection from mechanical in	πρατι					
	Efficiency level	1	2	3	4	5	Ĩ

Efficiency level	1	2	3	4	5
A. Wear resistance (cycles)	100	500	2000	8000	-
B. Cut resistance (index)	1,2	2,5	5,0	10,0	20,0
C. Tear resistance (H)	10	25	50	75	-
D. Puncture resistance (H)	20	60	100	150	-

### **EN374** Protection from ingress of chemicals

Operating time before ingress > 30 min for, at least, three chemicals from this list: (XYZ represent code letters for three of these chemicals, time of protective action from ingress of which for this glove exceeded 30 min)

A Methanol
<b>B</b> Acetone
C Acetonitrile
D Dichloromethane

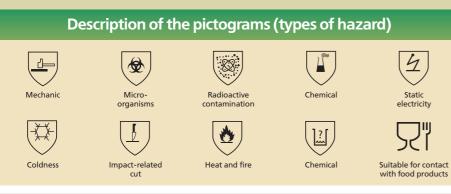
E Carbon sulfide	1
F Toluene	
	1
<b>G</b> Diethylamine	K
H Tetrahydrofura	L

Ethyl acetate n-heptane Sodium hydroxide 40% Sulfuric acid 96%

Efficiency levels	0	1	2	3	4	5	6
Minutes	<10	10	30	60	120	240	> 480



This pictogram may be used for gloves, which do not satisfy the above requirement (Chemical resistance to selected chemicals)



### **EN407** Protection from increased temperatures



	Efficiency level	1	2	3	4
	A. Behavior when burning (duration of residual burning and smoldering)	< 20 s No require- ments	< 10 s < 120 s	< 3 s < 25 s	< 2 s < 5 s
<b>ABCDEF</b> Tear: level as per $EN \ge 1$ Rubbing: level as per $EN \ge 1$	B. Contact heat (contact temperature and time to threshold)	100°C > 15 s	250°C > 15 s	350°C > 15 s	500°C > 15 s
	C. Convection heat (heat transfer coefficient)	> 4 s	> 7 s	> 10 s	> 18 s
	D. Radiant heat (heat transfer coefficient)	> 7 s	> 20 c	> 50 s	> 95 s
	E. Small drops of molten metal (number of drops)	> 10	> 15	> 25	> 35
	F. Large amounts of molten metal (weight)	30 g	60 g	120 g	200 g

### **EN511** Protection from lower temperatures

<u> </u>	Efficiency level	0	1	2	3	4
	A. Convection coldness. Resultant thermal insulation (ITR), sq.m×°C/W	I < 0,10	0,10 < I < 0,15	0,15 < I < 0,22	0,22 < I < 0,30	0,30 < I
<b>ABC</b> Tear: level as per $EN \ge 1$	B. Contact coldness. Thermal insulation R, sq.m×°C/W	R < 0,025	0,025 < R < 0,050	0,050 < R < 0,100	0,100 < R < 0,150	0,150 < R
Rubbing: level as per EN ≥ 1	C. Water ingress testing	Not suitable	Suitable	_	_	_

### Selection of optimal gloves material

	Nitrile	Neoprene	Natural rubber	Butyl	
Organic acids					
Inorganic acids					
Alkalis					
Oils, fats, greases					
Solvents					
Coloring agents					
Recommended for pr	Recommended for protection Not recommended for protection				

### Hand protectors



### 7.480 Sensilite gloves (48-101)

Universal nylon gloves with polyurethane coating for protection from mechanical impacts. These are intended for working with light items requiring application of gloves with high level of comfort and wear resistance. These are elastic, tightly fit the hand allowing manipulating especially small items. Due to the black basis and coating, these are suitable for working in relatively contaminated areas. The gloves may be used when assembling small parts (small bearings, hinges, springs) in all types of industry.

Ansell

Ansell

Size: 7, 8, 9, 10, 11. TR CU 019/2011, GOST R 12.4.246-2008 EN 388, EN 420



### 7.397 Hylite gloves with complete nitrile coating (47-402) Knitwear cuff

Oil and fuel gloves with stability to rubbing, cuts, puncture in combination with elasticity and perfect grip on slippery surfaces. These have nitrile coating. Antistatic. Cotton pad prevents from hand skin irritation. These perfectly fit for precision ad fine operations, in machinery manufacturing, construction, technical servicing and repairing equipment, and handling operations. Good alternative for cotton, light leather and leather-combined gloves.

Size: 7, 8, 9, 10. TR CU 019/2011 GOST R 12.4.246-2008 EN 388, EN 420, EN 1149



## 4221 EN1149 EN388

HYLITE

St Edmon

### 7.383 **Hvcron** gauntlets with complete nitrile coating (27-805)

Oil and fuel resistant high-strength elastic gloves are intended for works with rough and rigid surfaces, protect from puncture and cuts. These are analogous to gauntlets KR, but exceed in service life 6-7 times. These are 12-15 times better in service life than canvas gauntlets. These are ideal for working with abrasive materials such as casting, molding, and bricks. These are treated with special composition preventing hand skin irritation. Antistatic. These are used in oil, gas, chemical industry, construction and logistics. Basis fabric: cotton jersey. Coating: nitrile.

Size: 9, 10, 11. TR CU 019/2011, GOST R 12.4.246-2008 EN 388, EN 420, EN 1149



### 7.388 HvFlex gloves (11-800) Gray coating on the white basis

Oil and fuel resistant gloves are used when executing assembly and precision operations in any industry. These are elastic and tightly fit the hand allowing manipulating especially small items. Seam-free basis does not rub hands excluding skin irritation. Foam nitrile palm coating is air permeable to allow hands to breathe, and, thus, increase comfort for the worker. Antistatic. Basis: nylon, coating: foam nitrile.

Size: 7, 8, 9, 10, 11. TR CU 019/2011 GOST R 12.4.246-2008 EN 388, EN 420, EN 1149

### 7.485 HyFlex gloves (11-801) Black coating on the gray basis



Ansell

Oil and fuel resistant gloves are used when executing assembly and precision operations in any industry. Special non-spottable basis is intended for operations under the conditions of contamination impact. These are elastic and tightly fit the hand allowing manipulating especially small items. Seam-free basis does not rub hands excluding skin irritation. Foam nitrile palm coating is air permeable to allow hands to breathe, and, thus, increase comfort for the worker. Antistatic. Basis: nylon, coating: foam nitrile. Size: 7, 8, 9, 10, 11.

TR CU 019/2011, GOST R 12.4.246-2008 EN 388, EN 420, EN 1149

### 7.387 Hylite gloves with nitrile palm coating (47-400) Knitwear cuff

Oil and fuel gloves with stability to rubbing, cuts, puncture in combination with elasticity and perfect grip on slippery surfaces. These have nitrile coating. Antistatic. Cotton pad prevents from hand skin irritation. These perfectly fit for precision ad fine operations, in machinery manufacturing, construction, technical servicing and repairing equipment, and handling operations. Good alternative for cotton, light leather and leather-combined gloves.

Size: 7, 8, 9, 10. TR CU 019/2011 GOST R 12.4.246-2008 EN 388, EN 420, EN 1149

### Ansell



### www.technoavia.com www.technoavia.ru

3111 EN388 EN11



### 7.474

Mercury gloves (43-113)

High-strength gloves made of highly efficient thermal resistant (up to 700°C) Kevlar® (DuPont) fiber. Contact heat of 350°C for over 15 seconds as per EN 407.

Ansell

These are intended for protection from sparks, molten metal splashes, oxide scales, from heat radiation and open flame. Perfect stability to cuts and wear. Lining made of 100% cotton ensures comfort. These are recommended for works with hot glass, for extracting hot thermoplastic items from molds in molding shops, when producing tires, etc. Length: 380 mm.

Size: 10, 11. TR CU 019/2011, GOST R 12.4.246-2008 EN 388, EN 407, EN 420



### 7.477 Econohands gloves (87-190)



Universal gloves made of 100% latex with inside cotton spraying. Stability to chemical action of weak water solutions of acids and alkalis. Special treatment for reducing risks of allergic reactions. Shallow thickness ensures perfect sensitivity. Fields of application: domestic works with detergents, light assembly operations, cleaning and technical servicing of the equipment. Analogous to ABB gloves, type II. Thickness: 0.35 mm. Length: 305 mm. Size: 6.5-7, 7.5-8, 8.5-9, 9.5-10. TR CU 019/2011. GOST R 12.4.246-2008 EN 374, EN 420, EN 388, EN 1149



### 7.374 Ansell Work Guard gauntlets (43-216)

Heatproof gloves for protection from sparks and molten metal splashes. These are made of 1.2 mm thick split leather with soft jersey liner in the palm area and cotton fabric inside the gauntlet. The palm area is strengthened with leather insert for better resistance to rubbing; seams are stitched with strength fireproof thread Kevlar® (DuPont). These are intended for the application in all types of welding operations, and hard handling operations. Length: 410 mm. Size: 10.

TR CU 019/2011, GOST R 12.4.246-2008 EN 388, EN 407, EN 420



### 7.281 Universal-plus gloves (87-650)



Gloves with high stability to many acids and alkalis (up to 40% in concentration) and inorganic solvents. Made of 100% latex without fillers. Chlorination of the gloves increases stability to chemicals. Cotton spraying inside the glove with antibacterial treatment prevents from hand skin irritation. Suitable for agricultural works, at chemical plants, and pharmaceutical plants, where fingers sensitivity is reauired.

Analogous to ABB gloves, type II. Thickness: 0.40 mm. Length: 305 mm. Size 6.5-7, 7.5-8, 8.5-9, 9.5-10. TR CU 019/2011 GOST R 12.4.246-2008 EN 388, EN 420, EN 374

### 7.271 Extra gloves



High stability to many acids (up to 80%) and alkalis (up to 40%), spirits, fats, and detergents in combination with mechanical strength. Chlorination increases stability to chemicals. Cotton spraying inside the gloves with antibacterial treatment prevents from hand skin irritation. Made of 100% latex without fillers. Corrugated surface for ensuring better grip. Suitable for works in severe conditions in various industries and agriculture. Analogous to ABB gloves, type I. Thickness: 0.75 mm. Length: 320 mm. Size: 6.5-7.7.5-8.8.5-9.9.5-10.10.5-11. 87-950: black color. 87-955: orange color. TR CU 019/2011, GOST R 12.4.246-2008 EN 374, EN 388, EN 420



### 7.461 Vibraguard gloves (7-112)



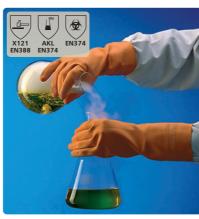
Anti-vibration gloves reduce impact of low- and high-freguency vibrations when working with electric and pneumatic tools.

In accordance with the results of testing as per EN 10819, the following risk is reduced:

- low-frequency vibrations (up to 31.5 Hz) by 90%
- medium-frequency vibrations
  - (31.5 to 200 Hz) by 90%

 high-frequency vibrations (200 to 1 500 Hz) by 42% Vibration protective liner, Gelform®, inside the glove, and oil and fuel resistant nitrile coating protecting from mechanical impacts: cuts, puncture, rubbing from outside. Recommended fields of application: manual polishing, base cap grinding; vibrating pyrograph, jack-hammer, road borer; operations with sledge hammer; chain saws, pneumatic tools, rammers.

Size: 9, 10, 11. TR CU 019/2011, GOST R 12.4.246-2008 EN 388, EN 10819, EN 420





### 7.261

**Bi-Color** gloves (87-900) High stability to the impact of acids (up to 80%) and alkalis (50%), salts, spirits, and inorganic solvents. Perfect grip on dry and wet surfaces. Made of latex and neoprene mixture. Cotton spraying inside the gloves with antibacterial treatment prevents from hand skin irritation. Corrugated surface for ensuring better grip. Vanilla-scented. Suitable for assembly operations in aviation, chemical and electronic industry. and agriculture.

Ansell

Thickness: 0.68 mm. Length: 323 mm. Size: 6.5–7, 7.5–8, 8.5–9, 9.5–10, 10.5–11. TR CU 019/2011, GOST R 12.4.246-2008 EN 388, EN 420, EN 374

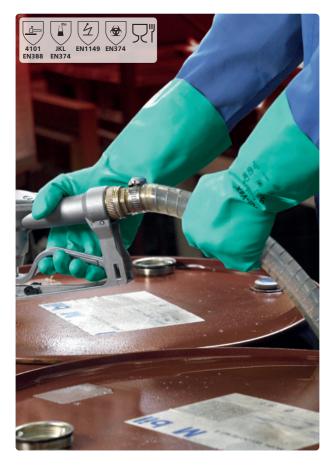


### 7.321

Neotop gloves (29-500) Protection form the action of concentrated acids (over 80%) and alkalis (up to 40%). Protection from mechanical impact

when working in moderately severe conditions, in combination with perfect elasticity (even at low temperatures) and strength. Made of neoprene. Cotton spraying inside the gloves with antibacterial treatment prevents from hand skin irritation. To be applied at chemical plants, in agriculture, oil refinery, technical servicing of the equipment.

Thickness: 0.75 mm. Length: 300 mm. Size: 7, 8, 9, 10, 11. TR CU 019/2011, GOST R 12.4.246-2008 EN 374, EN 388, EN 420



### 7.311 Solvex Ansell gloves (37-675)

Perfect combination of mechanical strength and protection from chemicals. Special stability to acids (up to 80%), alkalis (up to 40%), spirits, organic solvents, oil refinery derivatives. Corrugated surface ensures reliable grip on dry and wet surfaces. Made of high-quality nitrile. Cotton spraying inside the gloves with antibacterial treatment prevents from hand skin irritation. Suitable for operations in chemical and aviation industries, oil refineries, metal processing, and painting. Better in protective properties than butyl rubber and IFR gloves. Antistatic. Thickness: 0.38 mm. Length: 330 mm. Size: 6, 7, 8, 9, 10, 11. TR CU 019/2011 GOST R 12.4.246-2008 EN 388, EN 420, EN 1149



Conform Ansell gloves 7.2310 treated with starch (69-140)7.2300 without starch, textured surface of fin-

Ansell

aertips (69-150) Analogous to laboratory anatomic

gloves. Super-elastic gloves stable to the action of acids, alkalis solutions, spirits, and other chemicals with weak concentrations. Mirror symmetric. Made of 100% latex. Field of application: laboratory analysis, electronic items production, pharmacy. Thickness: 0.12 mm. Length: 240 mm. Size: 5-6.5, 7-8.5, 9-10.5. **Package:** sold in dispensing pack. Dispenser for 50 pairs. TR CU 019/2011 GOST R 12.4.246-2008 EN 374, EN 420

EN374



### 7.2330

NeoTouch gloves (25-101)

Ansell

Made of neoprene. These ensure perfect protection from acids, alkalis, and spirits, as well as chemical agent splashes. The gloves have inside polyurethane coating to significantly simplifying wearing. Relief fingertips surface ensures reliable grip. Improved strength to puncture, perfect flexibility, and extension. Not coated with starch. Fields of application: laboratory works, assembly works in electronic industry, pharmacy.

Thickness: 0.13 mm. Length: 240 mm. Size: 6.5-7, 7.5-8, 8.5-9, 9.5-10. Package: sold in dispensing pack. Dispenser for 50 pairs. TR CU 019/2011, GOST R 12.4.246-2008 EN 374, EN 420



### 7.711 PolyFit 7.711 nylon gloves with PU coating

PolyFit 7.711 elastic gloves are designed to fit tight and to provide additional sensitivity and flexibility when precision and accurate handling is of great importance. Made of 100% nylon with PU coating on palm area. Seamless design prevents from skin irritation and hand fatigue. Highly breathable gloves are meant for longer comfortable wear. The gloves are lint free and leave no marks on glossy and glass surfaces.

Color coded for sizing purposes: red - 7, yellow - 8, brown – 9, black – 10. Gauge: 13. Comply with EN 388, EN 420

### 7.6030 Versatouch gloves w/o starch (92-200)

### Ansell

Ansell

Increased wear resistance and tear strength ensure reliable hand and food protection during the whole working shift. Thinner (0.075 mm) than laboratory and medical gloves. These guarantee exclusive tactile sensitivity, and relief fingertips finish ensures reliable grip. Increased flexibility and elasticity ensure comfort. No latex added means no risk of type I allergic reaction. Suitable for handling any food products

Material: nitrile Thickness: 0.075 mm. Length: 240 mm. Size: 6.5-7, 7.5-8, 8.5-9, 9.5-10. Package: sold in dispensing pack, dispenser: 50 pairs. TR CU 019/2011, GOST R 12.4.246-2008, EN 420, EN 374 Declaration of Compliance with GMP and HACCP

### 7.2400 Touch N Tuff gloves (92-670)

Very thin 100% nitrile gloves. 3-4 times better than latex and vinyl gloves in terms of wear resistance. To be used in food industry. Not powdered, no risks of food contamination with corn starch used in powdered gloves. Textured surface of fingertips for better grip. Recommended for laboratory works with organic solvents, petrochemical derivatives (benzene, kerosene), formalin, and formaldehydes. Analogous to laboratory anatomic gloves. To be used in laboratories, chemical, electronic industries, during complicated assembly operations. Thickness: 0.10 mm. Lenath: 240 mm. Color: light blue.

Size: 6.5-7, 7.5-8, 8.5-9, 9.5-10. Package: sold in dispensing pack. Dispenser: 50 pairs. TR CU 019/2011, GOST R 12.4.246-2008 EN 374



### 7.712 NitriFit 7.712 nylon gloves with nitrile coating

NitriFit 7.712 gloves are designed to protect against oils and to provide great sensitivity, abrasion resistance, and freedom of movement when handling oily objects. Made of 100% nylon with nitrile coating on palm area. Seamless design prevents from skin irritation and hand fatigue. Designed for works that require handling greasy spare parts or equipment.

Color coded for sizing purposes: red - 7, yellow - 8, brown - 9, black - 10. Gauge: 13. Comply with EN 388, EN 420

### 7.700 **Build 7.700** blended fabric gloves with latex coating

Build 7.700 gloves are extremely comfortable thanks to the seamless weave technology. Palm fit latex coating provides advanced grip when handling wet and slick objects. Designed for use in automobile industry, construction works, cargo handling and loading, and general use.

Color coded for sizing purposes: red - 7, yellow - 8, brown - 9, black - 10.

Comply with EN 388, EN 420





### 7.721

SkySoft 7.721 100% cotton gloves with nitrile coating

SkySoft 7.721 gloves offer excellent abrasion resistance and protection against oils and benzene and provide excellent grip of smooth surfaces. 100% cotton lining prevents from skin irritation and enhances flexibility. The gloves are designed for works that require sensitivity such as precision handling operations in automotive industry, repair and maintenance works, and cargo handling and loading. Sizes: 8, 9, 10, 11. Comply with EN 388, EN 420



### 7.703 Sky 7.703 knitted safety-cuff gloves with fully dipped nitrile coating

High-quality oil and abrasion resistant Sky 7.703 safety-cuff gloves with nitrile coating that repels fuel refinery derivatives, greases, and dirt. Designed for works requiring contact with rough and hard surface objects and abrasive materials and offer good grip on dry and oiled surfaces. The gloves are suitable for works at refueling stations, oil&gas transporting vehicles and vessels, oil&gas production facilities and reservoir cleaning and maintenance, in aviation industry, and for construction operations. **Sizes:** 9, 10, 11.

Comply with EN 388, EN 420



### 7.701 Sky 7.701 knitted gloves with nitrile coating on palm

High-quality oil and abrasion resistant Sky 7.701 gloves with nitrile coating that repels fuel refinery derivatives, greases, and dirt. Designed for works requiring contact with rough and hard surface objects and abrasive materials and offer good grip on dry and oiled surfaces. Elastic knitwrist ensures snug fit. The gloves are designed for works at fueling stations, oil&gas transporting vehicles and vessels, oil&gas production facilities and reservoir cleaning and maintenance, in aviation industry, and for construction operations.

Sizes: 9, 10, 11. Comply with EN 388, EN 420



### 7.710 HiFit 7.710 nylon gloves

HiFit 7.710 nylon gloves providing superb touch sensitivity. Seamless design prevents skin from irritation. Designed for use in automobile industry, packaging, electronics, and for precision handling.

Color coded for sizing purposes: red -7, yellow -8, brown -9, black -10.

Gauge: 15. Comply with EN 388, EN 420



### 7.702 Sky 7.702 knitted gloves with fully dipped nitrile coating

High-quality oil and abrasion resistant Sky 7.702 gloves with nitrile coating that repels fuel refinery derivatives, greases, and dirt. Designed for works requiring contact with rough and hard surface objects and abrasive materials and offer good grip on dry and oiled surfaces. The gloves are suitable for works at fueling stations, oil&gas transporting vehicles and vessels, oil&gas production facilities and reservoir cleaning and maintenance, in aviation industry, and for construction operations.

Sizes: 9, 10, 11. Comply with EN 388, EN 420



### 7.713 Antistatic 7.713 nylon gloves with carbon fiber and polyurethane palm coating

Antistatic 7.713 elastic nylon gloves with carbon fiber that ensures antistatic properties. The gloves offer superb touch sensitivity for precision handling works. Seamless design prevents skin from irritation and hand fatigue. PU coating is lint free and leave no marks on glossy and glass surfaces. Designed for use in automobile industry, packaging, electronics, glass manufacturing, and for precision handling. **Color coded for sizing purposes:** red – 7, yellow – 8, brown – 9, black – 10

Gauge: 13. Comply with EN 388, EN 420



### 8.700

### Apachee 8.700 safety-cuff gloves

Apachee 8.700 gloves are designed to protect against mechanical impacts when handling objects with rough and hard surfaces. Made of cotton fabric combined with split-leather inserts.

**Size:** 10.



### 8.722 Navy 8.722 safety-cuff heavy-duty gloves

Navy 8.722 gloves are designed to protect against abrasion, cut, and puncture risks. Palm area is enhanced with split leather inserts for better durability and performance. The gloves are second to none when it comes to protection against significant mechanical impacts. **Size:** 10.

Comply with EN 388, EN 420



8.708 Dakar 8.708 full grain leather gloves

Multipurpose Dakar 8.708 leather are gloves designed to protect hands against impacts and are made of 0.6-0.8 mm full grain leather with no lining. The gloves provide good grip and better touch sensitivity. Great comfort is achieved by the advanced design that follows the anatomic shape of human hands. **Size:** 10.

Comply with EN 388, EN 407, EN 420



### 7.412 Split 7.412 safety-cuff leather gloves

Split 7.412 gloves offer protection against hot temperatures and are highly resistant to cuts and abrasion. The gloves ensure protection against burns caused by short-term contact with extremely hot surfaces and by molten metal splashes. Made of 1.0-1.2 mm split-leather with cotton lining. Highly impact resistant. Suitable for welding operations and handling objects with rough surfaces. **Size:** 11.

Comply with EN 388, EN 407, EN 420



### 7.422 Jamboo 7.422 safety-cuff leather gloves

Jamboo 7.422 gloves offer protection against hot temperatures and are highly resistant to cuts and abrasion. The gloves ensure protection against burns caused by short-term contact with extremely hot surfaces and by molten metal splashes. Soft and comfortable Jamboo 7.422 are made of 1.1-1.3 mm split-leather with gentle cotton lining. All seams are threaded with DuPont™ Kevlar®. The gloves are designed for welding operations and handling objects with rough surfaces.

Length: 380 mm Size: 10. Comply with EN 388, EN 407, EN 420



### PVCC400

**PVC glove, 40 cm long.** PVC on cotton jersey lining chemical glove. Comfortable fabric support. Very good long life service. Forearm protection. Excellent resistance to abrasion. Repels oils, chemical

tion. Excellent resistance to abrasion. Repels oils, che product and petrol derivatives. Materials:

Glove: 100% PVC vulcanized and coated on cotton jersey support. Thickness: 1.20 mm to 1.40 mm. Color: Red. Length: 40 cm. Size: 10.

EN 388, EN 420, EN374-3, EN374-2

124



### **JokaHold**<sup>™</sup> **Black PVC granulated glove**

JokaHold 35™



JokaHold<sup>™</sup> is made of 100% cotton lining with double black PVC-coating and PVC-granulation providing great robustness and decent cut resistance combined with excellent abrasion resistance required for tough jobs where hand protection and good grip is of great importance. Perfect for handling large objects with rough surfaces. Designed for oil & gas maintenance works, construction and concrete works, metal and mechanical engineering, timber and carpentry industry, road works, and agriculture. Gloves are re-usable and washable on 40°C.

Glove length: 25cm **Size:** 7 – 12 Color: black Complies with EN 388, EN 374.





**JokaStark**<sup>™</sup>

### JOKASAFE.FI

extended length and PVC-granulation on palm and

JokaStark™ is made of 100% cotton lining with double red PVC-coating and PVC-granulation on palm and fingertips providing excellent robustness and superb grip combined with protection against acids and oils. Extended glove length provides additional hand protection against liquid chemical splashes. Perfect for handling large objects with slippery surfaces. Designed for handling and transport of industrial oils and chemicals, mineral blasting, handling of fiberboard and plywood boards, construction material industry, and freight traffic.

Gloves are re-usable and washable on 40°C. Glove length: 35cm Size: 8 - 11 Color: red Complies with EN 388, EN 374.

### JokaOiler 35 SP™ **Red PVC glove with** extended length



JokaOiler 35 SP™ is made of 100% cotton lining with double red PVC-coating providing robustness and good grip combined with protection against acids and oils. Extended glove length provides additional hand protection against liquid chemical splashes. Perfect for handling objects with slippery surfaces. Designed for handling and transport of industrial oils and chemicals, mineral blasting, pesticide handling, gas station works, waterworks and sewage systems, agricul-



tural works, and industrial painting. Gloves are re-usable and washable on 40°C.

Glove length: 35cm Size: 8 - 11 Color: red Complies with EN 388, EN 374.





against liquid splashes is of great importance. Perfect for handling objects with rough or slippery surfaces such as fish handling, waste treatment, sewerage systems, agriculture and tree nurseries.

Gloves are re-usable and washable on 40°C. Glove length: 25cm, sleeve extension length: 35 cm. Size: 7 - 11 Color: black/yellow Complies with EN 388, EN 374.



### JOKASAFE.FI

JOKASAFE.FI

**Red PVC glove** JokaXO<sup>™</sup> is made of 100% cotton lining with double red PVC-coating providing robustness and good grip combined with protection against acids and oils. Offers good protection for various works where good grip and protection against liguid chemical splashes is important. Perfect for handling obtural works, and industrial painting. Glove length: 25cm Size: 7 – 11 Color: red Complies with EN 388, EN 374.



jects with slipperv surfaces. Designed for handling and transport of industrial oils and chemicals, maintenance and garbage disposal, waterworks and sewage systems, agricul-Gloves are re-usable and washable on 40°C.



PERSONAL PROTECTIVE EQUIPMENT

### Workwear in Action





www.technoavia.com www.technoavia.ru

# Workwear in Action REAL





P.O. Box 123879, SAIF Zone, U.A.E. Phone: +971 6 557 8299, +971 6 557 9350 Fax: +971 6 557 8334 Email: ap@technoavia.ru www.technoavia.com

