



Comfort and Safety

**TOMAX
WORKWEAR
INC.**



Tomax
www.tomaxwear.com

PRODUCT COLLECTION

CONTENTS

FR WORK WEAR (1-50)

HV WORK WEAR (51-62)

CLASSIC WORK WEAR (63-96)



ABOUT TOMAX

With over 16 years of experience in the production of workwear, Tomax stands for professional high-quality workwear, strives to build a long-term relationship based on trust with its customers and suppliers. With this ambition, a team of enthusiastic employees make every effort to fulfil this objective all the time.

The customer-oriented service will give solution-oriented answers to all your questions and support with your orders.

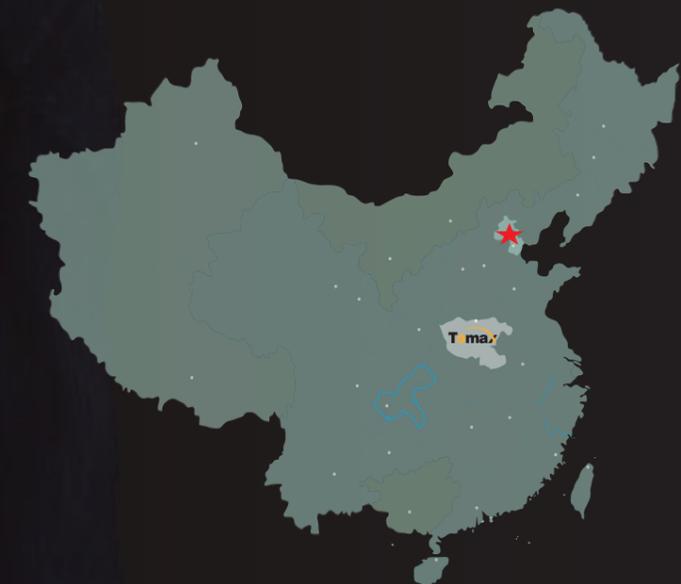
TOMAX PRODUCTS

FR workwear, Hivis workwear, Classic workwear, Winter wear and Outdoor wear, which is designed for DURABILITY, FUNCTIONALITY, COMFORT and SAFETY at work. This means you can expect each Tomax model to meet all your wishes as a demanding professional.

The stylish outfit cut for Fashion and Comfort to wear at work.

PRODUCTION AND QUALITY CONTROL

JIT production system of TOMAX workshop guarantees the shortest lead time and quick quality control response.



Office :Room 602,Xinxi Building,NO.144, Huayuan Road,Zhengzhou,China.
Post Code:450008
Workshop:No.200 Deyuan West Road,High-tech District,Xinxiang City,Henan Province.
Tel:0086-371-65982801,65982812
Fax:0086-371-65982805.
E-mail: info@tomaxwear.com
Http://www.tomaxwear.com



Producer : TOMAX GARMENTS FACTORY
DBID : 361583 and Audit Id : 132892 Audit Date : 08/09/2018
Audit Type : Full Audit



Auditee :	TOMAX GARMENTS FACTORY
Audit Date From :	06/09/2018
Audit Date To :	07/09/2018
Expiry Date of the Audit :	Please refer to the producer profile in the amfori BSCI platform
Auditing Company :	TUEV Rheinland
Auditor's Name(s) :	Richard Li(Lead)
Auditing Branch (if applicable) :	TUV Rheinland China



This is an extract of the on line Audit Report.The complete report is available in the amfori BSCI Platform.
Access www.bscliplatform.org, for entitled users only.

All rights reserved. No part of this publication may be reproduced, translated, stored in a retrieval system, or transmitted, in any form or by any means electronic, mechanical, photocopying recording or otherwise, be lent, re-sold, hired out or otherwise circulated without the amfori consent.

This is an extract of the amfori BSCI Audit Report, which is available in the amfori BSCI Platform. © amfori, 2018 - The English version is the legally binding One.

TESTEX AG, SWISS TEXTILE TESTING INSTITUTE
 GOTTHARDSTRASSE 61
 POSTFACH 2156
 8002 ZÜRICH, SWITZERLAND

OEKO-TEX®
 INSPIRING CONFIDENCE

CERTIFICATE

The company

Tomax Garments Factory
 High-Tech District, No. 200, Deyuan West Road
 Xinxiang, Henan, 453000
 China



is granted authorisation according to STANDARD 100 by OEKO-TEX® to use the STANDARD 100 by OEKO-TEX® mark, based on our test report SH020 161573.1

for the following articles:

Workwear (jacket, overalls, pants) made of 100% cotton and cotton/polyester woven fabric, piece-dyed, partly-produced with flame retardant product accepted by OEKO-TEX®, or made of 100% polyamide woven fabric, bleached and piece-dyed, with or without clear PU coating and water-repellence; including accessories (polyester sewing thread, zipper, electroplated metal accessories, plastic accessories, polyester woven label, polyester printed label, polyamide hook and loop fastener, reflective fabric in color grey and silver, polyester/latex elastic band) (based on material pre-certified according to STANDARD 100 by OEKO-TEX®)

The results of the inspection made according to STANDARD 100 by OEKO-TEX®, Annex 4, **product class II** have shown that the above mentioned goods meet the human-ecological requirements of the STANDARD 100 by OEKO-TEX® presently established in Annex 4 for products with direct contact to skin.

The certified articles fulfil requirements of Annex XVII of REACH (incl. the use of azo colourants, nickel release, etc.), the American requirement regarding total content of lead in children's articles (CPSIA; with the exception of accessories made from glass) and of the Chinese standard GB 18401:2010 (labelling requirements were not verified).

The holder of the certificate, who has issued a conformity declaration according to ISO 17050-1, is under an obligation to use the STANDARD 100 by OEKO-TEX® mark only in conjunction with products that conform with the sample initially tested. The conformity is verified by audits.

The certificate SHGO 085532 is valid until 15.11.2020

Zurich, 07.11.2019

Matz Bachmann
 Managing Director

Mary Rose Egloff
 Customer Service Ecology Manager



EC Type-Examination Certificate

522615/1

Date of Issue: 05 April 2017

Expiry date: 05 April 2022

This is to certify that BTTG Testing & Certification Ltd, specified as a "notified body" under the terms of the Personal Protective Equipment Regulations 2002, did undertake the relevant type approval procedures for the equipment identified below which was found to be in compliance with the relevant provisions of EC Directive 89/686/EEC, or as amended, subject to any conditions in the schedule attached hereto.

Manufacturer: Tomax Workwear Inc
Address: RM 602, Xinxi Building, No. 144 Huayuan Road, Jinshui District Zhengzhou, Henan China, 450008
Product Description: 100% Cotton FR Garments
Product Code: Jacket FR59; Trousers FR60 Bib & Brace FR61; Coverall FR62
Technical File reference: TMX116122016
Harmonised Standard(s): EN ISO 13688:2013 (A1 A2 B1 C1 F1)
 EN ISO 11612:2015

This certificate relates specifically to the PPE items described and depicted in the manufacturer's Technical File, copies of which are held by the manufacturer and BTTG, and not to any other items.

The attached schedule of approval forms part of this certificate. This certificate remains valid unless cancelled or revoked, provided the conditions in the attached schedule are complied with and the equipment remains satisfactory in service.

Certificate Authorised by:
 J Lumb
 Certification Officer
 and:
 C A Butcher
 Certification Manager



Issued by BTTG Testing & Certification Ltd., Notified Body Identification No. 0339.

50/00305

0339 EC10 v.11 10/102016

Page 1 of 4

CERTIFICATE
 EC Type-Examination Certificate
 EEC Directive 89/686/EEC Article 10
 as last amended by EEC Directive 96/58/EEC
 Personal Protective Equipment



Registration No.: BP 60101448 0001
 Report No.: 21231496 001

Holder: Tomax Workwear Inc.
 Room 602, Xinxi Building
 No. 36 Zhenghua Road
 Zhengzhou
 China

Product: Protective clothing
 for use in welding and allied processes according EN 11611:2007

Identification: WFR-76001J Jacket , WFR-76001P Pants , WFR-76002 Overall
 Class: 2 / A1+A2
 Sizes: 44/46/48/50/52/54/56/58/60/62/64
 Material: M018 (100% CO, 310 g/m², navy, flame retardant)

The EC type-examination certificate refers to the above mentioned product. This is to certify that the product complies with the essential requirements of Annex II of the directive 89/686/EEC. This certificate does not imply assessment of the production of the product and does not permit the use of a TÜV Rheinland mark of conformity. The holder is entitled to use this certificate in connection with the declaration of conformity in accordance with Annex VI.

Valid till: 11.05.2020

Date: 12.05.2015



TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg
 Notified by Zentralstelle der Länder für Sicherheitstechnik (ZLS).

Notified under No. 0197 to the EC Commission.

CE The CE marking may be used if all relevant and effective EC Directives are complied with. CE



BTTG Ref. No: 30/08562/A

Certificate of Test

We hereby declare that the fabric described below has been tested by BTTG Fire Technology Services according to EN ISO 11612: 2015 clauses 6.2.1, 6.3.2, 6.3.3, 6.4, 6.5.1, 6.5.2, 7.2, 7.3, 7.5 and 7.6 and achieved the following results:

Clause 6.2.1 Heat resistance (at 180°C)	PASS
Clause 6.3.2 Limited flame spread – Face ignition	PASS A1
Clause 6.3.3 Limited flame spread – Edge ignition	PASS A2
Clause 6.4 Dimensional change due to cleaning	PASS
Clause 6.5.1 Tensile strength	PASS
Clause 6.5.2 Tear strength	PASS
Clause 7.2 Convective heat	LEVEL B1
Clause 7.3 Radiant heat	LEVEL C1
Clause 7.5 Molten iron splash	LEVEL E2
Clause 7.6 Contact heat	LEVEL F1

Pre-treatment: Five wash/dry cycles according to ISO 6330: 2012 Procedure 4N (40°C) with tumble drying (Procedure F) (max. 80°C outlet temperature).

The full details of the test(s) and the result(s) are given in our report Ref. 30/08562 (dated 15 August 2016)

Description of sample tested:
 Navy woven fabric, referenced:
 FRCO-001; 330g/m²
 100% woven cotton twill

Client:
 Tomax Workwear INC.
 Rm 602
 Xinxi Building No. 144
 Huayuan Road
 Jinshui District
 Zhengzhou
 Henan
 China 450000

Certificate Authorised by: P M Collinson
 Laboratory Technician
 and: C Dean
 Laboratory Manager
 Date: 15 August 2016



The declaration in this test certificate applies to the actual sample tested and to the specified tests carried out as detailed in the referenced report(s) detailed above.

BTTG Testing & Certification Ltd. Registered Office: Unit 14, Wheel Forge Way, Ashburton Road West, Trafford Park, Manchester, M17 1EH, United Kingdom Registered in England No. 4669650
 Tel: +44 (0)161 873 6543 Fax: +44 (0)161 848 7378 e-mail: info@btg.co.uk



BTTG Ref. No: 24/02240/8/16

Certificate of Test

We hereby declare that the fabric described below has been tested by BTTG Electrostatics according to EN 1149-3: 2004 Method 2 Induction decay and achieved the following results:

Spacing of conductive threads = 9.0mm Shielding Factor (S) = 0.69 Half Decay Time (t ₅₀) = <0.01s	EN 1149-5: 2008 PASS
---	-------------------------

Pre-treatment: Five wash/dry cycles according to ISO 6330: 2012 Procedure 6N (60°C) with normal tumble dry (Procedure F)

The full details of the test(s) and the result(s) are given in our report Ref. 24/02240/8/16 (dated 17 August 2016)

Referenced: FR 99% COTTON, 1% ANTI-STATIC Fabric.
Model Code: FRACO-01
Product Description: FR 99% COTTON, 1% ANTI-STATIC Fabric
Colour: NAVY BLUE
Material: 99% COTTON, 1% CARBON FIBRE

Description of sample tested:
Client: Tomax Workwear INC.
RM602,
XINXI BUILDING NO 144
HUAYUAN ROAD
JINSHUI DISTRICT
ZHENGZHOU,
HENAN,
CHINA 450000

END

Certificate Authorised by: K Pillinger
Laboratory Technician

and: P Doherty
Operational Head

Date: 17 August 2016



The declaration in this test certificate applies to the actual sample tested and to the specified tests carried out as detailed in the referenced report(s) detailed above.

BTTG Testing & Certification Ltd. Registered Office: Unit 14, Wheel Forge Way, Ashburton Road West, Trafford Park, Manchester. M17 1EH. United Kingdom. Registered in England No. 4669650
Tel: +44 (0)161 873 6543 Fax: +44 (0)161 848 7378 e-mail: info@bttg.co.uk



Certificate of Test

FRACVC-01

described as

Navy blue woven FR & antistatic CVC fabric,
79% Cotton, 20% Polyester, 1% Antistatic; 330g/m²

submitted by

Tomax Workwear Inc
RM602 Xinx Building, No 144 Huayan Road
Jinshui District, Zhengzhou
Henan, China 450000

has been tested according to

EN 61482-1-2: 2015 (IEC 61482-1-2: 2014)

and achieved the following results:

Box test method Class 1 (4 kA) PASS

Tested before and after five wash/dry cycles according to ISO 6330: 2012, Procedure 6N / F (low)

The full details of the test(s) and the result(s) are given in our Report(s)

60/00340 (dated 21 December 2016)

Certificate Number

C1/60/00340

Laboratory Technician, Mr P Collinson

Laboratory Manager, Mr C Dean

10 February 2017

Date



The declaration in this test certificate applies to the actual sample tested and to the specified tests carried out as detailed in the referenced report(s) detailed above.

Shirley® Technologies Limited. Registered Office: Wira House, West Park Ring Road, Leeds, LS16 6QL. A company registered in England & Wales with company number 04669651. VAT Number GB 816764800. The supply of all goods and services is subject to our standard terms of business, copies of which are available on request. Copyright © 2017 Shirley Technologies Limited. All rights reserved.

CERTIFICATE OF COMPLIANCE

Certificate Number 071515-MH60776
Report Reference MH60776-20150715
Issue Date 2015-July-15

Issued to: Tomax Workwear Inc.
 Room 602, Xinxi Bldg, No 36 Zhenghua Rd, Jinshui District
 Zhengzhou, Henan 450008 China

This is to certify that representative samples of Component-Industrial Flash Fire
 Cold Weather Insulation System: Insulation Padding

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: CAN/CGSB 155.20, Standard on Workwear for Protection Against Hydrocarbon Flash Fire, 2000 Edition

NFPA 2112, Standard on Flame-Resistant Garments for Protection of Industrial Personnel Against Flash Fire, 2012 Edition

Additional Information: See the UL Online Certifications Directory at www.ul.com/database for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's Certification and Follow-Up Service.

Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for use as components of complete equipment submitted for investigation rather than for direct separate installation in the field. The final acceptance of the component is dependent upon its installation and use in complete equipment submitted to UL LLC.

Look for the UL Certification Mark on the product.

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

B. Mahrenholz

Bruce Mahrenholz, Director North American Certification Program
 UL LLC



Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>

CERTIFICATE OF COMPLIANCE

Certificate Number 20190913-MH63679
Report Reference MH63679-20190913
Issue Date 2019-SEPTEMBER-13

Issued to: TOMAX GARMENTS FACTORY
 NO.200 DEYUAN WEST ROAD
 XINXIANG, HENAN, 453700
 CHINA

This certificate confirms that representative samples of Component - Protective Clothing for Protection of Industrial Personnel Against Short-Duration Thermal Exposures From Fire
 See Addendum

Have been investigated by UL in accordance with the component requirements in the Standard(s) indicated on this Certificate. UL Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for installation in complete equipment submitted for investigation to UL LLC.

Standard(s) for Safety: NFPA 2112, Standard on Flame-Resistant Garments for Protection of Industrial Personnel Against Short-Duration Thermal Exposures From Fire, 2018 Edition

Additional Information: See the UL Online Certifications Directory at <https://iq.ulprospector.com> for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Recognized Component Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Recognized Component Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Recognized Component Mark on the product.

B. Mahrenholz

Bruce Mahrenholz, Director North American Certification Program
 UL LLC



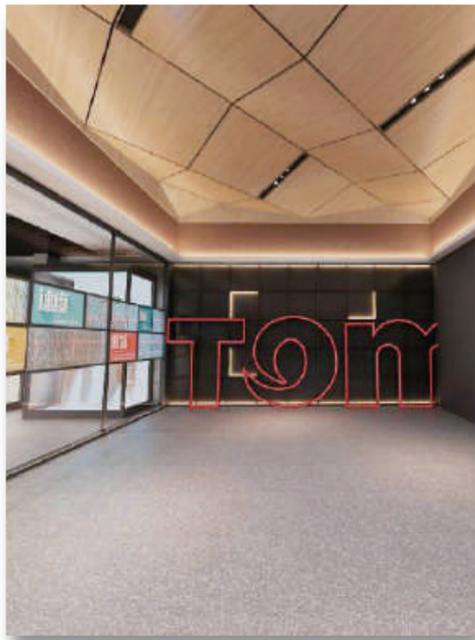
Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>



Office building



WORKSHOP



Show room



FOCUS ON QUALITY AT EVERY STEP



RELIANCE

A customer focused company provides high quality products and service.

TOMAX GARMENTS FACTORY

PRODUCTION CAPACITY

TOMAX GARMENTS FACTORY
• 4 PRODUCTION LINES
• 180 WORKERS

SUBCONTRACTOR 1
• 6 PRODUCTION LINES
• 300 WORKERS

SUBCONTRACTOR 2
• 5 PRODUCTION LINES
• 125 WORKERS



PRODUCTION WORKSHOP



PACKING





Fabric spreader :

Simple operation process,
to improve the efficiency of production,
to ensure high quality.



Model machine

Automatic fabric cutting machine :

High operational fluency precisely
engineered consistency performance



Laboratory :

Guarantee the materials we used is with good quality for each production.
Provides a good database for the materials before each production such
as the strength, the shrinkage, the color fastness, PH value, FR function etc.



PRODUCT LIST



FR24 Jacket (P1)



FR25 Pants (P2)



FR26 BIB Pants (P3)



FR27 Overall (P4)



FR49 Overall (P28)



FR32 Jacket/FR33 Pants (P9-10)



FR34 BIB Pants (P11)



FR35 Overall (P12)



FR28 Jacket/FR Pants (P5-6)



FR30 BIB Pants (P7)



FR46 Jacket/FR47 Pants (P25-26)



FR48 BIB Pants (P27)



FR31 Overall (P8)



FR36 Winter Overall (P13-14)



FR37 Winter BIB Pants (P15)



FR38 Winter Jacket (P16)

PRODUCT LIST

PRODUCT LIST



FR41A Jacket/FR42 Pants
(P17-18)



FR43A BIB Pants
(P19)



FR44A Overall
(P20)



FR002J Jacket/FR002P Pants
(P29)



FR41B Jacket/FR42B Pants
(P21-22)



FR43B BIB Pants
(P23)



FR44B Overall
(P24)



FR002O Overall
(P30)

PRODUCT LIST



FR008J Jacket/FR008P Pants
(P37)



FR008B Bib Pants
(P38)



FR001J Jacket/FR001P Pants
(P33)



FR001B Bib Pants
(P34)



FR006J Jacket/FR006P Pants
(P35)



FR006B Bib Pants
(P36)



FR015J Jacket/FR015P Pants
(P31)



FR015O Overall
(P32)

PRODUCT LIST



HV45 7in1 Jacket (P51)



HV45 7in1 Jacket (P52)



HV50A Jacket (P53)



HV51 Fleece Jacket (P54)



WK01 Vest (P63)



WK02 Jacket (P64)



WK04 BIB Pants (P66)



WK05 Overall (P68)



WK10 Jacket/WK11Pants (P69-70)



WK12 BIB Pants (P71)



WK13 Overall (P72)



WT21 Winter Pants (P73)



WT23 Winter Bodywarmer (P74)



WT14 Softshell Jacket (P75)

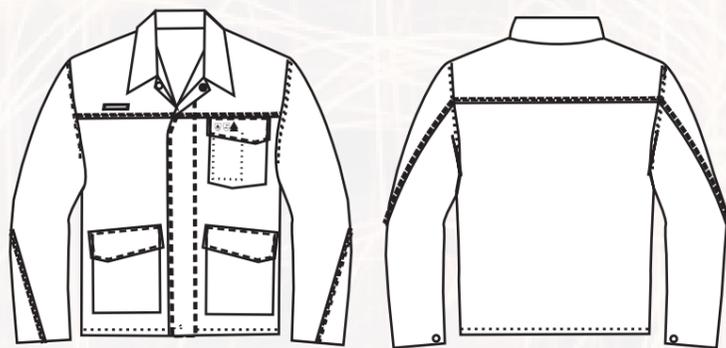


WT16 Softshell Bodywarmer (P76)



OW18 Fleece Jacket (P79)

PRODUCT LIST

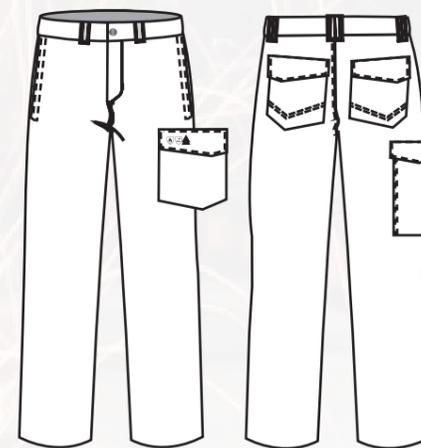


FR24 Jacket

Material: Flame retardant 100% cotton 350g
 1 chest pockets and 2 side pockets with flap and press studs.
 Radio loop on right chest
 Phone pocket in chest pocket
 Ergonomically shaped sleeves, with triple stitching in contrast color
 Front closure with concealed press studs
 Cuffs width-adjustable with covered press studs



EN11612 EN11611 IEC 61482



FR25 Pants

Material: Flame retardant 100% cotton 350g
 2 side pockets
 Thigh pocket with flap and concealed press stud
 Ruler pocket and 2 back pockets with flap and concealed press studs
 Front fly with covered metal zip



EN11612 EN11611 IEC 61482

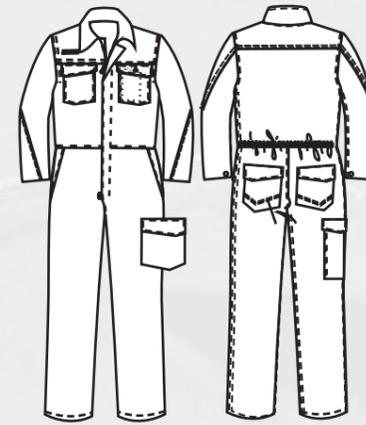


**FR26 BIB Pants**

Material: Flame retardant 100% cotton 350g
 Breast pocket with flap and Velcro fastener
 2 side pockets
 2 slit pockets allowing access to garments underneath
 Thigh pocket with flap and concealed press stud
 Ruler pocket and 2 back pockets with flap and concealed press studs
 Stretch straps with solid buckles
 Front fly with covered metal zip



EN11612 EN11611 IEC 61482

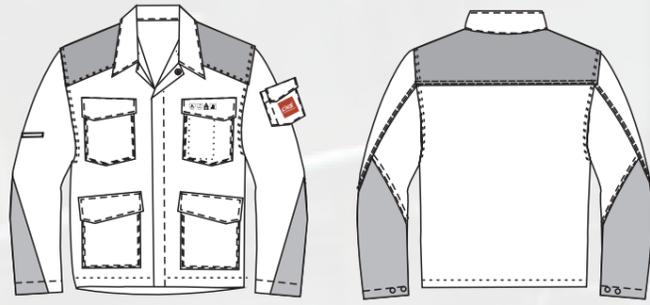
**FR27 Overall**

Material: Flame retardant 100% cotton 350g
 Concealed 2 way brass zipper on front, with flap and press studs.
 Radio loop on front chest.
 2 chest pockets with flap and press studs.
 Phone pocket in left chest pocket
 Ergonomically shaped sleeves, with triple stitching in contrast color
 Cuff width-adjustable with press studs
 Ruler pockets and 2 back pockets with flap and press studs
 2 side pockets
 2 slit pockets allowing access to garments underneath
 Thigh pocket with flap and concealed press stud



EN11612 EN11611 IEC 61482





FR28 Jacket

Material: Flame retardant 99% cotton 1% carbon fiber 350g
 2 chest pockets and 2 side pockets with flap and press studs.
 Sleeve pocket left, with pen compartments.
 Phone pocket in chest pocket
 Ergonomically shaped sleeves
 Front closure with concealed press studs
 Cuffs width-adjustable with covered press studs



EN11612 EN11611 EN1149 IEC 61482



FR29 Pants

Material: Flame retardant 99% cotton 1% carbon fiber 350g
 Contrast elements: waistband, knee pad pockets, hem
 2 side pockets
 Thigh pocket with flap and concealed press stud
 Ruler pocket and 2 back pockets with flap and concealed press stud
 Front fly with covered metal zip
 Hem width-adjustable with Velcro

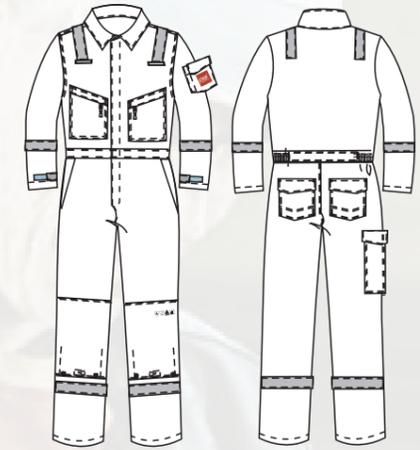
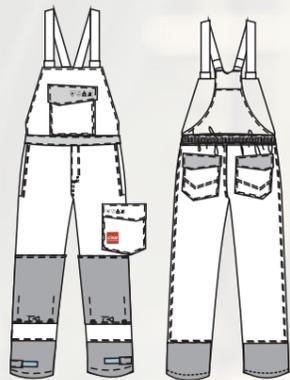


KNEE PAD POCKET EN11612 EN11611 EN1149 IEC 61482



**FR30 BIB Pants**

Material: Flame retardant 99% cotton 1% carbon fiber 350g
 Contrast elements: waistband, flap of pockets, knee pad pockets, hem
 Breast pocket with flap and Velcro fastener
 2 side pockets.
 2 slit pockets allowing access to garments underneath
 Thigh pocket with flap and concealed press stud.
 Ruler pocket and 2 back pockets with flap and concealed press stud
 Stretch straps with solid buckles
 Front fly with covered metal zip
 Hem width-adjustable with Velcro

**FR31 Overall**

Material: Flame retardant 99% cotton 1% carbon fiber 350g
 Concealed 2 way brass zipper on front, with flap and press studs.
 2 radio loops on front chest
 Concealed brass zips on chest pockets.
 Sleeve pocket left, with pen compartments.
 Cuff width-adjustable with Velcro.
 2 flapped back pockets below waist.
 2 back pockets with flap and press studs.
 1 ruler pocket with flap and press studs.
 Knee pad pockets with Velcro and bartacks at the bottom.
 FR-Reflective-tape, 50 mm.





FR32 Jacket

Material: Flame retardant 99% cotton 1% carbon fiber 330g
 Concealed front zipper with 5 snap fasteners
 2 internal breast pockets with flap and zipper closure
 2 radio loops on front chest
 sleeve ends width adjustable with velcro fastener
 FR-Reflective-tape, 50 mm



EN 20471 EN 11612 EN 11611 EN 1149 IEC 61482

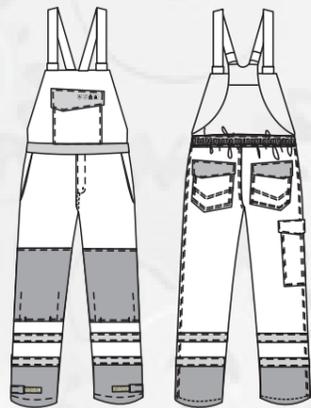


FR33 Pants

Material: Flame retardant 99% cotton 1% carbon fiber 330g
 2 flapped back pockets below waist
 2 back pockets with flap and velcro fastener
 1 ruler pocket with flap and velcro fastener
 Knee pad pockets with bartacks at the bottom
 Front fly with zip and button
 Hem width-adjustable with Velcro
 FR-Reflective-tape, 50 mm

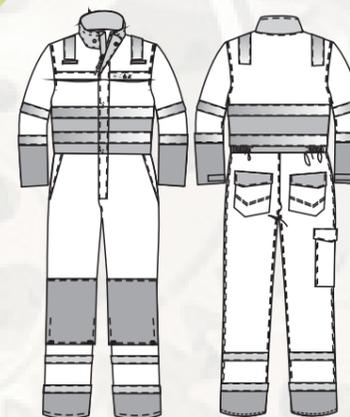


KNEE PAD POCKET EN 20471 EN 11612 EN 11611 EN 1149 IEC 61482



FR34 BIB Pants

Material: Flame retardant 99% cotton 1% carbon fiber 330g
 Bib pocket with flap and velcro fastener
 2 flapped back pockets below waist
 2 back pockets with flap and velcro fasteners
 1 ruler pocket with flap and velcro fastener
 Knee pad pockets with bartacks at the bottom
 Stretch straps with solid buckles
 Front fly with zip and button
 Hem width-adjustable with Velcro
 FR-Reflective-tape, 50 mm



FR35 Overall

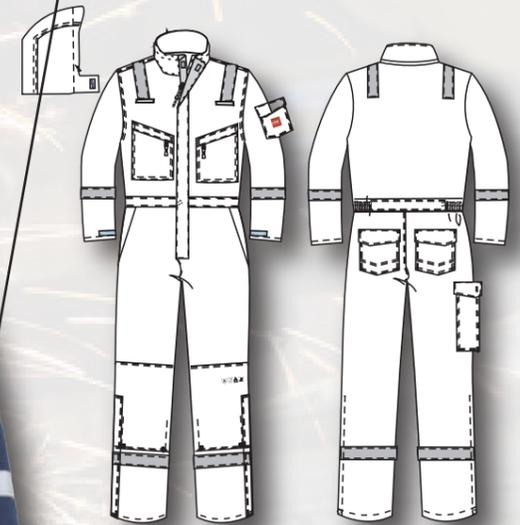
Material: Flame retardant 99% cotton 1% carbon fiber 330g
 Concealed front zipper with 5 snap fasteners
 2 internal breast pockets with flap and zipper closure
 2 radio loops on front chest
 Sleeve and hem width adjustable with velcro fastener
 2 flapped back pockets below waist
 Ruler pocket and 2 back pockets with flap and velcro fastener
 Knee pad pockets with bartacks at the bottom
 FR-Reflective-tape, 50 mm

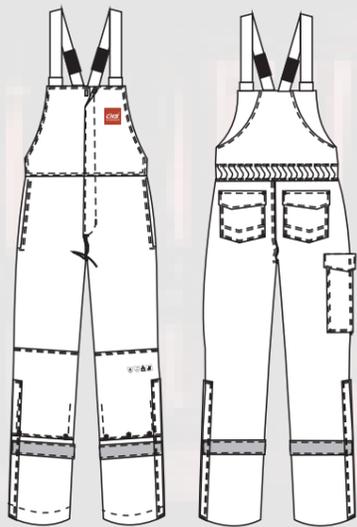




FR36 winter Overall

Material: Flame retardant 99% cotton 1% carbon fiber 350g
 Concealed 2-way brass zipper on front, with flap and velcro fastener.
 Detectable hood
 2 radio loops on front chest
 Concealed brass zips on chest pockets.
 Sleeve pocket left.
 Sleeve ends width adjustable with velcro fastener
 2 flapped back pockets below waist
 2 back pockets with flap and velcro fastener
 1 ruler pocket with flap and velcro fastener
 Knee pad pockets with Velcro and bartacks at the bottom
 Concealed zip opening on lower leg regions with flap and Velcro fastener.
 FR-Reflective-tape, 50 mm





FR37 winter BIB Pants

Material: Flame retardant 99% cotton 1% carbon fiber 350g
 2 side pockets.
 Ruler pocket and 2 back pockets with flap and concealed press stud
 Stretch straps with solid buckles
 Front fly with covered metal zip
 Knee pad pockets with Velcro and bartacks at the bottom
 Concealed zip opening on lower leg regions with flap and Velcro fastener.
 FR-Reflective-tape, 50 mm



FR38 winter Jacket

Material: Flame retardant 99% cotton 1% carbon fiber 350g
 Concealed front zipper with Velcro fastener.
 2 internal breast pockets with flap and zipper closure
 2 side pockets with flap and Velcro fastener
 Sleeve ends width adjustable with velcro fastener
 Detectable hood.
 FR-Reflective-tape, 50 mm





FR41 Jacket

Material: 79% cotton 20%polyester 1%carbon fiber 290g
 Concealed ID pocket
 Concealed front fly zipper with flap and Velcro closure.
 Concealed zipper on left chest pocket.
 Internal pocket with flap on right chest.
 2 side pockets with flap and zipper closure.
 Sleeve and hem ends width adjustable with Velcro fastener.
 FR reflective tape 50mm.
 Flame retardant & Hivis



FR42 Pants

Material: 79% cotton 20%polyester 1%carbon fiber 290g
 Front fly with zip and button.
 2 side pockets.
 Removable nail pockets with zippers and Velcro below waist.
 Leg pockets with flap, telephone pocket and pen pocket.
 Side hammer loop
 2 back pockets with flap and velcro closure
 FR reflective tape 50mm.
 Flame retardant & Hivis





FR43 Bib Pants

Material: 79% cotton 20% polyester 1% carbon fiber 290g
 Bib pocket with flap and Velcro fastener.
 Stretch straps with solid buckles.
 Concealed press studs on the waist sides.
 2 side pockets.
 Removable nail pockets with zippers and Velcro below waist.
 Leg pockets with flap, telephone pocket and pen pocket.
 Side hammer loop
 2 back pockets with flap and velcro closure
 Front fly with zip.
 FR reflective tape 50mm.
 Flame retardant & Hivis



FR44A Overall

Material: 79% cotton 20% polyester 1% carbon fiber 290g
 Concealed ID pocket.
 Concealed front zipper with flap and Velcro closure.
 Concealed zipper on left chest pocket.
 Internal pocket with flap on right chest.
 2 side pockets below waist.
 Leg pockets with flap, telephone pocket and pen pocket.
 Side hammer loop.
 2 back pockets with flap and velcro closure.
 Sleeve ends width adjustable with Velcro fastener.
 FR reflective tape 50mm.
 Flame retardant & Hivis





FR41B Jacket

Material: 79% cotton 20% polyester 1% carbon fiber 350g
 Concealed ID pocket.
 Concealed front fly zipper with flap and Velcro closure.
 Concealed zipper on left chest pocket.
 Internal pocket with flap on right chest.
 2 side pockets with flap and zipper closure.
 Sleeve and hem ends width adjustable with Velcro fastener.
 FR reflective tape 50mm.



FR42B Pants

Material: 79% cotton 20% polyester 1% carbon fiber 350g
 Front fly with zip and button.
 2 side pockets.
 Removable nail pockets with zippers and Velcro below waist.
 Leg pockets with flap, telephone pocket and pen pocket.
 Side hammer loop
 2 back pockets with flap and velcro closure
 FR reflective tape 50mm.





FR43B Bib Pants

Material: 79% cotton 20% polyester 1% carbon fiber 350g
 Bib pocket with flap and Velcro fastener.
 Stretch straps with solid buckles.
 Concealed press studs on the waist sides.
 2 side pockets.
 Removable nail pockets with zippers and Velcro below waist.
 Leg pockets with flap, telephone pocket and pen pocket.
 Side hammer loop.
 2 back pockets with flap and velcro closure.
 Front fly with zip.
 FR reflective tape 50mm.



FR44B Overall

Material: 79% cotton 20% polyester 1% carbon fiber 350g
 Concealed ID pocket.
 Concealed front zipper with flap and Velcro closure.
 Concealed zipper on left chest pocket.
 Internal pocket with flap on right chest.
 2 side pockets below waist.
 Leg pockets with flap, telephone pocket and pen pocket.
 Side hammer loop.
 2 back pockets with flap and velcro closure.
 Sleeve ends width adjustable with Velcro fastener.
 FR reflective tape 50mm.





FR46 Jacket

Material: 60% modacrylic 39% cotton 1% carbon fiber 280g
 Concealed front fly zipper with flap and Velcro closure.
 Protected zipped pocket under storm flap makes it easy to access contents without opening the jacket.
 Form cut sleeves with great freedom of movement.
 Pockets have flap closures to keep sparks out.
 Sleeve and hem ends width adjustable with Velcro fastener.
 For safety: reflectors on flap and sleeves.
 Flame retardant



FR47 Pants

Material: 60% modacrylic 39% cotton 1% carbon fiber 280g
 Front fly with zip and button.
 2 side pockets.
 Ergonomically shaped trouser legs are constructed to follow the body's natural movements.
 Leg pockets with flap, telephone pocket and pen pocket.
 2 back pockets with flap and Velcro closure.
 Adjustable kneepad pockets with flap and top access
 For safety: reflectors on flaps and legs.



FR48 Bib Pants

Material: 60% modacrylic 39% cotton 1% carbon fiber 280g
 Bib pocket with flap and Velcro fastener.
 Stretch straps with solid buckles.
 Concealed press studs on the waist sides.
 Front fly with zip.
 2 side pockets.
 Ergonomically shaped trouser legs are constructed to follow the body's natural movements.
 Leg pockets with flap, telephone pocket and pen pocket.
 2 back pockets with flap and Velcro closure.
 Adjustable kneepad pockets with flap and top access
 For safety: reflectors on flaps and legs.

**FR49 Overall**

Material: 60% modacrylic 39% cotton 1% carbon fiber 280g
 Concealed front fly zipper with flap and Velcro closure.
 Protected zipped pocket under storm flap makes it easy to access contents without opening the garments.
 Form cut sleeves with great freedom of movement.
 Pockets have flap closures to keep sparks out.
 2 side pockets.
 Ergonomically shaped trouser legs are constructed to follow the body's natural movements.
 Leg pockets with flap, telephone pocket and pen pocket.
 2 back pockets with flap and Velcro closure.
 Adjustable kneepad pockets with flap and top access.
 Sleeve and hem ends width adjustable with Velcro fastener.
 For safety: reflectors on flaps, sleeves and legs.



NEW



FR002J Jacket

Material:93%meta aramid 5%para aramid
2%antistatic 200g
Concealed front zipper with flap and snap buttons.
1 radio loop on right chest.
Left breast pocket with flap and Velcro closure.
2 concealed side pockets with Velcro closure.
Width-adjustable cuffs with snap buttons.
FR reflective tape,50mm.
FR thread.

FR002P Pants

Material:93%meta aramid 5%para aramid
2%antistatic 200g
Waistband with a D ring.
2 side pockets and 2 back pockets with Velcro closure.
Front closure with brass zipper and snap button.
Width-adjustable hems with snap buttons.
FR reflective tape,50mm.
FR thread.



NEW



FR002O Overall

Material:93%meta aramid 5%para aramid
2%antistatic 200g
Concealed front zipper with flap and snap buttons.
1 radio loop on right chest.
Left breast pocket with flap and Velcro closure.
2 concealed side pockets with Velcro closure.
Width-adjustable cuffs with snap buttons.
Drape back design for comfort.
Size-adjustable waistband with elastic ribbon.
2 side pockets and 2 back pockets with Velcro closure.
Width-adjustable hems with snap buttons.
FR reflective tape,50mm.
FR thread.



NEW



FR015J Jacket

Material:60% modacrylic 39% cotton,
1% carbon fiber 280g
Concealed front brass zipper and flap and snap buttons.
Concealed phone pocket.
Radio loops on both sides.
Width-adjustable cuffs with Velcro fastener.
FR sewing thread and Double stitched.
Industrial wash, FR reflective tape,50mm.
Hivis yellow with navy blue



FR015P Pants

Material:60% modacrylic 39% cotton,
1% carbon fiber 280g
1 back patch pockets.
1 rule pocket.
2tier knee pad pockets.
Triple-stitched seams.
FR sewing thread and Double stitched.
Industrial wash,FR reflective tape,50mm.
Hivis yellow with navy blue



NEW



FR0150 Overall

Material:60% modacrylic 39% cotton,
1% carbon fiber 280g
Front fly with snap buttons.
Radio loops on both sides.
2 chest pockets with concealed brass zips.
Size-adjustable cuffs with Velcro fastener.
1 back pocket.
1 rule pocket .
2tier knee pad pockets.
FR sewing thread and Double stitched.
Industrial wash, FR reflective tape,50mm.
Hivis yellow with navy blue



NEW

FR Rain001 Jacket

Concealed FR resin zipper with FR velcro fastener.
 2 breast pockets with flap and FR velcro fastener.
 Left breast pocket with one pen compartments.
 Size-adjustable cuffs with FR velcro fastener.
 2 side pockets with FR velcro closure.
 Back with FR ventilative mesh.
 Lengthening of the rear hem increases back coverage.
 Detachable hood with spring fastener.
 FR heat press reflective tape, 50mm.

FR Rain001 Pants

Side-adjustable waistband with elastic ribbon on both sides.
 Front fly with FR resin zipper closure.
 2 back pockets and left leg pocket with flap and Velcro fastener.
 Left leg pocket with one tool pocket.
 Size-adjustable hem with Velcro fastener.
 FR heat press reflective tape, 50mm.

Material: 3-layer fabric: Ripstop polyester fabric (& AST)
 + breathable FR PU + inherent FR knitting;
 100D fabric for Hivis yellow ± 300 g/m² ;
 300D fabric for Hivis orange ± 340 g/m²



NEW



FR Rain 001 Bib Pants

Adjustable straps with buckles.
 Adding stretch straps on the back sides for comfort.
 Size-adjustable waistband with FR elastic ribbon on back side.
 Front fly with FR resin zipper closure.
 1 leg pocket with flap and FR velcro fastener.
 1 tool pocket on leg pocket.
 Size-adjustable hem with FR velcro fastener.
 FR heat press reflective tape, 50mm.

Material: 3-layer fabric: Ripstop polyester fabric (& AST)
 + breathable FR PU + inherent FR knitting;
 100D fabric for Hivis yellow ± 300 g/m² ;
 300D fabric for Hivis orange ± 340 g/m²



NEW



FR Rain006 Jacket

Material: 3layers Bonding Fabric
 Nomex 4.8OZ+PTFE+FR Rayon
 Concealed front zipper and flap and snap buttons.
 2 side pockets with flap and Velcro fasteners.
 Width-adjustable cuffs with snap buttons.
 2 side seams with open-end zippers.
 Back access slot for fall protection harness.
 Size-adjustable rear hem with elastic ribbon.
 Detachable hood with spring fastener.
 50mm yellow-silver FR reflective tape.

FR Rain006 Pants

Material: 3layers Bonding Fabric
 Nomex 4.8OZ+PTFE+FR Rayon
 Size-adjustable waistband with elastic ribbon.
 2 side pockets.
 One left cargo pocket with flap and snap button.
 Hem with open-end zipper.
 50mm yellow-silver FR reflective tape.

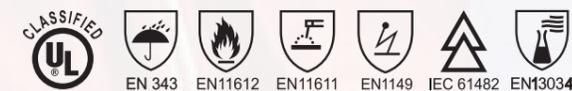


NEW



FR Rain006 Bib Pants

Material: 3layers Bonding Fabric
 Nomex 4.8OZ+PTFE+FR Rayon
 Size-adjustable bib stretch straps with buckles.
 Size-adjustable waistband with elastic ribbon at both sides.
 Hem with open-end zipper.
 50mm yellow-silver FR reflective tape.



NEW



FR Rain008 Jacket

Material:98%PES 2%Carbon+PU coated
 Concealed front zipper and flap and Velcro fastener.
 2 side pockets with flap and Velcro fastener.
 Width-adjustable cuffs with Velcro fastener.
 Size-adjustable hood with drawstring.
 Removable, size-adjustable hood that can be fixed on
 the front and stored in the collar to stand up.
 FR reflective tape,50mm.

FR Rain008 Pants

Material:98%PES 2%Carbon+PU coated
 Size-adjustable waistband with elastic ribbon.
 2 side pockets with Velcro closure.
 Width-adjustable hems with Velcro fastener.
 FR reflective tape,50mm.



EN 343 EN 20471 EN 14116 EN 1149 EN 13034



NEW



FR Rain008 Bib Pants

Material:98%PES 2%Carbon+PU coated
 Size-adjustable stretch straps with buckles.
 Concealed front zipper and flap and snap buttons.
 Left breast pocket with flap and Velcro closure.
 Size-adjustable waistband with elastic ribbon at both sides.
 FR reflective tape,50mm.



EN 343 EN 20471 EN 14116 EN 1149 EN 13034



FR013 Softshell Jacket

Material: 100% polyester with PTFE membrane and aramid knitted fabric
 Concealed front zipper and flap and Velcro fasteners.
 Right chest pocket with flap and Velcro closure.
 Left chest pocket with zipper closure.
 2 side pockets.
 Width-adjustable cuffs with Velcro fastener.
 Detachable and size-adjustable hood with spring fastener.
 Segmented heat reflective tapes, 50mm.



EN11612



EN20471

FR014 Denim Pants

Lighter weight 10.5 oz. 99% cotton/1% spandex
 flame-resistant stretch denim.
 Relaxed fit; classic 5-pocket jean design.
 High quality brass zipper with flame-resistant
 aramid zipper tape.
 Brass button waistband closure.
 Stitched with rugged flame-resistant aramid threads.
 Machine washable with FR protection through
 100 home washes.
 NFPA 2112; NFPA 70E



NEW



FR009 Hooded Jacket

Material: 68% Modacrylic 28% Cotton 4% Spandex 350g
 Front hidden zip with chin protection and storm flap.
 2 side pockets.
 Cuffs and hem with FR rib.
 Covering stitch for fashion.
 Side-adjustable hood with drawstring.



EN11612



EN11611



EN1149



IEC 61482

NEW



FR004 Shirt

8oz Flame-Resistant cotton
Denim and plaid shirt.
FR denim and plaid fabric stitching.
Denim fabric at the bottom of sleeves
improves its stain resistant and wear resistant.
Chest pocket with flap and snap fasteners.
Chest pocket with one pen pocket.
ASTM F1506, NFPA 70E, ARC2, NFPA2112



FR016 Denim Pants

14oz Flame-Resistant cotton
Relaxed fit; classic 5-pocket jean design.
High quality brass zipper with
flame-resistant aramid zipper tape.
Brass button waistband closure.
Stitched with rugged flame-resistant aramid threads.
Machine washable with FR protection through
100 home washes.
ASTM F1506, NFPA 70E, ARC2, NFPA2112



FR007 T-Shirt

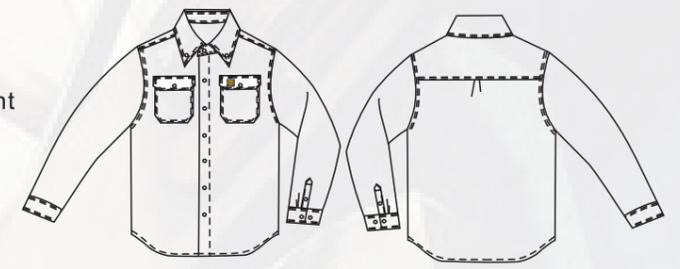
7 ounce flame-resistant cotton jersey knit.
Premium heat-resistant urea buttons.
Stitched with durable FR aramid threads.
Tested to retain protection through 100 washes.
ASTM F1506, NFPA 2112 certified
NFPA 70E certified





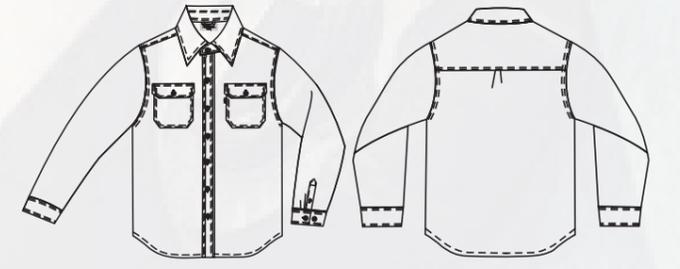
NO.1 FR71006 Shirt

FABRIC:100%cotton 260gsm Flame retardant
 Front closure with snap buttons
 2 chest pockets with flaps and snap buttons
 Cuffs with snap buttons



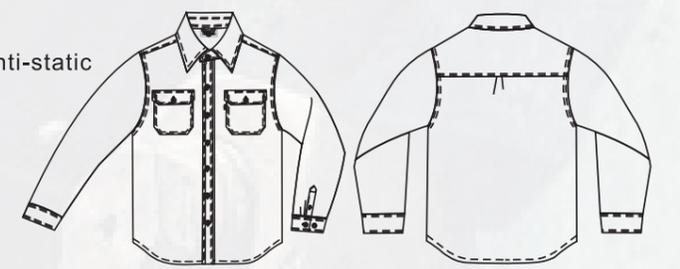
NO.2 FR8DS Shirt

FABRIC: Flame retardant denim 8oz
 Stand-up collar
 Front closure with FR buttons
 2 chest pockets with FR buttons closure
 Cuffs closure with FR buttons
 Double top-stitching
 Curved bottom
 FR thread
 Any size and color available



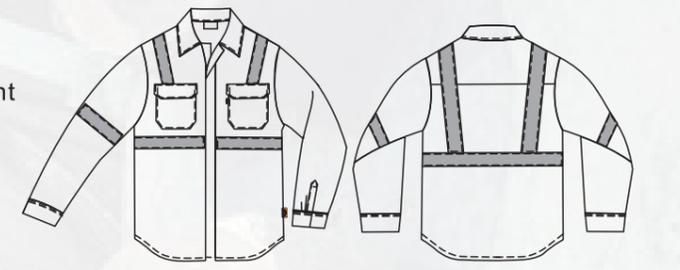
NO.3 FR180S Shirt

FABRIC: 80%modacrylic 19.8%cotton 0.2%anti-static
 180gsm Permanent flame retardant
 Stand-up collar
 Front closure with FR buttons
 2 chest pockets with FR buttons closure
 Cuffs closure with FR buttons
 Double top-stitching
 Curved bottom
 FR thread
 Any size and color available



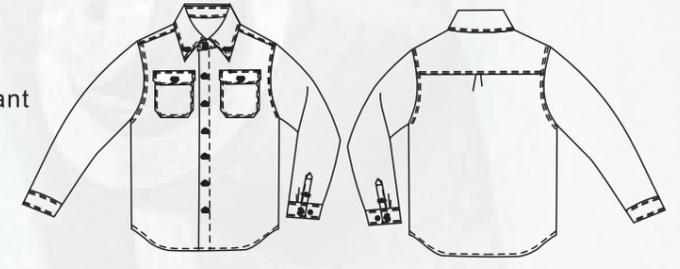
NO.4 FR220SR Shirt

FABRIC:100%cotton 220gsm Flame retardant
 Turn-down collar
 Front closure with concealed snaps
 2 chest pockets closure with concealed snaps
 Cuffs closure with concealed snaps
 Curved bottom
 5cm width FR reflective tape
 FR thread
 Any size and color available



NO.5 FR71005 Shirt

FABRIC:100%cotton 240gsm Flame retardant
 Front closure with four-hole buttons
 2 chest pockets with four-hole buttons
 Cuffs with four-hole buttons



ASTM NFPA
 F1506 2112
 EN14116 EN11612 EN11611 EN1149



NO.1

NO.2



NO.3



NO.4



NO.5



NO.6



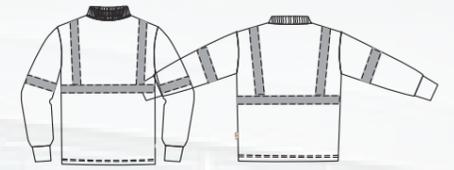
NO.7



NO.8

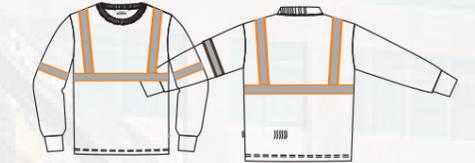
NO.1 FR220TSRR T-Shirt

FABRIC: 100% cotton 220gsm Flame retardant
FR rib-knit high neck
FR rib-knit cuffs
5cm silver FR reflective tape
Any size and color available



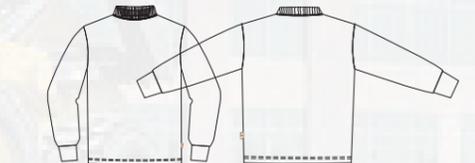
NO.2 FR220TSRO T-Shirt

FABRIC: 100% cotton 220gsm Flame retardant
FR rib-knit crew neck
FR rib-knit cuffs 5cm width orange-silver
FR reflective tape
Any size and color available



NO.3 FR220TLS T-Shirt

FABRIC: 100% cotton 220gsm Flame retardant
FR Rib-knit crew neck collar
Any size and color available



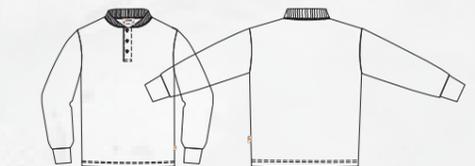
NO.4 FR210TS T-Shirt

FABRIC: 38% cotton 60% modacrylic 2% anti-static 210gsm
Permanent flame retardant
Knit henley collar
Three FR buttons placket
Any size and color available



NO.5 FRFL7401 T-Shirt

FABRIC: 60% modacrylic 39% cotton 1% anti-static 320g
Permanent FR
Kangaroo pocket at front
Rib knit fabric at wrist and bottom
FR tape across the chest, sleeves and shoulder



NO.6 FR71003 T-Shirt

FABRIC: 100% cotton 220gsm Flame retardant
FR rib-knit crew neck collar
Any size and color available



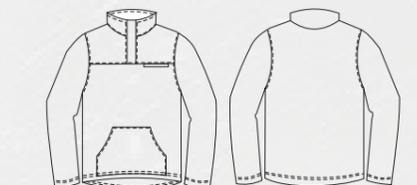
NO.7 FR71004 Hooded Jacket

FABRIC: 100% cotton 340gsm Flame retardant
Front closure with brass zipper
2 slanted pockets
Bottom and cuffs with elastic bands
Hood with adjustable string



NO.8 FRFL7402 T-Shirt

FABRIC: 60% modacrylic 39% cotton 1% anti-static 320g
Permanent FR
Kangaroo pocket at front
Polo collar with press buttons closure
1 chest pocket with plastic zipper closure



FR011 Aprons

9 oz. flame-resistant cotton.
Shoulder and waist harness straps.
NFPA 2112; NFPA 70E

**NEW****FR012 Hoods**

Flame-resistant cotton.
Single layer.
Ergonomic contoured fit.
Circular neck drape.
NFPA 70E compliant.

**FR010 Sleeves**

19" 9 oz. flame-resistant cotton sleeves.
Wide upper arm elastic and elastic wrist cuff.
Reinforcement layer for durability.
Black with royal blue.
Hivis Yellow.
NFPA 2112; NFPA 70E



**WFR-76001J Jacket**

Fabric: Flame resistant fabric
100% cotton 310g
Front snaps with covered fly
1 chest pocket with flap and velcro
2 below pockets with flaps and velcros

WFR-76001B BIB Pants

Fabric: Flame resistant fabric 100% cotton 310g
Adjustable straps with buckles
1 bib pocket
Fly with zipper
2 slanted pockets
1 back pocket with flap and velcro
1 tool pocket
Any size and color available

**WFR-76001P Pants**

Fabric: Flame resistant fabric
100% cotton 310g
Front fly with brass zipper
2 side pockets
2 back pocket with flaps and velcros
1 tool pocket
Any size and color available

WFR-76002 Overall

Fabric: Flame resistant fabric 100% cotton 310g
Front snaps with cover fly
2 chest pockets with flaps and velcros
2 side pockets
1 back pocket with flap and velcro
Elastic band at back waist
1 tool pocket
Any size and color available

**FR59 Jacket**

Fabric: 100% cotton 330g
1 radio loop above left chest pocket
2 front chest pockets
9 concealed snaps
on front of the placket, the pocket flaps & the cuffs

**FR60 Pants**

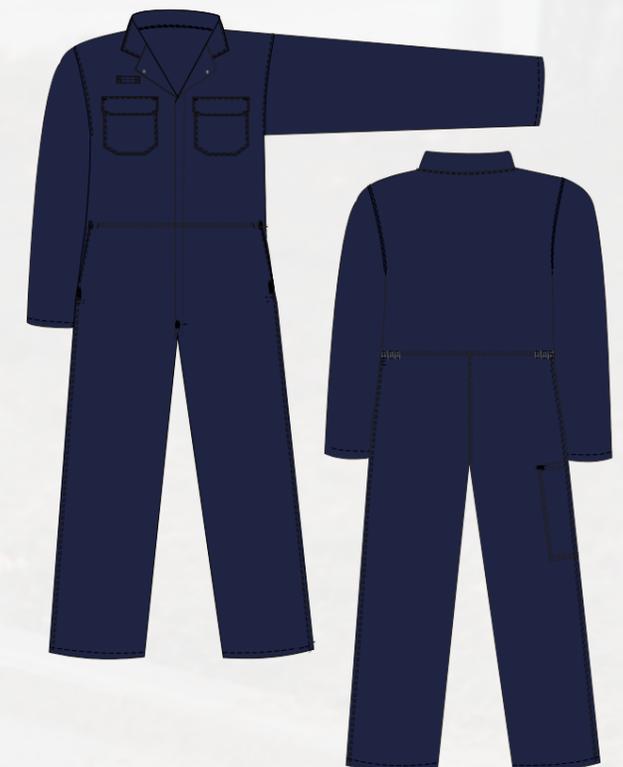
Fabric: 100% cotton 330g
2 side slant pockets
zipper & fixed snaps at waist

**FR61 BIB Pants**

Fabric: 100% cotton 330g
adjustable waist
1 front pocket
2 side pockets & 1 rule pocket
buckets used in the braces

**FR62 Overall**

Fabric: 100% cotton 330g
1 radio loop above left chest pocket
2 front chest pockets
9 concealed snaps
on front of the placket, the pocket flaps & the cuffs
1 rule pocket





Whether as a heavily lined winter jacket, light rain jacket, or reversed as a plain winter jacket, practical body warmer – with this waterproof 7 in 1 jacket you are well equipped for every season.

HV 45 7 in 1 Jacket

Outshell Material: 100% polyester 300Dx300D oxford
 Lining: Nylon mesh
 Rain jacket and winter jacket features:
 Reflective stripes
 Detachable hood with draw strings
 Front zip with storm flap and press studs
 2 side pockets with flap and press studs
 Mobile phone pocket with Velcro fastener

Material: 65% polyester 35% cotton 70g
 Padding: 100% polyester 160g
 Quilted reversible winter jacket and body warmer features:
 As a high-vis winter jacket and body warmer with reflective stripes and 2 side pockets.
 As a black winter jacket and body warmer with 2 side pockets.





HV 50A Jacket

Outshell Material: Softshell 100% polyester 290g
 Lining: 100% polyester
 Padding: 100% polyester 180gsm
 Water-repellent, windproof and breathable.
 Fluorescent and with vertical and chevroned crossed reflective strips.
 Front hidden zip with chin protector and internal storm flap.
 Soft micro fleece inside collar.
 Quilt lining on inside.
 Detachable hood.
 Rib (hidden in storm flap) at cuffs.



HV 51 Fleece Jacket

Material: 100% polyester microfleece 360g
 Fluorescent and with crossed reflective tapes.
 Front zip with chin protector and internal storm flap.
 Chest pocket with vertical zip and easy access - suitable for mobile phone.
 2 side pockets with flap.
 Elastic at the cuffs.
 Adjustable elastic drawstring at waist.





NO.1

NO.2

NO.3



NO.4

NO.5



NO.6

NO.1 **WYF 5601 Jacket**

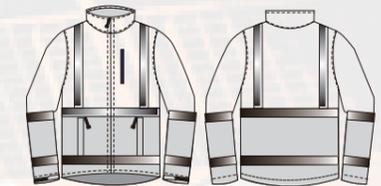
FABRIC: 100% polyester polar fleece 280g
 Front fly with zipper.
 2 slanted pockets with zipper.
 Reflective tapes.

NO.2 **WYF 5602 Jacket**

FABRIC: 100% polyester polar fleece 280g
 Front fly with zipper.
 2 slanted pockets with zipper.
 Reflective tapes.

NO.3 **WY 3604 Jacket**

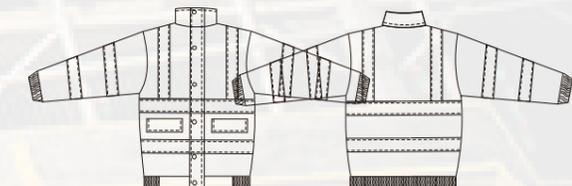
Out Layer: 100% polyester 290g
 Medium Layer: TPU film-Waterproofness on 3000mm and MVP 3000g/m²/hours.
 Inside layer: 100% polyester fleece.
 High-quality reflective bands 3M Scotchlite®.
 Contrasting front spliced work panel.
 High neckline for greater wind protection.
 2 side pockets with zipper.

NO.4 **WY 3603 Jacket**

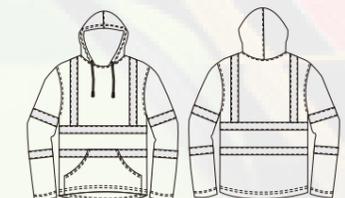
Out Layer: 100% polyester.
 Medium Layer: TPU film-Waterproofness on 5000mm and MVP on 500-1000g/m²/hours.
 Inside layer: 100% polyester fleece.
 Fabric weight : 320g
 Fabric and reflective tapes pass EN20471.
 2 hidden side pockets with zipper.
 Adjustable cuffs with Velcro fasteners.
 Reflective tapes on the front, back and on the arms.

NO.5 **WY 001J Jacket**

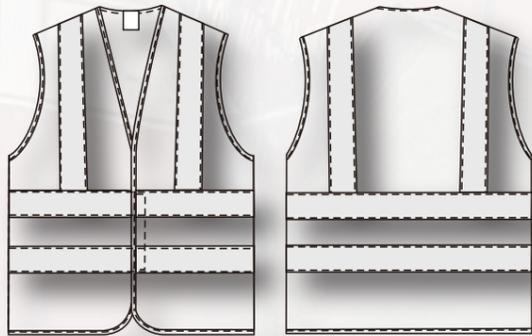
Out Shell: 100% polyester oxford, PU coating.
 Lining and Padding: 100% polyester 180g
 Front plastic zipper with covered fly.
 Fly fastening with 5 snaps.
 2 below pockets with flaps.
 Elastic cuffs.
 Reflective tapes.

NO.6 **WY 5603 Jacket**

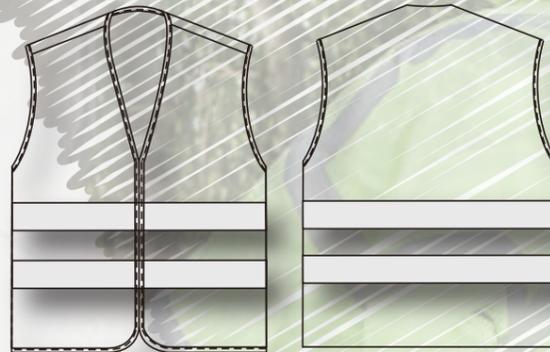
FABRIC: 100% polyester 300g
 Fabric and reflective tapes pass EN20471.
 Large kangaroo pocket.
 Reflective tapes on the front, back and on the arms.



EN 20471


WS 1801 Safety Vest

FABRIC: 100% polyester knitting fluo fabric.
 Reflective tape: EN 20471 class 2.
 Fluorescent yellow, orange.


WS 1804 Safety Vest

FABRIC: 100% polyester knitting fluo fabric
 Reflective tape: EN 20471 class 2
 Fluorescent yellow, orange


EN 20471

NO.1
NO.1 WY 003 Jacket

Lining: 100% polyester
 Padding: 100% polyester 120g
 Out Shell 100% polyester oxford, breathable and moisture permeable + 100% polyester polar fleece 240gsm.
 Fly with plastic zipper.
 1 right chest pocket with a small card pocket.
 1 left zip pocket.
 2 below pockets.
 Reflective tapes.
 Detachable sleeves.
 Rib cuffs.

NO.2 WY 002 Jacket

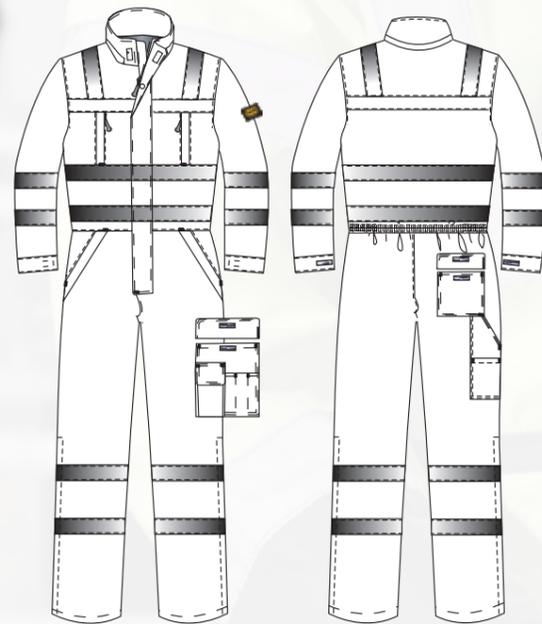
Lining: 100% polyester
 Padding: 100% polyester 160g
 Out Shell: 100% polyester oxford, water proof and non-breathable.
 Front plastic zipper with covered fly.
 Fly fastening with 5 snaps.
 2 below pockets with flaps.
 Reflective tapes.

NO.3 WY 001P Pants

Lining: 100% polyester.
 Padding: 100% polyester 180g
 Out Shell: 100% polyester Oxford, PU coating.
 Fly with plastic zipper.
 2 side pockets.
 Reflective tapes on the legs.


NO.2

NO.3



WY 1601 Overall

FABRIC: Oxford 100% polyester with PU coating 190g
 Fabric and reflective tapes pass EN20471.
 Front closure with zipper and Velcro fastening.
 2 chest pockets with concealed zippers.
 1 leg pocket with pen pockets and mobile pockets.
 1 hip pocket.
 1 rear tool pocket.
 Reflective tapes on the front, back, on the arms and legs.



EN 20471



NO.1

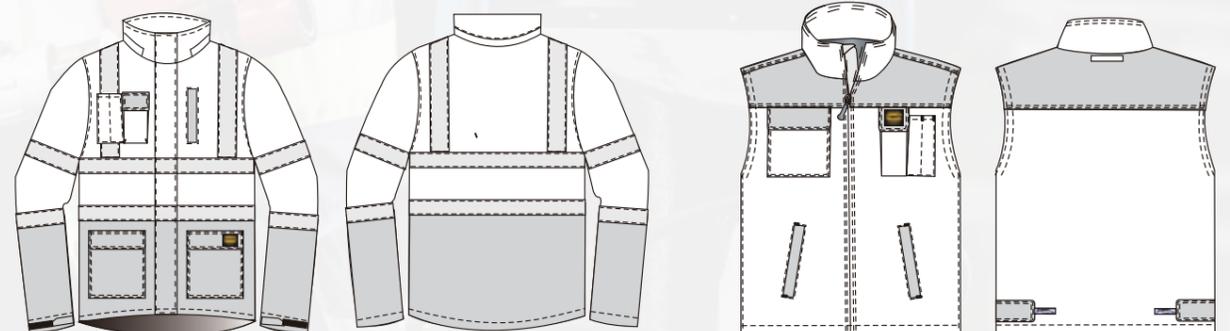
WY 3606 Jacket

FABRIC: Oxford 100% polyester with PU coating 190g
 Fabric and reflective tapes pass EN20471.
 Front closure with zipper and Velcro fastening.
 2 chest pockets with concealed zippers.
 1 leg pocket with pen pockets and mobile pockets.
 1 hip pocket.
 1 rear tool pocket.
 Reflective tapes on the front, back, on the arms and legs.

NO.2

WY 3607 Jacket

FABRIC: Oxford 100% polyester with PU coating 190g
 Fabric and reflective tapes pass EN20471.
 Front fly with zipper.
 2 chest pockets.
 2 slanted pockets with concealed zippers.
 Reflective piping on the chest and back of shoulder.



NEW



HV 003 Technical Chainsaw Jacket

Material: 60% cotton 40% polyester 270g
 Concealed front zipper with flap and snap buttons.
 Right chest pocket with reflective zip.
 Left chest accordion pocket with Velcro closure.
 2 side pockets.
 Width-adjustable cuffs with Velcro fastener.
 Segmented heat transfer tapes on the shoulders.
 Reflective trimming at front seams.
 Reinforced elbows thanks to Cordura®.
 Back ventilation.

EN381-5



Klasse1 20m/s

HV 003 Technical Chainsaw Bib Pants

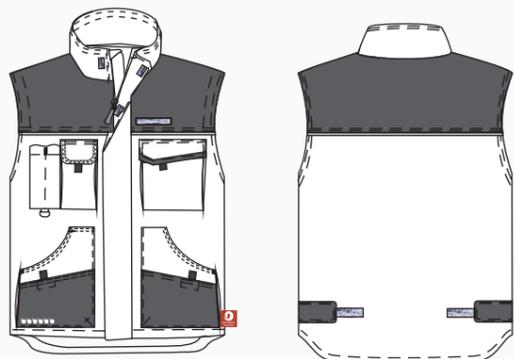
NEW

Outside fabric : 60% cotton 40% polyester 270g/m²
 Anti-breaking complex: 9 layers , 100% PES
 Lining 100% poly, 60 g/m²
 Size-adjustable bib straps with elastic braces.
 Size-adjustable waistband with elastic ribbon.
 2 side pockets with reflective zip.
 2 back pockets and 1 tool pocket.
 Reflective trimming at knee circumference.
 Reinforced knees thanks to Cordura®.
 Front legs with cut protection inserts.
 Segmented heat transfer tapes on the rear legs.
 Conform to: EN381-5:1995 : PROTECTIVE CLOTHING
 FOR USERS OF HAND-HELD CHAINSAWS.
 A - Type of the leg-shields (Type A / or Type B / or Type C).
 1 - Speed of the chain : Classify 1 = 20m/s ;
 Classify 2 = 24m/s ; Classify 3 = 28m/s.

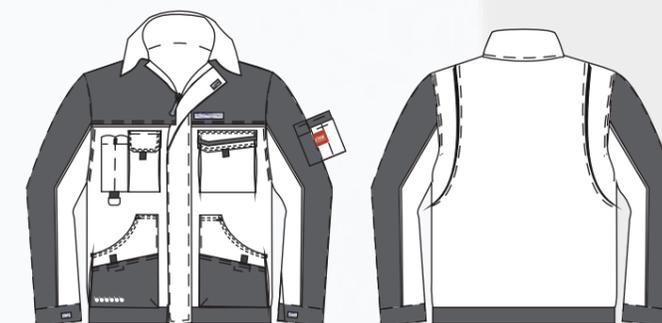


**WK01 Vest**

Material: Canvas 65% polyester 35% cotton 320g
 Left breast pocket with flap and Velcro fastenings,
 right with mobile phone and pen compartments.
 2 large side pockets with Cordura® reinforcement.
 Adjustable waistband with Velcro fastener.
 For safety: Reflective piping on the chest and back.
 Concealed front YKK® zip with flap and Velcro fastener.

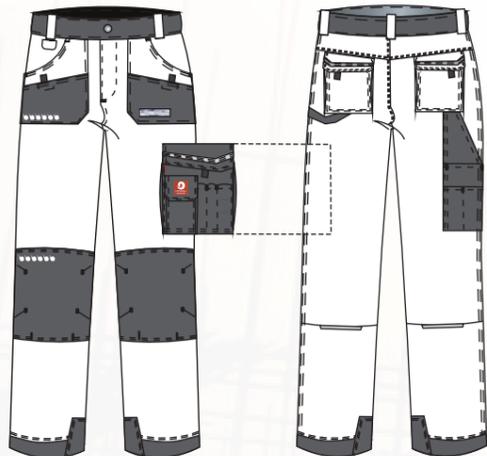
**WK02 Jacket**

Material: Canvas 65% polyester 35% cotton 320g
 Left breast pocket with flap and Velcro fastenings,
 right with mobile phone and pen compartments.
 Sleeve pocket left, with pen compartments.
 2 large side pockets with Cordura® reinforcement.
 Comfortable pleat in the back.
 Adjustable cuffs with Velcro fastenings.
 For safety: Reflective piping on the chest and sleeves.
 Concealed front YKK® zip with flap and Velcro fastenings.

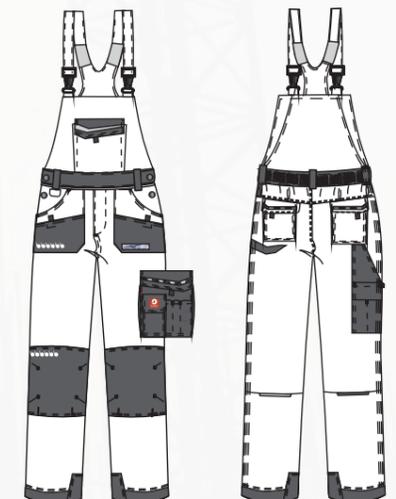


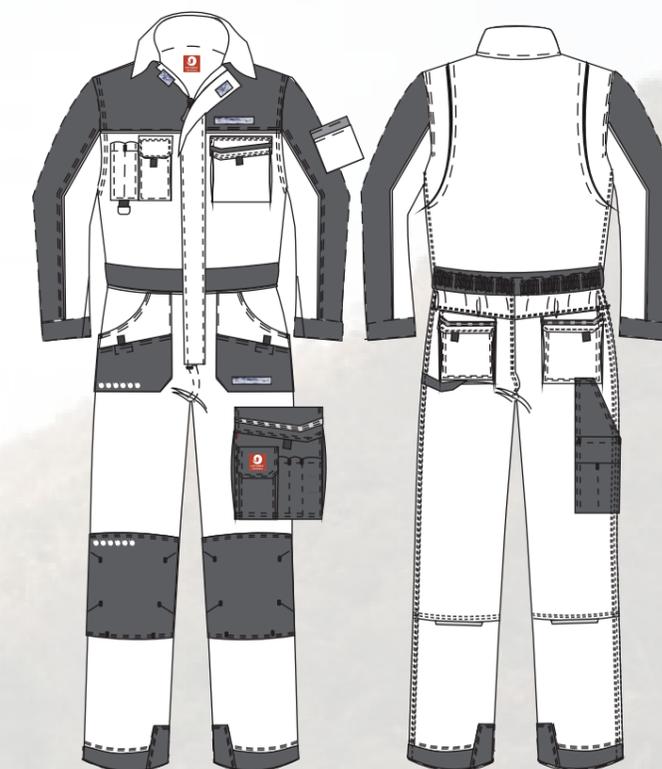
WK03 Pants

Material: Canvas 65% polyester 35% cotton 320g
 Knee pad pockets and leg hem reinforced with Cordura®.
 2 large expanding front pockets with Cordura® reinforcement.
 2 seat pockets, with flap and Velcro closure.
 Multi-functional thigh pocket with flap and Velcro fastening,
 attached mobile phone pocket and tool compartments.
 For safety: reflectors on back leg and flap of thigh pockets & seat pockets
 Hammer loop on the left.
 Two yard stick pockets on the right back, with pen compartments.
 Belt loops and YKK® zip.

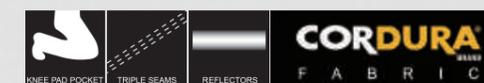

WK04 BIB Pants

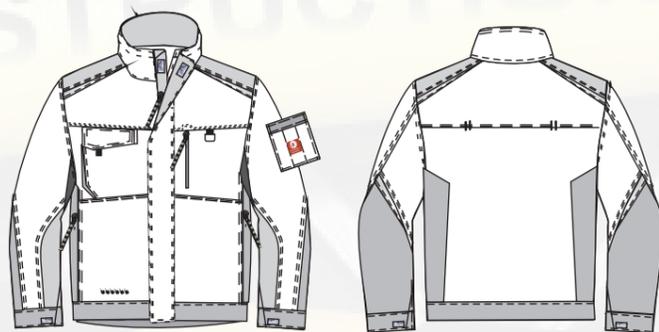
Material: Canvas 65% polyester 35% cotton 320g
 Knee pad pockets and leg hem reinforced with Cordura®.
 Elasticated waistband.
 Breast pocket with flap and Velcro fastenings.
 Elastic braces with sturdy clip buckles
 2 large expanding front pockets with Cordura® reinforcement.
 2 seat pockets, with flap and Velcro closure.
 Multi-functional thigh pocket with flap and Velcro fastening,
 attached mobile phone pocket and tool compartments.
 For safety: reflectors on front waist, back leg and flap of pockets.
 Hammer loop on the left.
 Two yard stick pockets on the right back, with pen compartments.
 Belt loops and YKK® zip.




WK05 Overall

Material: Canvas 65% polyester 35% cotton 320g
 Knee pad pockets and leg hem reinforced with Cordura®.
 Left breast pocket with flap and Velcro fastenings, right with mobile phone and pen compartments.
 Sleeve pocket left, with pen compartments.
 Comfortable pleat in the back.
 Adjustable cuffs with Velcro fastenings
 Elasticated waistband.
 2 large expanding front pockets with Cordura® reinforcement.
 2 seat pockets, with flap and Velcro closure.
 Multi-functional thigh pocket with flap and Velcro fastening, attached mobile phone pocket and tool compartments.
 For safety: reflectors on back leg and flap of pockets
 Hammer loop on the left.
 Two yard stick pockets on the right back, with pen compartments.
 Concealed front 2-way YKK® zip.




WK10 Jacket

Material: 65% polyester 35% cotton 250g
 Upright collar with microfleece inside
 Left chest pocket and two side pockets with zip
 Right chest pocket with flap and Velcro fastener
 Optimum air circulation thanks to the vents on back.
 For safety: reflectors on yoke and sleeves.
 Anatomically shaped sleeves with three pen compartments on left
 Concealed front YKK® zip with flap and Velcro fastener.


WK11 Pants

Material: 65% polyester 35% cotton 250g
 Knee pad pockets reinforced with Cordura®.
 Waistband with elasticated side elements, softly roughened on the inside
 Preformed knee zones with knee pad pockets, with Velcro fastener at the top.
 2 side and 2 back pockets, one with Velcro fastener
 Functional ruler pocket and multi-compartment thigh pocket
 For safety: reflectors on the leg
 Belt loops and YKK® zip.





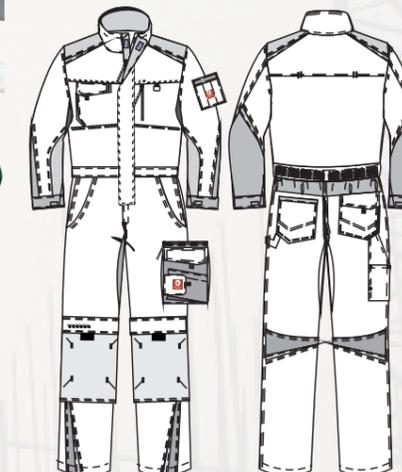
WK12 BIB Pants

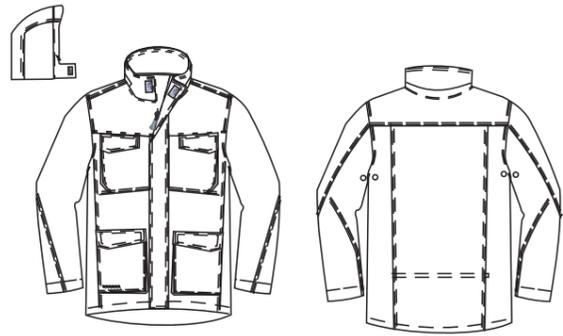
Material: 65% polyester 35% cotton 250g
 Knee pad pockets reinforced with Cordura®.
 Waistband with elasticated side elements, softly roughened on the inside.
 Breast pocket with flap and Velcro fastenings.
 Elastic braces with sturdy clip buckles.
 Stretch fabric on waistband at the back for wearing comfort.
 Preformed knee zones with knee pad pockets, with Velcro fastener at the top.
 2 side and 2 back pockets, one with Velcro fastener.
 Functional ruler pocket and multi-compartment thigh pocket.
 For safety: reflectors on the leg.
 Belt loops and YKK® zip.



WK13 Overall

Material: 65% polyester 35% cotton 250g
 Knee pad pockets reinforced with Cordura®.
 Upright collar with microfleece inside.
 Optimum air circulation thanks to the vents on back.
 2 breast pockets, left with zip, and right one with flap and Velcro closure.
 Anatomically shaped sleeves with three pen compartments on left
 2 slit pockets allowing access to garments underneath
 Preformed knee zones with knee pad pockets, with Velcro fastener at the top.
 2 side and 2 back pockets, one with Velcro fastener.
 Functional ruler pocket and multi-compartment thigh pocket.
 For safety: reflectors on shoulder, leg and sleeves.
 Concealed front YKK® zip with flap and Velcro fastener.





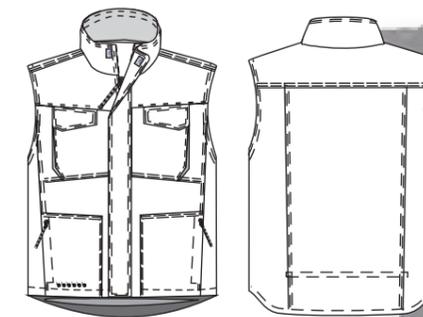
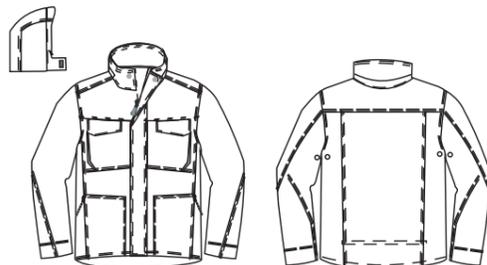
WT21 winter Parka

Out shell material: 100% nylon oxford with PU-coating, windproof, waterproof and breathable.
 Lining: 100% polyester
 Padding: 100% polyester 180g
 Lining material: 100% polyester
 4 front pockets with flap and Velcro fastening
 Mobile phone pocket inside with Velcro fastening
 Concealed front 2-way zip YKK® with storm flap and Velcro fastener
 Concealed elasticated cuffs
 Quilt lining on inside
 Underarm ventilation
 Detachable hood
 Waterproof seams
 3-layer laminate



WT22 winter jacket

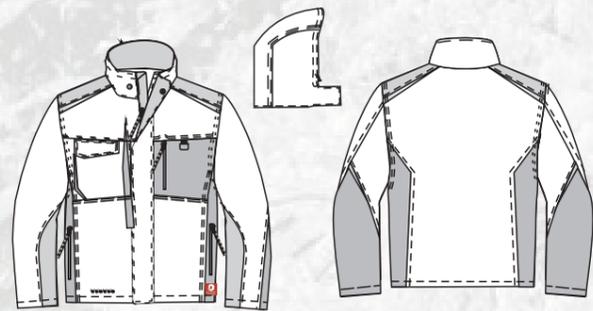
Out shell material: 100% nylon oxford with PU-coating, windproof, waterproof and breathable.
 Lining: 100% polyester
 Padding: 100% polyester 180g
 2 breast pockets with flap and Velcro fastening
 2 side pockets with zippers closure
 Mobile phone pocket inside with Velcro fastening
 Concealed front 2-way zip YKK® with storm flap and Velcro fastener
 Concealed elasticated cuffs
 Quilt lining on inside
 Underarm ventilation
 Detachable hood
 Waterproof seams



WT23 winter bodywarmer

Out shell material: 100% nylon oxford with PU-coating, windproof, waterproof and breathable.
 Lining: 100% polyester
 Padding: 100% polyester 180g
 Lining material: 100% polyester
 2 breast pockets with flap and Velcro fastening
 2 side pockets with zippers closure
 Mobile phone pocket inside with Velcro fastening
 Concealed front 2-way zip YKK® with storm flap and Velcro fastener
 Quilt lining on inside
 Waterproof seams
 3-layer laminate





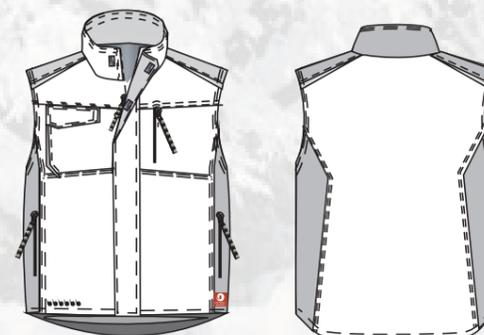
WT14 Softshell Jacket

Out shell Material: 96% polyester 4% spandex 320g
 Lining Material: 100% polyester; Thermo silver lining
 Water-repellent, windproof and breathable
 Quilt lining with the thermo-reflector zone in the back keeps you warm in cold days.
 Soft micro fleece inside collar.
 Hidden zip with chin protector.
 2 side pockets, 2 inner pockets and 1 breast pocket, each with zip
 Right chest pocket with flap and Velcro fastener
 Detachable, size-adjustable hood.
 Elastic inner sleeves.
 Adjustable hem
 Reflectors for safety are integrated into the dividing seams.
 3-layer laminate



WT16 Softshell bodywarmer

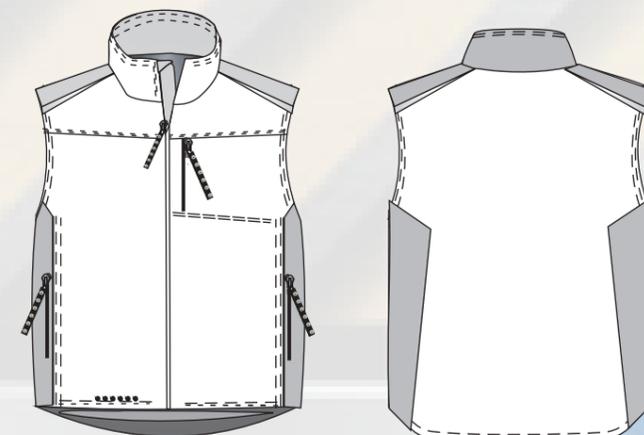
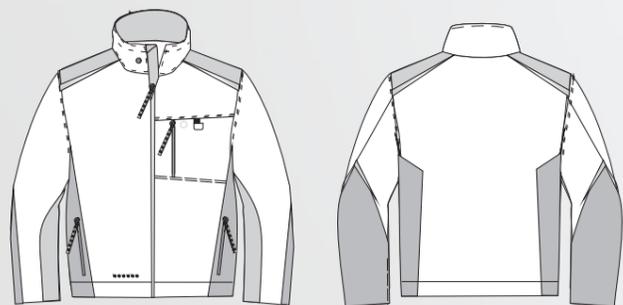
Material: 96% polyester 4% spandex 320g
 Water-repellent, windproof and breathable
 Quilt lining with the thermo-reflector zone in the back keeps you warm in cold days.
 Soft micro fleece inside collar.
 Hidden zip with chin protector.
 2 side pockets, 2 inner pockets and 1 breast pocket, each with zip
 Right chest pocket with flap and Velcro fastener
 Adjustable hem
 Reflectors for safety are integrated into the dividing seams.





OW15 Softshell Jacket

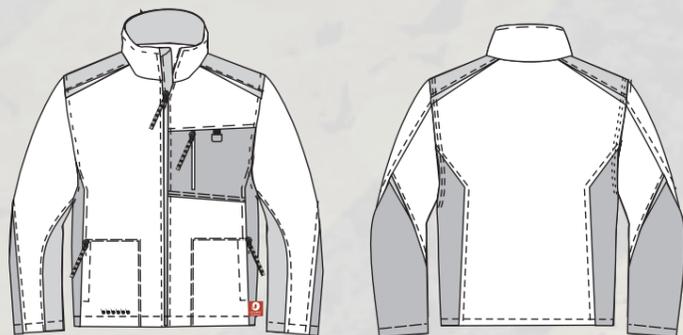
Material: 96% polyester 4% spandex 320g
Water-repellent, windproof and breathable
Ultra-light and stretchable
Soft micro fleece inside collar
Continuous zip with chin protector.
2 side pockets and breast pocket each with zip
Adjustable hem
Reflectors for safety are integrated into the dividing seams.



OW17 Softshell Vest

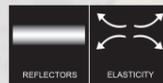
Material: 96% polyester 4% spandex 320g
Water-repellent, windproof and breathable
Ultra-light and stretchable
Soft micro fleece inside collar
Continuous zip with chin protector.
2 side pockets and breast pocket each with zip
Adjustable hem
Reflectors for safety are integrated into the dividing seams.





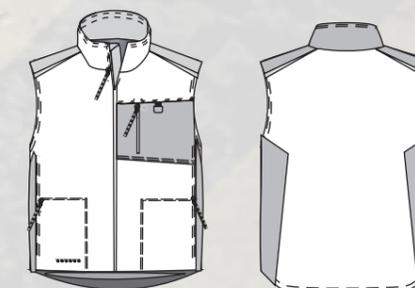
OW18 Fleece Jacket

Out shell material: 100% polyester microfleece 320g
 Trim fabric: 100% nylon Taslan
 Lining Material: 100% polyester
 Lightweight, warming and breathable fleece jacket
 2 practical side pockets and breast pocket, each with zip
 Front continuous zip with chin protector.
 With lining (but no fleece).
 Reflectors for safety are integrated into the dividing seams.
 3-layer laminate



OW19 Fleece Vest

Material: 100% polyester microfleece 320g
 Trim fabric: 100% nylon Taslan
 Lightweight, warming and breathable
 2 practical side pockets and breast pocket, each with zip
 Front continuous zip with chin protector.
 With lining (but no fleece).
 Reflectors for safety are integrated into the dividing seams.
 3-layer laminate




OW20 3 in 1 functional jacket

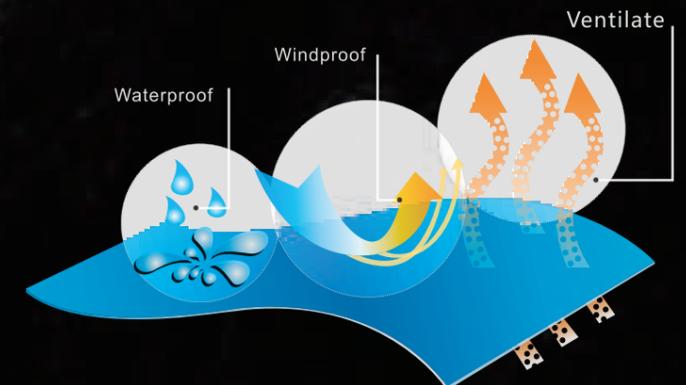
Sporty functional jacket with waterproof, windproof and breathable features. Two high-quality jackets combined in one to create a multifunctional clothing system. If the weather improves and the waterproof outer jacket is no longer required, the fleece inner jacket can also be worn on its own.

Outer jacket features:

Material: 100% nylon with PU coating
 Waterproofness on 3000mm and MVP on 3000m²/24hours
 Lining: 100% nylon
 Lining Material: 100% polyester
 Soft micro fleece inside collar
 Detachable and adjustable hood, can be stored away inside collar
 2-way front zip with fleece chin protection
 Chest pocket with waterproof zipper
 2 side pockets with zip closure.
 Adjustable cuffs with Velcro
 3-layer laminate

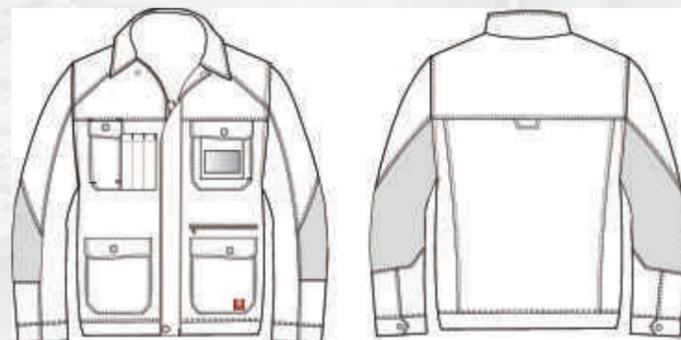
Fleece jacket features:

- Detachable
- 1 chest pocket and 2 deep side pockets with zip
- Continuously front zipper
- Stand-up collar


Fabric technology



WK 54 Jacket

Material: 65% polyester 35% cotton 245g or 300g
 Arms reinforced with Cordura®.
 Front fly with concealed YKK® zip and snaps.
 Adjustable cuffs with snaps.
 Right chest pocket with flap and snap, with pen compartments.
 Left chest double pockets with flap and snap, with the small ID card pocket on the top.
 2 side pockets with flaps and snaps.
 1 concealed pocket above the left side pocket, closed by YKK® zip.


WK 56 Pants

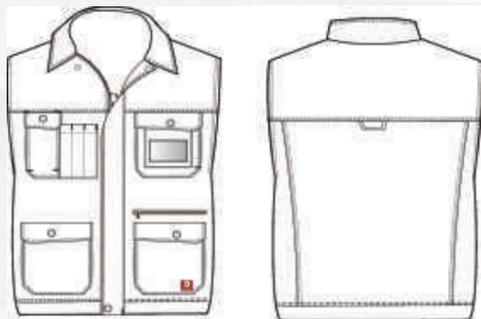
Material: 65% polyester 35% cotton 245g or 300g
 Knee pad pockets reinforced with Cordura®.
 2 large swing nail pockets with 2 front patch pockets beneath.
 Thigh pocket with ID card window and pen compartment, fastened by snap.
 2 back pockets with snaps.
 Functional ruler pocket.
 Belt loops and YKK® zip.





WK 55 Vest

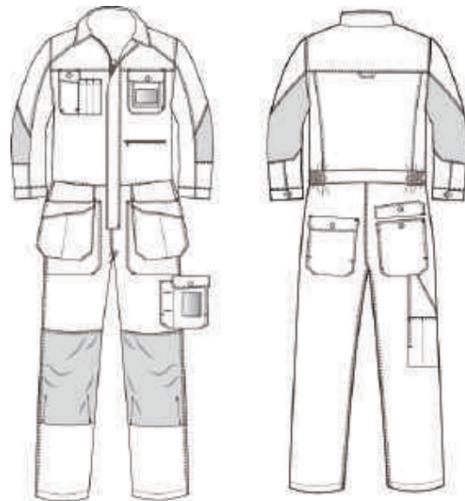
Material: 65% polyester 35% cotton 245g or 300g
 Front fly with concealed YKK® zip and snaps.
 Right chest pocket with flap and snap, with pen compartments.
 Left chest double pockets with flap and snap, with the small ID card pocket on the top.
 2 side pockets with flaps and snaps.
 1 concealed pocket above the left side pocket, closed by YKK® zip.



WK 57 Bib Pants

Material: 65% polyester 35% cotton 245g or 300g
 Knee pad pockets reinforced with Cordura®.
 Front fly with YKK® zip and snap.
 2 multi-compartment breast pockets fastened by snaps, with 2 hang loops beside.
 2 large swing nail pockets with 2 front patch pockets beneath.
 Thigh pocket with ID card window and pen compartment, fastened by snap.
 2 back pockets with snaps.
 Functional ruler pocket.





WK 58 Overall

Material: 65% polyester 35% cotton 245g or 300g
 Knee pad pockets and arms reinforced with Cordura®.
 Front fly with 2-way concealed YKK® zip and snaps.
 Adjustable cuffs with snaps.
 Right chest pocket with flap and snap, with pen compartments.
 Left chest double pockets with flap and snap with the small ID card pocket on the top.
 2 side pockets with flaps and snaps.
 1 concealed pocket above the left side pocket, closed by YKK® zip.
 Elastic band at the back of waist.
 2 large swing nail pockets with 2 front patch pockets beneath.
 Thigh pocket with ID card window and pen compartment, fastened by snap.
 2 back pockets with snaps.
 Functional ruler pocket.



WK 63 Jacket

Material: 65%Polyester 35%Cotton 260g
Highly durable Ripstop material
Sporty design with cool colour combinations.
Large back ventilation with mesh inside.
Continuous zip with velcro closure and underflap.
Anatomically shaped sleeves.
Two side pockets.



WK64 Vest

Material: 65%Polyester 35%Cotton 260g
Highly durable Ripstop material
Sporty design with cool colour combinations.
Large back ventilation with mesh inside.
Continuous zip with velcro closure and underflap.
Two side pockets.



WK 66 Shorts

Material: 65%Polyester 35%Cotton 260g
Highly durable Ripstop material
Sporty design with cool colour combinations.
Waistband with elasticated side elements.
Extra sturdy, triple-stitched seam on inside leg.
Wide belt loops with Velcro for worker bag.
Deep-set pockets for easy access.
Reinforced functional ruler pocket and multi-compartment thigh pocket.
Zipped safety pockets on left.



WK 65 Pants

Material: 65%Polyester 35%Cotton 260g
Highly durable Ripstop material
Sporty design with cool colour combinations.
Waistband with elasticated side elements.
Extra sturdy, triple-stitched seam on inside leg.
Wide belt loops with Velcro for worker bag.
Deep-set pockets for easy access.
Reinforced functional ruler pocket and multi-compartment thigh pocket.
Zipped safety pockets on left.
Knee pad pocket with Velcro fastener at the top.
Knee zone in durable CORDURA®.



WK 68 Overall

Material: 65%Polyester 35%Cotton 260g
Highly durable Ripstop material
Sporty design with cool colour combinations.
Large back ventilation with mesh inside.
Continuous zip with velcro closure and underflap.
Anatomically shaped sleeves.
Two side pockets.
Waistband with elasticated side elements.
Extra sturdy, triple-stitched seam on inside leg.
Wide belt loops with Velcro.
Deep-set pockets for easy access.
Reinforced functional ruler pocket and multi-compartment thigh pocket.
Zipped safety pockets on left.
Knee pad pocket with Velcro fastener at the top.
Knee zone in durable CORDURA®.



WK 67 Bib Pants

Material: 65%Polyester 35%Cotton 260g
Highly durable Ripstop material
Sporty design with cool colour combinations.
Waistband with elasticated side elements.
Extra sturdy, triple-stitched seam on inside leg.
Wide belt loops with Velcro for worker bag.
Reinforced functional ruler pocket and multi-compartment thigh pocket.
Zipped safety pockets on left.
Knee pad pocket with Velcro fastener at the top.
Knee zone in durable CORDURA®.
Length adjustable braces with elastic insert.
Bib pocket with a zip.
Stretch zone in back.



**OD 69 Jacket**

Material: 96%polyester 4%spandex 320g Softshell
 Water repellent, wind-resistant and breathable material in cool colour combinations.
 Pleasantly light and elastic.
 Full fleece inner lining.
 Front and a breast pocket with water repellent zips.
 Adjustable cuffs.

OD 70 Vest

Material: 96%polyester 4%spandex 320g Softshell
 Water repellent, wind-resistant and breathable material in cool colour combinations.
 Pleasantly light and elastic.
 Full fleece inner lining.
 Front and a breast pocket with water repellent zips.

**OD 71 Jacket**

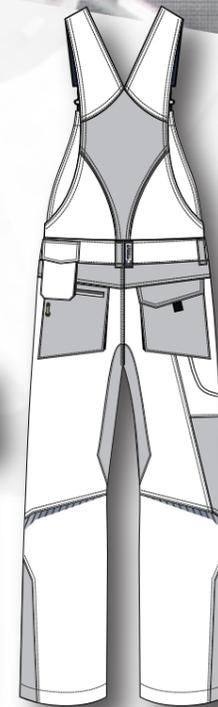
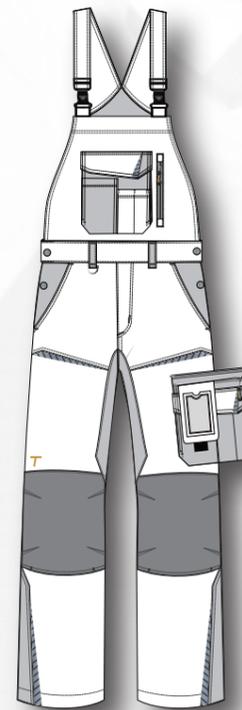
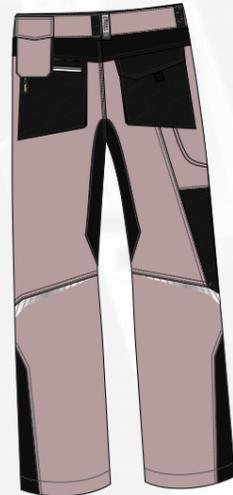
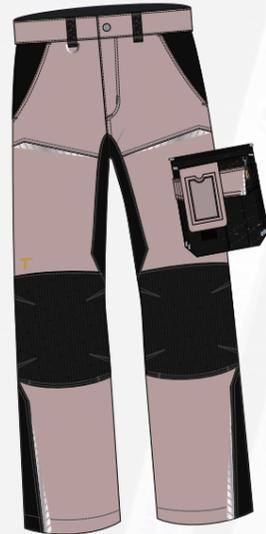
Material: 100%Polyester 300g Microfleece
 Pleasantly warm in cool colour combinations.
 Light and breathable.
 2 practical side pockets each with water repellent zip.

**OD 72 Vest**

Material: 100%Polyester 300g Microfleece
 Pleasantly warm in cool colour combinations.
 Light and breathable.
 2 practical side pockets each with water repellent zip.



NEW



NEW

JP002 Jacket

Material: Canvas 65%polyester 35%cotton 250g
 Front panel and sleeve stitching stretch fabric.
 Chest pocket using Cordura® fabric.
 Adding reflective strips on shoulder and side seams.
 Breast pockets with flaps and velcro reinforcement.
 Front, back and sleeves added Hot pressed reflective strip.

PP002 Pants

Material: Canvas 65%polyester 35%cotton 250g
 The pocket is covered with a reflective strip.
 The trouser pocket adds a transparent cassette.
 The trousers are designed with a hot-pressed reflective strip.
 The crotch, the foot, and the rear yoke are stitched with elastic fabric.
 Knee and back pocket use of Cordura® fabric.

BP002 Bib Pants

Material: Canvas 65%polyester 35%cotton 250g
 The chest pocket is covered with a reflective strip.
 The trouser pocket is added with a transparent cassette.
 The trousers are designed with a hot-pressed reflective strip.
 The back, ankle, foot, and rear Yuke are stitched with elastic fabric.
 Knee and back. Pocket use of Cordura® fabric.



NEW



JP003 Jacket

Material: Twill 72%Cotton 25.5%Polyester 2.5%Spandex 290g
 The front piece, the back piece and the sleeve are all stitched with elastic fabric.
 The chest bag adds the tool ring, the three-dimensional pocket.
 The multiple stitching uses the reflective strip.
 The sleeve pocket adds the flap and the velcro reinforcement.
 The front piece and the sleeve stitching Reflective strip.

PP003 Pants

Material: Twill 72%Cotton 25.5%Polyester 2.5%Spandex 290g
 Side seam and internal heel use splicing to increase elastic comfort.
 Lumbar add tool bag.
 Cover splicing reflective strip to increase velcro fixation.
 Side seam splicing reflective strip.
 Breast pocket and knee increase oxford stitching.
 Add a cell phone pocket to the trouser pocket and use a reflective zipper.



NEW

BP003 Bib Pants

Material: Twill 72%Cotton 25.5%Polyester 2.5%Spandex 290g
 Use the splicing on the back to increase the elasticity comfort.
 Add the tool pocket at the waist.
 Slip the splicing reflective strip to add the velcro fixed.
 Side seam and inner sling use elastic stitching.
 Chest pocket and knee increase oxford stitching.
 Pants Bag add phone bag, use reflective zipper.





Cordura®
 *10x more durable than cotton duck*3X more durable than standard polyester*2x more durable than standard nylon. It's resistant to abrasions, tears, and scuffs—all the qualities you expect from a high performance fabric. So regardless of your activities, you'll benefit from the toughness of Cordura®.



Reflectors
 Small reflectors on the garments can be crucial to your safety. It increases your chance of being seen.



Windproof
 The windproof clothes can keep you warm in cold days. When the wind blows through the garment, it keeps the warm layer of air next to your skin.



Waterproof
 Waterproof clothing is made of a natural or synthetic fabric that has been coated with a substance to repel water. In addition, the zippers are also waterproof and seams are taped on the back.



Breathable
 Breathability in waterproof clothing is especially important when you wear while working in cold environments. It helps get rid of the moisture to protect underclothes from getting wet, while allowing sweat to evaporate and escape from a person's skin or clothes.



Triple stitched seams
 Triple stitched seams placed on clothes most exposed areas, such as outside and inside of the leg, prolonging the wearability of clothing.



Knee pad pocket
 The clothes with knee pad pockets design ensure that the knee pads will remain in place while kneeling down, and while walking on knees.



Soft, stretchable, good mobility.
 Textiles with the spandex material are also extra lightweight but still very durable so that you always feel comfortable however strenuous the task.



EN 342: 2004 Protective clothing – ensembles and garments for protection against cold.
 This European standard specifies requirements and test methods for performance of clothing ensembles (i.e. two piece suits or coveralls) and of single garments for protection against cold environment.



EN 343: 2003 Protective clothing – Protection against rain
 This European standard specifies requirements and test methods applicable to material and seams of protective clothing against the influence of precipitation (e.g.rain, snowflakes), fog and ground humidity.The standard provides for two performance parameters:Y=Breathable properties – 3 levels.X=Waterproofness – 3 levels.



EN ISO 11611:2007
 Protective clothing for use in welding and allied processes.Supersedes EN 470-1:1995
 The protective clothing is intended to protect the wearer against small splashes of molten material, short contact time with flame, radiant heat from ARC, the clothing minimizes the possibility of electricalshock by short accidental contact with live electrical conductors up to 100 V d.c. voltages.The standard specifies 2 classes with specific performance requirements:
 Class 1 - lower level:less hazardous welding situations. Class 2 - higher level:more hazardous welding situations



EN ISO 11612:2008
 Protective clothing - Clothing to protect against heat and flame.Supersedes EN 531:1995.
 The standard specifies the performance requirements for garments which protect the body from heat and flame (except the hands). The standard is not applicable for fire fighters (EN 469) and welders (EN 470 - EN ISO 11611).Code A: limited flame spread
 Code B: Protection against convective heat – 3 levels.Code C: Protection against radiant heat – 4 levels.Code D: Protection against molten aluminum splash.Code E: Protection against molten iron splash.Code F: Protection against contact heat



EN ISO 14116:2008
 Protective clothing - Protection against heat and flame - Limited flame spread materials, material assemblies and clothing
 This international standard specifies the performance requirements for the limited flame spread properties of materials and protective clothing. The aim is to reduce the possibility of the clothing burning and thereby itself constituting a hazard: the wearer should not get extra injuries due to the burning of his clothing.
 The standard is not applicable for fire fighters (EN 469) and welders (EN 470 - EN ISO 11611).



IEC 61482-1-2:2007
 Live working – Protective clothing against the thermal hazards of an electric arc – Part 1-2: Test methods – Method 2:
 Determination of arc protection class of material and clothing by using a constrained and directed arc (box test)
 An electric arc or blast as a result of a disruption (e.g. a short circuit) in an electric installation generates a sudden release of intense heat and light causing serious burns, blindness or even death..This blazing bright electric discharge between two conducting electrodes.lasts for a very short time (0.5s, 1s and rarely >1s)develops a very strong radiant heat (several thousand °C) creates high physical forces, a pressure wave and pressure shrapnel
 a splash of molten metal particles or even vaporized metal up to 165 db noise



EN ISO 1149
 Electrostatic properties of protective clothing,EN 1149-5:2008 - Performance requirements.Anti-static PPE are certified to EN 1149-5 as this standard covers the performance requirements and refers to the choice of 2 different test methods
 (EN 1149-1 or EN 1149-3)EN 1149-1:2006 - Measurements of surface resistivity.This test method is most appropriate for materials for which the electrostatic dissipative behavior is based on surface conductivity (for instance containing surface conductive yarns or a homogenous conductive outside PVC coating layer). This method is not appropriate for core conductive fibers.EN 1149-3: 2004 - Measurements of charge decay.This test method is referenced for materials for which the electrostatic dissipative behavior is based on core conducting fibers. but can also be used for surface conducting materials.In the 1149 series, there is also an EN 1149-2 (measurement of the electrical resistance through a material; the vertical resistance). which is used as a test method in EN ISO 11611 (welders clothing) and which is also mentioned in Annex H of EN 469:2005. A full garment test is under development and will be issued as EN 1149-4.



EN ISO 20471:2013
 High-visibility warning clothing for professional use- Test methods and requirements.Supersedes EN471:2003+A1:2007.Visibility during the day, in the twilight and in the dark.Thanks to high-visibility warning clothing, the visibility of the pedestrian / wearer can be improved reducing the risk of accidents.The EN 471 High-vis warning clothing has two different performance classes:x: the surface of fluorescent and retro-reflective material (3 levels)The proportion of fluorescent background material and retro-reflective material.y: the performance of the retro-reflective material (2 levels)There are two performance classes for retro-reflective material (the commonly used class 2 and the very rarely seen lower performing class 1.