







# Vestilab s.a... Clean Room Control



#### Introduction

**M**ore than 20 years have gone by since **Vestilab, S.A. Clean Room Control** was set up to cover a segment of the Clean Room sector, the manufacture of Garments for use by personnel who work in these Areas and thus control the main source of contamination: people.

Right from the start, we have striven to find the best fabrics and the most suitable machinery to obtain a high quality product and enhanced user comfort, while complying with the ASTM F-51 / 00 Standard at all times.

An ongoing search for technology and constant market research have placed the company **Vestilab, S.A. Clean Room Control**, at the forefront of Garment manufacturing.

Tenacity and continuous commitment to innovation and service has likewise enabled us to provide a global solution to Clean Room sector, by extending our range of products to include the following items in our Programme, in addition to technical Garments and Clean Room Garment washing:

- · All types of equipment for personnel (gloves, masks, shoes, etc.).
- · Ultra cleaning material, products and accessories.
- · A variety of materials such as films, bags, stationery and office products.
- · General equipment such as mats, curtains, sinks, disinfectors, chairs, shelves, stainless steel furniture, vacuum cleaners, wall protections, etc.

Many thanks therefore to all our people, our distributors and especially to our customers whose demands have enabled us to grow.

Olga and Antonio de la Sotilla FOUNDERS OF VESTILAB S.A. CRC

# COVERALLS •

**G**arments for providing maximum control against microbial and particle contamination in High Classification Sterile or Clean Rooms.



Interior waist adjustment.



Raglan sleeve.





#### Simple coverall:

separated from the hood and from the footwear.

M ·Single piece coverall.

#### Integral coverall:

Hood stitched to the coverall.

MIA ·Hood with full face front opening. **MIC** ·Hood with front opening for the eyes.

PIN ·Includes coverall, hood and footwear in a single piece.



Knitted cuff, in white (standard) or in different colours.



M-003 ► M-004

M-001

## **COVERALLS** •







#### FEATURES / OPTIONS:

- Raglan sleeve (standard).
- Front fastening with zipper.
- Arm and/or leg adjustment:
  - ·with 100% polyester knitted cuff (standard).
  - ·with 100% polyester knitted cuff with ESD control.
  - ·with stainless steel grippers.
  - ·with interior strap.
- Waist adjustment.
  - ·with interior belt (standard).
  - ·with elastic band on the back.
  - ·non-adjustable.



Collar detail.



Hood - Coverall zipper joint.







MIC-008



Hood front fastening with stainless steel grippers.

Coveralls are manufactured with various options and special designs, in accordance with user needs.

## LAB COATS •



**D**ifferent models to provide proper protection to the product that is being manufactured in Areas with Medium Classification.



Shirt collar.

#### FEATURES / SPECIFICATIONS:

- Front fastening with zipper (standard) or with stainless steel grippers.
- Arm adjustment:
  - ·with stainless steel grippers.
  - ·with interior strap.
  - ·with knitted cuff (standard).
  - ·with knitted cuff with ESD control.
- Rising sleeve (standard).
- Raglan sleeve.
- Mandarin collar.
- Shirt collar (standard).
- Pockets with different finishes and positions.
- Waist strap adjustment from the back.
- Knitted cuff in white (standard) or in different colours.



Pocket.

**S**pecial design options according to customer requirements.



BC-100



BI-102



BM-101



BQ-103





CP-104 ► CP-105



BC-106 ► CPF-107 ► BM-108 / P-109



Front fastening with stainless steels grippers.

# There are several options according to user requirements:

- **BC** ·Lab Coat with shirt collar.
- **BM** ·Lab Coat with mandarin collar.
- BI ·Integral Lab Coat with integrated hood.
- **BQ** ·Lab Coat with adjustment at the back.
- **CP** •Two Pieces Suit with shirt or mandarin collar.
- **CPF** ·Two Pieces heat-insulated suit to protect against the cold.



Mandarin collar.

#### **Trousers:**

- Waist adjustment with interior elastic strap.
- Leg adjustment:
  - ·with knitted cuff (standard).
  - $\cdot with \ knitted \ cuff \ with \ ESD \ control.$
  - ·with stainless steel grippers.



## **HOODS / CAPS**



#### Hoods:

Especially designed to provide maximum protection in High Classification Areas and to allow for maximum operator mobility and comfort.

Operators may choose from a wide range of models, depending on whether work is in Sterile or Clean Rooms.



- Separate or integrated into the Coverall or Lab Coat.
- Tapes for adjustment from the back (standard).
- Elastic strap or stainless steel grippers located in different areas of the Hood for proper adjustment.
- Eye area opening only.
- Total front opening, leaving the face uncovered, with or without collar fastening.
- Shoulderless, for ease of dressing and enhanced comfort.
- With polyester mesh earnets for hearing.
- Side holes for glasses.
- Stainless steel grippers for mask adjustment.

#### Caps:

Head protection designed for Low Classification Areas.

Manufactured in Polyester mesh to adapt to any head type and designed to cover all the hair.

Mesh provides for maximum transpiration.



























## **FOOTWEAR / BOTINES**





PLAB-400 ► PLAB-401 ► P-402



Upper Footwear or Botin adjustment.



Z-406 ► CZ-407 ► PC-408



Strap adjustment.

**W**ide range of models for high performance and comfort.

#### Footwear:

- With flat rubber sole.
- With side-section anti-skid sole (Lab).

#### **Botines:**

**H**igh-comfort footwear type comprising a clog that adapts to any foot size. It is a clog to which a piece of fabric has been sewn. This piece of fabric may also be adapted to the clog with a zipper.

#### FEATURES / OPTIONS:

- · Upper adjustment with knitted cuff, elastic strap or strap with plastic fastening.
- Lower adjustment with bow or strap.
- Front or back (standard) zipper.
- Side grippers for fastening the coverall into position.
- May be washed and steam or radiation, sterilised.

#### Footwear sock:

Without sole. It allows Clean Room shoes to be worn (PC-408).

#### Overshoes:

Ankle adjustment by elastic band. With rubber or PVC sole.





## **UNDERGARMENTS / COMPLEMENTS •**





Collarless, opening with grippers.



Elastic side cuff.

**Undergarments** manufactured in very gentle fabric, light and comfortable, suitable for contact with the skin. They provide a second layer of protection and in some cases make the use of high-performance, frequently uncomfortable, exterior garments unnecessary . Different designs and finishes. They may be washed and sterilised. With or without ESD control. Pale colours. They are not see-through.

**Aprons** in water repellent fabric for protection against water, chemical agents or liquids that are dangerous for the operator.

Masks and beardcovers with different degrees of protection. With elastic band to apply to ears or to apply with stainless steel grippers to the Hood.

Bags in various designs to store clean clothes or to contain dirty clothes.



PJ-500 ► PJ-501







MS-503



BL-505

# **ACCESSORIES / OPTIONS**

In such a specific work environment, user needs must be met to the full with a wide range of options and accessories.

All our design and innovation department's experience and flexibility provides all types of solutions with our fabrics.

- Personalised logos.
- Personalised labels with user name or identification or work section, etc.
- Typographical codification or codification with microchips for Garment traceability (washes, sterilisation, repairs, and different incidences, etc.).
- Earnets, pen holders, mobile phone holders.
- Different adjustment systems for Coveralls, Lab coats, Hoods or Footwear.

#### **Tubotin:**

Piece of fabric joined to the clog to make up the BOTIN.

Different types of upper adjustment. If the Tubotin is attached to the clog by a zipper, separate washing and sterilisation will be easier and it may also be replaced.



Tubotin.



AA-600 ► AA-601



A-602









A-606



A-607







A-609



A-610









A-614



A-615





A-617



### **CLEAN ROOM LAUNDRY** •





PEG Room Class 100.



Control, folding and packing.



Helmke Drum Test.



Partial exterior view - SAS clean material output.

**W**ashing and particle removal of garments in our Clean ROOM CLASS 100. PEG system.

Clean Room Garments must not only be manufactured from fabrics and designs with fibre release control, but they must also be used with total intrinsic cleanliness and be treated with special care after work.



Bags and boxes for transport.

**Vestilab S.A. CRC** provides an integral service for the washing, decontamination and packaging of garments, in accordance with the IEST-RP-CC003.2 recommendation, our own SOPs and the specifications of each customer.

Our PEG Washing System guarantees end of wash quality by the use of the control equipment required to validate the different phases of the process: Water quality, pH, conductivity, ZONE classification according to the Fed. Standard 209e and end quality of the garments in accordance with the "Helmke Drum" Test, among other procedures.



**Vestilab S.A. CRC** selects very thoroughly the fabrics and accessories (threads, zippers, grippers and soles, etc.) necessary to manufacture a wide range of standard or specific Models in accordance with ASTM F-51/00 Standard and according to work or user requirements.

**O**ur fabrics ensure a good protection barrier and filtration efficiency and are also long-lasting and comfortable.

**W**e use fabrics with carbon filaments only in the warp (strip pattern) or in grid pattern (warp and weft).

**O**ur manufacturing combines the most refined technique with the most comfortable designs for the user and pays special attention to seams. These are double-sewn or covered to prevent fraying and use only monofilament thread.

**A** wide range of colours provides for choice and different uses in accordance with different areas of work.













## **FABRICS RANGE** •



 ${f B}$  asic information on the fabrics we normally use in manufacturing our technical Garments.

 $\boldsymbol{T}\!$  echnical specifications and samples are available upon request.

FABRICS	DESCRIPTION	COLOURS		
C	LEAN ROOM / STERILE: MAY BE WASHED AND STERILISED IN STEAM AUTOCLAVE AND IRRADIATIO	DN.		
POLVEB	Twill 2/1. 100% Polyester without anti-static properties. Very strong and long-lasting.	0000		
VBK-1120	Twill 2/1. 100% Polyester. Anti-static with carbon filament in strip pattern. Soft and comfortable. Filtration efficiency 78%/0.3 micron. Permeability to the air: 6.7 cc/ cm2/ sec.	00000		
VBK-2232	Twill 3/2 Polyester 100 %.Anti-static with carbon filament grid pattern.  Very gentle, silky appearance. Filtration efficiency 94%/0.3 micron.  Permeability to the air: 2.9 cc/cm2/sec.	000		
VBNW- 281-T	Twill 3/2 100% polyester. Anti-static with carbon filament in strip pattern.  Very pleasant on contact with skin, light. Filtration efficiency 80%/0.5 micron.  Permeability to the air: 8.00cc/cm2/sec.	0		
NOMEX	Twill 2/2 Aramide 100% .Very strong. Total protection against fire.	000		
PFWR-66	Twill 2/2 .Fabric with water-repellent finish and bacteriostatic treatment. Anti-static with carbon filament grid pattern.	0		
	CLEAN ROOM: ONLY WASHABLE (MAY NOT BE STERILISED)			
PTL-225	Twill 2/1, 100% Polyester Microfibre. Anti-static with carbon filament grid pattern.  Very gentle to touch, similar to natural fibre. Filtration efficiency 63%/5 micron. Permeability to the air: 4.2cc/cm2/sec.	000•0		
PTST-150	Twill 2/1 100% Polyester Microfibre. Anti-static with carbon filament grid pattern. Filtration efficiency 57%/0.3 micron. Permeability to the air: 3.25cc/cm2/sec.	000		
	NON-CLEAN ROOM ENVIRONMENTS: WASHABLE.			
POLSTAT	Twill 2/1. 65% Polyester, 35% Cotton, 0.5% carbon filament grid pattern. Anti-static.  Very strong and long-lasting.	0		
POLSTAT 151	Twill 2/1. 48% Polyester, 50% Cotton, 2% carbon filament grid pattern. Anti-static. Very popular for its price.	0		
VBK-AS5	Twill 1/2.85% Polyester, 15% Cotton, with carbon filament grid pattern. Anti-static. Very long-lasting and has specific static dissipation properties.	00		
POLCOT	Twill 2/1. 67% Polyester, 33% Cotton. Perfect blend for operator comfort in environments with no CLASS or static electricity control.	es O		

OTHER FABRICS and colours available on demand.

## **TECHNICAL DETAILS** •



**W**hen manufacturing Garments, we follow the ASTM F-51/00 standard. This defines the technical specifications that must be met by fabrics, the quality of all accessories used (threads, zippers, stainless steel grippers, etc.), Garment stitching and finish methods.

**O**ur Garments have been manufactured very thoroughly and an attempt has been made to combine the most refined technique with the most appropriate design to provide the user both with maximum protection and high comfort.

#### Fabrics recommended by ROOM CLASSIFICATION.

FABRIC	STERILE	ISO-4	ISO-5	ISO-6	ISO-7	ISO-8	>	SECTORS
		10	100A/B	1000	10.000/C	100.000/D	>	
POLVEB	•		•	•	•	•	•	F-B-A
VBK-1120	•		•	•	•	•		F-B-E-V
VBK-2232	•	•	•	•	•	•		F-B-E-V
VBNW-281-T	•		•	•	•	•		F-B-E-V
NOMEX	•		•	•	•	•	•	F-B-E
PFWR-66	•			•	•	•	•	F-B-A-E-V
PTL-225					•	•	•	F-B-A-E-V
PTST-150					•	•	•	F-B-A-E-V
POLSTAT							•	B-E-V
POLSTAT-151							•	B-E-V
VBK-AS5							•	E-V
POLCOT							•	F-B-A-V

Pharmaceutical labs F, biotechnology B, food and drink A, electronics E, audio/video V.

#### IEST - RP - CC003-2 recommendation. Frequency of garment change.

	Sterile	ISO-4	ISO-5	ISO-6	ISO-7	ISO-8
Regularity	on entering each time	on entering each time	daily	2/3 times per week	Twice per week	

#### Comparative table of approximate sizes.

	VESTILAB	0	1	2	3	4	5	6
Garments	EU	36	38	40	42	44	46	48
	USA	XS	S	М	L	L	XL	XXL
S/Lab Footwear	EU		36/37	38/39	40/42	43/45	46/47	
S/Flat Footwear	EU		35/38	39/41	42/44			

This table is based on our experience.



To guarantee the proper size, ask for samples.





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