

Products on the highest  
quality level



## Cleanroom garments Cleanroom undergarments

Professional  
Cleanroom Expertise

**dastex**  
REINRAUMZUBEHÖR

# Delivery programme / Products

## Reusable and washable cleanroom garments

sterile / non-sterile

- ▶ Cleanroom garments
- ▶ Cleanroom undergarments

standard or customised

## Disposable cleanroom garments

sterile / non-sterile

- ▶ Head, foot and body area

## Face masks & cleanroom goggles

sterile / non-sterile

- ▶ Disposable face masks for various applications
- ▶ Safety goggles (reusable / disposable)

## Cleanroom gloves & finger cots

sterile / non-sterile

- ▶ Disposable gloves
  - nitrile, latex, polypropylene and other materials
- ▶ Textile gloves
  - uncoated, coated
  - antistatic / for ESD-protected areas
- ▶ Protective gloves
  - protection against chemicals, heat or cold

## Cleanroom shoes & socks

- ▶ Occupational footwear & Safety footwear
  - clogs, slippers and sandals
- ▶ Shoes with textile upper
- ▶ Cleanroom socks (reusable / disposable)

## Disinfectants & Detergents

sterile / non-sterile

- ▶ Based on alcohol (IPA / ethanol)
- ▶ Biocides, sporicidal preparations, fungicides etc.
- ▶ Hand hygiene

## Cleanroom wipes

sterile / non-sterile

- ▶ Polyester cellulose wipes
- ▶ Polyester wipes
- ▶ Microfibre wipes
- ▶ Wipes for special requirements
- ▶ Saturated wipes
- ▶ Cotton and cellulose wipes
- ▶ Sponge wipes

## Cleaning & disposal articles

- ▶ Mop systems and handles
- ▶ Cleaning trolleys and accessories
- ▶ Cleaning swabs
- ▶ Special cleaning tools
- ▶ Cleanroom vacuum cleaners
- ▶ Disposal systems

## Tacky mats

- ▶ Removable dust binding foil mats
- ▶ Permanently adhesive and washable tacky mats

## Cleanroom furniture

- ▶ Chairs, stools, work tables, desks
- ▶ Shelving systems, wardrobes and carts
- ▶ Ladders and steps

## Cleanroom paper & pens

## Adhesive tapes & labels

## Dispenser systems & disposable overshoe dispensers

## Particle visualisation lamps

# Services

## Supply concepts

- ▶ Consignment warehouse
- ▶ Full supply systems
- ▶ E-Commerce solutions  
(incl. online shops)

## Staff training

## Research & Development

## Consultancy

# Since 1979



Since 1979, **Dastex** has been the competent partner for all questions concerning cleanrooms.

One of our company's maxims is that an optimal range of cleanroom products can only be created and continuously developed if we maintain close contact with operators of cleanrooms.

Our many years of know-how guarantee that an extensive and above all practice-oriented product range is available at all times, which meets all the requirements of our customers and at the same time represents the latest state of cleanroom technology.

Consistently high product quality, combined with competent advice and intensive customer care, are essential components of the Dastex quality principles.

We have a broad international base, speak twelve languages and attach great importance to the training and development of our employees in order to meet the growing demands of our customers in the future.

As a responsible company, **Dastex** has been operating a quality management system in accordance with **DIN EN ISO 9001** for many years.

In order to express the idea of sustainability, **Dastex** has had its environmental management system certified according to **DIN EN ISO 14001**.



# Cleanroom garments – the most important filter between person and product

## A cleanroom compatible garment system consists of:

- ▶ cleanroom garments, depending on process requirements
- ▶ cleanroom suitable undergarments
- ▶ additional equipment, such as hoods, face masks, gloves, safety goggles and shoes
- ▶ proper decontamination
- ▶ trained personnel in the handling of the cleanroom garments



View of the individual garment layers

Typical garment system for use in A/B areas

It is common knowledge that humans are one of the biggest sources of contamination in a cleanroom process. It is therefore all the more important to match the decisive filter, the cleanroom garment, to the respective requirements.

## The following criteria are decisive with regard to the efficiency of the selected clothing system:

- ▶ **Technical properties**  
e.g. particle retention capacity, abrasion behaviour, electrostatic properties etc.
- ▶ **Wearing comfort properties**  
important with regard to employee acceptance
- ▶ **Ready made technical features**  
e.g. seams, additional equipment (cuffs, zips etc.)
- ▶ **Concerted care and maintenance system**

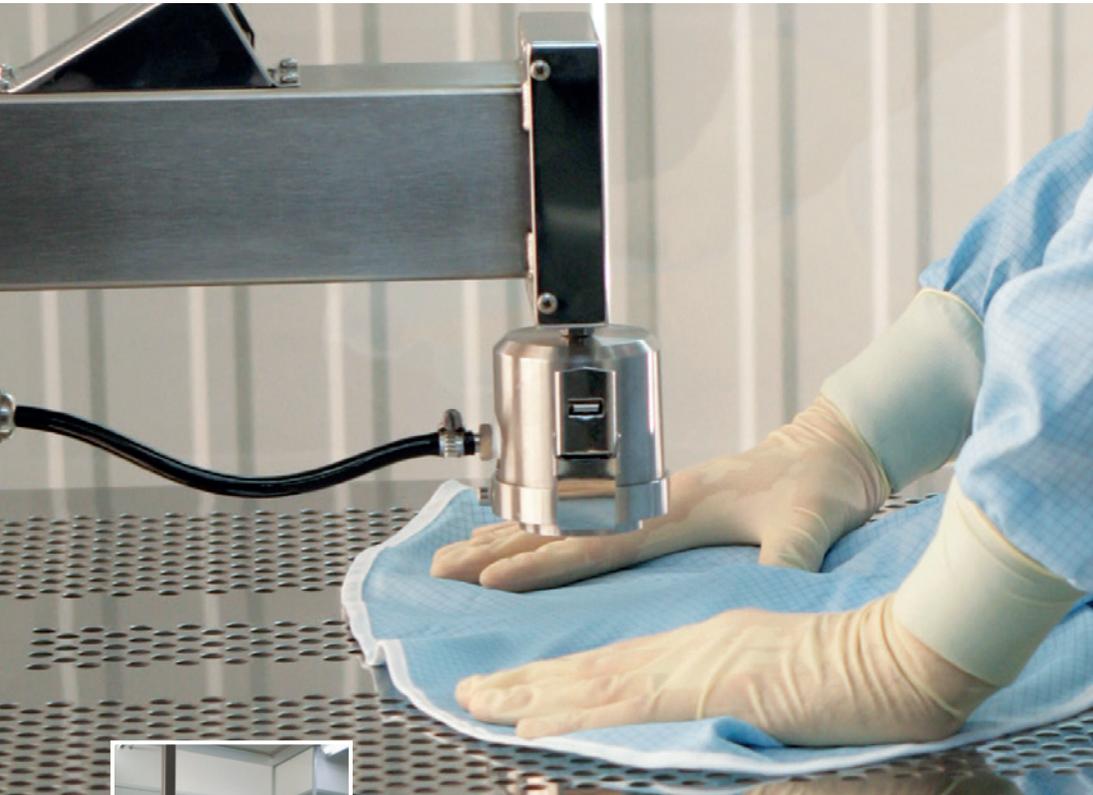
As one of the leading European manufacturers, we not only rely on the technical specifications of our suppliers, but also have all our textiles tested independently and neutrally by internationally recognised institutes.



- ▶ Deutsche Institute für Textil- und Faserforschung Denkendorf (DITF)
- ▶ Hohenstein Textile Testing Institute (HTTI)
- ▶ Sächsisches Textilforschungsinstitut e.V. (STFI)
- ▶ Fraunhofer-Institut für Produktionstechnik und Automatisierung IPA

Regular repetitions, own research and test facilities as well as cooperation in research projects are essential components of an extraordinary quality standard around the topic cleanroom garments.

# Cleanroom garments as a system



## Annex 1 (EU GMP Guideline)

With the required qualification / re-qualification studies, Dastex supports in particular pharmaceutical customers in the implementation of the new requirements according to Annex 1, et al. with regard to the intensification of contamination control management for garment systems.



### Research & Development at Dastex

Since 2002, **Dastex** has continuously invested in the development and expansion of its in-house R&D facilities. The centrepiece of the company's own R&D facility is a Body-Box (test cabin based on IEST-RP-CC003.4). Unique worldwide in terms of design and measuring equipment, it is used for comparative studies of cleanroom garment systems. Numerous studies on the subject of particle and germ release by humans and their clothing have been successfully completed here.



### Other complementary research facilities

- ▶ Testing equipment for determining residual contamination on and in cleanroom garments:  
Helmke drum, test table following ASTM F51
- ▶ Filter test rig for measuring the filtration efficiency of cleanroom fabrics (unique)
- ▶ Test bench for determining the roughening disposition/ abrasion resistance of textiles based on the Martindale method (adaptation of some test parameters to the special requirement profile of cleanroom textiles)
- ▶ Test equipment for measuring the antistatic properties of cleanroom textiles (conductivity with testing of surface resistances and discharge speed)



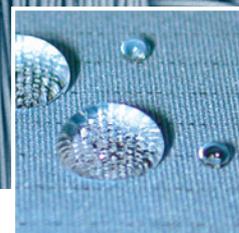
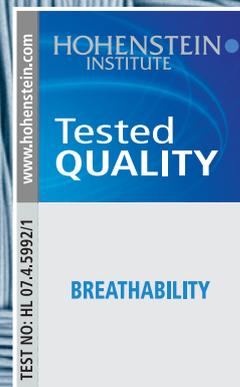
# Fabric qualities for the most diverse requirements

## The extensive Dastex delivery range includes a large selection of different fabrics

- ▶ for use in cleanrooms of air cleanliness classes ISO 4 – 9 (ISO 14644)
- ▶ for use in hygiene zones GMP A/B-C-D-(E)
- ▶ technical documentation according to the VDI Guideline 2083, Part 9.2, Chap. 8 and 9
- ▶ for additional process requirements such as ESD / EPA, heat / cold resistance
- ▶ special wearing comfort properties, like breathability, pleasant haptics

## Some of our fabrics can be specially finished

- ▶ antimicrobial
- ▶ hydrophilic
- ▶ hydrophobic
- ▶ flame retardant



Depending on the application / requirement, materials with both twill and plain weave are used. A microfibre fabric optimised for cleanroom use places particular emphasis on the highest possible wearing comfort.

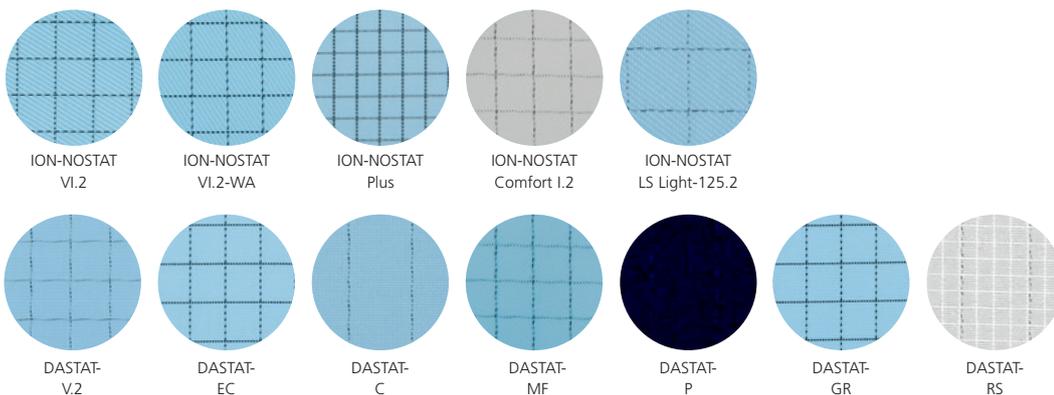
In addition to different woven and knitted fabrics, we also offer a very light microfibre-like material for the production of cleanroom-compatible undergarments – with a pleasant tactile feel – and, if required, with an additional special finish.

## Conservation of resources and sustainability are important criteria for us

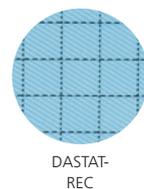
We have incorporated these aspects into our cleanroom garment product segment and were one of the first companies worldwide to successfully establish a complete cleanroom garment system made of recycled materials on the market.

Outergarments made of the fabric DASTAT-REC as well as cleanroom-compatible undergarments made either of the knitted fabric HT-REC or the woven fabric Light-Tech REC are supplemented by reusable cleanroom socks (39392-REC) made of recycled material.

## Woven fabrics for cleanroom garments



**OEKO-TEX® certificate**  
Our cleanroom garments and undergarments are OEKO-TEX® STANDARD 100 certified. This includes standard designs for coveralls, hoods, lab coats, trousers, as well T-shirts and pullovers.



# A variety of models that leaves nothing to be desired

- ▶ overalls / coveralls with integrated hood in various versions, e.g. throw-over coveralls without/with back entry
- ▶ jacket + trousers combinations
- ▶ laboratory coats
- ▶ aprons
- ▶ sleeve protectors
- ▶ full protective hoods / eye slit hoods
- ▶ bouffant hoods / umbrella caps
- ▶ textile face masks
- ▶ overshoe / overboots
- ▶ shoes with sewn-on textile shaft
- ▶ undergarments:  
T-shirts, jumpers, jackets, trousers



Apart from the standard models, **Dastex** provides a very large number of special models, developed for specific process requirements or individual customer requirements.

In addition, **Dastex** offers a wide range of additional features such as pockets, logos, knitted cuffs, name bands, straps, buckles etc.

**Dastex** also offers stock versions of various models, which are available at short notice.

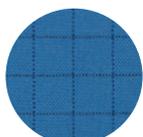


**A garment combination that can be worn in grey and black areas as well as under cleanroom garments!**

## Woven and knitted fabrics for undergarments



Light-Tech II



Light-Tech AS



Light-Tech SW



HAP-Tech



High-Tech



HT2



HT3



Light-Tech REC



HT-REC

**CLEAN GREENCYCLE™**  
by dastex

# Professional Cleanroom Expertise



**Dastex Reinraumzubehör  
GmbH & Co. KG**

Draisstr. 23

76461 Muggensturm

GERMANY

Telephone +49 7222 969660

Telefax +49 7222 969688

E-Mail [info@dastex.com](mailto:info@dastex.com)

[www.dastex.com](http://www.dastex.com)