

BLÜCHER®
PROTECTS

PROTECTED WE STAND
CBRN PERSONAL PROTECTIVE EQUIPMENT



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BLÜCHER®
PROTECTS

MAXIMUM PROTECTION WITH MINIMUM BURDEN

**PROTECTIVE GARMENTS TAILORED TO CUSTOMER NEEDS –
MADE IN GERMANY**

SARATOGA®

SARATOGA® CB protective equipment provides mission-oriented protection and innovative solutions for specific requirements in the fields of military and civil defense as well as for fire brigades and the police.

BLÜCHER is the only company in the world that controls the entire value chain in the manufacture of sorptive textile high-performance composites.

With over 50 years of experience, BLÜCHER stands for advanced engineering sciences, analytical solutions and on-demand protective technologies and applications.

SARATOGA® technology is used in over 60 nations worldwide, including 27 NATO member states. Over 12 million SARATOGA® protection systems have been delivered to date.

**OVER 12 MILLION PERSONAL PROTECTIVE
SUITS DELIVERED WORLDWIDE**



BLÜCHER PROTECTS



DEFENCE

UNENCUMBERED PROTECTION

- Focus on the full range of technologies from raw materials through protective fabrics to garments
- In-depth understanding of specific user requirements through intensive dialogue and cooperation with all stakeholders and partners
- Personal experience in using our protection systems in live situations

SARATOGA® FACTS

**OVER 50 YEARS OF EXPERIENCE AND INNOVATION
FOR USERS WORLDWIDE**

The success of SARATOGA® protection systems is based on the foundation of an innovative and well established company.

BLÜCHER owns unique technologies as well as full control over every stage of production. For over 50 years, the highest quality demands of users worldwide have been met without compromise.

100%

CONTROL OF
PRODUCTION

→ 50

YEARS OF EXPERIENCE

350+

PATENTS

12M+

CB PROTECTIVE SUITS
WORLDWIDE WITH
SARATOGA®
TECHNOLOGY

60+

NATIONS PROCURED
CB SUITS WITH
SARATOGA®
TECHNOLOGY

ISO 9001

RELIABILITY THROUGH
INTEGRATED QUALITY
MANAGEMENT

AAA

FINANCIALLY STABLE
AND INDEPENDENT

→

STRONG FOCUS
ON RESEARCH AND
DEVELOPMENT
ENSURES STATE-OF-
THE-ART PRODUCTS

EXPERIENCED RELIABLE USER-ORIENTED

MISSION-ORIENTED PROTECTION SYSTEMS

- **Performing under heightened CBRN Threat Conditions**
- **The missions are complex – Survey, Patrolling, Recce, just as examples**
- **The weather is hot, the missions long and physically demanding**
- **Be protected and ready for sustained mission performance relying on lightweight, air-permeable protective ensembles**







CBRN PROTECTIVE HOT CLIMATE SUIT

**YOUR PARTNER IN HOT
AND DANGEROUS SITUATIONS**

Zip to close the sleeve and wrist
easily after donning hand protection





Pockets on both upper arms



Fly brake with zipper
to connect jacket and trousers





TERRORIST ATTACK

INTER-SERVICE RESPONSE

- **Terrorist Attack involving Chemical Warfare Agents in an inhabited area with many civilians. The situation calls for different services to respond – Police, Fire, Ambulance, Forensics, Military**
- **Be ready for the unexpected – wear your IPE even in potentially “cold zones” until all eventualities are covered**
- **Different services involved with many different tasks – the need for low-burden individual protection is the same - for all**

BROADBAND PROTECTION AGAINST CB THREATS

MISSION-SPECIFIC INTEGRATION OF PROTECTION FEATURES

SARATOGA® protection systems provide flexible broadband protection against chemical warfare agents and hazardous substances.

SARATOGA® offers mission-specific solutions through integration of protective features for diverse requirements in the fields of military and civil defence as well as for fire brigades and the police.

BROADBAND PROTECTION

AGAINST ALL KINDS OF CHEMICAL AND BIOLOGICAL WAREFARE AGENTS



COVERING THE FULL RANGE OF PROTECTION

VAPOUR



AEROSOLS



DROPLETS



OPTIONAL INTEGRATION OF ADDITIONAL FEATURES

FLAME RETARDANCY



ANTISTATIC



CAMOUFLAGE



MISSION-SPECIFIC SOLUTIONS

Based on a wide range of protective technologies

CBRN PROTECTIVE SOCKS
with innovative flat seam courses
which prevent pressure marks
as well as chafing



CBRN PROTECTIVE UNDERGARMENT

FULL PROTECTION FROM HEAD TO TOE



**CBRN PROTECTIVE
UNDERGARMENT BALACLAVA**
close fit to the majority of respiratory masks
thanks to different butyl rubber seals



CBRN PROTECTIVE GLOVES

high tactility and dexterity combined
with an enhanced level of vapour and
aerosol protection

**CBRN PROTECTIVE
AIR PERMEABLE GLOVES**

**CBRN PROTECTIVE
AIR PERMEABLE HYBRID GLOVES**





OPCW

ENFORCING THE PROHIBITION OF CHEMICAL WEAPONS

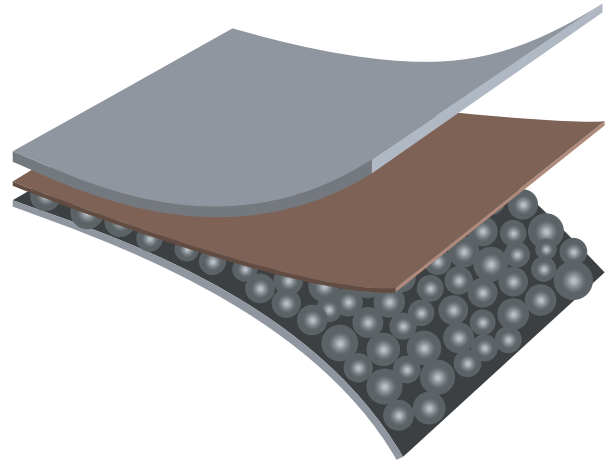
- Inspections of chemical plants, storage areas and laboratories carry the risk of exposure to chemicals
- A small team - under as much individual protection and with as much comfort as possible
- The work is tedious and time consuming - but it needs to be done
- The wear time of the IPE must not be a time limiting factor

THE SARATOGA® TECHNOLOGY

HIGHLY EFFICIENT PROTECTION SYSTEMS

SARATOGA® CB protective clothing is based on high-performance adsorbents and compound fabrics which offer outstanding protection against gaseous, liquid and aerosolised hazardous substances.

SARATOGA® protection systems offer many other features to increase mission effectiveness.



Schematic representation
of a SARATOGA® compound fabric



UNIQUE FEATURES

Mission effectiveness under all climatic conditions:

- Optimal ergonomics through stretch materials and optimised designs
- Low weight, high strength
- Air permeability

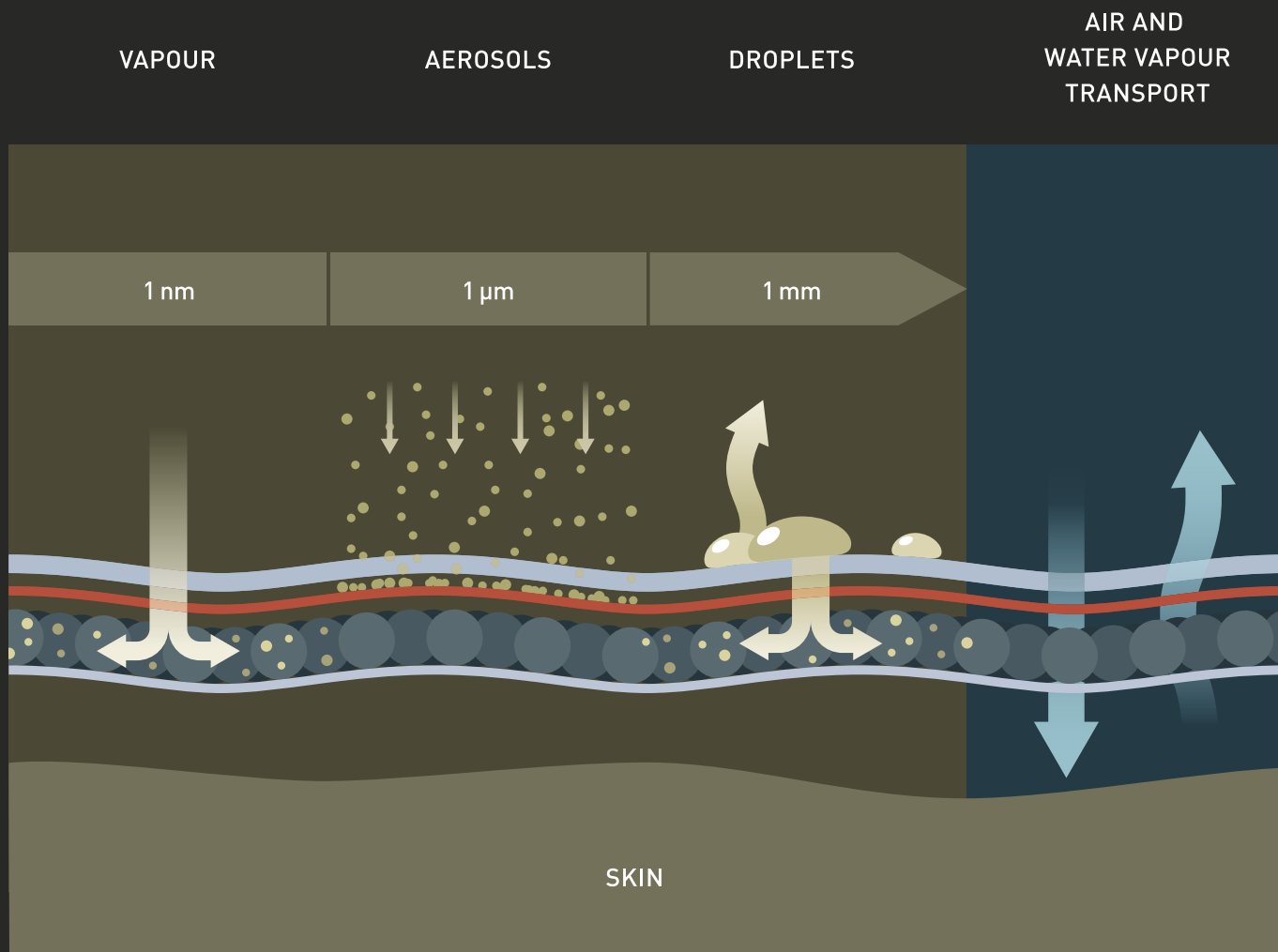
Low lifecycle cost:

- High durability
- Robust technology
- Long lifetime (wear time/shelf life)

THE SARATOGA® TECHNOLOGIES

ADAPTED TO A WIDE RANGE OF REQUIREMENTS
AND OPERATING CONDITIONS

All SARATOGA® CBRN protective clothing components are based on air permeable adsorptive technology, allowing the efficient removal of toxic contaminants in vapour, aerosol or droplet form with minimal impact on physiological burden.



Operating principle of adsorptive compound fabrics with high-performance adsorbents

POLICE

OPTIMISED PROTECTION

- Suspected terror lab - forced entry
- You need to be prepared for the worst, including very hazardous substances and fire attacks
- But there could also be armed persons – nothing must impair your presence of mind and your agility
- Personal Protection must be as unrestricting as possible
- Endorsed by UK Police CBRN Center





SARATOGA®

PRODUCT SOLUTIONS

MISSION-ORIENTED PROTECTIVE CLOTHING

SARATOGA® protective clothing includes overgarments, uniforms and undergarments as well as equipment accessories for complete dermal protection.

BLÜCHER develops mission-specific solutions for operational requirements. These solutions provide specific protective features for diverse threat environments.







CBRN PROTECTIVE COVERALL SFI

DEVELOPED FOR THE MOST EXTREME ACTIONS





Removable protectors inserted
in pockets on knees and elbows

Ergonomically pre-shaped
elbows and knees



Adjustable waistband on the outside
of the coverall for a perfect fit

CIVIL DEFENCE

PERFORM TO SAVE

- Natural Disaster can strike at any time – earthquake, floodings, storms
- Is the infrastructure at chemical plants still intact? Any spills or leakages?
- Locating leaks will take time - trained personnel are scarce
- Performing under IPE must not be a concern





CONTINUOUS DEVELOPMENT

**BLÜCHER DEDICATES SIGNIFICANT RESOURCES
TO RESEARCH AND DEVELOPMENT**

Various customer-specific protection needs and operational requirements have resulted in a variety of mission-specific technologies that serve as a basis for the continuous development of new solutions. Research and development at BLÜCHER is driven by the analysis and the understanding of customer requirements as well as by the creativity of the BLÜCHER scientists, engineers and specialists. BLÜCHER focuses on new technologies, advanced processes and innovative designs. All innovations are validated at internationally renowned and recognised test institutes.

BLÜCHER PROTECTS





Patented hood / mask interface allows the coverall to be worn with an extensive range of respirator types



Integrated socks to ensure quick, easy and intuitive donning



CBRN PROTECTIVE COVERALL POLYPROTECT

**A PERFECT FIT AND A HIGH DEGREE
OF FREEDOM OF MOVEMENT**



Thumb loops at the sleeve cuffs
ensure safe interfacing with the
sleeve/hand protection



BLÜCHER PROTECTS



AMBULANCE SERVICES

FOCUSED ON THE PATIENT

- Remember the Tokyo Subway Attack - you never know what is awaiting you at the scene
- The basic emergency rule – your own safety first!
- An incapacitated Paramedic is of no help to anyone but just an additional burden
- Wear IPE which does not add more discomfort than your normal operational suit



Integrated harness for
quick casualty extraction



Holder for agent tracer paper



Removeable agent tracer holder
which can be repeatedly replenished



CBRN PROTECTIVE COVERALL

CIVIL PROTECTION - SPECIAL TASKS
REQUIRE SPECIAL SOLUTIONS

hood / mask interface
to be worn with a range
of different respirators



SARATOGA®

PERSONAL PROTECTIVE CLOTHING

PROTECT THOSE WHO PROTECTS US

- All SARATOGA® products are designed for operations in which exposure to CBRN threats has to be anticipated
- All SARATOGA® products are available with vapour and enhanced aerosol protection
- The selected materials and filters ensure low physical burden and full operational capability for long periods of use
- An ergonomic fit guarantees a high level of wear comfort and freedom of movement
- Compatibility with additional equipment (e.g. masks, helmets) is ensured
- All SARATOGA® products are tailored to user and mission needs
- All SARATOGA® products are tested by external certified institutes



COMPANY FACTS

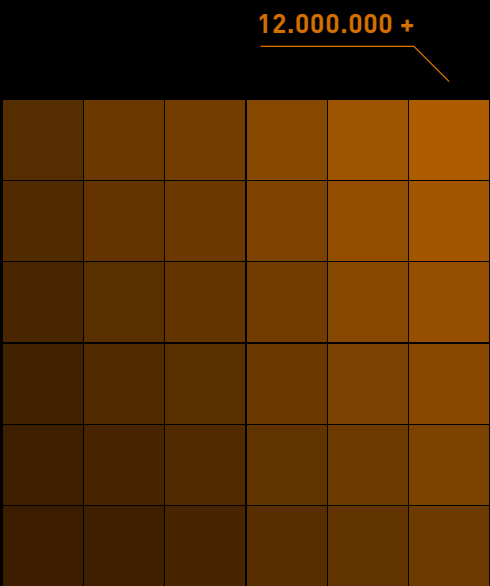
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RELIABILITY

OVER 12 MILLION SUITS SOLD ARE THE
RESULT OF ABSOLUTE QUALITY AND RELIABILITY



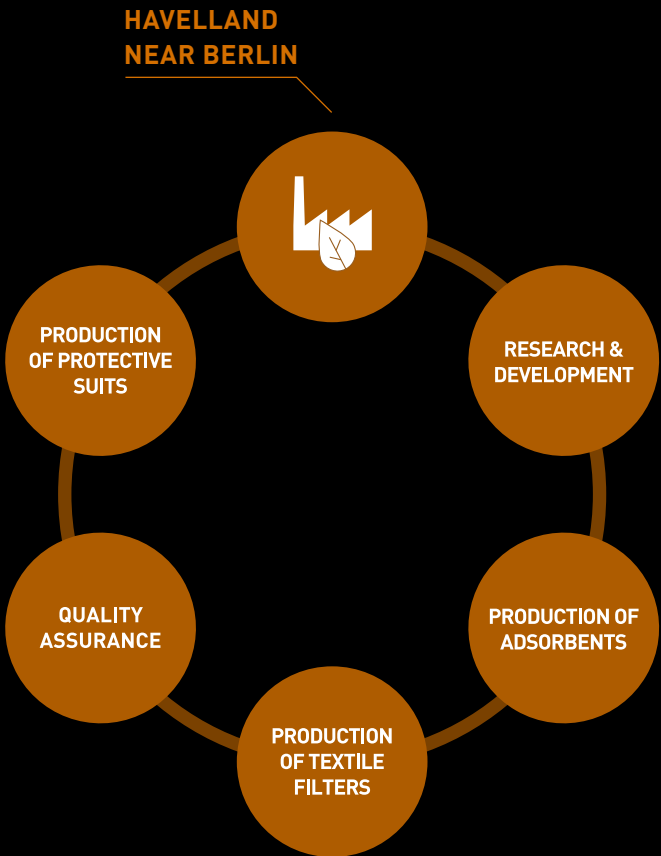
12 M+
protective suits supplied

100%
customer satisfaction

100% CONTROL OF PRODUCTION

RESEARCH AND DEVELOPMENT,
PRODUCTION AND QUALITY ASSURANCE
AT THREE LOCATIONS IN GERMANY

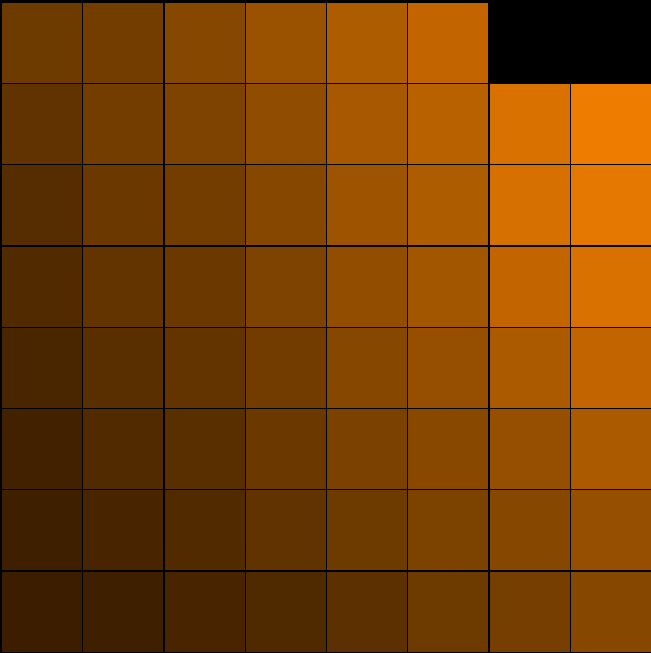
Premnitz Made in Germany – a production site with
over 100 years of industrial history. A sustainable
state-of-the-art facility covers all production steps
to achieve unique production depth.



WORLDWIDE PROTECTION

ALL OVER THE WORLD, USERS RELY ON THE UNCOMPROMISING QUALITY OF SARATOGA® PROTECTIVE CLOTHING FOR THEIR DIVERSE MISSIONS

60 +



Australia	Denmark	Hungary	Korea	Malta	Romania	Sultanate of Oman	United Kingdom
Austria	Dubai	India	Kuwait	NAMSA	Qatar	Sweden	United Nations
Bahrain	Egypt	Ireland	Latvia	NATO	Saudi Arabia	Switzerland	USA
Belgium	Estonia	Israel	Libya	New Zealand	Serbia	Thailand	Vietnam
Brasil	Finland	Italy	Lithuania	Norway	Singapore	The Netherlands	
Bulgaria	France	Japan	Luxembourg	OPCW	Slovakia	Turkey	
Canada	Germany	Jordan	Macedonia	Philippines	Slovenia	United Arab Emirates	
Croatia	Greece	Kazakhstan	Malaysia	Poland	Spain		





PROTECTED YOU STAND

**DO YOU HAVE A CAPABILITY GAP?
DO YOU NEED PROTECTION FOR YOUR TEAM?
LET US HELP YOU WITH QUALIFIED SUPPORT.**

CONTACT US

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BLÜCHER®
PROTECTS

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