

FUTURETECH

Kärcher Group



OUR PRODUCTS IN OVERVIEW

Protection and supply systems for armed forces and military organizations

Armed forces and military organizations

Helping you restore safety



Kärcher Futuretech GmbH – engineered in Germany

Armed forces and military organizations all over the world place their trust in Kärcher Futuretech solutions for CBRN decontamination, water supply, field camp technology, catering logistics and hygiene. These products were developed in cooperation with leading nations' defence ministries for worldwide deployment in the toughest conditions and under the most extreme stress.

That is because reliable decontamination, an assured water supply, clean accommodation and functional field kitchen modules create the indispensable foundation for coping with extreme situations. As such, they are the first step toward reconstruction.

Both for peacekeeping missions and for rapid relief after disasters, quality is the indispensable basis for safe and reliable operation.

Kärcher Futuretech is a subsidiary of the complete family-owned company Kärcher and stands up for its corporate social responsibility for peace and humanity as well as environmental protection.

Our advantages are:

- **Service** – we offer you all the services required for the training, maintenance and repair of our products worldwide.
- **Cost-efficiency** – our state-of-the-art technology allows for the best performance combined with minimal energy consumption.
- **Sustainability** – we develop eco-friendly, economically efficient systems, that last longer than the emergency.
- **Availability** – we deliver worldwide directly into disaster zones including service and training on the ground.
- **Know-how** – since over 30 years, we are developing reliable products for the harshest conditions. We have 29 active patents.
- **Quality** – our products are engineered, made and tested in Germany.
- **Easy to use** – we keep the complexity inside our products to gain simplicity on usage outside.

References

- German armed forces: Systems in the product area of Decontamination, Water Purification, Mobile Catering and Field Camp, Germany
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- Eastern Forum (Far East) Co. Ltd: Field Camp Systems, Hong Kong
- Royal Army of Oman: Decontamination Systems, Oman
- Armed Forces: Systems in the product area of Water Purification and Decontamination, Chile
- Military of Senegal: Water Supply Systems, Senegal
- Brazilian Armed Forces: Mobile Catering Systems, Brazil
- Canadian Armed Forces: Decontamination Systems, Canada
- G.H.Q. Armed Forces: Systems in the product area of Water Purification, Decontamination and Mobile Catering, United Arab Emirates
- Emergency Military Unit: Systems in the product area of Decontamination and Water Purification, Spain
- Saudi Arabian Army: Mobile Catering Systems, Saudi Arabia

Kärcher Futuretech 's solutions for the field

Best supplied wherever needed



Safe drinking water for everyone - produced where needed

Drinking water is one of the basic elements every person needs for living. We offer you effective and efficient mobile water purification systems. Depending on the scenario, we are able to deliver adequate solutions based on field proven state-of-the-art technologies which do not require any chemicals for the purification process itself.



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Water distribution - get it to the task forces

To increase hygiene and avoid unnecessary transportation costs, the transportation required should be reduced to a minimum. We offer you suitable mobile water filling systems that help the task forces to greatly simplify the distribution of safe drinking water in the field through bottling and packaging on site.



Mobile Catering - providing the best nutrition under adverse conditions

In order to carry out extraordinary tasks the required task forces must maintain an optimum energy level to enable them to provide emergency aid support under the harshest conditions. We offer flexible mobile field catering systems to prepare fresh, wholesome meals during these challenging situations and high volumes of complete meals for a large number of persons.



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Depending on the field environment and support requirements, we can deliver the most ideal field kitchen solutions for rapid or long-term operations.



CBRN Protection Systems - thorough treatment under hazardous conditions

CBRN threats may occur anytime in many different environments with limited or no early detection possibilities. The known developments in the international military political situation have not only led to a change in the tasks of the armed forces but also modified the spectrum of the present and expected CBRN threats. In addition, there are biological epidemics or terrorist attacks. Such unexpected, sudden situations require immediate, well-planned response.



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We offer a full range of equipment and systems for the safe decontamination of affected people, vehicles, terrain, high-value devices and sensitive equipment.



Field Camp Systems - complete customized system solutions

Task forces work under the harshest conditions that challenge their physical capabilities. Therefore, an adequate living environment is crucial for recuperation and to maintain their overall well-being.

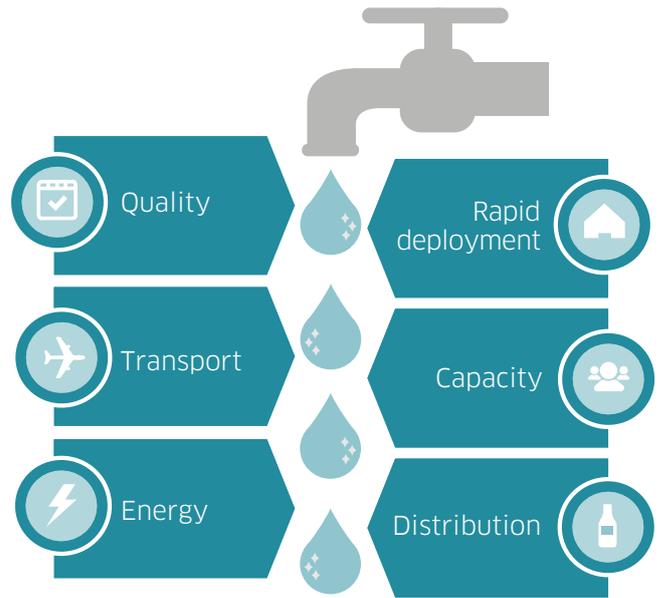


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We offer tailored high quality field camp solutions to support the task forces in focusing their energy on performing their professional work. The main field camp components include e.g. laundry, sanitation, catering and water supply.

The challenge of water supply in emergencies

Water is available almost everywhere in the world, but water which is directly suitable for drinking is very often scarce. Military scenarios can consequently vary greatly, depending on the respective mission area. It must be possible to ensure the operation of the systems and cater for the task forces under the harshest conditions: at extreme temperatures, at a high dust load or under strong mechanical stress, e.g. during transport. Missions have to be carried out very rapidly and can hardly be planned in advance, which means that a safe drinking water supply can only be ensured by purification directly on site. Practice has shown that this is the only way to reduce the logistical effort required.



Your ideal water supply system

Our solutions

Know-how and experience

To produce clean and safe drinking water, the Kärcher Futuretech engineers always base new product development on field-proven experiences. As a result, all our systems are user friendly, and reliable for water purification around the globe in almost any climatic zones under the harshest conditions.

This has been proven by many years of experience gained together with our customers in the planning and carrying out for the most varied missions all around the globe in almost all climatic zones.

Mobile technology

Military missions have to be carried out very quickly with little advanced planning, which means that an immediate drinking water supply can only be ensured by purification directly on site. Our system solutions allow you to master the technical challenge of mobile drinking water supply worldwide.

Quality

Although used under the harshest conditions our systems produce drinking water which comply, for example, with military standards such as STANAG 2136 from NATO, the regulations of the WHO (World Health Organization) and the German Drinking Water Regulation (TrinkwV 2001).

Experience gained by our customers in missions worldwide demonstrates that Kärcher Futuretech has met these criteria for many years. Thanks to the process safety of our systems for the water purification from nearly all natural raw water sources our equipment is fully reliable for global water missions.



Know-how and field experience



Mobile technology



Quality and water safety

Water Purification

Produced where needed

Water purification systems must be able to remove very different kinds of contaminants. We offer solutions for the purification of highly contaminated fresh, brackish or even salt water from nearly all natural raw water sources. Our current portfolio has a range from 550 l/h up to 15 000 l/h drinking water output.

Membrane technology

A method which does not require any chemicals for the purification process itself is to purify water using membrane technology. Depending on the mission scenario, the most effective and efficient membranes are Ultrafiltration or Reverse Osmosis membranes.

Mobility

Our products are designed to fulfill your specific transportation requirements. We provide a full range of modular systems. We have compact systems that can easily be carried by hand, designed with a "4 person 4 corners" lift principle. We also configure our larger systems for trailer mount or ISO 20' container configuration for optimal transportation.

Quality

Soldiers must be convinced of the water purity before they accept purified water as safe in all situations. This starts with the water's visual appearance, with all visible particles removed, and no bad taste, odor and color.

Even when the water might appear clean, it could still contain bacteria, viruses and chemicals. Kärcher Futuretech systems hold back these contaminants which you cannot sense.

Quantity

Depending on the mission scenario the amount of drinking water needed can vary from small output rates during short term operations to high output rates and long term consumption. For these different scenarios, we can deliver the right water supply solution.

Hygiene

Thanks to our adapted field-proven cleaning and disinfection concepts for the respective complete system, the highest level of hygiene can always be ensured in the field even during long-term missions. That is why drinking water purified by Kärcher Futuretech systems can be considered as excellent.

Easy to use

Our products are easy to understand and intuitive for routine operations. The complete procedure from transport to start-up and operation can be carried out rapidly by personnel after a customized training.

Safety

With the equipment of Kärcher Futuretech the operator can produce drinking water and distribute it by himself on site. Thus the customer can control the complete hygiene process. Furthermore, you can avoid the transport risk of water convoys through dangerous zones.



WTC 1600 GT on trailer



WTC 500 GT in action



WTC 3000 GT on trailer



WTC 8000 on container



Water Distribution

Get it to the task forces



After having purified the water available on site to valuable drinking water, it must be temporarily stored and packaged, if required, before distribution to the task forces. There is a high risk of contamination of the water during distribution and thus endangering the safety of the people to be catered for. Kärcher Futuretech offers solutions for drinking water filling and distribution in the field. Different systems are available which allow the water to be filled into packages of different sizes (0.25 or 0.5 liter) and bottles (1 liter).

Logistics

All mobile Kärcher Futuretech water filling systems help you to greatly simplify the distribution of drinking water in the field. The big advantage of our transportable filling systems are that unnecessary transportation costs and transport load volume can be reduced to a minimum by filling the purified water directly into hygienic packages or bottles.

Flexible receptacle size

The drinking water can be distributed in various sized containers directly to the people. Our systems can produce handy packages or bottles for local transportation and direct consumption.

Quality

Pure drinking water is not enough if the quality of the water cannot be assured till it is consumed. Thus, our solutions include filling on site with high quality and hygienic packages or bottles.

Hygiene

We offer systems for bottling and packaging of drinking water in the field environment at the highest hygiene level possible. Only by ensuring a very high level of hygiene is it possible to abstain from chlorine or reduce it to an absolute minimum. Thanks to the chlorine-free drinking water filling a pure taste can be assured and still guarantees a bestbefore-date of up to several months under field conditions.

Easy to use

Our distribution systems are easy to operate with their automated controls and provide an easy way to refill consumables needed throughout the process.



Preforms for mobile water bottling



WBP 1300 - Water bottling



WBP 1600 G - packaging



Drinking water distribution station

WTC 3000 GT - Reverse Osmosis

Clean drinking water, a precious commodity



Waterclean 3000 GT

- Particle-, microbial- and viral-free drinking water from almost any raw water source
- Retention of salt and chemicals
- Automatic and simple operation



Your Benefits

- 1 Produces up to 3,000 liters of drinking water per hour
- 2 Sturdy and all terrain single axle trailer
- 3 Independent system by integrated power generator
- 4 High reliability
- 5 Rapid deployment



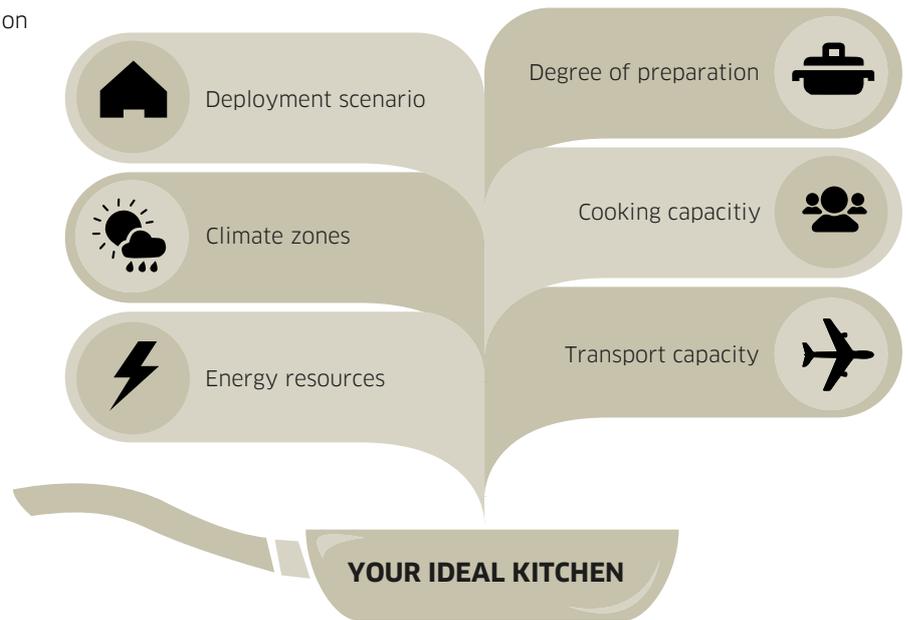
WTC 3000 GT



WTC 3000 GT in action

The optimum supply chain for catering in the field

There is not one ideal field kitchen configuration – but our tailored solution options meet your specific mission's deployment and operation scenario.



Our solutions

Deployment scenario

Regardless of the duration of a mission the task forces should be fed with highly nutritious meals. We have designed our highly efficient catering systems for any environment and mission requirement.

Cooking capacity

Cooking a basic meal for 20 soldiers is quite different to offering a full menu for several hundred soldiers, which requires an operational logistics supply chain combined with a high performance kitchen system. We have developed a modular based approach for field feeding systems to scale up capacity for cooking as needed.

Transport capacity

Whether you need to transport your field kitchen inside or outside by aircraft or by wheeled vehicle transportation, our catering systems are optimized in weight and size to meet these transportation requirements. Our systems are designed for rapid deployment and quick set up.

Energy resources

Whether you are cooking with diesel, gas or electricity, we offer a solution that fits your standards. Kärcher Futuretech's energy efficient technology allows you the most efficient use out of limited energy resources.

Climate zones

Operations occur in all different scenarios where extreme weather ranges and conditions can occur. Our products are robust and designed for rugged use, therefore comply with military standards.

A wide range of accessories complements our catering systems for operation at any location worldwide.

Degree of preparation

The available food supply chain affects the means of cooking. You can prepare fresh food or cook meals supplied with a high degree of preparation. Our modular kitchen set up adapts perfectly to your food flow concept.

Kärcher Futuretech in the field – Our products

KCC 500 – Mobile kitchen container with optimal space utilization

During large scale deployments several hundred soldiers may need to be catered for day and night. An adequate kitchen system is necessary in order to fulfill the high ongoing demand for varying complete meals.

The KCC 500 is the perfect solution, offering the highest cooking capacity even under extreme climatic field conditions. The two 20' ISO container based, configurable system has a compact design with maximum interior workspace allowing for rapid deployment and set up within a few hours and can operate permanently for months. With the highest hygiene standards, interchangeable cooking units and a modular container expansion to adapt to your catering requirements, the KCC 500 fits perfectly in your logistical catering strategy. This energy efficient Kitchen works with diesel, as a result it can achieve substantial savings compared to operation with generator power: With five cooking modules up to 100,000 litres of diesel a year.

TFK and MFK – Fast and robust for off-road performance

The TFK consists of permanently mounted units on an all-terrain single-axis trailer. All the system components of the TFK 250 are highly durable and specifically designed and constructed for cross-country travel. This allows the trailer to be used in impacted disaster areas.

The all-terrain single-axis trailer of the MFK includes four independent modular slots which can be freely configured to customer requirements. If needed there is the possibility to use the modules as freestanding operating units without the trailer.



KCC 500 – from the inside



TFK trailer



Individual configuration

Our catering systems are designed and tailored to fit your team size and mission requirements.

Expandability

Our efficient catering systems allow you to easily add more cooking components to support special requirements. For example, our autonomous cooking modules of the MFK and KCC 500 which can be split up and operated at multiple locations.

Adaptability

Depending on your catering strategy and the various cultural aspects, you can choose between a variety of kitchen set up options e.g. our combi steamer KCS 15 for baking and steaming. We also offer a wide range of accessories for nearly any field condition and type of food cooking.

Exchangeability

Standardized interfaces of cooking modules allow a quick and easy change to the most effective configuration.



Standardized freely configurable components

Thorough treatment under hazardous conditions

Developments in the international military political situation have not only led to a change in the tasks of the armed forces but also modified the spectrum of the present and expected CBRN threats.

In order to be able to react effectively to these new threats, it is not only necessary to draw the required conclusions from the potential threats but also to ensure the preconditions for minimizing the possible effects.

Kärcher Futuretech offers a full range of CBRN decontamination knowledge base, proven field experience, trained staff, fielded decon systems already in service and deployed, and the tested chemicals for nearly any kind of CBRN response. Furthermore we have a wide range of systems for the safe decontamination of affected people, vehicles, road sections, personal and sensitive equipment.



Influencing factors for a safe and thorough decontamination

Our solutions

Certified technology

Our equipment has been extensively tested under various climate conditions and operational scenarios. The decontamination agents have been checked and approved for a wide range of different contaminants. Kärcher Futuretech's decontamination systems comply with national and international norms, such as the NATO Standardization Agreement STANAG 4521 and the German Armed Forces AQAP-2110 certification.

With our highly reliable systems, including our patented vacuum chamber technology and decontamination agents, we play a leading role in countering the CBRN contamination threat.

Proven field experience & CBRN knowledge

We do not only develop our systems jointly with technical experts and operational test organizations, we also have a pool of multiskilled engineers, chemists, and CBRN experts to provide a wide range of know-how and consultation for all kinds of decontamination challenges.

For optimum decontamination success, we offer operator- and maintainer-related training for all our systems on-site worldwide. Kärcher Futuretech systems have proven field experience. Our systems are being used successfully under nearly all climatic zones, from the arctic freeze in Finland to the dry and hot desert in Afghanistan.

Quality and environmental management

We are proud of our systems and technology that are developed and made in Germany. As a member of the Kärcher Group, Kärcher Futuretech can select its components from a wide pool of high quality and extensively tested assemblies and parts. With Kärcher's global logistical network and highly skilled staff, Kärcher Futuretech's products can be maintained and repaired on time. We maintain and comply with the high level ISO 9001 standards, the AQAP-2110 certification and current manufacturing quality norms of our industry.

Our standards go beyond technology and include sustainable environmental management. Our decontamination agents are fully biodegradable and our devices are optimized towards a minimum use of water and energy resources. For this matter, we comply with the ISO 14001 (environmental management system).



State-of-the-art-technologies

Kärcher Futuretech in the field – Our products

Decontamination of persons

In the case of contaminated persons every minute counts. Thus, Kärcher Futuretech decontamination systems are designed for rapid deployment and set-up regardless of any existing infrastructure. The whole operational concept is optimized for fast but effective treatment in case of a potential mass panic amongst the affected people. Clear signs and an intuitive design ensure an easy and rapid treatment.

Kärcher Futuretech has developed an optimized decon shower technology based on current studies for safe skin decontamination with careful consideration for non-ambulant persons as well.



Decon shower lines for ambulatory persons - DSAP

Decontamination of material

In large scale deployments, the availability of personal equipment is limited and cannot always be left behind in the contaminated area. Kärcher Futuretech offers systems for the decontamination of protective clothing and equipment using heat, vapor and wet chemical decontamination technologies.

Decontamination of sensitive material

Laptops, communication and detection equipment and other important devices cannot withstand heat or wet chemical decontamination processes. Therefore, Kärcher Futuretech has developed a vacuum decontamination technology based on extensive studies and real contaminants tests.

Our agentless (C decon) or agent-enhanced (B decon) vacuum processes to evaporate, sublime or deactivate contaminants enable a safe ChemBio decontamination of sensitive material with even complex surfaces, small openings and pores.

Decontamination of large equipment and vehicles

An optimum decontamination of vehicles is a matter of details. It is not just about cleaning the vehicle, but many factors must be included to ensure process safety. With many years of field experience, Kärcher Futuretech offers exactly the decontamination system you need. Our sophisticated operational concept includes a three phases approach, full surface treatment down to the vehicle underbody and high performance equipment by Kärcher.

In a self-sufficient operation, time is crucial. All our components are designed to perform inline with our CBRN decontaminant agents for minimum reaction time at maximum operation cycle without refilling, refueling or additional maintenance steps.

Decontamination of infrastructure and interiors

After a contamination incident, interiors of vehicles, buildings and wide areas such as road sections may be affected as well. In order to decontaminate e.g. curved shapes of surfaces and the large areas of buildings from the ceiling to the cellar or for whole room interiors we offer spray extraction and fogging devices. For the decontamination of road sections high performance application equipment as spray-bars are attached to the front of the decontamination vehicles.



Hotgas chamber - HGSC



Vacuum chamber - VDM 265 (on trailer)



Kärcher technology - MPDS



Decontamination of road sections



Decontamination Systems

DSAP – Decontamination System for Ambulatory Persons

In the case of a CBRN contamination accident with a large number of affected persons, the DSAP system is designed for fast and safe decontamination. Configured in a 20' container (20' x 8' x 8') with pre-installed, ready-to-operate components, the system is operational within 40 minutes. It includes quickly inflatable tents for dressing and undressing with an integrated high-performance automated shower system. The DSAP can be equipped with 2 or 4 inflatable tents and 3 or 4 shower lines for ambulatory personnel or separate lines for parallel treatment of ambulatory and non-ambulatory persons.

Easy to use equipment, clearly marked instructional pictograms and a traffic light system facilitate fast and safe decon treatment for up to 180 personnel per hour.



DSAP, e.g. Spain

DSVP 10 C – Rapid deployment systems

The DSVP 10 C is one of our compact solutions for the decontamination of vehicles, soldiers, building interiors and road sections. Mounted in a 10' container with pre-installed equipment, the DSVP10 C System can be set up manually within minutes. No external lifting equipment or tools are required. All integrated lifting devices and components are perfectly matched to enable an easy operation of all decon processes from one intuitive, multi-functional control panel.

The system is fully self-sufficient including water for at least one hour of operation to decontaminate two large vehicles such as a tank, 20 task forces, 150 m² terrain or 200 m² of interior surfaces per hour.



10' Rapid deployment system, e.g. Netherlands

TEP 90 – The complete Decontamination System

The TEP 90 constitutes our high-end decontamination system using state-of-the-art technology to decontaminate vehicles, persons, personal CBRN protective clothing, personal and sensitive equipment, vehicle interiors, road sections and infrastructure.

The container-based TEP 90 consists of four self-sufficient modules that can be deployed with an integrated crane and used independently for parallel operation in each field of decontamination applications. With this system it is possible to decontaminate 20 to 40 task forces, four to six large vehicles such as a tank, 20 personal and sensitive equipment as well as 1,500 m² terrain simultaneously.



TEP 90, e.g. Germany

Modularity – the next generation of decontamination systems

Cage Based Modular Decon System

Based on a lightweight but robust cage frame, the new modular system consists of individual, compact and interoperable transport units, which are rapidly mounted, e.g. up to 9 modules on a 20' transportation platform compatible with the ISO twistlock system.

We believe, that the “choose the modules you need”-principle allows you to select the specific decontamination functions necessary for your individual decontamination scenario. Such modules are for example: two water transport modules with pumps and heating included, a universal treatment module for high-pressure cleaning and decontaminant application,

a personnel decontamination module including a fully equipped shower tent with heating and a generator unit for a full-scale power supply.



Cage Based Modular Decon System

CBRN Decontamination Agents



Kärcher Futuretech is also a worldwide well-known specialist for CBRN decontamination agents. We offer a complete set of decontamination agents that are fast-acting and highly efficient on a wide range of toxic chemicals, bacteria, fungi, viruses, radioactive particles as well as on ChemBio warfare agents. These agents have been extensively tested with live agent contaminants under various climate conditions, operational scenarios and certified by independent laboratories around the world.

Just 1% of all remaining contaminants can still be fatal. Several laboratory tests have proven that specialized agents for each kind of CBRN contamination perform significantly more effective than an all-in-one agent with a broad but individually weaker spectrum of effect.

General Benefits

- The optimum agent for each scenario
- Rapid reaction time with maximum effectiveness
- Easy, safe handling and rapid usability
- Biologically degradable and high surface material compatibility
- Long term storage stability and minimum logistical requirements
- All decon agents can be used in NATO-relevant climate zones (-30°C to +49°C / -22°F to +120°F)
- All decon agents comply with the NATO criteria as AEP 7, STANAG 2609; as well as further requirement parameters as short reaction time
- Reduced Logistical effort (e.g. no water necessary for GDS 2000)

Our products

GDS 2000

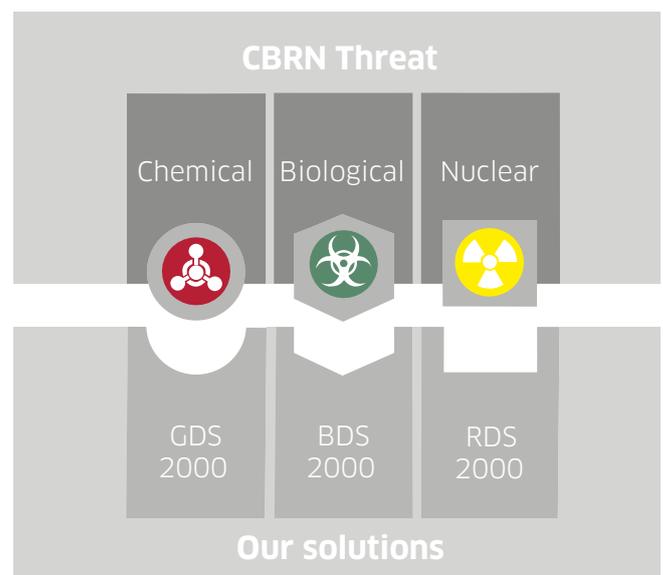
GDS 2000 is a highly effective, non-aqueous agent for rapid and efficient detoxification of a wide range of toxic chemicals and warfare agents. Specially developed as a ready to use decontaminant, no water is needed for the application resulting in a reduction of the logistics burden for water supply. One 20 liter GDS 2000 container is enough for the entire surface area of a tank (100 m²).

BDS 2000

BDS 2000 has been developed for the safe decontamination of biologically contaminated surfaces, sensitive materials and room interiors. This agent is based on a special thermally stable formula of peracetic acid (PAA) which has exhibited outstanding decontamination performance. There is no resistance of microbial pathogens observed for PAA testing. BDS 2000 can be injected directly into a high pressure water stream for fast-acting foam application. Due to its antifreeze compatibility, BDS 2000 can be used at temperatures from -30 °C to +49 °C.

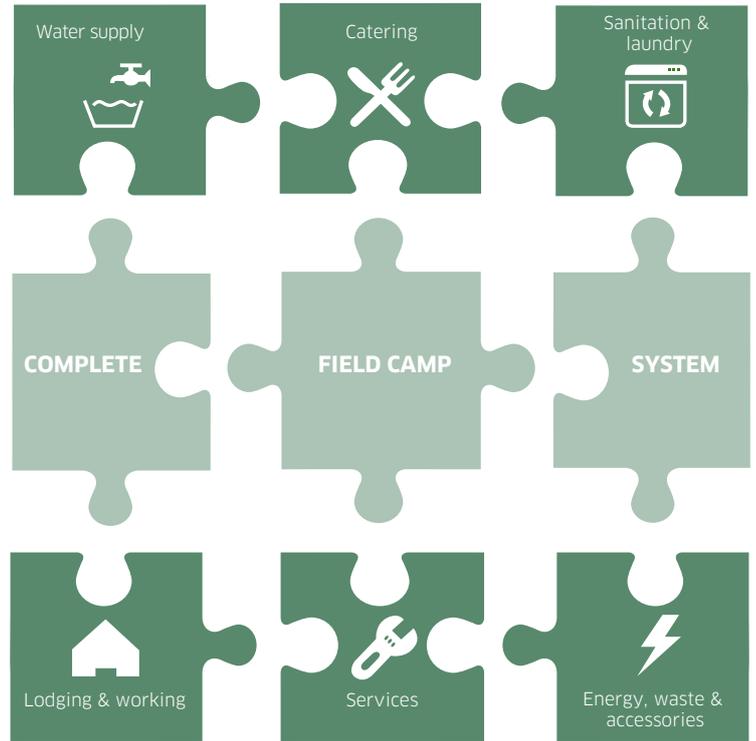
RDS 2000

RDS 2000 has been jointly developed by the Bundeswehr Research Institute for Protective Technologies and CBRN Protection (WIS) in Germany and Kärcher Futuretech for the decontamination of radioactively contaminated surfaces. The foaming agent can be applied by a wide range of devices. After a short reaction time, the radioactive contaminants are rinsed off together with the RDS 2000 foam by a high pressure water jet.



Complete customized system solutions

Before configuring a field camp layout, there are several questions that need to be answered to determine the base camp system that suits your mission scenario ideally. For example, how many persons are going to live in the camp, how mobile must it be, how is the climate and the environment on site, for how long will the system be deployed, how is the system transported? Kärcher Futuretech deals with all these questions and provides a complete customized system solution. All system components are designed for optimum interoperability as well as self-sufficient operation. Thus, our system elements can also be perfectly integrated in your existing field camp.



Our solutions

Know-how

Kärcher Futuretech is your best advisor and most reliable partner for mobile field camp systems. We offer over 30 years of field experience with experts in the design and set up of field camps and a wide range of system components.

In order to fulfil your requirements and reduce the complexity of designing a complete field camp, we take in to consideration all relevant parameters: number of persons, climate conditions, set-up area, energy supply and transport. Our services include consultancy, planning, training of your personnel, field service maintenance and repair.

Modularity

Due to the high modularity of all our components, we are able to provide you with the ideal solution for your respective mission scenario. We are able to plan, design and set-up camps for 50 to 3,000 task forces, including full living accommodation, catering, water supply, sanitation, laundry and waste management. During operation of the base camp, the capacity may have to be adapted to accommodate changing staff sizes or local constraints may require a different setup layout. Our standardized interfaces, different accessories and interoperable equipment give you the full flexibility to adjust and continue to support new or continuing deployment scenarios.

Transport

Your transport capacities define the transportation basis. Kärcher Futuretech offers you complete field camp systems on trailers, platforms or containers depending on your individual transport capacities. In conjunction with the deployment concept – highly mobile, mobile or semi-stationary – we offer you the ideal base camp solution to perfectly fit in your overall logistic concept.



Complete field camp systems

Kärcher Futuretech in the field – Our products

Sanitary components – Best hygiene under field conditions

Kärcher Futuretech provides fully mobile sanitary units modularly equipped with showers, washing basins, toilets and urinals. Their smooth and dirt repelling surfaces are easy to clean, and their sophisticated design reduces the maintenance requirements to a minimum. While compact in transportation, platform facilities are expanded on-site to closed cubicles for a maximum of privacy and comfort during deployment. All necessary equipment is already on board.



Sanitary facilities

Field laundry component – Clean clothing in the field

Best hygiene practices include fresh clothing. To cope with the large amount of clothing, Kärcher Futuretech offers a high performance mobile field laundry. For example, our solution in a 20'-container which includes 6 washing machines and 6 dryers. These machines are long-lasting and for professional use.



Washing facilities

Heating and air-conditioning components – Ready for any deployment scenario

Missions will be performed in all climatic conditions. Depending on the climate conditions on-site, Kärcher Futuretech offers a variety of high quality heating and air-conditioning devices with standardized hoses. We can provide individual capacity up to 18 kW cooling power and 60 kW heating power. All our equipment is weather-proof and robust for outdoor operation.



MAC 18 – Air conditioning unit

Field Deployment – self-sufficient and sustainable

“Field deployments should bring assistance”

Kärcher Futuretech field camps are not only developed for maximum comfort and reduced logistical efforts. Self-sufficiency and sustainable usage of local energy and water resources play also a central role in our system layout and component design.



Sustainable field camp systems



Technical Data Sheet

Water Supply Systems – A sample



1



2



3



4



5



6



7



8

1 WTC 500 RO

**2 WTC 1600 RO
WTC 3000 RO**

**3 WTC 8000/
15000 RO/UF**

**4 WTC 2500 UF
WTC 5000 UF**

Technical Data

Approx. Size (L x W x H)	mm	1,185 x 785 x 585	1,900 x 1,600 x 1,050	6,058 x 2,438 x 2,591	1,200 x 800 x 1,330
Approx. Weight	kg	197	1,000 (WTC 1600)	9,500	240 (WTC 5000)
Max. Capacity	l/h	550 RO	1,600 RO 3,000 RO	8,000 RO 15,000 UF	2,500 UF 5,000 UF
Transport		1 Euro-pallet, trailer	Platform, trailer	20' Container	1 Euro-pallet

**5 Water Packaging System
WPS 1600 GT**

**6 Water Bottling Plant
WBP 1300**

**7 Drinking Water
Distribution Station**

8 Water Tanks

Technical Data

Approx. Size (L x W x H)	mm	5,460 x 2,170 x 2,490	6,058 x 2,438 x 2,591	800 x 600 x 410	up to 5,500 x 2,700 x 800 (Bladder)
Approx. Weight	kg	3,500 (trailer)	8,900	32	
Max. Capacity		1,600 packages/h	1,300 bottles/h (1 l bottles)	5 m ³ /h (pump) 6 water faucets	1,000 l (Inliner) 2,500 - 10,000 l (Bladder / Onion)
Transport		Trailer	20' Container	Aluminium box	Bladder, Onion, Inliner

Technical Data Sheet

Mobile Catering Systems- A sample



1 **Modular Field Kitchen MFK**
 2 **Tactical Field Kitchen TFK 250**
 3 **Kitchen Catering Container KCC 500**
 4 **Rapid Response Kitchen KRR 50 E**

Technical Data					
Approx. Size (L x W x H)	mm	4,405 x 2,070 x 2,620	4,020 x 2,155 x 2,625	6,058 x 5,376 x 2,591	800 x 600 x 915 (per module)
Approx. Weight	kg	2,000 (max. weight)	2,170 (empty trailer)	2 x 4,000 (empty container)	< 100 kg per module
Max. Capacity		500 set meals 800 simple meals (depends on config.)	300 set meals 600 simple meals	500 set meals 1,500 simple meals (depends on conf.)	50 set meals 80 simple meals (standard)
Transport		Trailer for 4 cooking modules	Trailer incl. 8 cooking elements	2 x 20' Container (expandable with more containers)	1/2 Euro pallet per module

5 **Combi-Steamer KCS 15**
 6 **Kitchen Cooking Module KCM 125**
 7 **Frying module 20 l Electric**
 8 **Frying module 70 l Diesel**

Technical Data					
Approx. Size (L x W x H)	mm	1,010 x 700 x 1,500	1,100 x 700 x 910	1,180 x 705 x 900	1,107 x 700 x 984
Approx. Weight	kg	255	125	70	133 (w/o burner)
Max. Capacity		15 x GN 1/1 14 kW heating Diesel	125 l 14 kW heating Diesel	20 l 10,2 kW power input Electrical heating	70 l 14 kW heating Diesel
Transport		Mobile for KCC 500	Mobile for MFK or KCC 500	Mobile for KCC 500	Mobile for MFK

For more information about our complete product portfolio please visit us online
Subject to technical changes without prior notice

Technical Data Sheet

CBRN Decontamination Systems – A sample



1 Hot Water Module HWM 100

2 Spray Extraction Module SXM 30 C

3 Vacuum Chamber VDM 265

4 Decontamination agents

Technical Data					
Approx. Size (L x W x H)	mm	960 x 600 x 800	650 x 320 x 528	800 x 1,470 x 1,695	from 0.125 l to 20 l canister
Approx. Weight	kg	160	13	600 (main unit)	
Max. Capacity		700 to 3,000 l/h 100 kW heating	45 m ² /h max. area performance	259 l chamber volume	CBRN decontamination (-30 °C to +49 °C)
Transport		Mobile on wheels	Mobile on wheels	Built in	Carry on

5 Cage Based Modular System

6 Decontamination of personnel

7 Rapid Response System

8 Complete decon system

Technical Data					
Approx. Size (L x W x H)	mm	2,000 x 930 x 1,576 (per function module)	6,058 x 2,438 x 2,591	2,991 x 2,438 x 2,438	10,314 x 2,550 x 3,727
Max. Capacity		Depending on modules configuration	Decontamination of persons up to 180 p/h	Decontamination of persons, vehicles and infrastructure	Decontamination of persons, vehicles, personnel material and infrastructure
Transport		20' Platform	20' Container	10' Container	10', 6', 4' Container 20' Platform 1 truck with crane

Technical Data Sheet

Field Camp Systems – A sample



1 Cooling **2 Heating** **3 Sanitary** **4 Laundry**

Technical Data					
Approx. Size (L x W x H)	mm	1,450 x 1,140 x 780	1,720 x 735 x 910	6,058 x 2,438 x 2,591	6,058 x 2,438 x 2,591
Approx. Weight	kg	180 - 220	120 - 200	1,700 - 8,000	8,000
Max. Capacity		11 - 18 kW	20, 40, 60 kW	up to 6 showers or 6 toilets or other combination	6 washing units and 6 drying units
Transport		Mobile (steel frame)	Mobile (steel frame)	Container	Container

Service, maintenance and training - worldwide when you need it

Regular maintenance, checking and testing is essential for complex products. Kärcher Futuretech offers all the services required for the training, maintenance and repair of our products. These are carried out by our specialists, either at our service center in Schwaikheim, on site at the location of the systems, or by phone directly in the field during operations.



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