

FUTURETECH

Kärcher Group



OUR PRODUCTS IN OVERVIEW

Decontamination and Supply Systems for Armed Forces and Military Organisations

Armed Forces and Military Organisations

Helping you Restore Safety

Kärcher Futuretech GmbH – Made in Germany

Armed forces and military organisations 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 have been developed in cooperation with leading nations' defence ministries for worldwide deployment in the toughest conditions and under the most extreme stress.

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. Complementary to its innovative product portfolio, Kärcher Futuretech provides customer-centric logistical services and training worldwide, even in remote areas. Kärcher Futuretech integrates Kärcher's globally valued core competences in the fields of high pressure and burner technology into its high-quality, robust and reliable systems.



Our Solutions



Water Supply Systems

Clean drinking water in every situation



Field Camp Systems

Tailor-made system solutions



Mobile Catering Systems

Freshly prepared anytime, anywhere



CBRN Protection Systems

Decontamination solutions for every CBRN threat



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 to survive. We offer 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.

Water Distribution – Available to the Task Forces

To increase hygiene and avoid unnecessary transportation costs, the transportation required should be reduced to a minimum. We produce suitable mobile water filling systems that help the task forces 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. Our product range includes mobile field catering systems, enabling you to prepare fresh, wholesome meals during these challenging situations and high volumes of complete meals for a large number of persons.

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



Field Camp Systems – Complete Customised System Solutions

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

We provide 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.



CBRN Protection Systems – Thorough Treatment under Hazardous Conditions

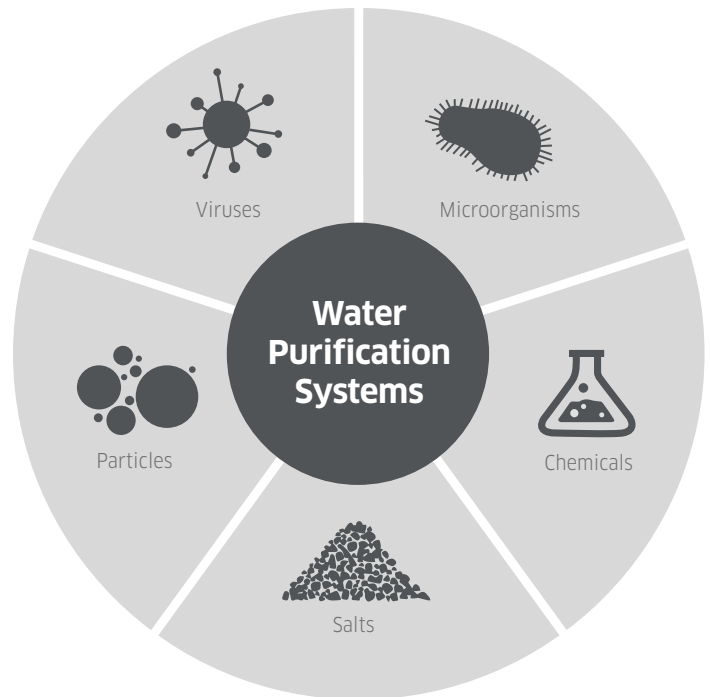
CBRN threats may occur anytime in many different environments with limited or no early detection possibilities. The known developments in the international military political situation have not only led to a change in the tasks of the armed forces but also modified the spectrum of the present and expected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

We offer a full range of equipment and systems for the safe decontamination of affected persons, material, large equipment, vehicles and infrastructure.

Save Drinking Water

The Challenge of Water Supply in a Mission

Water is available almost everywhere in the world, however water which is directly suitable for drinking is very often scarce. It is necessary to ensure the drinking water supply of task forces under the harshest conditions: extreme temperatures, in high dusty environments or under strong mechanical stress. To solve these problems above, there are mobile systems for water purification and distribution which are prepared for these challenges.



Our Solutions

Know-how and Experience

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

This has been proven by many years of experience gained together with our customers in the planning and carrying out of varied missions all around the globe in nearly all climate 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 often only be ensured by purification directly on site. Our system solutions allow you to master the technical challenge of mobile drinking water supply worldwide.

Our mobile water solutions can be combined with other systems to work fully autonomously setting new standards in efficiency, service life and cost-effectiveness.

Quality

Although used under the harshest conditions, our systems produce drinking water that comply with the highest standards, such as STANAG 2136 from NATO, WHO (World Healthorganisation) and the German Drinking Water Regulation (TrinkwV2001).

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



Water Purification

Produced Where Needed

Water Purification Systems

They must be able to remove 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 provide 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 sure 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 colour. Even when the water might appear clean, it could still contain bacteria, viruses and chemicals. Kärcher Futuretech's systems hold back these contaminants which cannot be seen.

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 provide the ideal 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. For this reason, drinking water purified by Kärcher Futuretech systems can be considered as excellent.

Easy to Use

Our products are easy to understand and can be operated intuitively. The complete procedure from transport to start-up and operation can be carried out quickly by personnel after a customised training.

Safety

With our equipment the operator can produce drinking water and distribute it by himself on site. Thus, he can control the complete hygiene process. Furthermore, the transport risk of water convoys through dangerous zones can be avoided.



WTC 500 | 700 – Reverse Osmosis

Clean Drinking Water, a Precious Commodity

The portable water purification system WTC 500 | 700 provides drinking water, even in conflict or disaster areas.

With this system, it is possible to supply approx. 4000 people per day with purified water, even from salt water. Only field proven components and high-quality materials are used to ensure it is extremely reliable. Furthermore, the new clearly structured human-machine interface makes it even easier to operate than before.

Your Benefits

- Retention of particles, microorganisms and viruses
- Retention of salts and chemicals
- Intuitive, easy operating
- Integrated handles for convenient movement by persons
- Available as self-sufficient system with generator and trailer



Benefits of Our Membrane Filtration

- High reliability of the drinking water quality
- Compact design
- High output
- Retention of particles, microorganisms and viruses
- High energy efficiency
- Ultrafiltration as pre-treatment of reverse osmosis

Water Distribution

Get it to the Task Forces

After having purified the water available on site to produce valuable drinking water, it must be temporarily stored and packaged, if required, before distribution to the task forces. There is a high risk of water contamination during distribution and thus endangering the safety of the people to be catered for. Kärcher Futuretech offers solutions for filling and distributing of drinking water in the field. Different systems are available which allow the water to be filled into packages of different sizes (250 ml - 1 l) and bottles (1 l).

Logistics

All Kärcher Futuretech mobile water filling systems help you to greatly simplify the distribution of drinking water in the field. The big advantage of our transportable filling systems is 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 consumers. 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 until 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 process a pure taste can be assured and still guarantees a best before-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

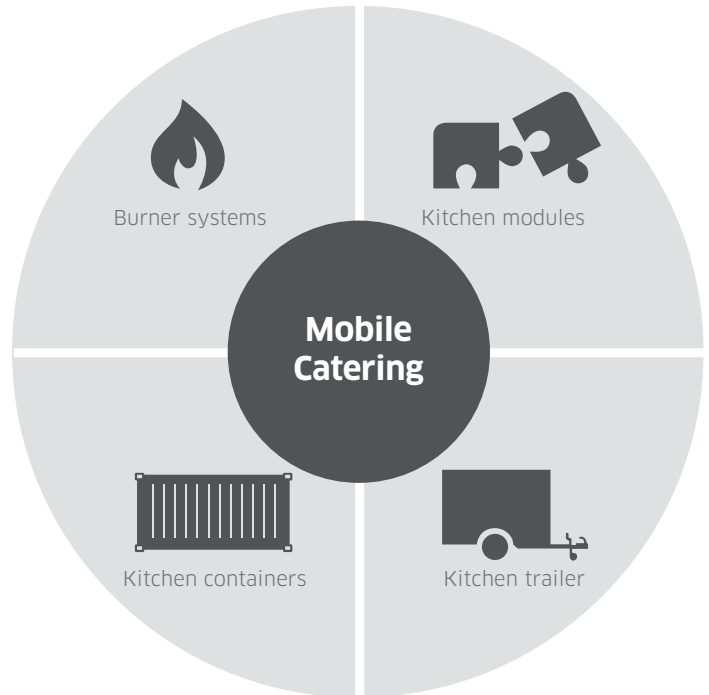


WPS 1600 G - packaging



The Optimum Supply Chain for Catering in the Field

There is not one ideal 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 to fulfill 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 catering systems to scale up capacity for cooking as needed.

Transport Capacity

It doesn't matter if you need to transport your field kitchen inside or outside by aircraft or by wheeled vehicle transportation. Our catering systems are optimised in weight and size to meet any transportation requirements and are designed for rapid deployment and assembly.

Energy Resources

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

Climate Zones

Operations occur in 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 cook with fresh ingredients or with pre-cooked products. Our modular kitchen set up adapts perfectly to your food flow concept.



Maximum Flexibility with Our Modular Approach

MFK 2 – Individually Configurable Modular Field Kitchen

The new version of the proven modular field kitchen has four free module slots that can be configured on an off-road single-axle trailer. The customer can choose from a large number of different cooking and frying modules (also with closed combustion chamber) as well as the combi-steamer, “cooling” and “freezing” function modules.

Further benefits of the MFK 2 include a sturdy axle as well as a parallel height-adjustable drawbar, which allow uncomplicated transport using different vehicles.

KCC 500 – Mobile Kitchen Container with Optimal Space Utilisation

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 configurable system based in two 20' ISO container, 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 100000 litres of diesel a year.



Modular Field Kitchen MFK 2



Mobile Kitchen Container KCC 500

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 separated and operated in different 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

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

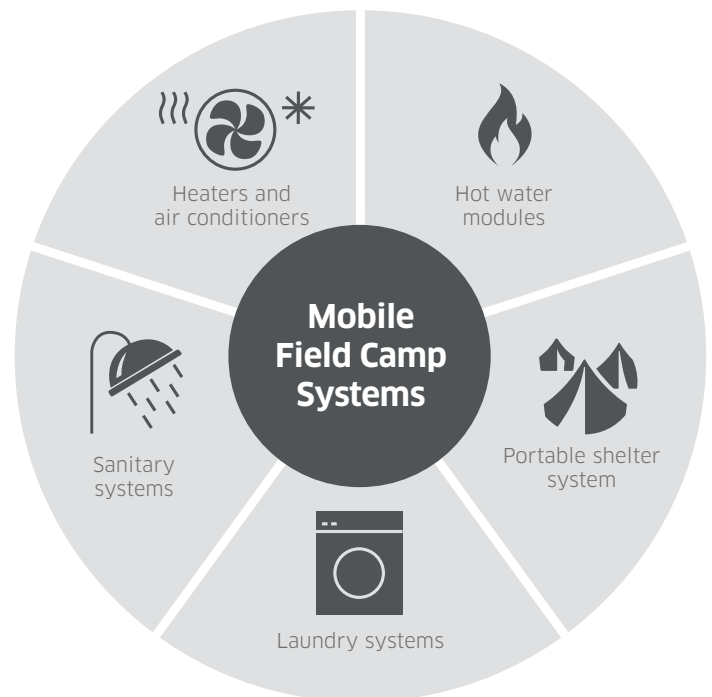


Standardised freely configurable components

Complete Customised System Solutions

Before configuring a field camp layout, there are several questions that need to be answered to determine the base camp system that ideally suits your mission scenario. For example, how many persons are going to live in the camp, how mobile it must be, how is the climate and the environment on site, for how long will the system be deployed, how will the system be transported? Kärcher Futuretech deals with all these questions and provides a complete customised 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 into 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 fulfill your requirements and reduce the complexity of designing a complete field camp, we take all relevant parameters in consideration: 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 3000 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 standardised 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

Efficient Components

Sanitary Components – Best Hygiene under Field Conditions

Kärcher Futuretech offers mobile sanitary units which are equipped with showers and washbasins or toilets, urinals and washbasins. The necessary privacy is guaranteed by the division into individual cabins. Due to stainless steel surfaces, the insides of the containers are easy to clean, which reduces the maintenance effort to a minimum. At the same time, the well insulated containers are robust and highly durable which allows any mission scenario over a long period of use. Standardised transport dimensions facilitate the entire logistic process.



Sanitary facilities

Laundry Container – Clean Uniform on Site

Our laundry containers are capable of cleaning and drying large quantities of laundry. The 10' or 20' containers offer 3 or 6 washing machines and dryers with a capacity of 6.5 kg each. Various washing programmes can be easily selected in many languages using the stored programme control. All components of the container are made of stainless steel, enabling easy cleaning and ensuring compliance with hygiene standards.



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 standardised hoses. We can provide individual capacity up to 18 kW cooling power and 60 kW heating power. All our equipment is weatherproof and robust for outdoor operation.

HWM 100 B – Hot Water Module with Buffer Tank

In larger field camps a lot of energy is needed, even more when it comes to the cooking and heating of water. The diesel-driven and energy-efficient hot water module HWM 100 B produces hot water for various quantities. It allows a continuous and adjustable flow rate, even at fluctuating incoming water temperatures: From very low (e.g. hand wash basins) to very high (e.g. showers) water volume flow rates.



MAC 18 – Air conditioning unit



HWM 100 B – Hot Water Module

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 also play a central role in our system layout and component design.



Sustainable field camp systems

Portable Shelter System

Modular Equipment for Fast and Mobile Operations

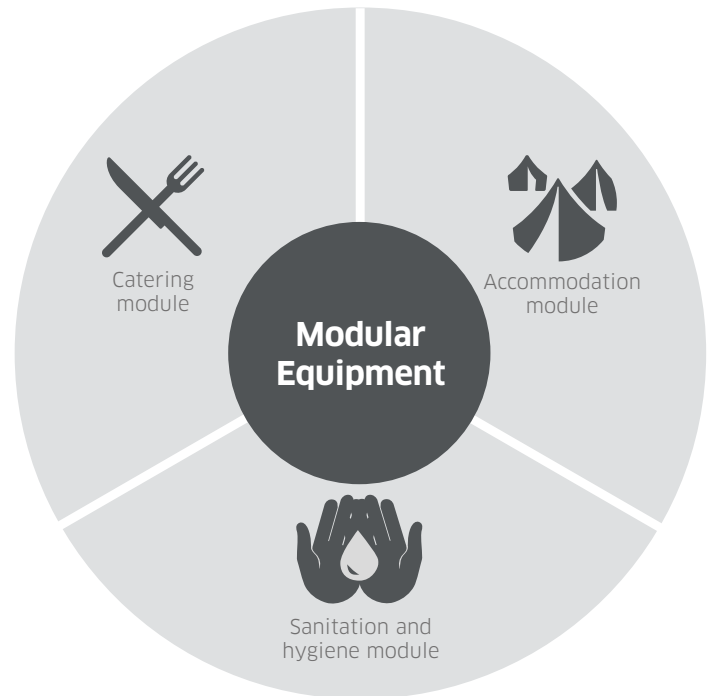
During operations or exercises, the troops are often required to be flexible and fast. These requirements should also apply for their accommodation.

Our aim is to provide the best possible accommodation for the troops so that they can benefit from relaxing rest phases and thus concentrate fully, both physically and mentally, on their missions.

The portable shelter system consists of different modules that cover the areas of accommodation, catering, sanitation and hygiene. For example, the various modules offer a tent, field beds, cooking equipment and much more for one soldier.

Due to the simple and intuitive manageability of the individual modules, the portable shelter system meets the above-mentioned requirements. The set up and dismantling as well as the operation, transport and maintenance of all modules can be carried out without any problems or special tools.

All items of equipment function without the use of electricity and can therefore be used completely self-sufficient. They are optimised in terms of weight and volume so that they can be carried in the 110-litre backpacks of the soldiers together with their personal equipment (except for the supplementary accommodation module).



Cooperation in the Field of Camps and Catering

Camp Supply International AS

Since October 2019, we are collaborating with Camp Supply International AS (CSI). 34% of the stakes of CSI were acquired in this year by Alfred Kärcher SE & Co. KG.

CSI is a well-known company in the Scandinavian market and focuses on residential, special and functional containers for military requirements. The company stands for high-quality, container-based solutions with worldwide success.

The special feature of the containers is the very efficient degree insulation despite its lightweight construction. CSI's headquarters is located in Norway while production is based in China.

CSI offers a wide range of container variants. These are for example sanitary, laundry and kitchen containers. In addition, they also cover containers in the areas of laboratory, workshop, ballistic protection, generators, UVC protection, explosive containers, oil bar and POL storage, water storage, kennel container, office and accommodation, reefer, radio and communication.



Cooperation project Kitchen Container KCC 300



Cooperation project sanitary containers

Advantages of CSI Containers

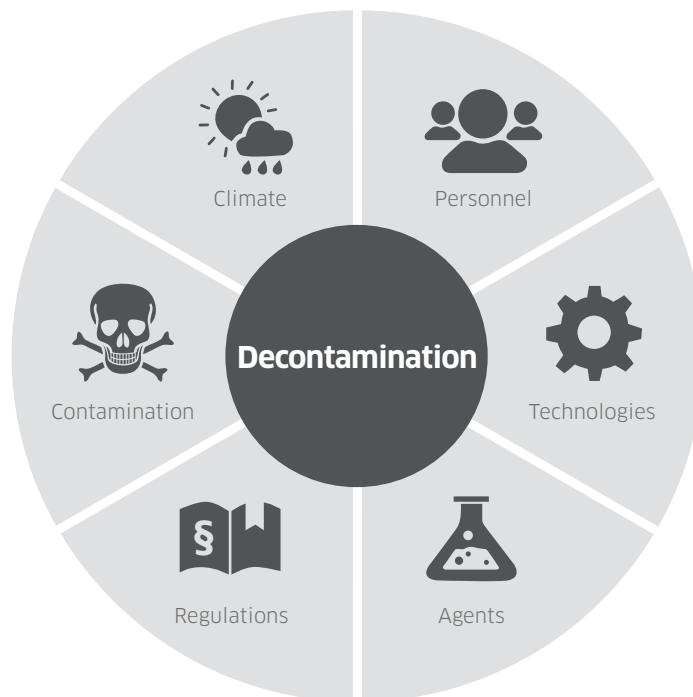
- The container's insulation is 50 % more effective than containers equipped with rock wool with the same wall thickness
- Energy-saving due to very good insulation of the container shell
- No moisture absorption in the case of damage to walls, floors or ceilings
- Interior completely made of stainless steel, therefore easy to clean and disinfect
- Wall and ceiling are laser welded watertight
- Lightweight construction, but fully CSC certified

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 changed 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 minimising the possible effects.

Kärcher Futuretech offers a complete 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 persons, material, large equipment, vehicles and infrastructure.



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 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 not only develop our systems jointly with technical experts and operational testorganisations, we also have a pool of multi-skilled 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 maintenance personnel trainings for all our systems on-site worldwide. Kärcher Futuretech systems have proven field experience. Our systems are being used successfully in nearly all climate 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 manufactured 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 optimised for a minimum use of water and energy resources. With this, we comply with the ISO 14001 (environmental management system).

Innovative Solutions for Various Decontamination Missions

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 the existing infrastructure. The whole operational concept is optimised for fast and effective treatment in case of a potential mass panic amongst the affected people. Clear signs and an intuitive design ensure easy and quick treatment.

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

Decontamination of Material

During 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 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 lies in the details. It is not just about cleaning the vehicle. But many factors must be taken into consideration to ensure process safety. With many years of field experience, Kärcher Futuretech offers the exact decontamination system you need. Our sophisticated operational concept includes a three-phase approach, full surface treatment down to the vehicle underbody and high performance equipment by Kärcher.

During a self-sufficient operation, time is crucial. All our components are designed to perform in line with our CBRN decontamination 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, vehicle interiors, 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.



Decon shower lines for ambulatory and non-ambulatory persons - DSAP



Hot gas chamber - HGSC



Vacuum chamber - VDM 265 (on trailer)



Decontamination of vehicles - MPDS 2



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. Separate lines are also possible for the treatment of ambulatory and non-ambulatory persons. Easy to use equipment, clearly marked instructional pictograms and a traffic light system facilitate fast and safe decontamination treatment for up to 180 personnel per hour.



DSAP, e.g. Spain

CDS 1000 GDS – Platform Decontamination System

The CDS 1000 GDS is a platform-integrated, compact, fully equipped decontamination system for the simultaneous decontamination of vehicles, material, persons and equipment. Likewise, road sections can be decontaminated with the system. The compact dimensions of the CDS 1000 GDS ensure the ideal transportation by standard trailers and trucks. The system can be set up ready for operation within 30 minutes. The integration of several applying modules designed for the specific decontamination task ensures that a high decontamination performance can be achieved. In operation the system can decontaminate up to 100 task forces, 4 to 6 vehicles, 20 to 30 sets of equipment and 1500 m² of road sections per hour.



CDS 1000 GDS platform

Decocontain 3000 – Powerful System

The Decocontain 3000 is a multi-purpose and highly mobile decontamination system featuring all the major components required for a complete decontamination centre. All the steps needed for the thorough decontamination of people, personal equipment, vehicles and sections of road can be performed with this unit. The Decocontain 3000 is ready to use in less than 30 minutes, and in one hour it can decontaminate up to 160 persons, 8 to 12 vehicles and 20 to 30 sets of equipment.



Decontamination with the Decocontain 3000

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, e.g.: two water transport modules with pumps and heating included, a universal treatment module for high-pressure cleaning and decontaminate 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

MPDS 2 – Universal Decontamination System



This is a multi-purpose system for the decontamination of material and vehicles. Now the “one-for-all” MPDS 2 can be operated with up to three lances at the same time. Therefore pre-, main- and post-treatment are possible simultaneously, making decontamination much faster.

MPDS 2 truly represents the most efficient and complete decontamination site of its class.

Your Benefits

- Simultaneous 2-3-lance operation
- Up to 2.5 kW power available, even during hot water applications
- Usable with standard commercially available decon agents
- Independent dosage of aqueous two-component chemicals
- Simultaneous application of non-aqueous agents and high pressure operation
- Smallest complete decontamination system
- No belt drives

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 remaining contaminants can still be fatal. Several laboratory tests have proven that specialised agents for each kind of CBRN contamination perform significantly more effective than an all-in-one agent which has 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)

Technical Data

Water Supply Systems – A Delection



	1 WTC 500 WTC 700	2 WTC 3200	3 WTC 8000/15000 RO/UF C	4 WTC 2500 UF WTC 5000 UF
Drinking water yield l/h	Up to 500 700	Up to 3200	Up to 8000 (RO) or 15000 (UF)	Up to 2500 5000
Empty weight kg	215 230	< 1000	9500	190 240
Dimensions (L x W x H) mm	1200 x 800 x 900	2400 x 1200 x 1060	6058 x 2438 x 2591	1200 x 800 x 1330



	5 WPS 1600 GT	6 WBP 1300	7 Drinking water distribution station	8 Raw and drinking water tank
Filling capacity	Up to 1600 bags/h	Up to 1300 bottles/h	8000 l/h	1000 - 10000 l storage
Empty weight kg	3500	9700	32	Up to 100
Dimensions (L x W x H) mm	5460 x 2170 x 2490	20-foot container, 1C, 1CC	800 x 600 x 410	Up to 5500 x 2700 x 800

Technical Data

Mobile Catering Systems – A Selection



	1 Modular Field Kitchen MFK 2	2 Kitchen Catering Container KCC 300	3 Kitchen Catering Container KCC 500	4 Combi-Steamer KCS 15
Capacity	Up to 250 set meals Up to 600 simple meals (depends on configuration)	Up to 300 set meals Up to 600 simple meals (depends on configuration)	Up to 500 set meals Up to 1500 simple meals (depends on configuration)	15 x GN 1/1 14 kW heating capacity Diesel burner
Empty weight kg	Max. 2000 (depends on configuration)	Max. 6000 (depends on configuration)	Max. 2 x 10700 (depends on configuration)	255
Dimensions (L x W x H) mm	4405 x 2115 x 2330	20-foot container, 1CC	2 x 20-foot container, 1CC	935 x 700 x 1500



	5 Cooking module 125 l, closed combustion chamber	6 Frying module 70 l, closed combustion chamber	7 Frying and baking module 25 l/78 l	8 Multi cooking module MKM
Capacity in litre	125	70	25/78	200
Empty weight kg	150	150	165	84
Dimensions (L x W x H) mm	1100 x 700 x 1050	1100 x 700 x 1050	1100 x 700 x 695	970 x 690 x 370
Cooking methods	Cooking, stewing and steaming	Cooking, stewing, steaming and frying	Cooking, stewing, steaming, frying and baking	Cooking, stewing, steaming and frying

Technical Data

Field Camp Systems – A Selection



	1 Cooling/Heating	2 Hot Water Module HWM 100 B	3 10'/20' sanitary container	4 Laundry container
Capacity	11 to 18 kW cooling 20 to 60 kW heating	125 l tank volume 105 kW heating performance	3 or 6 toilets 3 or 6 showers	25 kg/h washing and drying
Empty weight kg	Depending on device	290	4500	Max. 5200
Dimensions (L x W x H) mm	Depending on device	1250 x 820 x 1060	2990 x 2438 x 2591 6058 x 2438 x 2591	6058 x 2438 x 2591

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.



Technical Data

CBRN Decontamination Systems – A Selection



	1 Hot Water Module HWM 40	2 Hot Water Module HWM 100	3 MPDS 2	4 Vacuum Chamber VDM 265
Special features	1200 l/h 40 kW heating	700 to 3000 l/h 100 kW heating	Simultaneous 2-3-lance operation	265 l chamber volume
Empty weight kg	85	160	400	600 (main unit)
Dimensions (L x W x H) mm	880 x 680 x 860	960 x 600 x 800	1200 x 800 x 1100	800 x 1470 x 1695



	5 Decontamination agents	6 Cage Based Modular Decon System	7 Personnel Decontamination System	8 Decocontain 3000
Special features	CBRN decontamination (-30 °C to +49 °C)	Modulare system – choose the modules you need	Decontamination of up to 180 p/h	Decontamination of persons, personal equipment, vehicles and road sections
Dimensions (L x W x H) mm	Container from 0,125 - 20 l	2000 x 930 x 1576 (per function module)	6058 x 2438 x 2591	6058 x 2438 x 2438

Extract From Our References 2017 - 2021



- 1 USA**
Water Bottling Plant WBP 900 |
Personnel Decontamination System DSAP
- 2 Sint Maarten | Netherlands**
Sanitary Container | Cooling Container |
Kitchen Catering Container KCC 500
- 3 Brazil**
Kitchen Catering Container KCC 500 |
Modular Field Kitchen MFK 2
- 4 Norway**
Various Decontamination Systems
- 6 Germany**
Container Decontamination System DSSM |
Cage frame-based Modular Decontamination System |
Water Purification Systems WAA Decon |
Kitchen Containers | Various Field Camp Components |
Portable Shelter System
- 7 Austria**
Various Kitchen and Dishwashing Containers
- 8 Morocco**
Water Purification System WTC 500 GT |
Modular Field Kitchen MFK 1 + 2
- 9 Burkina Faso**
Modular Field Kitchen MFK | Water Bottling Plant WBP 700 |
Various Water Purification Systems
- 10 Benin**
Multi-Cooking Module MKM | Modular Field Kitchen MFK 2 |
Water Purification System WTC 2500 UF
- 11 Kuwait**
Decontamination System Decocontain 3000
- 12 China**
Water Packaging System WPS 1600 GT |
Water Bottling Plant WBP 1300 |
Various Water Purification Systems
- 14 Indonesia**
Hot Water Module HWM 100 | Multi-Purpose Unit MPDS |
Application Device AMGDS
- 15 New Zealand**
Water Packaging System WPS 1600 GT |
Various Water Purification Systems



5 Rapid Response System DSVP 10C

In the Netherlands in 2017, the DSVP 10C rapid response system, which is used for various decontamination jobs, underwent intensive testing after handover.



13 Modular Field Kitchen MFK in Taiwan

The Modular Field Kitchens MFK were intensively tested immediately after their arrival in 2018. The individual modules were also used in a remote state.



15 Water Treatment in New Zealand

After the 2016 Fiji Islands cyclone about 270 New Zealand Defence Forces supported the island reconstruction efforts. In order to ensure the reliable drinking water supply for the inhabitants, existing salt water was converted with the water purification system WTC 500 RO into clean drinking water.

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