

FUTURETECH

Kärcher Group



OUR PRODUCTS IN OVERVIEW

Decontamination and Supply Systems for Civil Protection,
Humanitarian Aid and Disaster Relief Organizations

Civil Protection, Humanitarian Aid and Disaster Relief Systems

Helping you restore safety

Kärcher Futuretech GmbH – engineered in Germany

Kärcher Futuretech provides lifesaving solutions for civil protection, humanitarian aid and disaster relief.

As a worldwide, well-known specialist for protection and supply systems, we are active in the business areas of CBRN Protection Systems, Water Supply Systems, Mobile Catering Systems and Field Camp Systems.

Kärcher Futuretech is a wholly owned subsidiary of the complete family-owned company Alfred Kärcher SE & Co. KG.



Excerpt Worldwide Missions



- | | |
|--|---|
| 1 Mexico, flood 2013 – WTC 3000 G | 7 Uganda, refugee camp 2018 – WTC 5000 UF |
| 2 Haiti, earthquake 2010 – WTC 500 RO MFK | 8 Mozambique, cyclone 2019 –
WTC 5000 UF WTC 500 RO HWM 100 |
| 3 Bolivia, drought 2016 – WTC 500 RO | 9 Nepal, earthquake 2015 – WTC 5000 UF HWM 100 |
| 4 Germany, flood 2013 – TFK 250
G7/G20 Summit 2015/2017 – MFK
Moorland fire sparks, Meppen 2018 – MFK | 10 Sri Lanka, flood 2016 – WTC 5000 UF |
| 5 Serbia, flood 2014 – WTC 5000 UF | 11 Philippines, typhoon 2013 – KRR 50 |
| 6 Jordan, refugee camp since 2014 – KRR 50 | |

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. Futuretech offers 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 people

To increase hygiene and avoid unnecessary transportation costs, the transportation effort should be reduced to a minimum. Futuretech offers suitable mobile water filling systems that help the customers greatly simplify the distribution of safe drinking water in the field through bottling, packaging and bagging on site.



Mobile Catering Systems – providing the best nutrition under adverse conditions

In order to carry out extraordinary tasks, the required personnel must maintain an optimum energy level to enable them to provide emergency aid support under the harshest conditions. Kärcher Futuretech offers 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 beneficiaries.

Depending on the field environment and support requirements, we can deliver the most ideal field kitchen solutions for rapid deployment missions, full-scale emergency disaster relief missions and long-term humanitarian aid or development programs.



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CBRN Protection Systems – thorough treatment under hazardous conditions

CBRN threats may occur anytime in many different environments with limited or no early detection possibilities. Chemical goods are transported on highways every day, chemical facilities or nuclear power plants can turn into a hazard during a major accident, as well as biological epidemics or terrorist attacks. Such unexpected, sudden situations require immediate, well-planned response.

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



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Field Camp Systems – complete customized system solutions

During emergency response situations, the first responders have to face the harshest conditions that challenge their physical capabilities. Therefore, an adequate living environment is crucial for recuperation and to maintain their overall well-being.

Kärcher Futuretech offers tailored high quality field camp solutions to support the first responders in focusing their energy on performing their professional work. The main field camp components include e.g. laundry, sanitation, catering, water supply and waste management.



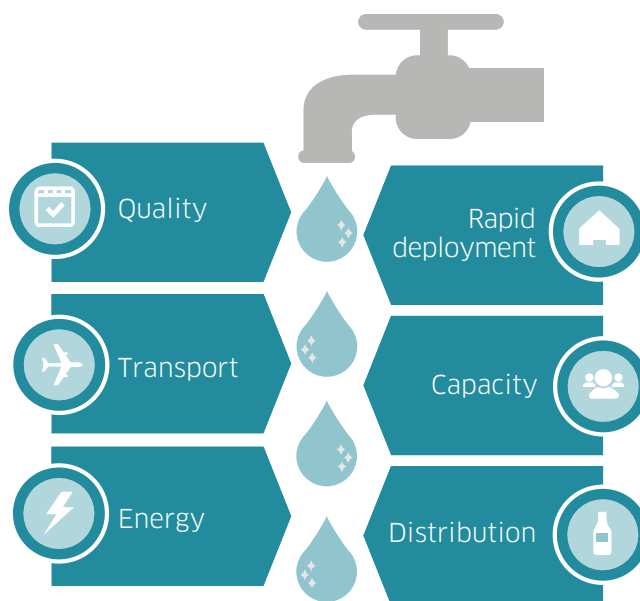
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Safe Drinking Water

The challenge of water supply in a mission

The number of catastrophes involving a drinking water shortage increases every year. In many cases, people become sick from drinking water contaminated with bacteria and viruses. This health risk from diseases can spread throughout the local population up to an epidemic situation. Many water sources worldwide are contaminated with waste water or pesticides and herbicides from agriculture, heavy metals and/or organic compounds.

The need for water purification and supply systems is increasingly in demand. The ultimate public health goal is to provide drinking water with the best quality and in a sufficient quantity wherever needed.



Your ideal water supply system

Our Solutions

Know-how and experience

To produce clean and safe drinking water, the Kärcher Futuretech engineers always base our 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 climatic 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 climatic zones.

Mobile technology

Rapid deployment 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.

Kärcher Futuretech supplies mobile water solutions that 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 most difficult field conditions, in challenging and varied customer missions over the world, our systems produced drinking water which complied, for example, with the regulations of the WHO (World Health Organization), the German Drinking Water Regulation (TrinkwV 2001) and for our top products even military standards such as NATO STANAG 2136.

Experience gained by our customers in missions worldwide demonstrates that Kärcher Futuretech has met this decisive 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 500 l/h up to about 15000 l/h drinking water output.

Mobility

Kärcher Futuretech 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 standard 20' container configuration for optimal transportation.

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.

Quality

Even people in need must be convinced of the water purity before they accept purified water as safe. 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, as for refugee camp supply. For these different scenarios, Kärcher Futuretech can provide 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

Kärcher Futuretech products are easy to understand and intuitive for routine operations. The complete procedure from transport to startup and operation can be carried out rapidly by introduced personnel. If necessary, we can offer personnel training on site.



WTC 5000 UF – Germany (Balkan Floods)



WTC 1600 GT on trailer – Italy



WTC 500 RO – Pakistan



WTC 3000 RO – Mexico



WTC 500 – Reverse Osmosis

Clean drinking water, a precious commodity

NEW

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

With this new 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 people

A mission in crisis areas means for civil protection, humanitarian aid and disaster relief organizations that they have to carry out their tasks in an environment where the infrastructure is mostly destroyed and logistics are difficult to operate. Kärcher Futuretech offers solution for drinking water filling and distribution in the field. Different systems are available which allow filling in packages of different sizes (0.25, 0.5 or 1 litre), bags (up to 1 litre) and bottles (1 litre). Further, we offer water distribution stations for rapid manual filling of different containers.

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 bags, packages or bottles.

Flexible receptacle size

The drinking water can be distributed in various sized containers directly to the people. Kärcher Futuretech 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. The containers people bring to the water stations are often not suitable for hygienic filling. Thus, Kärcher Futuretech's solutions include filling on site with high quality and hygienic bags, packages or bottles. By this, drinking water is more accepted than from big storage tanks.

Hygiene

Kärcher Futuretech offers systems for bottling, bagging 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 best-before-date of up to several months under field conditions.

Easy to use

Kärcher Futuretech 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 – Filling in bottles

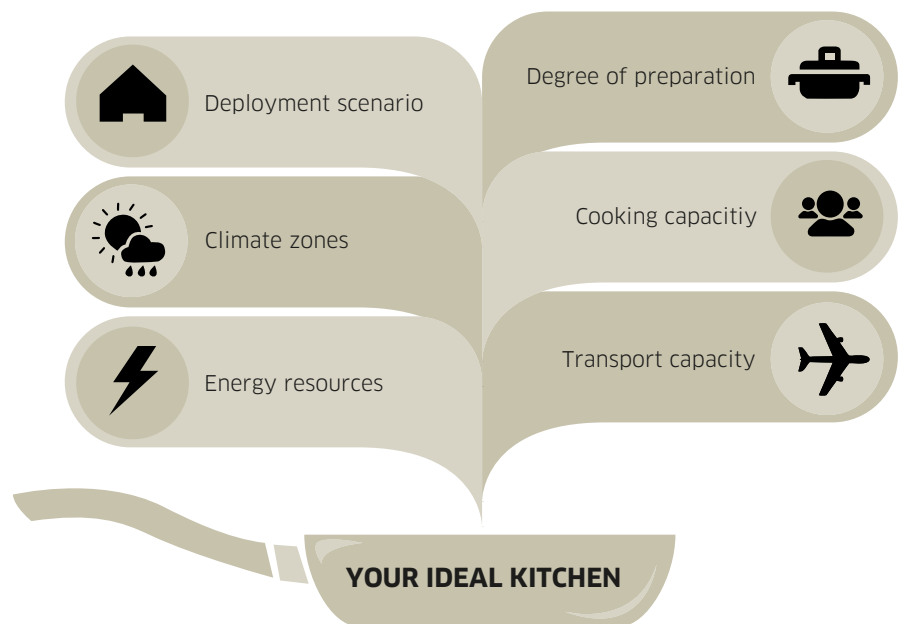


WPS 1600 GT - Filling in packages



The Optimum Supply Chain for Catering in the Field

There is no ideal field kitchen configuration – but our tailored solution options meet your specific mission's deployment and operation scenario.



Our Solutions

Deployment scenario

There are many different emergency scenarios, e.g. during a firefighting mission, where staff needs to be fed quickly with high energy meals. When deploying in an earthquake or other natural disaster areas, in an unknown environment for several days or weeks, or during a large scale deployment operation, a whole camp has to be fully catered for with a varied and balanced diet over the period of sustainment for several months. Kärcher Futuretech has designed its highly efficient catering systems for any environment and mission requirement.

Cooking capacity

Cooking a basic meal for 20 people is quite different to offering a full menu for several hundred people, which requires an operational logistics supply chain combined with a high performance kitchen system. Kärcher Futuretech has developed a modular based approach for field feeding 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 optimized 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 allows you the most efficient use out of limited energy resources.

Climate zones

Emergencies occur in all different scenarios where extreme weather ranges and conditions can occur. Kärcher Futuretech's products are robust, designed for rugged use and our top products even comply with military standards.

A wide range of accessories complements our catering systems in order to make them work properly at any location worldwide.

Degree of preparation

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

Maximum Flexibility with our Modular Approach

KRR 50 – Rapid deployment, compact design, and lightweight configuration

This mobile kitchen is the ideal all-round catering system for emergency and disaster relief missions around the world. For example, in an earthquake emergency where a rapid deployment within hours for up to weeks is necessary. The compact design allows you to airlift the KRR 50 and deploy it on-site in a car transporter.

Once on site, the KRR 50 is set up within minutes and due to its minimal space requirements it can operate in a soft shelter or any fixed building with only 3x3 meters of minimum floor space required. Thanks to its modular concept and large variety of accessories, the cooking capacity can be upgraded to adapt to any team size, environmental requirements and logistical constraints.

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 utilization

During large scale deployments in crisis areas, for example a field or refugee camp, several hundred persons 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 container based, configurable systems have a compact design with maximum interior workspace allowing for a rapid deployment and set up within a few hours and can operate permanently for months. With the highest hygiene standards, energy efficient cooking, interchangeable cooking units and a modular container expansion to adapt to your catering requirements, the KCC 500 fits perfectly in your logistical catering strategy.



KRR 50 in action



Modular Field Kitchen MFK 2



KCC 500 – from the inside

Individual Configuration

Kärcher Futuretech's catering systems are designed and tailored to fit your team size and multiple disaster requirements and scenarios.

Expandability

Our efficient catering systems allow for an easy addition of more cooking components to support special requirements. For example, our autonomous cooking modules of the MFK 2 and KCC 500 allow for a split to be distributed to 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 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 for quick and easy changes to the catering task for your convenience and labor saving.

Thorough Treatment under Hazardous Conditions

Given the various threats of a CBRN incident at your location, a quick response plan is necessary. Millions of tons of chemical goods are transported on the highways every day. Chemical factories and nuclear power plants can be the origin of a dangerous situation during a major accident. The terror attack with sarin on the Metro of Tokyo in 1995, the Fukushima accident in Japan in 2011 or the West fertilizer plant explosion in Texas in 2013 are some examples.

Also, epidemics such as fatal infections by microbes, viruses like the H1N1 pandemic flu in 2009 or the weapons of mass destruction (WMD) Sarin and mustard attacks in Syria are still current threats. These events require immediate action with well-trained emergency rescue personnel and fielded equipment, that works reliably under any climate condition. The same applies for the decontamination agents that have to fulfill their tasks under all circumstances.

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



Influencing factors for a safe and thorough decontamination

Our Solutions

Certified technology

Just 1% of remaining contaminants can still be fatal to humans. Thus, our equipment has been extensively tested under various climate conditions and operational scenarios. Our decontamination agents have been tested 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. These systems operate especially in disaster areas worldwide. 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 being developed and made in Germany. As a member of the Kärcher Group, Kärcher Futuretech can select its components from a wide pool of in-house developed 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-site wherever they are in operation. We maintain and comply with the high level ISO 9001 standards 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 European ISO 14001 (environmental management system).



State-of-the-art-technologies

Innovative Solutions for Various Decontamination Missions

Decontamination of persons

In the case of contaminated persons – especially unprotected civilians – 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 and effective treatment, even for untrained persons 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.

Decontamination of material

In a large scale disaster, 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 by heat, vapor and wet decontamination technologies.

Decontamination of sensitive material

Laptops, communication and detection equipment and other important devices cannot withstand heat or wet 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, holes 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 complex factors must be included 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.

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 Kärcher Futuretech offers spray extraction and fogging devices for whole room interiors or high performance application equipment as a spray-bar for road sections.



Hot Water Module – HWM 100



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 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 will facilitate a fast and safe decontamination treatment for up to 180 personnel per hour.



DSAP, e.g. Spain

DSVP – Rapid deployment systems

The DSVP is one of our compact solutions for the decontamination of vehicles, personnel, building interiors and road sections. Mounted in a 10' container with pre-installed equipment, the DSVP 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 fire trucks, 20 personnel, 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, the full and rapid decontamination e.g. of a typical fire brigade is possible.

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.



TEP 90, e.g. Turkey



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 4,2 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 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.

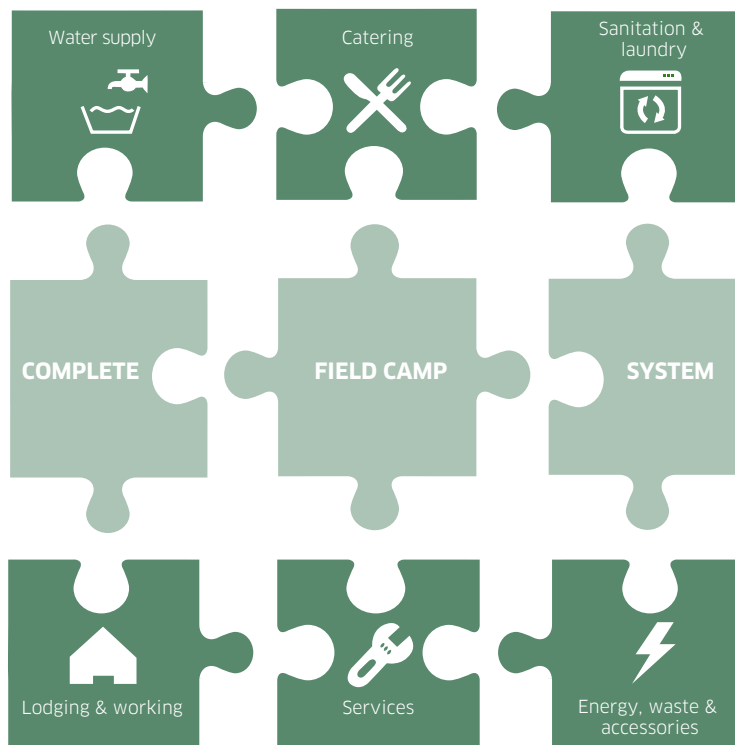
General Benefits

- 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)



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 subject matter 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 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 personnel, 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

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.



Laundry container FL 6-6 C

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

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.



HWM 100 B – Hot Water Module

Field Deployment – Self-sufficient and sustainable

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



Technical Data

Water supply systems – A selection



	1 WTC 500 WTC 700	2 WTC 1600 WTC 3000	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 1600 3000	Up to 8000 (RO) or 15000 (UF)	Up to 2500 5000
Total weight kg	160 175	1000	9500	200 245
Dimensions (L x W x H) mm	1210 x 790 x 910	1900 x 1600 x 1050	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
Total weight kg	3500	8900	32	Up to 100
Dimensions (L x W x H) mm	5460 x 2170 x 2490	6058 x 2435 x 2591	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 500	3 Rapid Response Kitchen KRR 50	4 Combi-Steamer KCS 15
Capacity	Up to 250 set meals Up to 600 simple meals (depends on configuration)	Up to 500 set meals Up to 1500 simple meals (depends on configuration)	Up to 50 set meals Up to 75 simple meals	15 x GN 1/1 14 kW heating capacity Diesel burner
Total weight kg	Max. 2000	2 x 4000 (empty container)	Between 46 - 87	255
Dimensions (L x W x H) mm	4405 x 2070 x 2620	6058 x 5376 x 2591	800 x 600 x 915	1010 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
Total 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

CBRN decontamination systems – A Selection



	1 MPDS 2	2 Hot Water Module HWM 100	3 Vacuum Chamber VDM 265	4 Decontamination agents
Special features	Simultaneous 2-3-lance operation	700 to 3000 l/h 100 kW heating	265 l chamber volume	CBRN decontamination (-30 °C to +49 °C)
Total weight kg	400	160	600 (main unit)	
Dimensions (L x W x H) mm	1200 x 800 x 1100	960 x 600 x 800	800 x 1470 x 1695	Container from 0,125 - 20 l

	5 Cage Based Modular Decon System	6 Decontamination of personnel	7 Rapid Response System DSVP 10C	8 Complete Decon System TEP 90
Special features	Modulare system – choose the modules you need	Decontamination of up to 180 p/h	Decontamination of persons, vehicles and infrastructure	Decontamination of persons, vehicles, personnel material and infrastructure
Dimensions (L x W x H) mm	2000 x 930 x 1576 (per function module)	6058 x 2438 x 2591	2991 x 2438 x 2438	10314 x 2550 x 3727

Technical Data

Field camp systems – A Selection



	1 10'/20' sanitary container	2 Cooling/Heating	3 Laundry container	4 Hot Water Module HWM 100 B
Capacity	3 or 6 toilets 3 or 6 showers	11 to 18 kW cooling 20 to 60 kW heating	25 kg/h washing and drying	125 l tank volume 105 kW heating performance
Total weight kg	4500	Depending on device	Max. 5200	286
Dimensions (L x W x H) mm	2990 x 2438 x 2591 6058 x 2438 x 2591	Depending on device	6058 x 2438 x 2591	1250 x 820 x 1060

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 or at the location of the systems, even directly in the field during the disaster response operations.



We support:



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