

makes a difference



THE CHEMISTRY IS RIGHT!

Our cleaning systems are individual solutions for your requirements.



PROFESSIONAL | CHEMICALS INDUSTRY

EXPERTISE IN CHEMISTRY

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The chemicals industry produces a variety of basic substances and end products. Diverse raw materials and systems are used for this purpose. A decisive factor for smooth-running and reliable processes is professional and efficient cleaning in all areas.

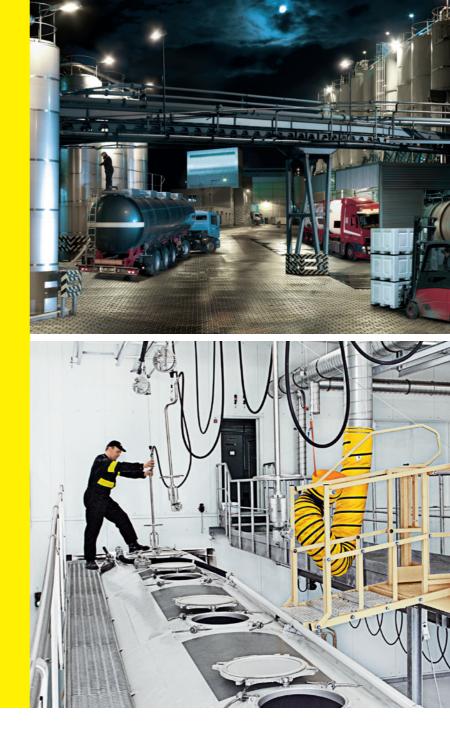
We offer you reliable and efficient cleaning solutions which save you both time and money. From the standard machine through to the customised complete solution. And from consulting and planning through to commissioning and comprehensive service.



MAXIMUM RESULTS AND MINIMUM DOWNTIMES

We can provide you with the perfect, individual solution for all of your cleaning tasks: appropriate cleaning agents, machines with explosion protection and special filters. Plus our individual service.

We offer complete solutions for almost all applications in the chemical industry. Cleaning agents are always an important component. They reduce the surface tension of the water, diminish the binding forces between the dirt and surface, make the dirt swell, dissolve it and emulsify water-insoluble dirt in order to discharge it. Our cleaning agents cover the entire pH range, from very acidic to very alkaline.



EX protection: for cleaning in potentially explosive environments you are always in safe hands with our cleaning machines certified for different protection classes.

Filter classes for industrial vacuums: dust is always a problem. It can be troublesome, hazardous, dangerous to the environment or explosive. The proper and reliable separation of dust makes an important contribution to safety, as well as to the protection of people, the environment and equipment. Our industrial vacuums have suitable filters for all dust and filter classes.





*OEL = occupational exposure limit



	Max. permeation degree	Suitable for	Application
	< 1.0%	Dust with OEL* values > 1 mg/m ³	Noodles, pasta, biscuit crumbs, liquids
M	< 1.0%	Dust with OEL* values $\ge 1 \text{ mg/m}^3$ Wood dust up to max. 1200 W/50 I	Coffee beans, flour, vitamin C, sodium
H	< 0.005%	Dust with OEL* values < 1 mg/m ³ Carcinogenic dusts (§ 35 GEStoffV [Ordinance on Hazardous Sub- stances]), pathogenic dusts	Carcinogenic dusts (lead, coal, cobalt, nickel, tar, copper, cadmium, etc.), mould, bacteria, germs, vitamin D ₂ / vitamin D ₃
$\langle \rangle$	Such as dust class M, L or H with addi- tional requirements	Dusts of dust explosion classes in Zone 22	Vitamin dusts, flour dusts

EXPERTISE

We use our expertise, experience and innovation for cleanliness in your production.





We offer you sophisticated and economically viable cleaning solutions for every area and every task: production, laboratory, offices and infrastructure, tanks and containers, heat exchangers, filters, sieves, parts cleaning and logistics. Our Kärcher system comprising machines, accessories, cleaning agents and servicing provides everything from a single source, from the individual machine to the customised complete solution.

You plan, organise and optimise your production down to the smallest detail. This way you always attain better results. And that should also apply to your cleaning tasks. We are happy to show you the potential you can still exploit in the different areas of cleaning. Our complete solutions cover all applications in wet and dry cleaning and all types of contamination. The Kärcher system provides all options for individual solutions. The chemicals industry sometimes makes extremely complex demands. We adapt our cleaning procedures to the respective site conditions. We guarantee maximum safety and optimal product quality without contamination. On top of this, you benefit from the extended service life of the production equipment and minimum downtimes.

For cleaning in hazard zones, we have industrial vacuum cleaners and other machines that can be certified for zones 1, 2, 21 and 22. It is also possible to equip machines with H filters for very fine particles. For cleaning in hazard zones, the aim is complete automation or remote control in order to relieve staff from activities such as cleaning heat exchangers with ultra-high pressure (UHP). Last but not least, we have extremely effective cleaning agents in all pH value ranges, which we can integrate into practically every cleaning solution. And for tank and container interior cleaning, you can optionally use a special high-pressure pump that is resistant to acids, alkalis and solvents.

EFFICIENCY

When cleaning it is not only the result that counts. Safety, costs, time required, production interruptions and protection of investments are critical factors.



IN HARMONY EVERYWHERE



WET CLEANING IN PRODUCTION AREA

Cleaning problem: adhesives, greases, paints, gum, incrustations, production residue, solids

Areas to be cleaned: production halls, floors, walls, all types of surfaces

Cleaning solution: cold and hot water high-pressure cleaners, scrubber driers, ultra-high-pressure cleaning

Accessories: floor cleaning nozzles, different high-pressure cleaning: PressurePro Active nozzles and trigger guns, as well as surface cleaners

Cleaning agents: high-pressure Cleaner, alkaline RM 81, PressurePro Oil and Grease Cleaner Extra RM 31; Floor: FloorPro Industrial Cleaner RM 69, Inten sive Deep Cleaner RM 750

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DRY CLEANING IN PRODUCTION AREA

Cleaning problem: surfaces in the production area. Liquid, solid, adhesive dirt that has to be removed. Incrustations that have to be removed dry. Dust that builds up during production

Areas to be cleaned: production halls, production equipment, floors, etc.

Cleaning solution: different wet and dry vacuum cleaners. various industrial vacuums for oils, liquids, production waste and residues, dust, also as Z22 and with M filter, also optional H filter, sweepers, dry ice cleaners

TANK AND CONTAINER/DEPOSIT CLEANING

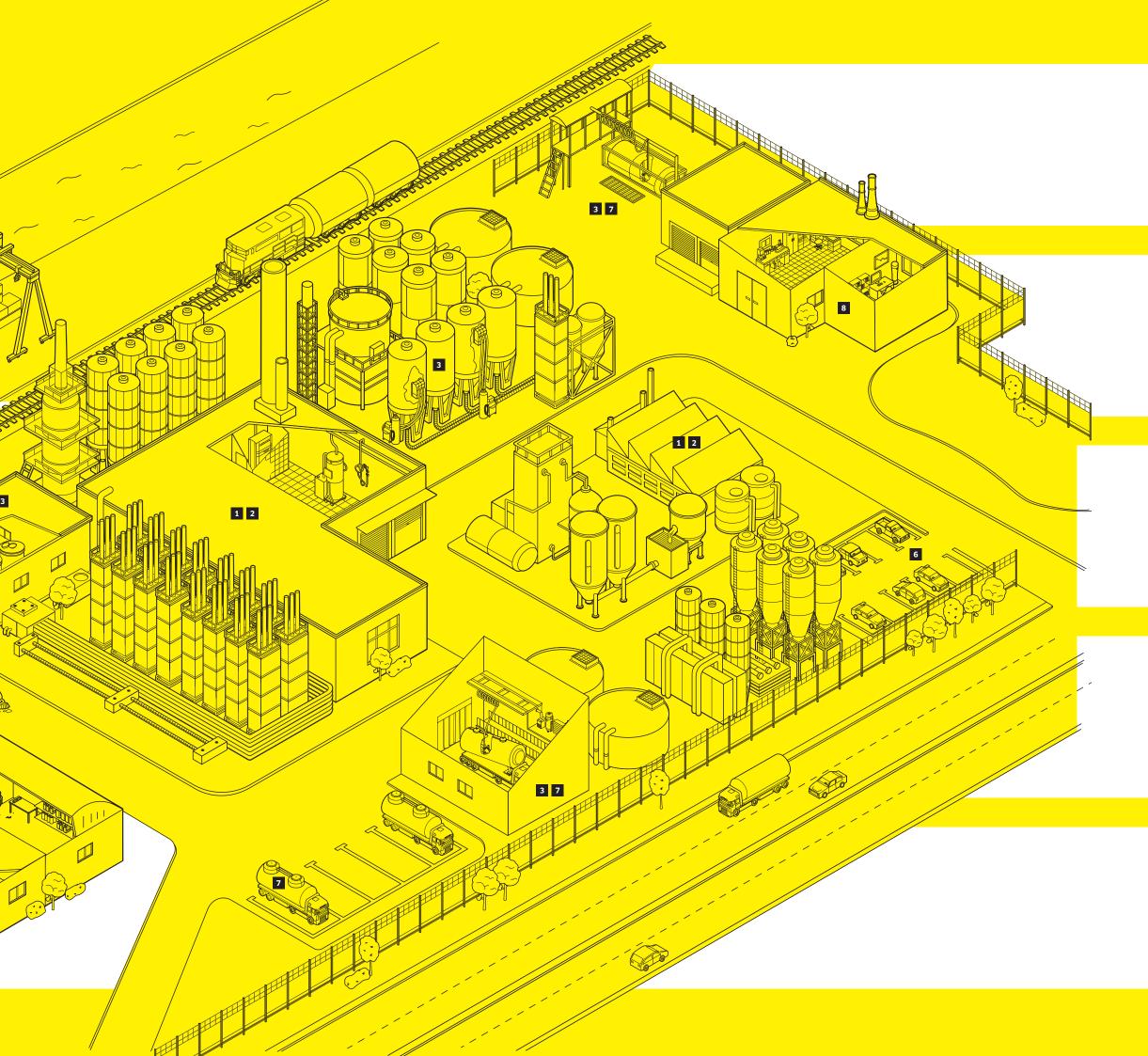
Cleaning problem: cleaning tanks and containers when changing products or regularly. Product residues in and on containers, tanks and silos, reactors

Areas to be cleaned: tanks and silos. All types of containers in production and storage tanks and containers

Cleaning solution: interior tank cleaning system with dryer for faster production restart, stationary high-pressure cleaning systems

zles, telescopic and positioning acidic RM 870. TankPro Cleaner. devices

Accessories: various spray noz- Cleaning agent: TankPro Cleaner, alkaline RM 875, TankPro Cleaner, Polymer RM 880, TankPro Latex Remover RM 885





HEAT EXCHANGER CLEANING

incrustations and dirt for higher efficiency and extended service life of the heat exchanger

Areas to be cleaned: cleaning heat exchangers on site or at the wash bay

Cleaning problem: removal of heavy **Cleaning solution:** ultra-high-pressure cleaning

Accessories: different high-pressure guns and nozzles, as well as positioning devices

FILTER, SIEVE AND PARTS CLEANING

Cleaning problem: heavy incrustations and dirt, production residues. Many parts have to be cleaned, generally at the wash bay

Areas to be cleaned: production equipment, parts, diaphragms, filters, sieves

Cleaning solution: ultrahigh-pressure cleaning. parts cleaner, cold and hot water high-pressure cleaner, dry ice blasters

Accessories: high-pressure guns, turbo nozzles, Orbimaster, Speedy, TubeMaster, vortex blasting nozzles

CLEANING INFRASTRUCTURE

Cleaning problem: infrastructure must be maintained so that no dirt ends up in production. By cleaning the external areas the cleaning requirement in the internal area is reduced, thus also saving costs

Areas to be cleaned: all outside areas, storage areas, entrances, loading zones, paths, roadways and parking areas, green areas

carriers, industrial sweepers, mowers, side brushes, weed vacuum sweepers, scrubber driers, cold and hot water high-pressure cleaners

Cleaning solution: leaf blowers, Accessories: flushing systems, chain saws, municipal implement watering systems, snowploughs, killers

TRANSPORT

Cleaning problem: product residues on and in transport vehicles

Areas to be cleaned: trucks, rail tankers, containers

Cleaning solution: handheld hot and cold water high-pres- ing wash brushes, telescopic sure cleaners, internal tank spray lances, surface cleaners, cleaning system, truck wash steam jet nozzles system

Accessories: lance holders, scrubber driers and sweepers, swivel arm, attachable or rotat-

BUILDINGS, OFFICES, LABS

Cleaning problem: various cleaning tasks in buildings

Areas to be cleaned: offices, workshops, social and sanitary areas, laho

Cleaning solution: carpet cleaners, wet and dry vacuum cleaners, dry vacuum cleaners, manual cleaning equipment, industrial vacuums

Machines: water dispensers, air purifiers

Cleaning agent: SanitPro Maintenance Cleaner Allsan, SurfacePro Alcohol-based Cleaner Alcal, SurfacePro Glass and Surface Cleaner Sural, Universal Stain Remover RM 769, CarpetPro Cleaner RM 760

KÄRCHER: GLOBAL PROVIDER OF CLEANING TECHNOLOGY



Today the family-run company Kärcher is considered the world's leading provider of efficient, resource-saving cleaning systems. Kärcher makes the difference with top performance, innovation and quality.

Solutions instead of just products: the Kärcher system

The development of Kärcher to a system pro- nology leader and innovation driver in highvider is based on the principle of achieving more together. We look for solutions from which everyone benefits in the company itself as well as together with suppliers and users. We search for innovative products and services that make possible an optimised is that with the use of the Kärcher system your essential, and ideally all of your require- for high-pressure pumps and high-pressure ments and needs are fully met.

Not everything you can think of, but making everything possible

As a system provider, Kärcher does not want systems. to offer everything you can think of, but everything you as a user need for your individual cleaning system. It is not the available range that decides, but the actual requirement alone. Responding to your questions on performance, efficiency and sustainability is important. A system of machines, accessories, cleaning agents, services and digital solutions that can be easily integrated into your operations and brings real added value. A system that makes the difference. The Kärcher system.

per minute.

system: the Kärcher system. What is important Since April 2011 WOMA has been part of the Kärcher Group and our competence centre water jet technology. With WOMA the Kärcher Group has strengthened its position as a global market leader for cleaning technology in the promising segment of high-pressure

WOMA - Water force as a tool

For over 50 years WOMA has been a techpressure water jet technology. Through continuous research and development, today we use systems with water pressures of up to 4,000 bar and flow rates of over 1,600 litres

YOU MANAGE YOUR SUCCESS. WE GIVE YOU THE SUPPORT.

Almost everything can be so much easier when talents are combined. Because it is more successful to pursue objectives together, complement each other and learn from each other. You could call it the principle of progress. We call it Kärcher Services. A promise of partnership. By professionals for professionals.





Kärcher Services:

The complete service package from the global leader. And the perfect continuation of the progressive Kärcher system with innovative tools, customised service offers and high-performance software solutions.



Kärcher Lease - Leasing Customised. Flexible. Safe. We give you the flexibility you need: with leasing and financing models for every requirement.



Kärcher Used - Used machines When used or second-hand is what

When used or second-hand is what you need. Starting up? Or simply want to save costs? We have the right used machine for you. Used, generally reconditioned, good and affordable. Offers are constantly changing. Ask us.



Kärcher Service – Customer Service

Service means trust. At all times. Services you actually need. Fast response for maximum availability. Maximum value retention and compliance with all statutory requirements.



Kärcher Rent – Renting

Just the machine you need. Rent instead of buying. And get more: expertise and Kärcher Full Service in one package.



Kärcher Service packages

Every service package is tailored precisely to a defined requirement. The range of services includes inspections as part of prescribed safety tests, timely maintenance and flat-rate full service. Please contact us for more information:

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