

difference

THE KÄRCHER MAGAZINE

02 | 2021

AN UNPARALLELED ART PROJECT

So close to the
heavens

WHERE ARE WE HEADED?

Hygiene in
changing times

OUR PATH TO A SUSTAINABLE SUPPLY CHAIN

How Kärcher takes
responsibility





» 02 | 2021

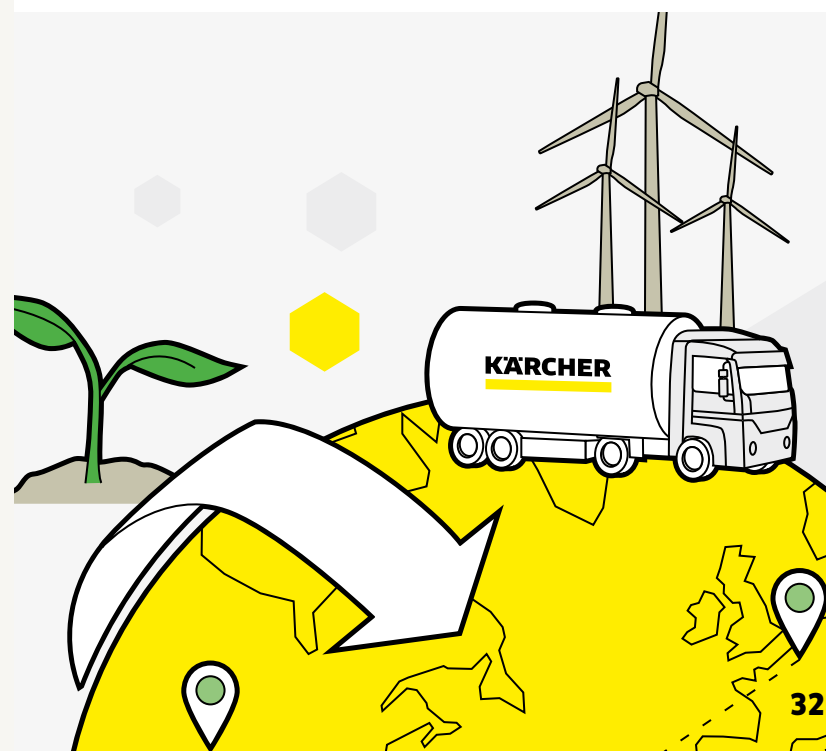
Dear readers,

Something that always fascinates me about our machines is their range of possible uses. You can see this versatility in our title story. Artist Klaus Dauven, along with our cleaning experts, has created a huge work of art – known as “reverse graffiti” – on a dam in Vouglans in France. This technique involves creating images by carefully removing the layer of dirt using our high-pressure cleaners.

In this issue, you will also see how we cleaned an almost 4,000-square-metre floor in Cologne Cathedral. In addition, we explore the importance of hygiene in public spaces from completely different aspects and take a look behind the scenes of filming our “Bring back the WOW” adverts.

I hope you enjoy reading these reports and many other stories from the world of Kärcher!

Hartmut Jenner
Chief Executive Officer and Chairman
of the Board of Management
Alfred Kärcher SE & Co. KG



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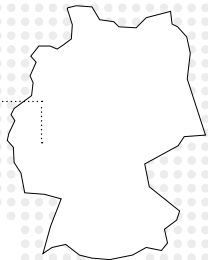
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Within the framework of its cultural sponsorship programme, **KÄRCHER** has restored and cleaned more than 150 monuments worldwide since 1980, and this now includes the sandstone and mosaic floor in the chancel of Cologne Cathedral in Germany.

COLOGNE CATHEDRAL



1880

TO 1899, THE MOSAIC FLOOR WAS LAID in the chancel of Cologne Cathedral - the largest work of art in the building in terms of area. It has been restored and preserved using Kärcher technology. In addition, the grey film covering the 4,000-square-metre sandstone floor in the nave was removed using Kärcher surface cleaners and scrubber driers.



Kärcher cultural sponsorship
Find out more about the deep and maintenance cleaning at Cologne Cathedral on our website [kaercher.com/CSR](https://www.kaercher.com/CSR)

So close to the heavens

AN UNPARALLELED ART PROJECT

Large formats have always appealed to German artist Klaus Dauven. In France, he is currently conjuring up a woodland silhouette on a gigantic dam run by the French energy company Électricité de France. Instead of using paints and brushes, he creates his artworks by removing the layers of algae and moss formed by nature itself: the perfect blend of a thirst for adventure, fantasy and technical precision.

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Small black dots move skilfully back and forth across the gigantic concrete wall. A turquoise lake shimmers behind them, framed by mountains. The lush, green valley sprawls at the foot of the 103-metre-high dam. For artist Klaus Dauven, a long-held dream is coming true here and now, at the Barrage de Vouglans dam.

Born in Düren, Germany, he has a special relationship with France. He travelled the country many times with his students in his days as a teacher. He is at home with French language and culture and can now finally show off his artistic talent in the country he loves – and in XXL format at that. Over weeks of hard work, a monumental piece of art – a project on an unparalleled scale – has been emerging amidst the breath-

taking Jura mountains: in harmony with nature, the surroundings and the weather. “We have just had to stop for a day because it was pouring down. It was impossible for the men to abseil down in that weather,” reports Klaus

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METRES:
THE DAM IS AN
IMPRESSIVE HEIGHT.

Dauven. Indeed, when you move closer, the black dots begin to take shape, and the red and white ropes on which two

climbers are suspended at dizzying heights become visible.

They are using modelling clay to stick around 2,500 tiny red and yellow points to the 427-metre-long, 103-metre-high wall in line with the highly precise instructions of two surveyors, who are using their measuring instruments between bushes and trees opposite the dam. They radio instructions to the climbers: “Move your finger another 10 centimetres to the right and another 20 centimetres up!” Then the next marker made from biodegradable modelling clay is stuck on. It is highly precise work which will later form the outline of Dauven’s woodland silhouette, based on the principle of “painting by numbers”. The work is entitled “La forêt”. But instead of paint, deposits caused by the weather on the bottom section of the

» WIPING AND REMOVAL PRODUCES AN AESTHETIC OF ITS VERY OWN.«

KLAUS DAUVEN

dam will form the artwork’s contours. The concrete will be cleaned centimetre by centimetre around the points using Kärcher high-pressure cleaners, revealing a contrast between the concrete and the patina – the blackish, naturally occurring layer of algae and moss.

A happy accident

This principle, christened “reverse graffiti”, was invented by Klaus Dauven. However, his background is not in graffiti in the slightest, and he in fact studied at the Kunstakademie (art academy) in Düsseldorf and Münster. As an artist, he has always been interested in large formats. He initially started with charcoal drawings, a material that links him to his Rhineland origins. “One day, I simply wanted to remove the charcoal residue from a piece and noticed that something special happened when



Klaus Dauven has had a long and special relationship with France. On the left: modern surveying technology is used to position the adhesive points.



BARRAGE DE VOUGLANS

5 FACTS ABOUT FRANCE

- The Republic of France covers an area of 632,834 km², with overseas territories accounting for 88,868 km²; the capital city is Paris.
- Many countries have a saying: “Eat like a god in France” – in 2010, “cuisine française” was awarded Intangible Cultural Heritage of Humanity status by UNESCO.
- A distinction is made between different types of tea, namely black tea (“thé”), which has an energising effect, and caffeine-free tea varieties, primarily herbal teas (“tisanes”).
- The Eiffel Tower in Paris was built specially for the Universal Exposition in 1889.
- The three colours of the French flag represent liberty (blue), equality (white) and fraternity (red).



»THE MEETING POINT BETWEEN ENGINEERING AND CREATIVITY.«

KLAUS DAUVEN

.....
Four professional cold-water high-pressure cleaners were used. They were fed from the lake; the electricity came from the local power station.



EMERALD IN THE JURA

Lac de Vouglans is the third-largest artificial reservoir in France, measuring 35 kilometres in length and containing 600 million cubic metres of water. It is located in the Bourgogne-Franche-Comté region and mainly serves as a retention basin for electricity generation, although the hydroelectric power plant also meets water demand. In summer, its emerald-green waters attract water-sports enthusiasts in particular, but nature lovers also enjoy hiking through the dense lakeside forests.

I used a vacuum cleaner on the paper. The wiping and removal produces an aesthetic of its very own. It was actually a complete accident that I discovered this principle for myself in 1997," he explains. An accident that was set to change his life. He refined his technique using specially made diamond-shaped nozzles. The geometric shapes turned into house structures, outlines of factories and urban landscapes. Shortly after, Dauven also began working outdoors more and more often. He sought out locations where he could play with surfaces, light and shadow, just like in the studio. To remove substances, he soon moved on from using just a wire brush to more powerful water streams. Be it on motorway bridges, a grain silo or dams, as in Japan and Korea, for him it is always about incor-

porating the surroundings of the artwork into the design.

Thirst for adventure and expertise

The breadth of his subjects ranges from plants to animals to faces, which always tell a story too. For example, in Bamberg, Dauven created portraits of young people from different backgrounds on a bridge: a plea for a tolerant, open society. Another of his works is in the French port town of Sète. He used old photographs of seafarers and fishermen from the region as a template for it. Dauven and Kärcher have already collaborated on joint projects many times, but the technical challenges were never as great as in the latest work. Strict safety standards apply to the German-French team of surveyors and industrial climbers: "I like the democratic principle of my artistic

direction. I work with specialists even though they aren't artists. It's the meeting point between engineering and creativity." The physical challenge, combined with a thirst for adventure and expertise,

2,500

ADHESIVE POINTS

MADE FROM BIODEGRADABLE MODELLING CLAY SERVE AS A GUIDE.

is what binds the team together. Every handhold, every knot must be just right when the anchors are initially fixed

onto the top of the wall; two ropes are dropped down a depth of five metres from each anchor. Over the course of several weeks, the team has planned the project meticulously and checked the equipment, but new, unexpected difficulties arise on-site every day, for which solutions have to be found.

Transient art

What makes Dauven's art particularly special is its transience. While other artists want to immortalise their talent, Dauven plays with the fleeting nature of his works. How long his art remains visible is ultimately decided by the weather, the slope of the wall, the ambient temperature and sunlight. Only one thing is certain: his works will disappear over time. And there is another thing that makes them special: it is not

museum visitors but hikers, holiday-makers and passers-by who become the viewers of his art, quite without meaning to. Klaus Dauven enjoys presenting this accidental encounter with his art, in exactly the same way he experienced it himself: as a magical stroke of luck. ■



Discover how the dam in Vouglans is becoming a spectacular work of art.
www.kaercher.com/difference





Hygiene in changing times

WHERE ARE WE HEADED?

Since the start of the coronavirus pandemic, cleanliness and hygiene in public spaces have taken on a different role than in the past. Be it in the restaurant trade, government agencies, schools or offices – certain cleaning regulations and procedures are changing due to the virus. It is a challenge that will doubtless play a major role in the future.

➤ The solutions being adopted include the standardised use of particular methods, training cleaners using digital processes and developing hygiene concepts, as illustrated by one example from Russia (see page 15).

perception and behaviour changing, and what opportunities do we have to maintain or improve well-being? Find out more in our interview with psychologist Dr Enno Maaß, Deputy Chair of the German psychotherapist association Deutsche PsychotherapeutenVereinigung.

On an individual level, the change goes deeper, as every person must decide for themselves what degree of hygiene they wish to enforce. How are

100 per cent hygiene?

IT IS ONLY REALLY POSSIBLE IN CLEANROOMS

Perfect hygiene is not realistic in everyday life, as there always remains a certain risk of germ transfer. Generally speaking, well-performed cleaning is more effective than poorly executed disinfection because what is important is to remove the breeding ground or host for pathogenic germs, bacteria, fungi and viruses.

The dirt pathway ...

Daniel Meier, Senior Director Special Sales & Consulting Services at Kärcher, emphasises that many bacteria are actually harmless. "At the moment, we are just thinking about the negative, but we need countless bacteria to even survive." Where harmful, pathogenic germs are concerned, the challenge is to minimise the risk of infection wherever possible. "In building cleaning and cleaning in public spaces, the question of 'where' is crucial: where is the dirt, where do people come into contact with dirt and what are the transfer paths of potentially pathogenic germs?"

... and a set of options

With this in mind, it is important to use the right cleaning methods and devices from the wide range of options. For example, when cleaning surfaces, the cloth-folding method is recommended. "That means using a new side of a cleaning cloth

for each surface – once they've all been used, change to a new cloth." This removes germs and stops them from being transferred from one surface to another. When it comes to pathogens that are transferred by contact between surfaces, a high level of cleanliness, hygiene and safety can be achieved in this way. "What's more, pathogens are not killed by cleaning – that doesn't happen until the laundry process, where there is an optimum combination of temperature, chemistry and mechanics." As a result, the use of disinfectants can be reduced to critical areas in a property.

In many areas, manual cleaning can be supported by modern cleaning technology. There is a very wide range of methods that can be combined – depending on the space – to achieve the best possible result. In areas such as sanitary facilities or commercial kitchens, the use of steam clean-



ers has now become established. Hot water high-pressure cleaners can even have a disinfectant effect in children's playgrounds when used correctly.

Society is changing

Be it in retail, the restaurant trade or local authorities – all operators of publicly accessible spaces have to deal with the raised awareness of hygiene

» WE NEED MANY BACTERIA TO SURVIVE.«

DANIEL MEIER

in society (see "From handwashing to arguments in the fruit aisle", interview with Dr Enno Maaß). They not only need to comply with regulations but must also give people back a feeling of safety in everyday life. Good, visible documentation of cleaning and hygiene measures in public areas can help to strengthen trust. At the same time, the greater need for hygiene can pave the way towards improved visibility and appreciation of cleaning services.

HOW A HYGIENE CONCEPT IS DEVELOPED

To improve the level of cleanliness and hygiene in buildings, it is worth analysing cleaning methods and techniques. Kärcher carried out a project of this kind for the ministry of education in Yekaterinburg (Russia) and developed a cleanliness and hygiene concept on-site in several consulting stages. Starting with a school and nursery, suggestions for improvement were drawn up in early 2020; these are to be implemented at all schools and nurseries in the administrative district in the future.

Jens Kuhn, Cleaning and Hygiene Expert, Cleaning Consulting Services at Kärcher, explains: "If you optimise the cleaning sequences and train the staff accordingly, the cleaning results improve automatically. The outcome: less dirt, fewer germs and so lower health risks." The set of standardised measures includes colour coding of cleaning textiles for specific areas of use, known as the four-colour system. By using, for example, red

cloths for sanitary facilities only, and blue for classrooms and offices, cleaners prevent germs from being mixed and spread. The floor cleaning system is being changed to a mop swap method, i.e., one mop head per room, which is then laundered in the washing machine.

"To ensure the new methods are easy for all employees to understand, we work with different documentation types, such as method cards and videos. We highlight critical hygiene safety points on hygiene plans, and these are explained in detail," explains Kuhn. This allows cleaners to see where the main focus is at a glance, and building users can understand how cleaning is done. The rollout of the proposed measures, which has yet to be completed, will not only improve cleanliness and the level of hygiene but will also cut the time taken by 30 per cent thanks to the standardised sequences.

»WE OWE OUR
HEALTH TO PEOPLE
ABOVE ALL ELSE.«

DANIEL MEIER



The world of cleaning is changing

"The most obvious change is new cleaning requirements," explains Meier. "Many different protection measures have been established, for example screens at cash desks or partitions in restaurants. These items must not be forgotten during cleaning." It is important, therefore, to adapt existing cleaning concepts to the new circumstances. In addition, good ventilation systems and air purifiers reduce the risk of spreading germs via aerosols.

Certified hygiene concepts

From employees to workspace users to visitors and guests: people increasingly want proof that hygiene measures are being carried out to the latest standards. To meet this new requirement, an increasing number of large building operators are having their hygiene concepts certified (see "How a hygiene concept is developed"). "Incidentally, this is also highly relevant to employers," stresses Meier. "Hygiene issues are becoming a priority for staff positioning and recruitment, because applicants are looking for safety and well-being in the workplace. There is a new emphasis on cleaning services as a result."

New focus on digitalised solutions

For anyone wanting to provide transparent proof of hygiene measures, digitalisation is an unavoidable subject. Modern systems make it possible to control and document when and

where cleaning is done – using data on how much specific rooms are used, the filling levels of soap dispensers and other factors. "Until now, cleaning-on-demand solutions were about increasing productivity and reducing superfluous walking," explains Meier. "Now quality assurance is the new, focal driver."

Relevance of equipment and training

To survive in this new reality, cleaners must be given appropriate equipment to guarantee health and safety in the course of their work. In a field with high staff turnover, they must also be able to acquire the expertise needed to implement hygiene concepts effectively. "We are seeing a big increase in the importance of training, consulting services and the visual preparation of standardised cleaning concepts for specific rooms," says Maier. "At the end of the day, above all else, we owe our health and safety to the people who complete their work conscientiously." ■



Find out more about the topic:
www.kaercher.com/difference



Dr Enno Maaß,
Psychotherapist and Deputy Chair of the
German psychotherapist association
Deutsche PsychotherapeutenVereinigung (DPTV)

Interview with Dr Enno Maaß

FROM HANDWASHING TO ARGUMENTS IN THE FRUIT AISLE

How has the public perception of hygiene changed because of the pandemic?

In my experience, the change has taken place in phases depending on our level of knowledge about the pandemic. At the start, hand hygiene was a major issue. Everyone strictly adhered to the 20-second handwashing rule and used disinfectant. Back then, we didn't know that infection from contaminated surfaces plays a lesser role in transmission. My view is that hand hygiene has returned to a more normal level since then. But what we are seeing is that the focus is generally more on "perceived" or subjective hygiene factors in everyday life, as people don't always behave purely according to rational mechanisms.

What behaviours have undergone change as a result; how long term will these changes be, based on your experience?

I think there is a growing focus on the question of how we deal with closeness. It's likely that people will continue to have a greater need for personal space, so things like appointment systems for offices or retail policies that include

social distancing recommendations could remain in place. Of course, that doesn't apply to fruit aisles at the supermarket, where it's clear that hygiene has become a controversial issue: can you take an apple out of the crate and then put it back in? Arguments have already broken out over this in some places.

What tips can help us maintain a sense of well-being – even when surrounded by ignorance and hysteria?

We have observed a significant rise in stress levels, and many people are overwhelmed by the current situation. Figuratively speaking, not everyone still has the energy to stay calm in the fruit aisle. When people feel ready, they should gradually start enjoying their old freedoms and activities again in their everyday life, in accordance with their own assessment of the risks. Not all at once, but bit by bit. In this way, they can get their life back, have fun again and relax, which will really help to improve their general well-being. ■

OUR HIGHLIGHTS FROM THE KÄRCHER RANGE

The service training specialists at the Kärcher Sales & Service Academy are the experts when it comes to machine expertise, maintenance, cleaning and hygiene. In this issue, they present their current favourite products and give specific tips for their use.



Ronald Cropsey,
Specialist Technical Service
Training High-Pressure

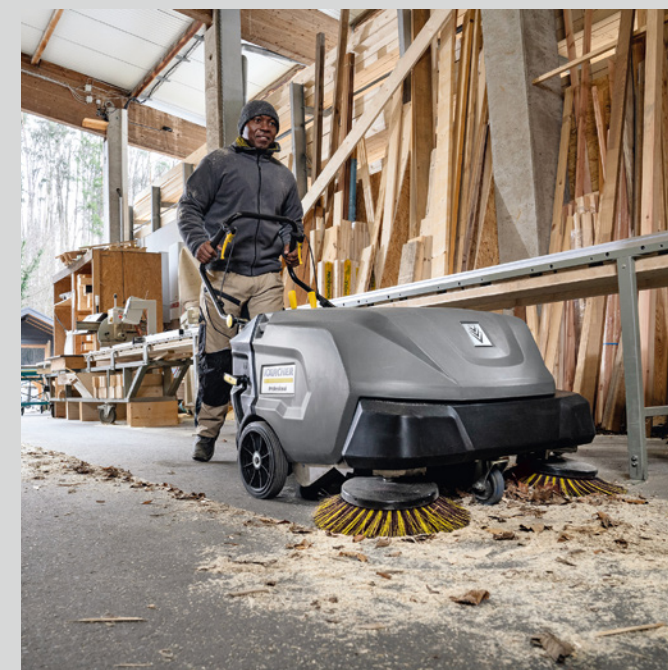


Stuart Fabian,
Specialist Technical Service
Training Sweepers

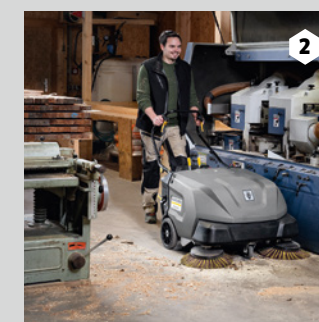
Professional

» A COMPACT VACUUM SWEEPER WITH HIGH AREA PERFORMANCE.«

STUART FABIAN, SPECIALIST TECHNICAL SERVICE, TRAINING SWEEPERS



THE KM 85/50 W Bp Pack can be operated intuitively and is compact enough to reach areas that are difficult to access.



The **KM 85/50 W Bp Pack** vacuum sweeper is equipped as standard with a disc brake, battery and battery charger.



1 TIP 1: CLEVER DESIGN FOR MAXIMUM MANOEUVRABILITY

The KM 85/50 W Bp Pack offers unprecedented freedom of movement and, with its lower height from the ground, areas that are difficult to access can be cleaned. The compact design allows use in confined spaces, and the powerful battery ensures location-independent, quiet and emissions-free operation.

2 TIP 2: TOOL-FREE PARTS REPLACEMENT FOR UNCOMPLICATED USE

The main sweeper roller and the filter can be replaced without tools – a dream for every service technician! The floating main sweeper roller optimally picks up dirt on smooth and uneven floors.

More product information online at:
[kaercher.com/professional](https://www.kaercher.com/professional)

»READY IN NO TIME AT ALL.«

RONALD CROSEY, SPECIALIST TECHNICAL SERVICE, TRAINING HIGH-PRESSURE



OPTIMAL CLEANING RESULTS. The flexible nozzle joint ensures full contact between floor cleaning cloth and floor at all times.

Thanks to its clever product design, the **SC 3 UPRIGHT EASYFIX** steam mop turns out to be a real space saver that always delivers the right amount of steam to the floor.

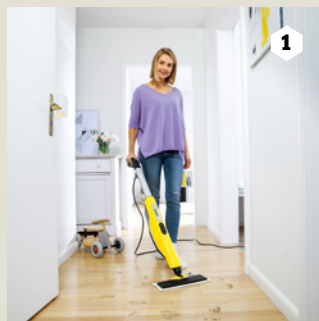
1 TIP 1: FIBRE-DEEP CLEANLINESS WITHOUT CHEMICALS

What I really like about the SC 3 Upright EasyFix is that it is ready for operation in only 30 seconds – I don't have to wait until the boiler is heated. I also like the fact that only the power of steam is used for cleaning; no chemicals are required. This reliably eliminates bacteria, protects the environment and ensures a healthy living environment.

2 TIP 2: FOR TILES, CARPETS AND WOODEN FLOORING

At home, I have many floors that have to be cleaned very often as I have kids and pets. What I really appreciate about our steam mop is that I can use three different preset steam levels – even for sensitive parquet.

More product information online at: [kaercher.com/home-garden](https://www.kaercher.com/home-garden)



»THE SWISS ARMY KNIFE AMONG VACUUM CLEANERS.«

RONALD CROSEY, SPECIALIST TECHNICAL SERVICE, TRAINING HIGH-PRESSURE

The **WD 3 BATTERY SET** wet and dry vacuum cleaner allows you to work independently of mains power and thus achieve maximum freedom of movement: in the house and garden, car and even when camping!

1 TIP 1: CORDLESS AND LIMITLESS

Thanks to a 36 V li-ion battery, the WD 3 Battery Set thoroughly cleans areas that corded wet and dry vacuum cleaners cannot reach or can only access with great difficulty – this is great! That's why I'm happy to take the device with me when I go camping to remove dry, wet, fine or coarse dirt.

2 TIP 2: ACCESSORIES FOR GREATER VERSATILITY

The accessories can be directly attached to the suction hose thanks to the effortlessly detachable handle. The suction tube and floor nozzle can be easily parked when taking a break from work. I clean my car with the crevice nozzle to remove dog hair, for example.

More product information online at: [kaercher.com/home-garden](https://www.kaercher.com/home-garden)



THE BATTERY-OPERATED WD 3 BATTERY SET is a versatile wet and dry vacuum cleaner with battery included.



»SMALL BUT POWERFUL.«

STUART FABIAN, SPECIALIST TECHNICAL SERVICE, TRAINING SWEEPERS

The **KV 4 VIBRAPAD** effortlessly removes dirt from smooth surfaces and is perfect for use all around the house.

1 TIP 1: CLEANING WITHOUT SCRUBBING

There are not many people who like cleaning windows. I certainly never enjoyed it. That's why I bought myself the KV 4 Vibrapad. Thanks to the vibration, even stubborn dirt can be effectively loosened without much effort. This saves annoying scrubbing and lots of time. For me, the KV 4 is therefore an absolute must-have!

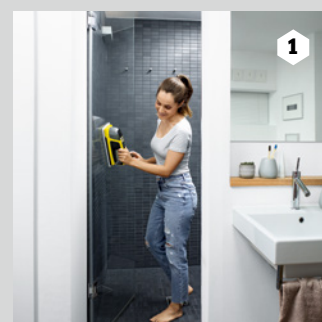
2 TIP 2: A WIDE RANGE OF APPLICATION OPTIONS

Originally, I purchased the KV 4 for cleaning windows... but I now use it for cleaning all smooth surfaces: tiles, mirrors, shower cubicles and counter-tops. I am always amazed at how far you can go with the 180 ml fresh water tank.

More product information
online at:
[kaercher.com/home-garden](https://www.kaercher.com/home-garden)



THE BATTERY-POWERED WATER DISTRIBUTION stops automatically after 15 seconds but can be repeated at any time by pressing a button.



»FRESH WATER AT THE TOUCH OF A BUTTON.«

RONALD CROPEY, SPECIALIST TECHNICAL SERVICE, TRAINING HIGH-PRESSURE



THE WPD 50 Ws IS PERFECT for small spaces such as offices, doctor's surgeries, law firms, kitchens and hotel rooms because it does not require a lot of space.



Anyone who likes carbonated water but wants to avoid plastic bottles will find an environmentally friendly alternative in the compact water dispenser **WPD 50 Ws**.

1 TIP 1: FRESH WATER FOR THE WHOLE FAMILY TO ENJOY

Everyone in my family can operate the WPD 50 Ws simply and intuitively. Even the combination filter, which comprises an active carbon filter and an ultrafilter, can be easily exchanged as needed. And the most important thing: the water tastes so good and refreshing that nobody in our house wants to do without the WPD 50 Ws.

2 TIP 2: VERY EASY TO CLEAN QUICKLY

I am not somebody who likes to spend a lot of time cleaning, and that's why I love the glass surfaces of the water dispenser. They are very easy to clean and to keep clean. Simply wipe and you're done - the WPD 50 Ws looks like new again.

More product information
online at:
[kaercher.com/professional](https://www.kaercher.com/professional)



A (MOSTLY) INVISIBLE MARVEL

Nothing but hot air? A few fun facts – and more

Earth is the only known planet in the universe that has an atmosphere containing oxygen. Oxygen has always been one of the essential requirements for every type of life. Today, the quality of the air we breathe has become a universal issue because it is partly in jeopardy – depending on where we live. So there is much to learn and do when it comes to the marvel of air.

AIR IS THE SUBSTANCE THAT HUMANS CONSUME IN THE GREATEST VOLUMES.

Dry air is primarily composed of two gases: nitrogen is the main component of air, making up 78 per cent of it. The second most important component, at 21 per cent, is oxygen. Air also contains noble gases and carbon dioxide. Although the latter makes up a small proportion, at 0.037 per cent, it is nevertheless seen as one of the main components of air due to its significance for life and the climate.

10,000 litres, 3.5 million balloons

Air is the substance that humans consume in the greatest volumes. We normally take 12 to 18 breaths per minute. Babies have a much faster breathing rate, taking 40 to 50 breaths per minute. With every breath, an adult human inhales about half a litre of air into their lungs. This volume can rise to more than 2.5 litres. Therefore an adult breathes in 10,000 to 20,000 litres of air every day. A fifth of this is oxygen. By our 21st year, our lungs will have inhaled the equivalent of roughly 3.5 million balloons.

World records, muscle cramps and philosophy

There are even more interesting facts about air. For example, two world records have been set for people holding in air – i.e., holding their breath – under water: the first was 11 minutes, and that was after breathing normal air. The second was over 22 minutes – after breathing pure, additional oxygen. Another matter altogether is muscle cramps in sport, caused by the build-up of lactic acid. This can occur when the

body is not supplied with enough oxygen. Athletes who focus on their breathing report fewer cramps and less muscle fatigue after sport.

The Greek natural philosophers believed air was one of the four basic elements that made up everything. 369 Aëria, an asteroid in the central region of the asteroid belt, is named after air. What is more: air has a weight, which was first proven by natural scientist Otto von Guericke from Magdeburg. The weight has been calculated precisely since then: 1 cubic metre of air weighs 1.2041 kilograms at 20 °C at sea level.

Air concerns us all: a task spanning the whole planet

Air pollution is a problem of our time, affecting large cities in a different way to rural areas. That means all members of society must confront it, deal with it and develop individual or societal solutions.

You and I: what it means for the individual

The quality of the air we breathe affects us directly. Little can be done to counter the negative global impact of industrialisation in everyday life, but there is room for conscious decisions which, if taken in mass numbers, can contribute

to improving air quality. For example, using a bike or underground train for short journeys instead of a car, avoiding unnecessary air travel, shopping locally and many other small steps.

In addition to long-term prospects concerning air quality, there are other factors that may make breathing more difficult and cause bad air: for example, pollen, odours, vapours, dust or bacteria and viruses can impair air quality or even pose a danger. In such cases, air-conditioning systems or air purifiers can help to improve individual well-being and allow us to breathe deeply (see “We clean everything, why not air?”).

Local authorities: responsibility for the population

Local authorities are responsible for improving the quality of life in the local area – reducing air pollution and improving air quality are a key part of this. For example, in London, one of the cities battling extensive air pollution, there are numerous measures to improve air quality. The Ultra Low Emission Zone (ULEZ) is being extended in October 2021 and will then cover central London up to the North and South Circular Roads.

If vehicles do not meet set emission limits, £12.50 must be paid per day for vehicles weighing up to 3.5 tonnes, or £100 per day for vehicles over 5 tonnes. In addition, the City of London has made the entire city a Low Emission Bus Zone, in which all buses meet or fall below the Euro VI standard. Manufacturers of every type of vehicle are currently working on environmentally friendly engines, so even more will be possible in the future.

The industrial city of Stuttgart is one of the cities with the poorest air quality in Germany due to its location in a basin combined with high traffic volumes. For that reason, there is a set of measures in place to help keep the air clean. These include investments in public transport, walking and cycling, measures to improve traffic flow, more urban green spaces to enhance the city climate, projects such as air filter columns and enhancements to street cleaning. ■



More information about the topic can be found online at:
www.kaercher.com/difference

LOCAL AUTHORITIES IMPROVE THE QUALITY OF LIFE IN THE LOCAL AREA.



“WE CLEAN EVERYTHING, WHY NOT AIR?”

Interview with Markus Boos, Senior Specialist Product Management Water & Air at Kärcher

At the moment, discussions about air purifiers quickly turn to the topic of reducing infection risks. Is that the only motivation for Kärcher to dedicate itself to this area?

No, definitely not. The market is changing and of course one driver at the moment is preventing the spread of disease indoors. However, there are other strong megatrends that are making air purification a topic for the future: air-borne allergens and allergies are unfortunately increasing significantly, and air purifiers can provide relief, at least within your own four walls. Air pollution and denser living space due to urbanisation are also making good air quality a valuable asset.

And what does Kärcher have to offer in this field?

A company like Kärcher that cleans almost everything should not stop at air. We have had a good product on the market for some time, which is suitable for all requirements. We also offer H13 and H14 HEPA filters, which are often spoken of in connection with the COVID-19

pandemic. However, even devices with a class E11 EPA filter are able to clear the majority of infectious aerosol particles from the air we breathe. Apart from virus-infected aerosols, this also includes harmful or irritating particles such as pollen, mites, animal hair, household dust, gases and odours or fine dust.

What will happen next?

I have a counterquestion: Does Kärcher only have one air purifier? There's a lot more in store (smiles – Ed.). Taking this as a basis, we're going to build up a portfolio that caters for every price level, from children's rooms to open-plan offices. From the beginning of 2022, we will start bringing smaller devices onto the market. We also have a new type of technology in development. I can't give anything else away, but I'm excited about the launch. ■

30,000 WORKING STEPS FOR A 30-SECOND VIDEO

A look at the creation of the new WOW ads

What colour is “bubblegum” anyway? Why does the thermal image effect remind you of a unicorn tail? And what is the choreography like for the Window Vac? The questions being pondered by employees during the filming of the new “Bring back the WOW” adverts are definitely different. In this interview, they give us a look behind the scenes and an insight into the many small details that create the WOW effect.

The new TV adverts for the battery-powered window vacuum cleaners and steam cleaner range were completed recently. How did the ideas for the new films come about?

Alexander Becker: “With both campaigns, the central factor was that we were not presenting new products. In previous campaigns of this size, the motivation was always a new product launch. With the Window Vacs, we wanted to create new momentum for the product category with an attention-grabbing campaign.”

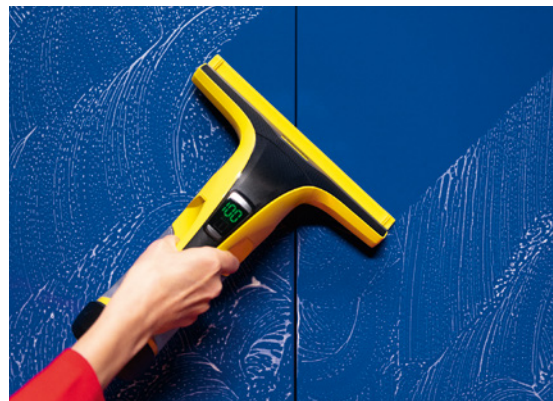
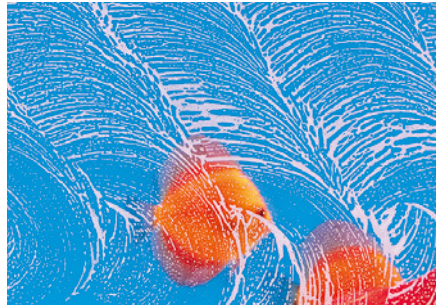
Tim Wissmann: “With the steam cleaners, we seized on the coronavirus situation to show that you can remove even invisible dirt, such as bacteria and viruses, using our steam cleaners.”

Mel Baierschmitt: “A lot of people think ‘We’ll make a quick TV advert’ and it’ll be super glamorous and really fast. But what happens behind the scenes is very time-consuming, requires a lot of coordination and is sometimes quite tough. There are a lot of small things involved that you don’t

see in the end product. After we have developed the marketing briefing with our product management colleagues and the communication materials have been decided on, such as a TV advert, we brief our agency, antoni boost. We then coordinate the ideas from the communication concept internally, as well as with marketing colleagues from other countries – ultimately, the idea should get people all over the world excited about the Kärcher brand and its products.”

What decisions are involved in making sure the complete WOW picture is just right in the end?

Mel Baierschmitt: “Everything hinges on the concept. In a briefing which is several pages long, details are set out specifying what material must be produced for what product, in which formats and for which media channels. We take a 360-degree approach to our thinking. For example, that means we film our TV advert and take photos at the same time. That allows us to generate a lot of material in one go, which we can then show on different



Just WOW! Kärcher gives fresh momentum to the Window Vac product category with an attention-grabbing campaign.



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 Left to right: Mel Baierschmitt, Group Leader H & G Marketing Projects,
 Tim Wissmann, Project Manager H & G Marketing Projects,
 Alexander Becker, Project Manager H & G Marketing Projects

channels around the world. It is important to focus on the communication media and the fact that they belong to one and the same campaign.”

Certainly, nothing is ever left to chance in the production of a TV advert ...

Mel Baierschmitt: “That’s definitely true. For the WV advert, there was even a choreographer who rehearsed every movement with the models and actors. She thought about how to make the movement suit the music. A complete first since we launched the ‘Bring back the WOW’ campaign was that we had music composed especially for our adverts. Music is an absolutely brilliant medium for carrying emotions.”

The outfits and choreography are details that you can see in the final advert. What else happens behind the scenes that you don’t see at all later on?

Alexander Becker: “My favourite word during the final coordination meetings was the colour ‘bubblegum’. But it’s not even a colour and that made discussions difficult when there were questions being asked like: ‘Is that bubblegum?’, ‘Why does it look like that? That isn’t bubblegum!’. Talking about colours can be tricky and not all colleagues work on colour-accurate monitors. At the same time, defined colours, especially in such a colourful campaign, should look identical everywhere: on the TV, the website and in the brochure. Sometimes that is not technically easy to do at all.”

Speaking of technology, the advert uses a very particular effect to show hygienic cleaning using steam cleaners...

Mel Baierschmitt: “Yes! We used what is known as a heat effect in an advert for the first time. It was a bit like with the colour ‘bubblegum’: What do you actually imagine a heat effect to look like? We wanted to show invisible dirt to highlight the efficiency of the steam cleaners. The whole thing should look as though you had placed a picture from a thermal imaging camera on the ‘cleaning highway’, i. e., the area that the device has gone over. This then shows that 99.999 per cent of viruses and bacteria can be eliminated with steam alone. With one version, Tim remarked that it looked like a unicorn tail. Another time, the effect was too oily, and then it was too stripy again. It took weeks until we got the result we wanted.”

What is it like once everything is finally finished and you watch the final adverts?

Tim Wissmann: “When I watch the adverts, I feel very proud. We believe in what we’ve done.”

Alexander Becker: “I feel exactly the same as Tim.”

Mel Baierschmitt: “Everyone who has seen the adverts so far thought they were great. And that feedback gives us a really good feeling. I am truly very proud that we battled through it together. It’s thanks to the whole team that we can now look with pride at our ‘TV thoroughbreds’ and all of the other WOW-tastic campaign materials after this nerve-racking ride.” ■



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 How do you visualise the efficiency of Kärcher steam cleaners in a TV advert? A question that caused sleepless nights for the marketing team.

OUR PATH TO A SUSTAINABLE SUPPLY CHAIN

As a manufacturing company, Kärcher accepts its responsibility for the environment, people and products. The supply chain is a key area of focus for our sustainability ambitions, as it allows us to have a positive impact that reaches way beyond our factory gates.



1 REDUCING EMISSIONS

Reducing and compensating for climate-damaging emissions is a key element of the fight against climate change. That is why Kärcher wants to become a climate-neutral company. Our factories have been carbon-neutral since the start of 2021.

Regional supply chains

In our supplier structure and our production, our policy worldwide is "Regional for local": that means we procure the required materials and components in the local region of each factory as much as we can, and manufacture our goods mainly in the markets or world regions in which they are sold.

Optimising transport routes

Since 2017, we have increasingly been delivering our products directly from our production locations, without any detours via a central warehouse, to several Kärcher sales companies in Europe. And the difference that direct supply makes in the battle for eco-friendly logistics can be seen in the figures.

An analysis at our German logistics centre showed that, thanks to direct transport from production locations in Italy and Romania to 13 European sales companies, we were able to save over 70 tonnes of CO₂ per year. This corresponds to 30,900 transport kilometres saved. Step by step, more Kärcher companies are being incorporated into the direct supply structures.



2 EFFICIENTLY USING RAW MATERIALS AND RESOURCES

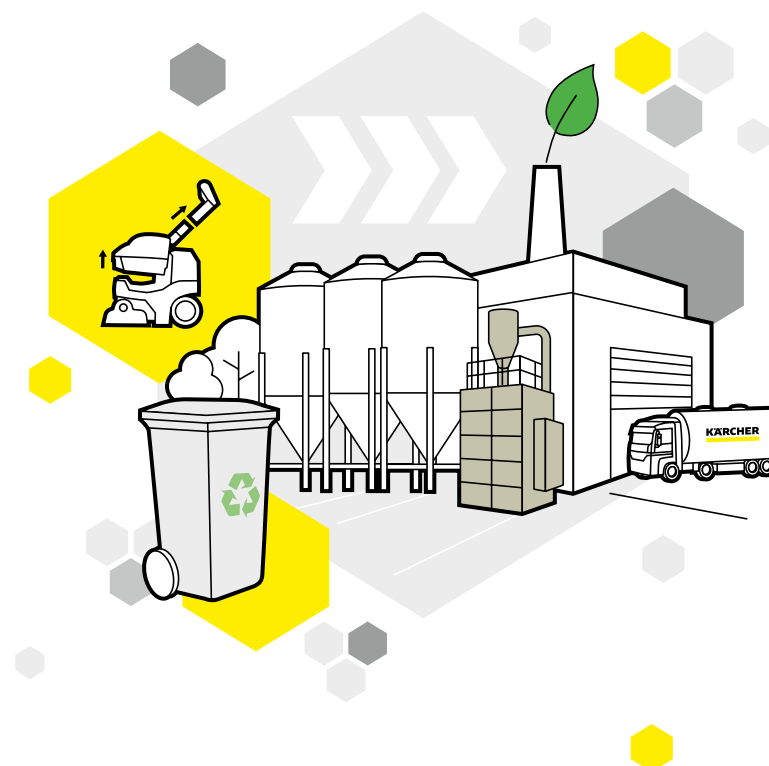
Our careful processes begin with R&D, taking care to design products that allow for the responsible use of resources. When we select partners, we look specifically for suppliers that deliver pollutant-free, sustainable materials. We are also increasing the percentage of recycled materials in our products, and we value materials that can also be easily recycled at the end of their usable life.

Choosing raw materials

When we select raw materials for our products, we go further than the law: for example, we stopped using plasticisers as early as 2009, even though they were not banned until 2019. We also specify binding limits for PAHs (polycyclic aromatic hydrocarbons) for Kärcher products, although these are only partly covered by legal regulations.

Optimising packaging

We are continuously working to optimise our packaging and reduce the associated waste, both during the production component supply stages and during delivery to our customers. As part of our 2025 sustainability goal, our factory site in Winnenden, Germany, is testing ways to significantly reduce packaging waste both on-site and in the supply chain, with the aim of achieving a plastic-waste-free production process. For example, in 2021 we are installing a powder mill to create our own plastic powder. Until now, we have received the powder in giant plastic sacks known as Big Bags, and now we are going to eliminate this waste. The granulate, which we use to make the powder ourselves, arrives in tankers with no packaging.



3 SETTING AND MONITORING STANDARDS

Is a supply chain sustainable or not? This is hardly a matter of opinion. We set a clear focus on specific criteria which we and our partners regularly measure. We use modern software to help us thoroughly check and assess suppliers before we sign contracts with them. In addition, we make all parties commit to a Code of Conduct governing principles for the treatment of employees and the environment.

Transparent supplier selection

To become a Kärcher supplier, you have to fulfil strict criteria. We check that every new supplier adheres to our regulations and regularly audit our existing suppliers. We include questions on quality, as well as welfare and environmental standards, and health and safety. We also use software that – with help from AI – searches all available online sources for indications of discrepancies or anomalies. For example, it scours social networks for posts about our partner companies.

Code of Conduct

Our Code of Conduct describes in detail our requirements for both our own behaviour and that of our suppliers. The heart of the document focuses on the treatment of employees. For example, the Code of Conduct prescribes ethical behaviour and prohibits discrimination, child labour and other forced labour.

Sustainability ratings from independent institutions

As well as self-assessment, independent institutions are a good way to gain a better overview of the sustainability of certain companies. For this, Kärcher primarily relies on

**TO BECOME A
KÄRCHER SUPPLIER,
YOU HAVE TO FULFIL
STRICT CRITERIA.**



EcoVadis and Sedex. For transparency, Kärcher is also listed on both platforms as a supplier.

The ratings give a quick overview of a company, but also contain more detailed information, for example on areas such as sustainable procurement, environmentally friendly behaviour and information on working conditions.

Focusing on fewer suppliers

We will reduce our material suppliers by 40 per cent by 2025, thereby driving our regional partner strategy for a reliable and sustainable supply chain. This reduction in supplier numbers will also simplify our collaboration with the remaining suppliers. Ultimately, it is much easier for all parties to conclude good contracts with fewer suppliers than with a larger number of suppliers. ■



More information about the topic
can be found here:
www.kaercher.com/CSR

IMPRINT

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Sustainability at Kärcher

[kaercher.com/CSR](https://www.kaercher.com/CSR)

KÄRCHER is the world's leading provider of cleaning technology. With high- and ultra high-pressure cleaners, vacuum and steam cleaners, sweepers and scrubber dryers, gantry car wash systems, detergents and cleaning agents, dry ice blasters, drinking and waste water treatment systems, water dispensers, pumps and watering systems for home and garden, Kärcher offers a range of innovative solutions. These include compatible products and accessories, along with advice, service and numerous digital applications. In 2020, Alfred Kärcher SE & Co. KG achieved a turnover of 2.721 billion euros, the highest in its history. The family-run company employs 13,500 staff in more than 130 companies in 73 countries. Over 50,000 service outlets provide comprehensive service for customers all over the world. Innovation is the most important growth factor for the company, and it has been a pillar of our corporate culture since our founding in 1935: around 90 per cent of all products are five years old or younger. A total of more than 1,000 employees work in research and development at the cleaning machine manufacturer.





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