

makes a difference



# **DON'T GET LEFT IN THE DUST**

Don't let your lungs be the filter

# DUST MAKES US ILL

Our lungs simply aren't built to deal with fine dust, let alone large volumes of it. And it's those large volumes that can be extremely dangerous – they are the reason why chronic lung disease is one of the most frequent health problems recorded. Treatment costs total several billion euros. How much is your health worth to you?





# WHAT KIND OF DUST ARE YOU BREATHING?



## **QUARTZ AND ASBESTOS DUSTS**

are especially dangerous as they are carcinogenic.



## **TOXIC OR CARCINOGENIC DUST**

from lead, cadmium, vanadium or manganese does not just damage your lungs, it also affects other organs like your liver and spleen. This kind of dust is created during welding work, among other tasks.



### WOOD DUST (such as oak and beech dust)

can cause nasal cancer in the long term.



## **ALLERGENIC DUST**

usually has a plant or animal origin and occurs during cleaning work in or on buildings that are contaminated by bird droppings, for example. Mould spores or microorganisms can also cause allergic reactions.



### **FIBRINOGENIC DUST**

causes scar tissue to form and progressively changes the composition of your lung tissue after frequent exposure over longer periods. Pneumoconiosis, also know as black lung, caused by quartz and asbestos is one of the most prevalent recognised occupational diseases.





# NOT ALL DUST IS THE SAME

Dust is a complex mixture comprising air and solid particles of varied size, shape, chemical composition and physical properties. Dust is categorised into different classes using these variables. Fibres, such as the particularly dangerous asbestos and mineral fibres (when < 5  $\mu$ m), can also penetrate deep into the respiratory tract. That is why it is so important to be familiar with the individual dust classes when evaluating the risk to health in each case.

## **DUST CLASSES**

EN 60335-2-69 / IEC 60335-2-69

| Dust class                        | Max. permeation degree                              | Suitable for   | Application  |
|-----------------------------------|---|--|--|
| L                                 | ≤ 1.0%  | Dust with OEL values > 1 mg/m <sup>3</sup>   | <ul><li>Lime dust</li><li>Plaster dust</li></ul>   |
| м                                 | < 0.1%  | <ul> <li>Dust with OEL values ≥ 0.1 mg/m<sup>3</sup></li> <li>Wood dust up to max. 1,200 W/50 I</li> </ul>   | <ul> <li>Wood dust (beech, oak)</li> <li>Paint dust particles</li> <li>Ceramic dusts</li> <li>Plastic dusts</li> </ul>   |
| н                                 | < 0.005%  | <ul> <li>Dust with OEL values &lt; 0.1 mg/m<sup>3</sup></li> <li>Carcinogenic dust (Section 35<br/>GEStoffV [Ordinance on Hazardous<br/>Substances])</li> <li>Pathogenic dust</li> </ul> | <ul> <li>Carcinogenic dust<br/>(lead, coal, cobalt, nickel, tar,<br/>copper, cadmium, etc.)</li> <li>Mould, bacteria</li> <li>Germs</li> <li>Formaldehyde</li> </ul> |
| Special requirement<br>asbestos*  | < 0.005%  | <ul> <li>Dust containing asbestos</li> </ul>   | <ul> <li>Asbestos dust<br/>from night storage heaters<br/>or firewalls</li> </ul>  |
| Explosive dusts<br>(ATEX Zone 22) | Like dust class L, M or H with special requirements | <ul> <li>Dusts of dust explosion classes<br/>in Zone 22</li> </ul>   | <ul><li>Paper dust</li><li>Flour dust</li><li>Metal dust (e.g. aluminium)</li></ul>  |

# PREVENTION IS ALWAYS THE BEST PROTECTION

Dust that isn't created in the first place cannot endanger anyone. There are many different ways to prevent dust forming. And if we cannot prevent dust, we can still bind it, vacuum it or block it from entering our lungs with protective clothing and dust masks.







Choose **low-dust working methods**, e.g. wet or damp operation.



**Bind dust with water**, e.g. during demolition work and grinding work outdoors.



Use **low-dust products**, e.g. mortar pellets, ready-mixed concrete and plaster.

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Avoid stirring up dust unnecessarily. Instead of dry sweeping and using blowers, employ vacuum cleaners and vacuum sweepers.



Arrange and take advantage of **occupa**tional health screenings.



Regularly clean **workstations**, ventilate **work rooms** sufficiently, keep **work clothes** clean.



Remove waste immediately and without creating dust.

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**Check the vacuum cleaner's suction performance regularly.** Clean or replace the filter as needed. Use vacuum cleaners with automatic filter cleaning for a constantly high suction power.



Wear **protective clothing and dust masks**. While used as a matter of course for particularly dusty tasks, you should

for particularly dusty tasks, you should always wear a suitable dust mask at the very least, even when the dust impact is less severe.

# THE BEST REDEFINED

Yes, appearances matter to us. You can tell that Kärcher cleaning machines can achieve great things just by looking at them. But what really matters is on the inside – the technology. Our current filter engineering innovations prove that great leaps are possible even in times where advanced technology is common.





**Cartridge filter** The first of its kind and exclusively available from Kärcher.





**Flat pleated filter** The colour-coded specialist. Now also available as a revolutionary H filter.



# **CARTRIDGE FILTER: FOR WOOD DUST**

Wood dust and fibre dust in general have always been a big problem. We have now solved this for good with our exclusive cartridge filter.





Just like other fibre dust, wood dust can clog conventional main filters in next to no time. As a result, filters need to be cleaned or replaced frequently, which takes up time and resources. Not any longer. Our cartridge filter was developed specifically for working with wood and other fibre dust from paper or plastic. Working in conjunction with our automatic Tact cleaning system, it effectively prevents the filter becoming clogged. This means that the suction power remains consistently high even when dealing with fine wood dust – and unscheduled interruptions while working are a thing of the past. You can insert our cartridge filter into any single-motor Tact vacuum cleaner just like a regular flat pleated filter. This enables you to turn your vacuum cleaner into a highly efficient specialised machine in no time. Our cartridge filter may cost more than a standard filter, but in return it saves you having to buy filter bags or even a special vacuum cleaner - and it allows you to be incredibly flexible.

# H AS IN "HIGHEST POSSIBLE SAFETY"

With some revolutionary products, you have to look a little harder to realise they will fundamentally change the game. Our new filter for dust class H has the potential to be the best in its class since it can be fully cleaned in our vacuum cleaners with an automatic Tact system.



Unlike anything you have seen before. And you can only get it at Kärcher: the first and only H filter worldwide for automatic cleaning at full Tact power. 

 NEW

 Suitable for asbestos



Our revolutionary Kärcher H filter for vacuum cleaners with a filter cleaning system features a Teflon coating with excellent cleaning properties. The Teflon is so smooth that dust literally slides off. And with a dust retention capacity of 99.995%, it easily complies with the strict requirements of dust class H. From now on, all of our new Tact H safety vacuum cleaners will feature our H filter. This means just like any safety-conscious user, you will receive the best solution worldwide for dusts that may be hazardous to health and any other kind of industrial or construction dust.

# TOP IN EVERY CLASS

It has never been safer to show true colours. Our main filters are colour-coded to indicate their intended purpose. Brown signifies wood and general fibre dust. Red indicates HEPA. Black denotes the toughest applications. Blue means they can be used anywhere. And green stands for dry dust and high cost-effectiveness.



### WOOD

Our brand new cartridge filter fits into any single-motor Kärcher Tact vacuum cleaner. The eight cartridges with PTFE coating work efficiently for wood and fibre dust of any kind. Certified for dust classes M and L. Guaranteed dust separation rate: 99.9%.



The first cleanable H filter for wet and dry vacuum cleaners. Single-stage and available exclusively from Kärcher. Certified for dust class H. Guaranteed dust separation rate: 99.995% (HEPA).



We have the best filter solution for applications that create a great deal of dust, for example sanding fresh concrete or working with toners: our PTFE filter. Can be used in all new NT Tact models. Certified for dust classes M and L. Guaranteed dust separation rate: 99.9%.



WET & DRY

Our new NT Tact vacuum cleaners feature these PES filters as standard, offering excellent results for both wet and dry applications. Certified for dust classes M and L. Guaranteed dust separation rate: 99.9%.



DRY

These paper filters are an excellent choice for dry applications, including in terms of price. Can be used in all new NT Tact vacuum cleaners. Certified for dust classes M and L. Guaranteed dust separation rate: 99.9%.

# FUNCTION AND SAFETY AT A GLANCE

Our new generation of filters offers top performance and, thanks to the colour coding, exemplary safety when choosing the application.



\* e.g. coolants/lubricants or cutting fluids, wet industrial waste from the food/construction industry (except acids and oils)

# **SAFETY VACUUM CLEANERS - THE NEXT GENERATION**

Tact Tact

With the new Tact range, we've thought of everything that's important to professional users: outstanding suction power, simple and comfortable operation, as well as durability and longevity.



## Our tried-and-tested Tact filter cleaning system is now even quieter and more effi-

**cient.** And when it comes to equipment and accessories, we have done everything to ensure that your work is faster, easier and more convenient. Outstanding innovations are integrated in the turbine and filter engineering. Our ground-breaking cartridge filters, the use of PTFE filter materials and our new range of flat pleated filters protect the health of millions of users better than ever before.

### BG Bau support options

Safety vacuum cleaners that are equipped with a power outlet for working with power tools are also known as construction site dust collectors. This makes them especially suitable for general use on a construction site. Financial support is available for all construction site dust collectors that meet the requirements of dust class M as a minimum and can therefore be used on construction sites to remove mineral dust containing quartz.

BG Bau offers up to  $\in$ 300 for dust class M construction site dust collectors with an extended warning system. For all other construction site dust collectors, a maximum of  $\notin$ 200 is available.

# VACUUM CLEANERS FOR INCREASED SAFETY

### AND PROTECTION OF YOUR HEALTH



### NT 50/1 Tact Te M The biggest of its kind

Our NT 50/1 Tact Te M wet and dry vacuum cleaner impresses even the most demanding customers working in industrial and construction applications. Being powerful and reliable, it even vacuums very large volumes of fine dust, coarse dirt or liquids with its 50-litre container, thereby guaranteeing uninterrupted work in a clean and dust-free environment.

The adjustable ergonomic push handle adapts to the user's height thanks to a quick-release coupling. For compact storage, the push handle simply folds down. An oil-resistant drain hose makes it possible to easily and safely drain vacuumed liquids.

### NT 40/1 Tact Te L Just the right size

Not too big, not too small, but just right. The NT 40/1 Tact Te L is perfect for everybody who wants a machine that has compact dimensions and is easy to transport, yet also offers a large container volume to enable them to work for long periods without stopping. It comes with or without a push handle. The suction hose port in the machine head makes for a larger usable container volume. Emptying the container is simple thanks to the connection of hose and machine head. Tool boxes stand securely and without slipping on the flat rubber-lined machine head. Transport eyelets make it possible to securely fasten the machine with conventional lashing straps.

### NT 30/1 Tact Te H Fine dust expert

The NT 30/1 Tact Te is the fine dust expert among wet and dry vacuum cleaners and is perfect for use wherever tradespeople want outstanding power – whether in the workshop or for tough jobs on construction sites. This makes the robust, durable and powerful machine a favourite among tradespeople. Certified for dust class H dusts that pose a high risk to health.



### NT 75/1 Tact Me Te H Certified safety – even with asbestos

In older buildings, renovation work often releases dust that may contain asbestos and other harmful or carcinogenic particles.

The safe removal of this dust is only possible with a certified safety vacuum cleaner for dust class H, such as our new Tact machines. They guarantee a dust retention capacity of 99.995% and, thanks to a new double filtration system, can also handle large amounts of dust.

### **NT 40/1 Ap L** Premium in the middle class

Whether used for vehicle interior cleaning, professional applications of building service contractors, in the hotel and gastronomy sector or in many other industries: the new Ap range of powerful and compact wet and dry vacuum cleaners impresses with excellent suction power, semi-automatic filter cleaning, simple operation, clever accessory storage and high-quality, durable components.

### NT 22/1 Ap Te L Compact, powerful and always at hand

Whether you are in a skilled trade, vehicle cleaning, retail or any other kind of business: the NT 22/1 Ap will equip you against small and large amounts of dirt. The entrylevel class in the world of professional wet and dry vacuum cleaners boasts low weight, high manoeuvrability and, most importantly, the high suction power typical of Kärcher products. Please contact us for more information:

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