

# Sources of dust problems



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Poor working environment, damaged goods, breakdowns in important production equipment, high cleaning costs, damage to reputation, risk of fire and dust explosions ...

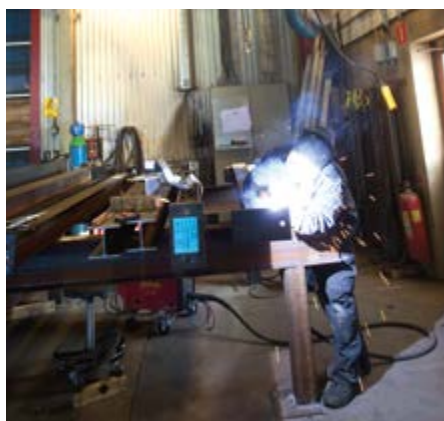
The list of problems caused by dust, particles and other pollutants can, in principle, go on and on..

## ■ Dynamic sources of dust



Dynamic (mobile) sources are often more difficult to identify and understand. Dynamic sources of dust are to be found in all environments where activity takes place. The activity in question may, for example, be forklift traffic in a warehouse, goods handling, unpacking, packaging and general human activity.

## ■ Static sources of dust



In some cases, the source of the problem is easy to identify. In other cases, it is not. Generally speaking, static (immobile) sources are easier to identify. Such sources may, for example, include welding stations in a mechanical production line, dough mixers at a bakery, or printing presses at a printers. It is often immediately obvious that sources of this kind generate large volumes of dust and particles that affect the immediate environment.

## ■ Outdoor air



Most indoor environments are affected by the quality of the outdoor air in their immediate surroundings, as well as by static and dynamic sources of dust. Dust and particles in the outdoor air often penetrate indoor environments through ventilation systems, through leaks and gaps in the building itself, and through open doors and windows. If buildings are located close to large motorways in urban areas and the like, then the location itself will naturally have a negative impact on the indoor environment because the outdoor air in such areas is generally “dirty”. The influence from outside also varies with the seasons. Most people consider spring – when it is time to clean up the salt and gravel used to treat the roads during the winter, and when the air is full of pollen – to be the worst season of the year.

“When dealing with dynamic sources of dust, an air purification system is far and away the most economical and effective solution“



## Tackling sources of dust

WHEN YOU HAVE DECIDED to deal with your dust problem, it is important to start by identifying the principal sources of dust and then to choose the best solution.

STATIC SOURCES OF DUST ARE often best dealt with by encapsulation (i.e. physically isolating them) and then maintaining under-pressure in the area, combined with point extraction. It is important to stress that the effectiveness of point extraction declines dramatically if it is not possible to isolate the source of dust. If the source of dust is “open”, point extraction will, in principle, be almost completely ineffective unless the extractor is positioned right next to the source you wish to deal with.

DYNAMIC SOURCES OF DUST ARE, by definition, mobile, and often cover the entire area of a room or facility. To achieve a good result, you must therefore choose a solution that functions throughout the area in question. If it is possible to establish the areas where the levels of activity are highest, then dust-busting activities will need to be intensified in these areas. High activity areas may include delivery/reception areas, or the main forklift routes in a warehouse. When dealing with dynamic sources of dust, an air purification system is far and away the most economical and effective solution.

WHEN CHOOSING A SOLUTION, take care to:

- Formulate the problems you have in the existing situation – Need
- Define what you want to achieve – Goal
- Evaluate all parameters that will be affected and perform a pay-off analysis.

On the basis of our experience, following these relatively simple steps will guide you to a solution that will deliver what you expect and, in most cases, pay for itself because the savings made will outweigh the costs.

