



Case study

87 % fewer particles for healthier employees and higher quality standards



Customer

Schenker
Deutschland AG



Location

Dortmund (DE)



Sector

Transport &
logistics



Dust reduction

Up to 87 %

At a glance

“I was impressed that the results were visible immediately after commissioning the air cleaning devices. It’s as if we are now seeing everything in high definition. Not only that, but the employees seem to feel cleaner and enjoy their work more.”

Benjamin Kalle, Head of System Freight

Challenges

DB Schenker in Dortmund is one of this successful global player’s largest facilities and specialises in contract logistics and transport services. As with any logistics location, enormous quantities of fine and coarse particulate matter are produced here every day and distributed throughout the space. The main sources are due to abrasion of the forklift wheels, people coming and going and industrial trucks driving around. The consequences of this torrent of particles were already evident in everyday occurrences: “Whenever employees would blow their noses, the tissues were black.” Above all, however, the dust affected safety, employee health, the quality of the goods and the overall condition of the halls. To counteract this, a solution for air cleaning in logistics was required.

About Schenker Deutschland AG

Schenker is a leading provider of global logistics services. Over 68,000 employees work for customers at over 2,000 locations around the world. Schenker Deutschland AG has 100 sites in Germany and is an industry leader in integrated logistics. As a successful global player, the logistics service provider focuses on high quality standards and responsible relationships with customers, partners and employees.

Benefits

After the commissioning of the air cleaning devices from Zehnder Clean Air Solutions, the results were instantly visible and tangible. Thanks to the clean, particulate-free air, employees can now breathe deeply, feel healthier and enjoy their work more. Safety has also increased dramatically, as dust no longer obscures the view, causes slipping on the floor or impairs the electronic systems. The amount of cleaning and maintenance required has been significantly reduced, representing considerable savings in terms of both time and cost. The clean air is also like a marketing tool in itself: even customers noticed the impeccable appearance of the clean facility thanks to Zehnder.



DB Schenker in Dortmund is one of the industry leader’s largest facilities, with two warehouses and an overland transport terminal. Around 650 employees work here across approximately 84,000 m2 in the contract logistics and transport services sector. Michael Rehbein, Managing Director at DB Schenker Dortmund, highlights how important the staff are: “As a service company that does not produce anything, **our employees are our most valuable assets – and we must protect them.**” In the past, the company has already taken various measures to do so, e.g. equipping all employees in the transport and warehouse area with protective equipment. Special health and safety committees continuously monitor the safety standards across divisions boundaries. Now they wanted to go one step further.

Particles, a hazard to health, safety and the corporate image

Every logistics facility produces immense quantities of fine and coarse particulate every day; especially in overland transport terminals, where goods are constantly in motion. Abrasion from forklift tyres, people coming and going, industrial trucks driving around – these are all ideal conditions for dust emission and distribution indoors. Particle concentrations of this size leave their mark. Benjamin Kalle, Head of System Freight at DB Schenker Dortmund, reports: **“Whenever we blew our noses, the tissues were black.”**

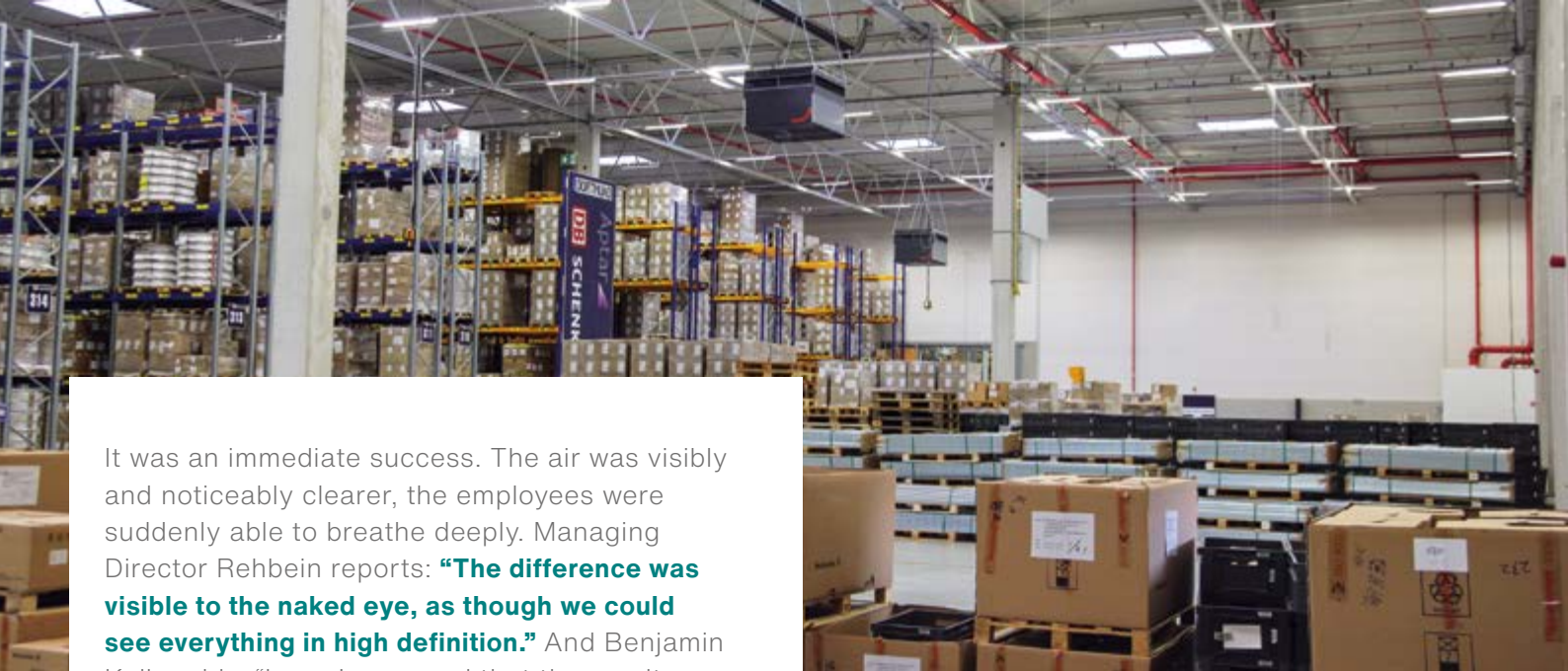
If the dust film was deposited on the floor, there was a risk of the wheels of the industrial truck spinning or employees slipping. In addition to this, the flying particles posed another hazard in the form of reduced visibility. Dust could settle on batteries and the transport technology and impair its operation. Not least, the particles were deposited throughout the indoor space. The dust was not only visible, it also adversely affected employee health, the quality of the goods and the overall condition of the halls. To cope with this flood of particles, labour- and cost-intensive cleaning processes were necessary. The managers decided that something had to be done.

Zehnder Clean Air Solutions: Efficiency from experience

The initiative came from a DB Schenker employee who had heard about Zehnder Clean Air Solutions. He brought the industrial air cleaning system to Managing Director Rehbein’s attention. The company scheduled an appointment with Zehnder. Project Manager Benjamin Kalle reports: “Michael Kräling, Regional Manager for Clean Air Solutions at Zehnder, visited us and presented the concept. The presentation impressed us. And the measurements revealed that the particulate-matter load here is higher than in inner cities. [...] **There were even some health problems. We needed to take immediate action.**”

The systems were to be installed in one of the trans-shipment halls initially. Kräling visited Schenker and took stock. How is the hall used? Which industrial trucks are used? Where are the cameras, security systems, sprinkler systems? During the first investigatory meetings, the goals quickly became clear. The focus was on guaranteeing employee health and safety. In addition, the extreme cleaning workload had to be reduced and the overall appearance of the location was to be improved. After defining all of the parameters, ten Zehnder CleanAir 3 air cleaning systems were installed in the trans-shipment hall. These units filter fine and coarse dust particles from the air as it flows through them, before the particles settle, adversely affecting people, goods or machines.





It was an immediate success. The air was visibly and noticeably clearer, the employees were suddenly able to breathe deeply. Managing Director Rehbein reports: **“The difference was visible to the naked eye, as though we could see everything in high definition.”** And Benjamin Kalle adds: “I was impressed that the results were visible immediately after commissioning. [...] The employees appear cleaner and are enjoying their work more. “Dust level readings before and after installing the Zehnder air cleaning system backed up these subjective impressions. The particulate-matter load was reduced by 70.5% on average; at peak load times, the dust levels even decreased by 87%.

Healthier employees, more safety, higher quality at all facilities

After this impressive result, the project managers in Dortmund decided to equip the two contract logistics facilities at the Dortmund site with air cleaning systems by Zehnder Clean Air Solutions, with verifiable success there too: Depending on the application, a reduction in particles of up to 87% was achieved.

Customers also noticed these changes. One visitor came straight to the point: “Your facilities are so wonderfully clean.” That proves that good air can be a selling point for a company. In the end, by installing the industrial air cleaning system, DB Schenker are highlighting that they care for their employees AND the goods entrusted to them. And does so without restrictions in day-to-day operations. Managing Director Rehbein explains: **“Working with Zehnder was easy and flawless. We hardly noticed them. And that’s the way it should be.”**

Of course, DB Schenker Dortmund is also benefiting from the reliable service quality and the full-service package after commissioning the systems: From filter replacement to maintenance – Zehnder does everything for its customers. Michael Kräling, Project Manager at Zehnder, sums it up as follows: “It is important to me that we can help people. We remove dust from the air – unhealthy, even carcinogenic dust. With our air cleaning systems, we help make employees healthier, even extend their lives.”