



Case study

Professional air cleaning ensures minimal sick leave



Customer

CHI Cargo Handling



Location

Frankfurt (DE)



Sector

Freight handling



Dust reduction

Up to 76 %

At a glance

“When maintenance was performed on the air cleaning devices, almost 70 kilograms of dust were removed – 70 kilograms that is no longer affecting the lungs of the staff”

Adriano Fries, Technical Manager

Challenges

Optimal working conditions and the safety of employees are of great importance to this logistics company. However, the huge volume of goods being moved caused high levels of dust to occur, which had a negative impact on the health and well-being of the workforce. Furthermore, the build-up of dust was affecting the function and accuracy of the biometric sensors in the systems. The increasingly rigorous audits and tightened regulations posed yet another challenge for the logistics company, which required a high degree of cleanliness. Last but not least, the abundance of particles affected the appearance of the hall.

About CHI Deutschland Cargo Handling GmbH

CHI Deutschland has been specialising in freight handling for over 20 years. Its portfolio ranges from trucking and air freight security right the way up to check-in services for cargo and airlines. The logistics company is particularly active in locations with high levels of goods transport, such as Frankfurt am Main, Munich and Nuremberg.

Benefits

Efficient air cleaning in logistics offers many advantages. This can be seen at CHI Cargo each and every day. Thanks to the air cleaning systems from Zehnder Clean Air Solutions, employees can now breathe easier and feel more comfortable. The amount of sick leave among employees has been significantly reduced.

Another positive effect is the reduction in the amount of cleaning required: Now the systems and equipment only need to be cleaned every 3 to 4 days instead of daily as was the case before. The dust-free halls now have an impeccable appearance, serving to greatly enhance the image of the company.



Logistics services of the highest standard

In CargoCity alone – Europe’s largest logistics hub located at Frankfurt Airport – CHI Deutschland handles around 550,000 tonnes of freight every year and operates ten halls, each covering an area of up to 8000 m². The logistics company owes its success to the advances it has made by incorporating the latest technologies, high quality standards and, in particular, a clear focus on its employees.

Goal: a healthy working environment for healthy employees

Kai Domscheit, Managing Director of CHI Deutschland, explains: “We have about 1000 employees. As a family-run company, these employees are like members of our family.”

Ensuring optimum working conditions and occupational health and safety is therefore the top priority. Nevertheless, day-to-day operations presented the logistics provider with a number of challenges in this regard. The huge volumes of goods being moved meant high levels of dust occurred, which had a negative impact on both employee health and well-being. Adriano Fries, Technical Manager at the Frankfurt am Main site, describes the experience of many colleagues:

“When we blew our noses, our tissues were black; and when we took a shower after work, the water also turned black.” This provoked dissatisfaction among the workforce. As employee satisfaction plays an important role at CHI Deutschland, the management took it upon themselves to find a solution to this problem.

However, this wasn’t the only reason to show the dust who was boss. Cleanliness in general is very important to the logistics company, as biometric sensors and sensitive equipment are in constant use. **Dust deposits affect their accuracy and the way they function.** What’s more, the regulations are increasingly being tightened and audits are becoming ever more rigorous and comprehensive.

Domscheit added the following: “For example, when iPhone prototypes go through our hall, we have to be able to say that we work according to the highest standards that can currently be achieved in the industry.” Added to this was the notion of image: an impeccable, “dust-free” appearance for the halls makes a good impression among current and prospective customers alike and promotes the good reputation of the company.

Extensive practical tests performed to reach the optimum Zehnder solution

A solution therefore had to be found which reduced the dust in the air, while at the same time lowering the build-up of dust in the halls. When it comes to finding solutions, CHI Deutschland follows a best-practice philosophy in all areas. Managing Director Domscheit explains: “We always endeavour to trace the best products on the market and put these through their paces.” The logistics company discovered the industrial air cleaning systems offered by Zehnder Clean Air Solutions through one of its largest customers, as they had used the systems to reduce the concentrations of particles at their site. While their interest was piqued, they were still not entirely convinced. This was because the functionality and results did not seem to fit the needs of CHI Germany one hundred percent. Armin Gläber, Regional Manager of Zehnder Clean Air Solutions, held in-depth discussions with the company to create a specific requirements profile and some time later presented a solution that was precisely tailored to the conditions of the logistics provider.

A pilot project was initiated, and industrial air cleaning systems from Zehnder Clean Air Solutions were installed in one of the halls. The systems use intelligent technology to filter fine and coarse dust particles effectively from the air before they can be inhaled or settle on valuable goods or machines. **The particular challenge**



for the Zehnder Service team was that all of the components had to be installed while the halls were in use, as they are in operation

24/7, 365 days a year. The excellent preparations that were made for this project meant that this requirement could be met. Fries states the following: “When Zehnder employees come to us, they are always finished in no time at all. We don’t even notice that they are here.”

The newly installed equipment configuration was put through its paces in practical tests for an entire year and six employees were chosen to regularly report on their experiences. Warehouse Manager Antonio Azevedo reports: “It was very easy for us to make a comparison, as the air cleaning systems were initially only installed in one hall. When we switched from one hall to the newly equipped hall, we noticed the difference immediately: **the air is fresher, cleaner and you can breathe more easily.** Other members of staff came up to me and even asked, What happened here?”

The result: Reduced sick leave, higher standards, optimised appearance

Black shower water and sooty tissues are now a thing of the past. Employees can breathe more easily at work and feel better. A further welcome effect is that the amount of sick leave taken is lower. Even during daily processes, the results are clear to see. Whereas some equipment had to be cleaned on an almost daily basis before the air cleaning systems were installed, this is now only necessary every three to four days.

In addition, measurements showed that the level of dust has decreased by up to 76%. These figures can also be backed up by practical experience. The Technical Manager added: “When maintenance was performed on the systems, almost 70 kilograms of dust were removed – 70 kilograms that no longer enters the lungs of the staff.” The results have won over the management and workforce in equal measure. When the staff asked the managers to install the air cleaning systems in the other halls too, they didn’t take much persuading.

Gradually, the high-performance equipment from Zehnder Clean Air Solutions has been installed in four additional halls, and plans are under way for more.

Domscheit describes the overall response to the Zehnder project in a nutshell: **“Our employees are more content and more motivated. Our company image has also definitely improved. Zehnder has therefore been a huge success.”**