



Case study

Air purifiers cut cleaning by 75 %



Customer

LK Pex AB



Location

Ulricehamn
(Sweden)



Sector

Pipe
manufacturing



Dust reduction

Up to 88 %

At a glance

“Zehnder’s air purifiers have helped us create a positive, healthy working environment where employees are happy and productive. This allows us to focus more on our further development and the future of our company.”

Kim Klesell, Head of Building Technology and Working Environment

Challenges

For LK Pex, employee health and wellbeing has always been a huge priority. But the nature of the pipe manufacturing process means the company will always produce a large amount of harmful air pollution on its factory floor, if it is not dealt with correctly. Despite significant investment in cleaning and filter replacements, the current ventilation system was not working well enough. As a result, LK Pex began to look for an alternative solution that would be better for its workforce.

About LK PEX AB

LK Pex manufactures pipes used in under-floor heating, radiator heating and tap water systems, as well as braided hoses. Since it was founded in 2000, the company has quickly expanded, and last year delivered more than 60 million metres of pipes to the heating, ventilation, sanitation and plumbing industries in Europe, the USA, Asia and the Middle East. Based in Ulricehamn, Sweden, the business currently employs 85 people.

Benefits

Zehnder Clean Air Solutions installed its air cleaning system in just two days. Now, at peak times, particle pollution has reduced by up to 88 %. The rate of dust-related complaints from employees (red eyes, rashes and other skin irritation) has dropped to almost zero. There are less sickness-related absences, lower staff turnover and higher productivity. On top of this, cleaning costs have significantly reduced, with LK Pex now only needing to clean the factory three times a year instead of every month. The clean air helps maintain a consistent product quality, minimises waste and ultimately benefits the company’s reputation.



Tiny dust particles – the invisible irritant

A major challenge in this industry is the high level of competition. To maintain its reputation as a leader in the market, LK Pex works to ensure it offers high quality products and services – constantly reviewing, refining and improving its services. The same mindset applies to the working environment. “At LK Pex, our employees are our most important resources and employee health and wellbeing is paramount,” says Kim Klesell.

Unfortunately, the high-speed production of pipes comes with some negative consequences. The process and raw materials involved both create dust and other airborne residues. **Some employees suffered from exposure to dust by getting red eyes, dry skin and even rashes.** The air quality was a constant source of irritation and subject of for discussion.

LK Pex has tried a number of approaches to tackling the problem including fans, filters and increased ventilation, as well as cleaning with compressed air to remove built-up dust in the ventilation system and on the surfaces of equipment. This strategy was clearly not enough to fully resolve the dust problem and LK Pex went in search of a better way to improve the working environment.

A need for clean air

In 2018, Zehnder Clean Air Solutions contacted LK Pex to discuss how they could help. **After several meetings, Zehnder’s team conducted**

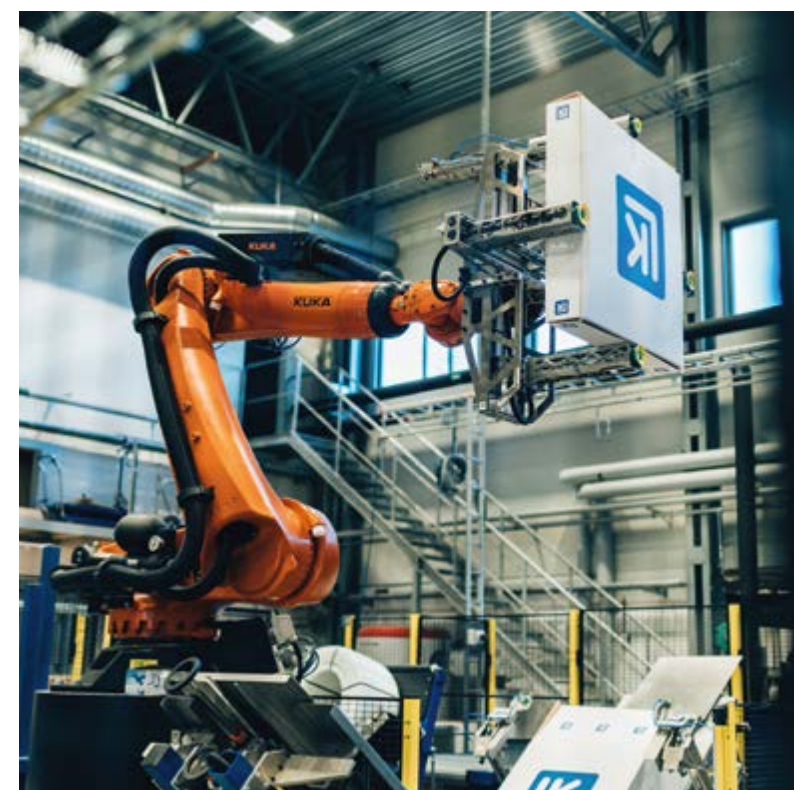
thorough dust and air quality measurements to assess the magnitude of the problem. “We were really impressed by how meticulous the team was and how passionate they were about improving our working environment,” says Kim Klesell. After meeting the team, LK Pex decided to try Zehnder’s industrial air cleaning systems to improve the air quality in its factory.

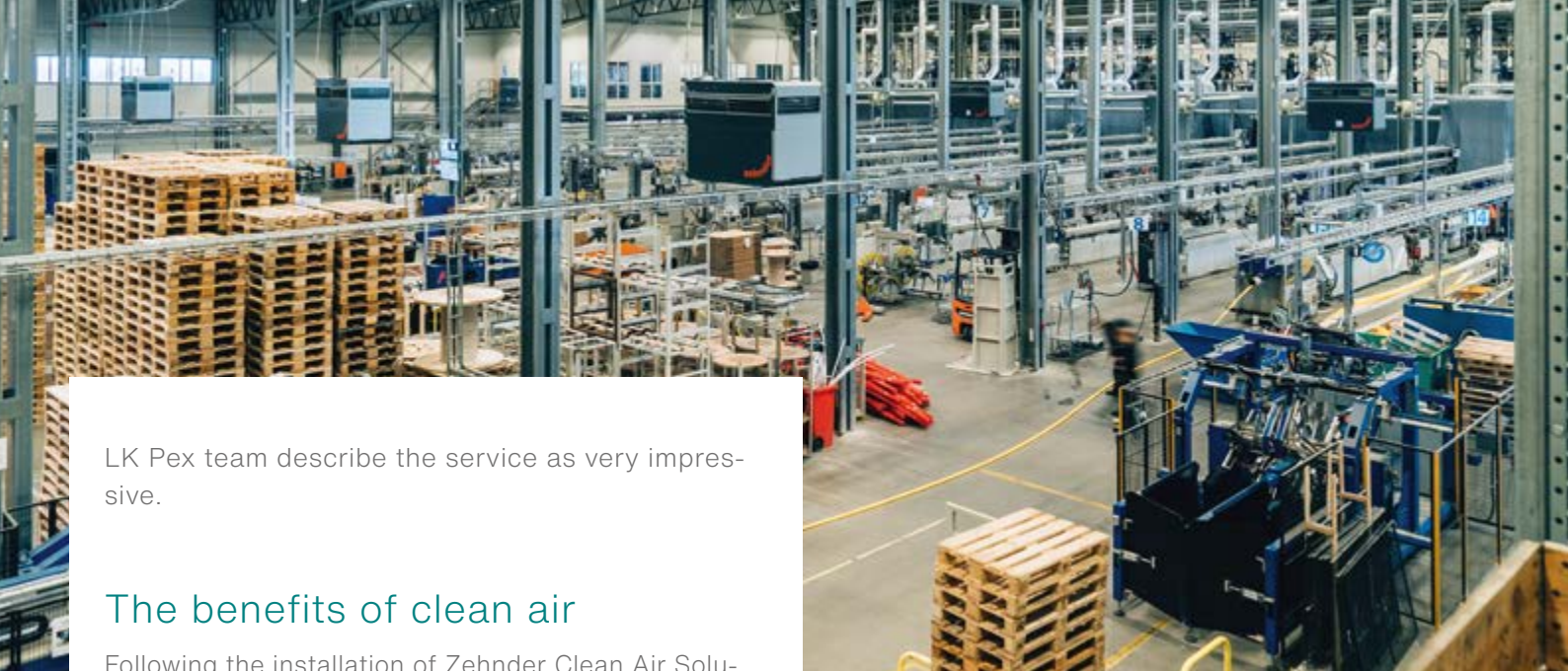
Zehnder immediately began working closely with LK Pex to design a bespoke solution that would efficiently filter the air, eliminating excessive cleaning and creating a healthier environment for the company’s employees.

Zehnder first installed 14 CleanAir 6 units in 2018. LK Pex was so impressed with the results that it asked for an additional six air cleaning units the following year. Both installations went incredibly smoothly, the first installation took one day and the second just half a day to get up and running. I don’t think this follows.

The factory’s production was not disrupted in the process – it didn’t have to temporarily shut down or close any production lines for the installation to take place. This meant LK Pex could focus on business as usual as it sought to improve its working environment.

While cleaning the ventilation system and replacing the filters previously cost the company significant time and money, it is now handled smoothly and efficiently by Zehnder. The





LK Pex team describe the service as very impressive.

The benefits of clean air

Following the installation of Zehnder Clean Air Solutions, the results have been encouraging. Overall, the amount of dust pollution in the factory has been reduced by up to 50 % on average and even 88 % during peak times.

After just one year, there was a major reduction in air quality complaints from employees. **The number of staff who suffer from rashes, red eyes or other skin irritations has decreased to almost zero**, showing that Zehnder Clean Air Solutions has significantly improved the air quality at LK Pex.

A healthy working environment is a win-win for workforce and company. It reduces sick leave, as well as cutting down on staff turnover. It also helps increase staff motivation, improves individual's output and has a positive effect on the overall quality of the final product.

The results also show that LK Pex has saved a considerable amount of time and money on cleaning, taking the company from cleaning once a month to around three times per year. The cleaner working environment enables LK Pex to maintain high standards and consistent product quality, while reducing waste, too. It all ultimately benefits the company's products and reputation.

With sustainability and clean air remaining important for LK Pex, the business will continue to use Zehnder and recommend the service to others.

Zehnder has helped LK Pex cultivate a positive, healthy work environment – one where employees are happy, productive and efficient. The business can now concentrate on other parts of the production process, as well as the ongoing development and future of the company.

“Zehnder have done exactly what they told us they would do. They are very reliable and have helped us to improve business,” says Kim Klesell.