



Case study

Quality air cleaning helps keep competitive edge



Client

Huf UK Ltd



Location

Tipton (UK)



Sector

Automotive



Dust reduction

Up to 80 %

At a glance

“The improvement in the air quality was immediate thanks to Zehnder’s air purifiers, and was far more comprehensive than we had imagined. I was surprised and very impressed”.

Peter Gwilt, Plastics and Assembly Manager

Challenges

In the automotive industry, it is important to produce high-quality products at competitive prices, and to be able to do it quickly. But at Huf, an ongoing problem with dust getting into finished products was making this ambition hard to achieve. Any part, for example, that showed signs of dust under the paintwork, did not meet Huf's strict quality standards and had to be disposed of. This delayed production and caused unnecessary costs. The management was also determined to create a healthier working environment for all of its employees, which also meant reducing dust. The key to solving the problem lay in an air cleaning system designed specifically for the automotive industry.

About Huf

Huf UK manufactures automotive parts and the electrical systems you'll find in most vehicles on the road today. Its production process includes plastic moulding, painting and assembly, and Huf can boast that it supplies most leading car manufacturers. Huf UK is part of a global business and is based in Tipton, in the Midlands, where it employs more than 250 staff.

Benefits

Air cleaners from Zehnder have dramatically reduced the dust on painted components and in doing so improved efficiency. Existing dust extraction systems now need to be maintained far less frequently, and additional daily cleaning is no longer necessary. This has led to significant cost savings that have markedly increased the company's competitiveness.



Reducing rejected products and protecting health

One of the main challenges in the automotive industry is meeting tight turnaround times. Original equipment manufacturers (OEMs) are very demanding and expect the people supplying their parts to deliver quality goods “yesterday”, and at a great price.

To remain competitive, therefore, is a huge challenge. With this in mind, Huf was looking into ways to improve the rate of products being right first time round, by reducing what's known as “inclusions” – where dust and other debris gets under paintwork and into products. **Every sprayed part that does not meet Huf’s stringent quality requirements has to be disposed of.**

This waste delays production and creates unnecessary costs. To achieve efficient production and reduce waste, therefore, Huf needed absolute cleanliness in the paint shop.

So the company began to monitor air in the paint shop to work out where improvements could be made. Their measurements confirmed their suspicion that there was significant scope for improvement in the level of dust – and

that this was behind the high inclusion rate. **In addition to this was the matter of** employee health and safety. This is of paramount importance to Huf UK, and a priority KPI for the company as a whole, with senior management committed to providing all staff with a healthy working environment.

Clean air – the key to quality products

The Zehnder Clean Air Solutions team had heard about Huf UK's challenges with dust, and suspected that what the company really needed was a quality air cleaning system. So they got in touch to explore options. Huf liked what it heard and immediately saw potential benefits in the Zehnder service.

So Zehnder got to work. First, the team sought to understand the dust concentrations in the paint shop. Armed with this, and working closely with the Huf UK team, Zehnder then designed a solution that filtered the air both before and after the paint process.

The resulting system consists of three air cleaning units, all delivered on time and installed without disrupting production at Huf.

“The effortlessness of dealing with Zehnder impressed me the most,” says Peter Gwilt of Huf. “In this industry, we’re constantly changing and installing things. Suppliers often let us down and we often have to chase them. When we don’t have to do any of that it makes my life so much easier.”

The benefits of clean air

After the installation of Zehnder’s equipment, subsequent air quality testing revealed dramatic results.





“The improvement was almost immediate and more than we could have imagined. I was amazed and very impressed,” says Gwilt.

The most significant improvement was a reduction in inclusions, making the **production process substantially more efficient**, and saving money too. The company has enjoyed other benefits from its new air cleaners.

Clean air has had a **positive impact on automated equipment, too, which now needs less maintenance. This is extremely important to Huf as automation helps keep them competitive.**

Overall, by investing in Zehnder Clean Air Solutions, Huf UK is able to run its plant more efficiently and invest in other areas.

In fact, the company was so impressed with the results, it ordered a fourth air cleaning unit six months after the initial three were installed. Huf is also considering installing Zehnder units in other areas of the factory.

“The plastics department is a likely candidate,” says Gwilt. “Their work involves regrinding plastics which creates a lot of dust. I want to monitor the air to see if we need units in there too.

“To remain competitive, we need to keep getting better and better – and improve our right-first-time rate. Clean air is one of the ways we can do that.”