

Smart Upgrade With 3d Laser scanning and engineering



AERZEN
EXPECT PERFORMANCE

The perfect database for the retrofit of your plant

Integrating new blower and compressor technology to an existing plant requires extensive and precise planning and perfect engineering.

Mistakes can already occur during manual scanning, which can be found throughout the entire planning process and, in the worst case, are only recognised during implementation. Project and budget planning thus become a challenge that is associated with many risks.

As one of the world's leading manufacturers of blower and compressor technologies, AERZEN masters this challenge by using state-of-the-art 3D laser scanning.

With the Smart Upgrade, we enable our customers to integrate new compressor stages or assemblies into existing systems in a simple and cost-saving way.



What is 3D-Laserscanning?

3D laser scanning from AERZEN is a pioneering technology that enables us to create a precise and complete 3D representation of the original environment in which our blowers and compressors are integrated in just a few days.

Every detail is captured in colour and highest resolution, allowing absolute precision in construction planning.

As soon as the scan has been processed, further site visits are hardly necessary, as the entire environment is already available in digital form and can be accessed by all parties involved at any time and from anywhere.

This saves time and money!

Your advantages Maximum added value with minimum effort

Cost and time saving

- ✓ **The replacement of individual stages or assemblies takes place in the existing package.**
↳ **Significant reduction in investment costs!**
- ✓ The need to dismantle individual assemblies is reduced
- ✓ Fast, complete and accurate data capture of the original environment
- ✓ Short downtimes
- ✓ Early visualisation of the target state

Planning security

- ✓ Safety in adherence to project goals and budgets
- ✓ Safety in design planning
- ✓ Precise and complete collision check
- ✓ Risk minimisation during installation of the new system
- ✓ Easier handling of space restrictions

Added value

- ✓ Exact and comprehensive documentation with „As built“ data for further projects and correction of inventory data

Smart Upgrade at SOLVAY Plant modernisation in soda production using 3D laser scan

For a plant modernisation of the soda producer SOLVAY, AERZEN used 3D scanning to precisely collect the planning data. The project challenge was to integrate a new compressor stage precisely into the existing package. Using the 3D laser scan method, the new compressor stage could be precisely designed into the existing system. The investment costs as well as the time expenditure were thus considerably reduced.

Installation of an oil-free screw compressor in the 3D environment

True-to-the-original visualisation of the planned plant design using CAD software

View of the compressor plant in soda production as 3D point cloud via laser scan

Fields of application

- Retrofitting and modernisation of existing plants
- Replacement and new integration of blower and compressor technology
- Determining the installation space when building new systems



**SOLVAY GmbH
in Bernburg**
Scope of application:
Chemical industry



AERZEN Compression is the key to success

AERZEN was founded in 1864 as Aerzener Maschinenfabrik. In 1868, we built Europe's first positive displacement blower. The first turbo blowers followed in 1911, the first screw compressors in 1943, and in 2010 the world's first rotary lobe compressor package. Innovations made by AERZEN keep driving forward the development of compressor technology. Today, AERZEN is among the world's longest established and most significant manufacturers of positive displacement blowers, rotary lobe compressors, screw compressors and turbo blowers.

AERZEN is among the undisputed market leaders in many areas of application. At our 50 subsidiaries around the world, more than 2,500 experienced employees are working hard to shape the future of compressor technology. Their technological expertise, our international network of experts, and the constant feedback we get from our customers provide the basis for our success. AERZEN products and services set the standard in terms of reliability, value and efficiency. Challenge us.



LET'S TALK

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