

sandblasting conveying dustextraction

# Sandblasting rooms

# Powerful, flexible, adaptable and adjustable to any application desired by the customer.

The field of application of our highly developed sandblasting rooms runs from small-scale parts in large series to large workpieces, such as ship components, vehicle parts and much more. The individual workpieces are processed with a pressure sandblasting technique.

It is with large parts in particular, or when accessibility is problematic, that the advantages of air blasting systems comes to the fore.

Over 150 built sandblasting rooms speak for themselves.



We are the better solution



# "Measuring up to your needs"

Our long years of experience in the construction of sandblasting rooms becomes part of every new project.

The requirements of sandblasting rooms are individually implemented for every application. This is why it is essential that we measure up: to your demands, to the local conditions – because the solution we create for you must be sustainable over the long term for every situation. The modern basic concept of the plants and the variety of technical variants ensure that all your goals can be realised.

# Sandblasting rooms

- Compact design, space-saving arrangement of all ancillary components
- Powerful sandblasting grit transport with efficient preparation
- Noise-reducing, dust-tight housings
- Environmentally friendly dust extraction and filter technology
- Use of flexible transport systems for workpiece transportation
- Low-wear, long-life components

Our sandblasting rooms are made to measure.

Thus, your requirements, such as technical conditions and local particularities, can be taken account of to the greatest possible extent. Room size is defined by workpiece dimensions and offers the worker enough free space to work. Of critical importance for the concept are, alongside the pure dimensions, the definition of the blasting grit preparation, ventilation-related aspects and peripheral operational and safety aspects (number of doors, emergency exits, lighting, wall and ceiling coverings).



## Construction options

The housing of the sandblasting rooms can be built of masonry or steel with "sandwich elements". Walls and doors are provided with wear protection (thick special rubber). In the design of the sandblasting room floor, various different requirements can also be accounted for.

The leeway offered in design runs from simple sweeping pits through partially evacuated sections to tried and tested highperformance flat conveyor floors with grille covers for various different loads. Here, the installation of rails and longitudinal working trenches is also possible, offering the following additional advantages:

- Low-noise operation
- Long service life
- Great conveying capacity

A traditional strength of our sandblasting room systems is in the motor industry (lorries, buses) and carriage construction (rolling stock, trams). The particular demands of these sectors are accounted for in the plant concepts:

- Incorporation of lower work trenches or entire floor
- Illumination of vehicle underside
- Transport platforms or blasting robots on blasting room walls
- Extraction units for large blasting agent quantities from blasted vehicle interiors





Full-area extraction floor/honeycomb floor with grille covering

## **Blasting system**

Depending on the blasting room size and required area output, one or more free jet pressure blowers can be used. The sandblasting nozzles of our tried and tested free jet pressure blowers are manually operated and can be fitted with an automatic refilling system to ensure continuous operation for the worker without interruptions.

### Blasting grit recirculation

To keep foundation costs as low as possible, space-saving flat conveyor systems are used. In special cases, systems can also be directly assembled on the floor of the industrial hall. Transverse screw conveyors, or vibrating sieves in larger systems, and bucket conveyors transport the blasting grit to processing.

# Carriage blasting system

- Carriage blasting system 33 m x 8 m x 8 m
- With 8 free jet sandblasting installations (4 each for ferrous and mineral blasting agents)
- 2 lifting work platforms, moveable, swivelling.
- Complete blasting grit recirculation via flat conveyor floor, sandblasting grit preparation with magnetic separator, dust extraction system according to the circulation principle with heat recovery, sandblasting room illumination with additional lighting level.
- Raised rails for undercarriage processing with light carriage.
- Side moving platforms that can be swivelled out to reach all surfaces.
- Extraction unit to extract the sandblasting medium in the railway vehicles.

Carriage blasting system in operation



Flat conveyor floor, screw conveyor, bucket conveyor, wind sifter, bunker, blasting grit refilling, free jet pressure blower

## Blasting grit preparation

High quality requirements for blasted surfaces and the deployment of reusable, recirculated sandblasting grit make it necessary to separate out contamination (rust, scale, old paint layers) and worn sandblasting medium. To this end, we offer various separation systems, depending on the application.

- Pneumatic separation, cascade wind sifter and vibrating sieves offer defined quality and guarantee the reusability of the treated blasting grit.
- Using powerful magnetic separation systems, nonferrous metals and high-alloy steel can also be processed to account the highest quality grades.

# Dust extraction system

The blasting result is critically defined by having the best possible dust extraction. That is why we place great value on suitably sized ventilation systems which are designed for the best possible airflow.

To clean the dust-laden air, powerful dust extraction systems in graduated series are used. Automatic cleaning with pressurised air counter-flow ensures continuous operation and constant air quality. Thanks to low residual dust values, systems can be operated in partial ventilation mode, also allowing the plant to save energy during operation.

Thanks to our high production quality, you will receive a sandblasting system with strong value retention when resold, even after many years.



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# Sandblasting equipment in modular system

For optimal processing of the workpieces, in our sandblasting rooms the use of all current sandblasting grit is possible. These are recirculated via several stages to the free jet pressure blower, are processed and provided once again to the sandblasting process at a constant working mixture. This guarantees a high-quality result.

#### Example uses:

- Metal-processing industries
- Foundries
- Vehicle construction (road, rail)
- Ship-building, carriage construction
- Maintenance sector (reconditioning in varied fields)

Air sandblasting systems offer maximum freedom where workpieces of the most varied geometries are processed.

This offers the following advantages:

- ideal impact of blasting medium
- Maximum blasting (no scattering loss of blasting medium)
- The most efficient use of energy and resources



High-performance flat conveyor floor



Sandblasting vehicle with rotary table on track bed

Blasting room system with track bed



# Benefit from Our experience

#### Pressure sandblasting

- Container sandblasting systems
- Sandblasting rooms
- Pressure sandblasting automations machines
- Pressure sandblasting cabins

#### **Injector sandblasting**

- Injector sandblasting machines
- Injector sandblasting automations cabins

#### Blower wheel turbine Shot blasting machines

- Tunnel shot blasting flow-through systems
- Hook Type shot blasting systems
- Troughed belt shot blasting systems
- Steel belt shot blasting systems
- Rotary table shot blasting systems
- Roller conveyor flow-through systems
- Wire mesh flow-through shot blasting systems
- Pipe and gas bottles flow-through shot blasting systems



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# The experts in blasting system construction and maintenance works

For more than 45 years, blasting systems of the most diverse kinds have been developed, constructed and manufactured for the most varied uses in Großenlüder, including blasting rooms, containers and cabins for injector blasting or pressurised air blasting.

The experience gained in this period is reflected in our standard products and special constructions. The core of our business is always the high-quality implementation of our customers' requirements.

I, as a associat and managing director, began developing everything to do with blasting during my apprenticeship at the Großenlüder location and later in other companies.

That is why I took over the Großenlüder company and wish to continue its work in the tradition of uniting customer demands and their high-quality implementation.

#### Yours, Oliver Fritz



Oliver Fritz Managing Direktor Jennifer Sickels Management