



AGTOS® Report

Recent Reports on Surface Technology
Issue October 2014

Expansion of the AGTOS plant in Konin



The expanded Agtos plant in Konin features upgraded offices and a doubling in manufacturing floor area.

Due to the continuous growth in Germany and Poland, the production area was almost doubled and a new representative office building replaces the existing extension. Recently, we handed over the nearly 2,700 square metres hall for production and

moved into the newly furnished office building.

We had several reasons for investing in the Polish plant. One reason was the increasing number of assembled machines and systems. More large blasting

machines are being manufactured, therefore the need for larger production and packing areas was needed. The Polish plant also lacked the space for demo machines to show customers our technology and to carry out blasting tests.

In addition, better offices and a conference room were built. "We put a different complexion on our plant in Poland with this investment," says Managing Director Antonius Heitmann. "The response from employees and customers is very positive."

EDITORIAL

This fourth edition of the **AGTOS** report shows interesting blasting solutions that were developed in cooperation with our customers. In addition to automation, economic and energy efficiency of machines and equipment are becoming more important. We hope that these examples give you some ideas for your blasting objectives. We'll happily provide details of how we can help you be more efficient.

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Your **AGTOS** team

AGTOS builds new conservation line

Recently, **AGTOS** took the first conservation line into service on behalf of a client. This allows immediate priming of sheet metal and profiles after blasting and protection against all weathers. The line is available in various sizes and supplied on request with the necessary transport technology. Customers benefit from the well-engineered and economic shot blast

technology of **AGTOS** roller conveyor blast systems. After blasting, the painting process starts. Sensors determine the position and height of work pieces allowing the painting process with airless high-pressure nozzles to adapt automatically to the work piece geometry. The subsequent drying process ensures faster throughput of workpieces.



An **AGTOS** roller conveyor blast system with downstream paint shop and dryer

Automatic blasting of large work pieces

Requirement:

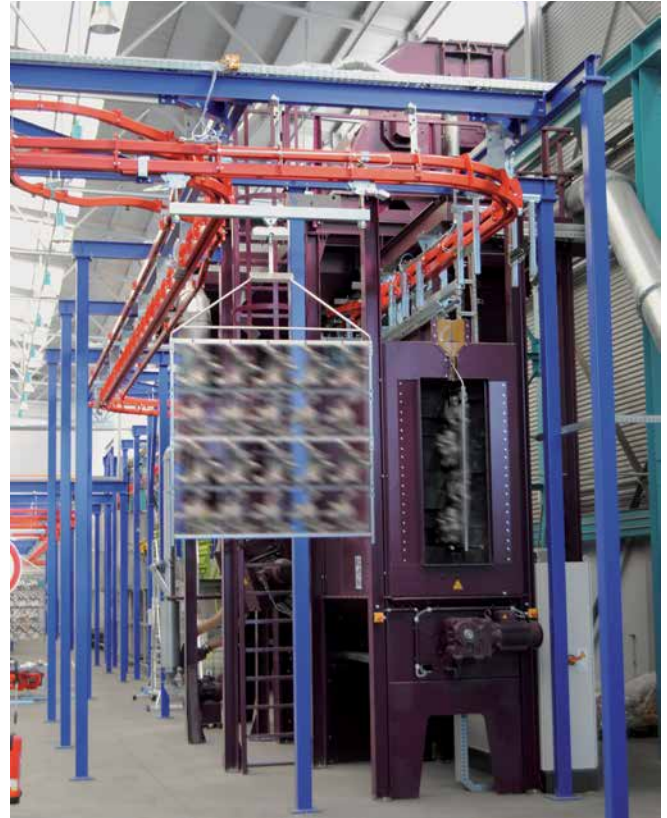
Pre-treating components of wind turbines and other large steel work pieces prior to coating.

Solution:

Due to growing activities in the field of manufacturing wind turbine components and other increasingly large work pieces, LMB invested in a new SLF-blastroom along with a ReCo-Blast-er® robot. The locally made parts may be blasted automatically and / or by hand in the blastroom of 18 x 8.5 x 7 metres.



Fully automatic and highly efficient blasting of (small) series production parts with ReCo-Blast-er®



Frame with aluminium components ahead of the **AGTOS** pass-through monorail blast system

Blasting of aluminium forging blanks

Requirement:

Crack detection in aluminium components for the automotive industry.

Solution:

For the detection of irregularities in aluminium die-forged parts, the company Vohtec use 100 % dye penetrant non-destructive

testing. For this purpose, the work pieces must be prepared accordingly. By blasting in the **AGTOS** pass-through monorail blast system, impurities from the forging process, such as scale, small burrs or dirt, but also dye penetrant residues as well as other possible deposits are removed.

One-stop blasting and painting of profiles and structures



Roller conveyor blast system for sheet metal, profiles and structures

Requirement:

Equipping one of Europe's most modern centres for surface technology.

Solution:

The coating of structures was a production bottleneck at the company Schone & Bruns. Therefore, the company developed a suitable concept for a surface technology centre in conjunction with a planning office. The centre comprises a blastroom (SLF), a roller conveyor blast system of type RT 26-16 (**AGTOS**) and two open space

paint shops with telescopic and movable drying tunnel (SLF). This allows automatic blasting and subsequent coating of large profiles and weldments up to 1500 mm height. As a result, Schone & Bruns can now produce more efficiently and expand their strong market position.

Did you know that...

...**AGTOS** employs over 150 permanent staff members in both plants (Emsdetten and Konin)?



Blasting joints of gratings and stairs

Requirement:
Fully automatic surface finishing.

Solution:
Our client Thielco gave us the following challenge: The process must produce impeccable quality without any manual intervention. Therefore, we developed a concept with WMV Apparatebau for

guiding the parts fully automatically through the process. The work pieces are manually loaded onto specially designed frames. Afterwards, roller beds, transport trolleys and grippers take over the handling. After degreasing and washing, the parts are blasted and then coated – without an operator having to intervene. The benefits for the customer are obvious: Process reliability, optimum time management and a perfect quality speak for themselves.

Work piece carrier with parts after the blasting process

Blasting of castings

Requirement:
Optimum processing of fittings in batch operation.

Solution:
ORAS is one of the most important manufacturers of fittings made of different materials. Products include single lever taps, thermostats, electronic fittings, valves and electronic modules. To cover the range a products, a tumblast system of type MR270 for processing raw castings was installed. A feeder carries out the



filling of the system. Discharging is carried out automatically through a chute. The principle of the tumblast system is the most effective blasting method for bulk goods.

Blasting stair lift components

Requirement:
Ergonomic processing of components and weldments.

Solution:
A special project requires a special solution. A fully automated hanger type blast system, specifically geared for the customer's building conditions, processes the work pieces of very different geometrical designs. For ergonomic loading of hangers, the conveyor is designed with both an up- and downhill section. The **AGTOS** high performance turbines achieve the roughness of 20-40 RZ and the required degree of purity of SA 2.5 with a power of 11 kW. The parts are blasted perfectly all around in the hanger type blast system to ensure that the powder coat sticks optimally to the surface.



A bespoke pass-through monorail blast system for weldments



A tried and tested tumblast system for castings

Did you know that...

... over 17 apprentices have been and are trained at **AGTOS** and **AGTOS** provided 8 of them with a permanent employment contract?

Blasting of girders and sections

Requirement:

Compact roller conveyor blast system for small companies in the blasting sector.

Solution:

With the "Ocean Blaster", **AGTOS** engineers created a particularly compact solution for companies that do not employ a blast system for capacity or space reasons. The

"Ocean Blaster" measures just 4.10 metres in height and can be installed in low-ceilinged buildings without the need of a foundation. The engineers placed particular emphasis on energy efficiency and maintainability of the system. Good sealing and the proven turbine and filter technology make the "Ocean Blaster" an appropriate alternative.



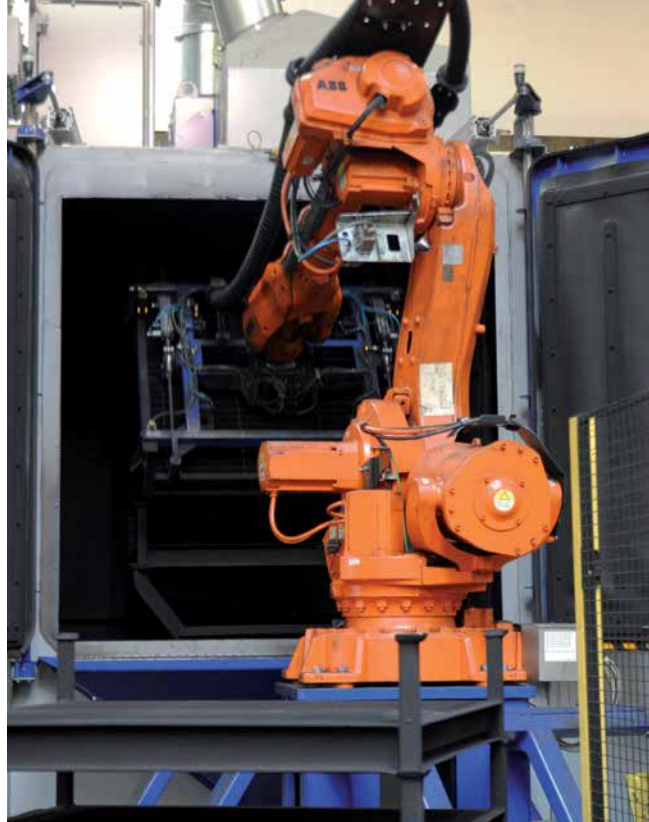
A steel girder after blasting

Did you know that...

...**AGTOS** supplies blasting systems to all five continents?

...**AGTOS** exports more than half of the machinery?

...**AGTOS** has over 6,500 products in stock?



A robot takes care of the handling.

Blasting of circulating pallets

Requirement:

Removal of tar layers on circulating pallets.

Solution:

The RHI Group produces refractory bricks for blast furnaces. As part of the processes, the bricks are soaked under high pressure with a tar solution on a circulating pallet. For trouble-free reuse, the circulat-

ing pallets must be freed of tar quickly and effectively. Specifically for this purpose, a turntable blast machine was developed and adapted to customer needs. With 2 x 11 kW, the blasting process takes just 30 seconds! The turntable can stop in a precise position and allows for loading and unloading by robots.

Blasting of hardened gear wheels and shafts

Requirement:

Blast cleaning of gear parts.

Solution:

As a manufacturer of sophisticated extruder gearboxes as well as worm and other special gears, the company Henschel needed a customised solution for cleaning hardened gear wheels and shafts.

AGTOS supplied a hanger type blast system that was set into a new foundation. Design modification reduced the space requirement significantly. The carrying capacity of the hanger type system is designed for 2 tonnes. The entire system rests on vibration damping mats. With the new system, the customer improved on the blast-



ing quality and reduced the blasting time significantly, providing a very acceptable result.

Manual loading and unloading of the hanger type blast system

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AGTOS

Gesellschaft für technische Oberflächensysteme mbH
Gutenbergstraße 14
D-48282 Emsdetten
Tel.: +49(0)2572 96026-0
Fax: +49(0)2572 96026-111
E-mail: info@agtos.de
Internet: www.agtos.com
Editor:
Ulf Kapitza, **AGTOS** GmbH