

# Economic Blasting Of Bulk Goods

**MFN had the opportunity to talk to Andreas Sterthaus, Sales Engineer of AGTOS GmbH.**



**Andreas Sterthaus, Sales Engineer of AGTOS GmbH**

**(?) MFN:** Hello Mr. Sterthaus, what kind of new trends in the blasting technology do you notice as a sales engineer?

**(!) A. S.:** The trend towards delicate production parts continues. Material savings and new manufacturing methods require a continual careful treatment. We are facing this development in the blasting technology as well. This is why AGTOS developed a new series of drum shot blast machines in particular for the treatment of bulk goods. Apart from a professional blasting technology, they focus on a careful treatment of the work pieces.

**(?) MFN:** What are the advantages of this type of machine?

**(!) A. S.:** Drum shot blast machines are designed for a large variety of parts.

The blast technology treatment of bulk goods may have different objectives. Two of the most common are clean blasting and hardening. It is important that all parts are treated in the same way and with the same intensity which frequently has to be proofed by means

of technical data. AGTOS has the experience to treat bulk goods reproducibly and identically. The size of the work pieces varies from a few millimeters up to compact parts.

**(?) MFN:** Would you please explain the principle of this type of machine in more detail?

**(!) A. S.:** With a loading unit drum shot blast machines are automatically loaded batchwise. For this, the drum is in loading position and after the loading process swivels into the blasting position. The abrasive is thrown into the rotating drum by means of an AGTOS high performance turbine. Thanks to the good blending, all of the work pieces are evenly blasted. After the blasting process they return into the provided containers by softly tilting them out of the drum.

**(?) MFN:** Okay, so we are talking about a kind of "washing drum" into which we are blasting?

**(!) A. S.:** Yes and no. The problem is in the detail: first of all we need to work out the customer's requirements for the blasting procedure. This results in the requirements on the machine. The geometry of the drum, the perforation of the drum so that the abrasive can flow-off, the mixing level of the parts and so on. This part of project work is a mutual exchange of experiences between the customer and our team.

**(?) MFN:** How does the user achieve a continuous process with a batchwise treatment?

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**Andreas Sterthaus, Sales Engineer of AGTOS GmbH**

(!) **A. S.:** The combination of several machines allows a continuous production to be built up. Besides an increase of the capacity by operating additional machines, non-productive times can be reduced and downtimes can be balanced for example by maintenance works.

(?) **MFN:** What are the decisive advantages of an AGTOS drum shot blast machine?

(!) **A. S.:** Reliable procedures are essential for a safe production. The AGTOS high performance turbines with their functional one-disc system represent a maintenance-friendly and powerful plus of the machines. The optimized construction saves abrasive, the tool in the blasting technology. Apart from the proven turbine technology, the reliable and maintenance-friendly filter technology is especially worth mentioning. A differential pressure depending clean-



AGTOS drum shot blast machine TS 0150 for blast technology treatment of bulk goods

### In the Spotlight:

#### AGTOS blasting technology: expertise in the turbine-wheel shot blast technology

AGTOS was founded in the year 2001 in Emsdetten by experienced employees within this sector. In the meantime, there are 160 employees working on two sites. In Emsdetten, the headquarter of the company, the concepts as well as the construction of the turbine-wheel shot blast machines are created. The production is located in Konin in Poland, near Poznan. Recently a new assembly hall with large foundation pits as well as a modern office building has been built so that the production surface could be doubled.

The steady focus on the requirements of the customer had the effect that the company is classified to be a nationwide specialist for the construction and production of turbine-wheel shot blast machines for the roughening, cleaning, de-rusting, descaling and shot peening. That is the reason why customers from all five continents are working with AGTOS shot blast machines.

There is a considerable range of possible applications of the shot blast machines. From the treatment of millimeter-sized chain parts up to steel constructions in the size of overseas containers there is nearly no limit in the operational capability and size of the machines.

The challenge is again and again to adopt the quality of the work piece surface to the requirements of the customer. Moreover, the machines have to be designed for the necessary work piece quantities and fit into the existing spacial conditions. This is something the customers in the different sectors really appreciate. The automobile and supply industry, foundries, forges, steel distributors and machine manufacturers rank among the most important group of customers. An interesting fact is that small and medium-size companies as well as large corporations are working with AGTOS shot blast machines.

High-quality refurbished shot blast machines are offered by the specialist company as well. This is an advantage for those companies needing a shot blast machine at short notice or operating them only temporarily. There are always different machines available in our external warehouse in Emsdetten as well as at our site in Konin.

The abrasive used in the shot blast machines does not only affect the work piece surfaces. It has a perceptible impact within the shot blast machine as well. That is why the service plays a significant role, i.e. the stockage and supply as well as the installation of spare and wear parts. Other features include maintenance, repair and modernization works on machines of other manufacturers as well. These works are always executed by experienced staff.

ing of the filter cartridges contributes to the economic method of operation as well.

**(?) MFN:** What other aspects are important?

**(!) A. S.:** Another aspect for the design of this machine series was the energy efficiency. All drives are designed according to the latest eco-design guidelines. Thus, the shot blast machine consumes a relatively small quantity of energy compared to conventional machines. This helps to keep the operation costs to a minimum.

**(?) MFN:** What is the capacity of the machine you are talking about?

**(!) A. S.:** We do not refer to only one machine in particular. We have a frame-

work, which we developed based on customer's requirements and experience. We are able to extend the capacity of the drum from a volume of 50 liters per charge to more than 150, 300 up to 500 liters. Many variables such as for example the turbine performance, loading and unloading system, the kind of shot or any other influence factor lead to a very individual machine at the customer. Despite a certain grade of standardization we are therefore still a manufacturer of special machines.

**(?) MFN:** That means that you are going to develop a machine even if the requirements of the customer are "very special"?

**(!) A. S.:** We are especially pleased to offer special things. We like this kind of niche and we have grown within

it. Our range of products is in the end the amount of repeated requirements of customer projects within the last 16 years.

*MFN would like to thank Andreas Sterthaus for this interview!*

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