

# Optimal Blasting of Heavily Used Fasteners

**K**rausz Industries with its plant in Tel Aviv has been the market leader for more than 90 years and is part of the Mueller Water Products, Inc. (NYSE: MWA). It is a leading manufacturer and marketer of products and services for the transmission, distribution and measurement of water in North America.

Krausz Industries develops, designs and produces market-leading intelligent products for the repair and connection of different types of pipes for drinking water and wastewater pipe systems. The company offers a comprehensive range in standard sizes from 40 to 1800 mm as well as customized products.

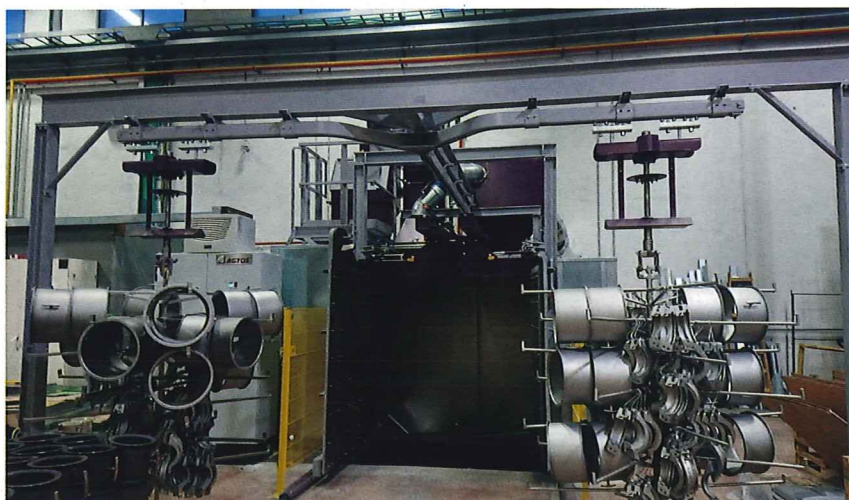
For example, the REPAMAX repair couplings known under their brand names, HYMAX coupling solutions (some with hinged seals) and HYMAX GRIP sealing couplings are manufactured.

With the variety of products, there is one thing in common: The high demands and consequently the high demands on corrosion resistance. This means for the blasting technology up-

stream of the coating, that the required high roughness values (RZ values) must always be the same, to keep the quality of the products constantly high. The parts were heat-treated before blasting.

By 2016, AGTOS had already delivered a HT 17-17 Hanger-type blast machine. It replaced the blasting machine from another manufacturer, which was not designed for angular abrasive and whose wear parts nevertheless had a much shorter service life. In addition, there was no uniform coverage of the workpieces during the blasting process.

The AGTOS machine has a blasting chamber with a height and width of 1700 mm. The hangers can be equipped with many different workpieces. Three high-performance turbines, each with 11 KW, throw the abrasive onto the workpieces. Due to the requirement of the high RZ values, angular grain is used in the blasting process. This abrasive is extremely effective, but has the side effect that the machine must also be very well-protected against wear. The body in the area of the blasting chamber is therefore additionally protected with easily replaceable wear plates.



The AGTOS Hanger-type blast machine from type HT 17-17



AGTOS turbines with wear parts made of highly wear-resistant hard metal

The angular grain does not only attack the walls of the blasting chamber; the wear parts of the high-performance turbines are also heavily used. The machine therefore has high-performance turbines with many parts made of tungsten carbide. This material is extremely resistant to wear; therefore, long service life of the blades, impeller and guiding sleeve as well as the wear plates make a decisive contribution to the economical operation of the machine.

Due to increasing capacity utilization, management decided to relocate to a new building and to defuse the "bottleneck" of the blasting machine with a second machine of the same size. Due to this good experience, AGTOS was again chosen as the supplier.

This fact enabled the team to further increase the good experience from operating the first AGTOS blasting machine. So practical experience took over. In addition, the operator's employees were given training on the many options for fine adjustment of the new machine during the preliminary acceptance at the AGTOS plant. This enabled them to adjust the machine so that fine undersized and dust particles were removed from the abrasive. This had great positive effects on the lifetime.

As with the first blasting system, the AGTOS high-performance turbines of

### **In the Spotlight:**

**Agtos was founded in 2001 in Emsdetten. Meanwhile, over 160 employees work at the two locations. In Emsdetten, the company's headquarters, the concept is created and the shot-blasting machines are constructed, with production located in the Polish town of Konin, near Poznan.**

**The constant focus on the needs of the customers has made the company an international specialist for the design and manufacture of shot-blasting machines for roughening, cleaning, rust removal, descaling and hardening. That's why customers on all five continents work with blasting machines from AGTOS.**

**In addition to new shot-blasting machines, AGTOS also offers used shot-blasting machines. This is advantageous for companies that need a blasting machine at very short notice or who only use it temporarily. The abrasive used in the shot-blasting machine does not only work on the workpiece surfaces. The abrasive effect is also noticeable in the blasting machine. For this reason, service, i.e. stocking and delivery, as well as the installation of spare and wear parts, both play an important role. There is also maintenance, repair and modernization work on machines from other manufacturers. These are always carried out by experienced specialists.**

the second machine also had frequency converters. These made it possible to continuously adjust the blasting intensity and thus adapt it to all requirements of the many different workpieces. Noam Hendel, production engineer at Krausz: "We are very satisfied with the performance, installation and service of AGTOS."

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