



W NEWS

MAY 2011



W Abrasives®
your key success factor

1961 - 2011

50 years

Wheelabrator Allevard celebrates its 50th anniversary

Please join us on our stand, no 16 B 32

12th International Foundry Trade Fair
June 28 - July 2, 2011



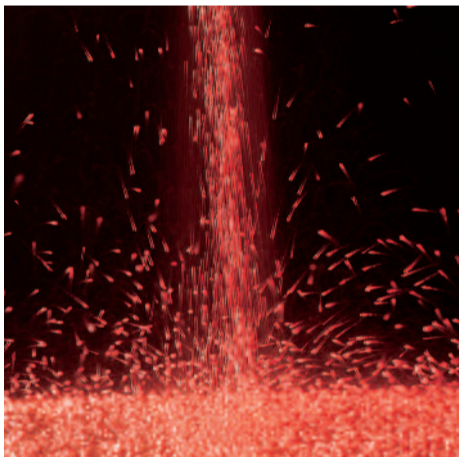
>>> W ABRASIVES, YOUR KEY SUCCESS FACTOR

BUILDING A BRIGHT FUTURE WITH YOU...THROUGH INNOVATION !

BREAK-THROUGH TECHNOLOGIES FOR AN INNOVATIVE SERVICE

World leader in metallic abrasives Wheelabrator Allevard (WA) proposes its new service: **Atomization On Demand (AOD)**. Based on a recognized know-how and break-through production techniques issued from the latest researches, this innovative service brings to the customer an environmental-friendly and cost-efficient supply solution for high quality steel particles.

It allows to propose specific products with customized properties, responding to the most specific and unmet customers needs in terms of chemical composition, size distribution, shape and density... In other words the era of fine tuned steel particles has arrived!



The process

In its cutting-edge research centres, WA constantly develops innovative production techniques. Combined with its 50 years experience in steel particles processing, WA wishes through this service to bring to the

customers its latest developments and its expertise to jointly develop the best suitable and the more economical solution.

The AOD offer is based on an existing network of production plants and research centres worldwide. Nevertheless, a dedicated medium-scale plant based in particular on a dual atomization technology has been developed by WA research teams in order to meet the most specific requests. This break-through atomization process allows to obtain specific qualities of the metallic particles by joining the cost-efficiency of water atomization with the high quality of rotary atomized particles, especially in terms of roundness and density.

Particles obtained after atomization can eventually be crushed to generate angular particles if required by the final application.

Furthermore, the products can be heat treated (under standard or inert atmosphere) to adjust their microstructure and hardness thus obtaining adequate properties for each need.

Size distribution can be fine-tuned with special sieving equipment. Optimal shape is obtained through adapted atomization conditions, separation tools or conditioning. This last treatment can also be used to convey other properties especially a very high level of surface cleanliness (absence of oxidation, shiny

aspect) as well as a high mechanical resistance.

To guarantee to the customer a fully dedicated product without any risk of contamination, WA has pushed the precautionary principle to its limits: first of all by not using any hazardous substances in its processes but also by a deliberate equipment design and operating strategies aiming at suppressing cross-contamination between different product types.

The advantages in comparison to the traditional offer

Unlike the traditional standard production which proposes standard quality products, the AOD service has been developed to quickly respond to very specific and unmet needs of customers. Dedicated production units can produce specific batches of particles from about 100 µm to 10 mm, within a wide range of alloyed steel and iron compositions. WA can provide test or regular production batches from a few hundred kilograms to hundreds of tons, with the possibility to upscale to thousands.

Customers can count on the confidential aspect of the process. Close cooperation with potential partners starts at the very beginning, and the respect of confidentiality and careful understanding of customers needs, guarantee a truly customized solution.

The cost-efficient production processes enable WA partners to develop new technologies which were not accessible before due to product cost limitations. For instance, AOD can provide millimetric steel balls with a far lower cost than forged balls produced in the bearing industry.

More than just a standard supplier, WA wishes to provide added-value to its customers by bringing both customized and cost-efficient solutions.

The applications

The idea of customization can be observed within the scope of WA's traditional core business.

WA is well known for its standard product range for typical

blasting applications such as desanding, descaling, surface preparation, shot peening or stone cutting. A premium steel abrasives range dedicated to these applications comes on top of the standard range, developed to meet specific needs of each application. WA can go even further in the optimization of the blasting and cutting media by offering individual solutions.

Out of these traditional applications, there are practically no limits to the applications of tailored steel particles. They can be used in many industrial fields, for instance as iron-based reactives for chemical or environmental applications, as precise alloying elements for the steel and metallurgical industries, as well as specific welding powders, metallic coating particles, heat transfer particles, non-toxic substitutes to lead ammunition, vibratory finishing steel media and much more...

Summary

The customers who will develop the AOD reflex, such as proposed by WA, will be satisfied to find both a partner and a committed supplier with an out of the standard product, finely tuned for their needs. They will be able to rely on world leader's quality, flexibility and reactivity. Cost efficiency and optimisation answer to the ever growing customers demand to get the best value for their money.

To go further in this customized approach, WA continues to invest in cutting-edge production equipment. One of the major steps for the year 2011 will be toward the production of even finer particles with the launch of a new industrial line, based on a proprietary technology and able to produce perfectly spherical particles from 40 to 100 µm.

As AOD can fulfil requirements of countless domains which need high quality engineered steel particles, imagination seems to be the only limit...

For information:
joan.samuel@wheelabratrallevar.com

>>> INTERVIEW



REVOLUTIONARY ECOLOGICAL SOLUTIONS

Stéphane Guillon, Vice President of Marketing & Innovation speaks about the abrasive industry and discusses latest ecological innovations at Wheelabrator Allevard.

Wheelabrator Allevard is the world leader for steel abrasives. What is your mission?

As the world leader, we have a clear mission: we team up with our customers all around the world to transform the surfaces of their products with more and more economical, ecological and comfortable solutions.

How do you do it?

Every day, on all 5 continents, our 1600 employees assist our customers, helping them boost their performance on their particular markets, thanks to our:

4 TEST CENTERS

(Japan, Brazil, Czech Republic and France) perform tests and provide training and solutions for our customers. Our Test Centre in France, for example, carried out tests with around 100 customers in 2010.

VALUE APPROACH AND 23 VALUE EXPERTS

who provide expertise and assist our customers in their quest for quality and productivity throughout the world .

WA SALES UNIVERSITY (WASU)

provides a first-rank training programme for our employees, as well as for our customers and distributors. In 2010, 40 distributors were trained by WASU.

PREMIUM PRODUCT RANGE:

HPG, Stainium, Profilium, Prowheelium, Granitium, Stelux. The sales of these products are enjoying a growth of +15% in volume per year, guaranteeing to our customers very significant productivity gains for their blasting operations.

SPECIALTIES PRODUCTS AND OUR ADD

(Atomization on Demand) service respond to the most specific and unmet customer needs with value-added products having customized properties in terms of chemical composition, size distribution, shape and density.

3 RESEARCH & INNOVATION CENTERS

(France, Japan and Czech Republic) develop continuously new products and solutions to address even better the current and future needs of our customers.

What are the new innovations you are working on? Can you give some examples to our readers?

Innovation is to transform knowledge into value creation for our customers.

I can give you 3 examples of close collaboration with our customers:

An innovative hard peening media which outclasses existing offers through a high peening efficiency and a high productivity:

- > an exclusive high hardness : 62-65 HRC
- > a high lifetime : higher than 54 HRC shots

- A wireless device for full blasting monitoring.
- A high performance solution of surface hardening complimentary to the thermo-chemical treatments and hard coatings, and for a better environmental approach.

As you know ecological consciousness is evolving and there is an ever increasing demand for environmental compliance. What is your vision of environmental responsibility and sustainability at Wheelabrator Allevard?

We always prioritize sustainable solutions and invest on environmentally-friendly technologies. Our plants are equipped with state-of-the-art technologies compliant with the most stringent environmental requirements. In recent years we have achieved significant improvements. Some examples are:

- Air quality: the installations (furnace and process) are dedusted on a permanent basis. In recent years the performance of dedusting unit has been improved and dust releases dropped from the required limitation of 20 mg/m³ to 5mg/m³.
- Water treatment: we invested € 2.5 M on advanced water cooling and treatment system in our plant located in Le Cheylas, France in order to reduce the quantity of the water

consumed, lower the temperature of the recycled water and ensure the quality of the water. Thanks to this new facility we doubled our water treatment capacity while reducing the water disposal rate by 50%. Our new production plant in Kurgan, Russia, equipped with latest technologies consumes five times less water than required by the usual standards. Our commitment to sustainability does not end here. We also encourage our customers to be environmentally-aware by offering them ecological solutions. Our target is not only providing leading edge solutions to our customers but also to be their ecological partners.

You have talked about being an ecological partner for customers. Can you give us an example for ecological solutions that you are offering to your customers?

A striking example is our revolutionary ecological solution, PHENICS (Productive, Healthy, Ecological, New, Itinerant

Cleaning Solutions), enabling from now on the use of recycled steel grit in mobile air-blasting operations of industrial blasting and painting contractors. Being 100% recyclable, steel abrasive is an extremely clean product in comparison with other technologies such as non-recyclable abrasives which generate huge amounts of dust and waste. Our solution PHENICS, from now on allows simultaneous blasting and recycling operations with steel grit for surface preparation operations concerning metallic structures such as bridges, penstocks, dams etc. while offering high productivity and efficiency.

PHENICS has been developed as a direct response to changing ecological awareness and the increasing need to achieve better environmental compliance and is based on a unique business model aimed at minimizing the environmental impact of surface preparation and maximizing the operation efficiency of industrial painting contractors and steel rehabilitation companies.



You said PHENICS is based on a unique business model. What do you mean by that?

PHENICS is unique since it brings together a combination of services which is unprecedented in the abrasive industry:

PHENICS Mobile Equipment Rental: This state-of-the-art equipment will be accessible to all customers without the need for an additional investment on equipments and maintenance through rentals adapted to the duration of their on-site projects.

PHENICS Premium Steel Grit: A dedicated range of high performance steel grit, Profilium is designed for air blasting surface preparation offering accelerated surface cleanliness, improved coating adhesion and optimum paint consumption through better surface profile quality.

PHENICS Field Technical Support: A team of experts committed to ensure the most efficient blasting and equipment usage of our customers will provide regular technical support on job site.

How will this revolutionary solution change on-site blasting operations of industrial blasting & painting contractors?

PHENICS will transform our customers' surface cleaning experience for once and all. By replacing expendable abrasives with recyclable steel grit, the cleaning rate will be increased by 50%. The abrasive volume and waste generation will decrease by minimum 90% ensuring maximum conformity to environmental regulations and outstanding cost savings in waste disposal and transportation. The working conditions of operators will be improved dramatically due to the much lower dust generation. Overall they will benefit maximized on-site operation efficiency with a saving up to 30% on their total blasting costs.

How has been the response of industrial blasting & painting contractors for such an innovative solution so far?

Some of our customers have already been familiar with the concept, some have never thought about it. When we introduced **PHENICS**, they were surprised with the power of the suction units and the cleaning efficiency of the recycling units, even in the cases of lead contamination. They showed great interest in our complete solution composed of rental services, technical assistance and premium steel grit. Our rental service has especially been a very motivating factor for contractors, whose on-site blasting works tend to be seasonal, mostly taking place during spring-summer period.

PHENICS has been launched in the second half of 2010. Today the number of our customers has increased significantly, extending not only to Europe but to the Middle East as well, and it is only the beginning.

Finally how do you see the future for Wheelabrator Allevard and the abrasive industry in general?

The abrasive industry is recovering from the crisis of 2008. If we look at the last 3 years market growth (2009-2011), we see an evolution of 8% per year, which is very promising. The economic projections for the next five years also point out a stable growth of the market. Our Group is committed to support and develop the sustainable growth of the abrasive industry.

Maintaining and strengthening our commitment over and over to our customers and our industry is our leitmotiv!

zerrin.koltukcuoglu@wheelabratorallevard.com

We are looking forward to seeing our customers at the GIFA Show to be held between the dates of June 28th and July 2nd, 2011 in Düsseldorf Germany, where Wheelabrator Allevard will celebrate its 50th on the booth 16B32.