Vol. 19
May
Issue
Year 2018

Publication for the Peening, Blasting, Cleaning and Vibratory Finishing Industries

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Metal Finishing News INTERNATIONAL

MFN

Distributed in North & South America, Europe and Asia

Separate Print: Vol. 19 May Issue, Year 2018
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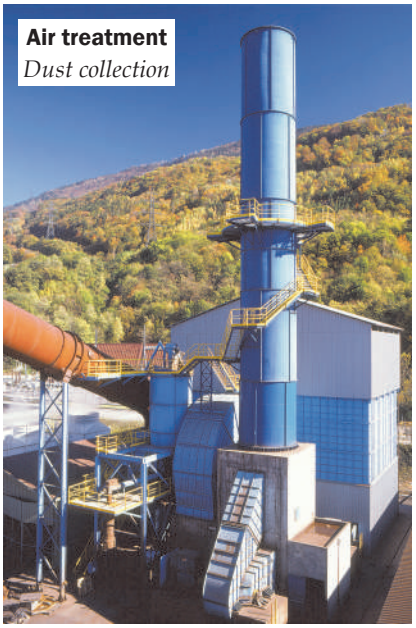
Committed To Protect The Environment

When the environment, more than a concern, becomes an imperative, it is time to make a choice. Winoa contributes in different ways to the responsibility in the matters of environment, recycling and energy.
By exclusively using recycled scrap steel for production purposes, by reducing its reliance on energy and consumables, and by finding new applications for the co-products created throughout the manufacturing cycle, Winoa is working closer to reduce its environmental impact and make its steel abrasives range so unique.
This commitment has been going on for a long time and remains one of the priorities of Winoa, which strengthens the pillars of its "Green Environment concept", acting on various fields. All of the group's productions sites are ISO 14001- certified (environmental management system), confirming the relevance of its processes to ensure environmental compliance.

1-A model of energy efficiency management

Winoa's plant in Le Cheylas, France is the largest in terms of production capacity among the 10 sites of the group. Focusing on energy efficiency can have a big impact.
The Le Cheylas Plant has been certified ISO 50001 for 5 years already thanks to a drastic program of human and material resources investment to conduct energy resources preservation.
Informative and training campaigns have been implemented for the collaborators along with a program based on structured continuous improvement process. It means the elaboration of a policy for a better use of the energy, the definition of objectives and targets, data analysis to better manage the use and energy consumption, results measurement, and many other actions to improve the energy management system.
The investment program has been focused on the melting furnace, the tundish, the dust collectors and the dryer, with consequent energy savings. This program has allowed the reduction of electricity consumption of the melting furnace, as well as the reduction of gas consumption of its tempering and quenching furnaces.
At the same time, Winoa has successfully improved its atmospheric releases and its noise emissions in line with its activity. Winoa has worked hard



Air treatment
Dust collection

Water treatment
Cleaning circuit

Process waste
Systematic valorization

Recyclable packaging
Wooden pallet ; Big bag

on the sorting and the valorization of its production wastes, thus taking an active part in the protection of the environment.
In conclusion, the reduction of emissions, waste, noise, consumption of water and raw material in order to minimize the impact of the Winoa activities on the environment has been successfully implemented and are used as a reference and source of inspiration for its remaining international facilities, including at its newest plant in Spain.
Winoa invests, Winoa thinks « environment friendly » - Its new production plant in Spain, the most modern and ecologic in the world is being built in this state of mind.
The new plant is going to set a new worldwide standard in steel abrasives plants regarding resource efficiency, safety, quality and environmental impact.
Quenching will be performed with air using regenerative burner technology. This ensures minimum energy consumption, zero water consumption and zero transmission of salts to the abrasive, as opposed to water quenching.
There are two dust collection systems, one for melting and another one for processing, equipped with continuous monitoring systems to measure our particles emissions in real time. Due to the high dust collection capacity, diffused emissions will be minimized, ensuring a dust-free environment inside the plant.
Regarding water, thanks to a state-of-the-art water treatment plant, the river water consumption per ton of production will be minimized.
All the plant will be controlled by a distributed control system centralized in a control room in the processing area.

New abrasives

The construction of the plant started in June 2016 and is expected to be finished in the second quarter of 2018.

2-Use steel abrasive media to create value

Through the implementation of new services that extend its know-how and the use of its 100% recyclable abrasive to new business lines, Winoa makes a strong environmental commitment to participate in building a cleaner world for tomorrow.
Some solutions to replace expendable abrasives by recyclable steel abrasives have been successfully implemented. When slag and garnet sources are becoming scarce and present considerable drawbacks due to excessive generation of dust and waste resulting in low efficiency, it is more cost-effective and efficient to replace expendable abrasives by recyclable steel abrasives. Their advantage is clear: they guarantee superior productivity and surface roughness at a competitive price.
Winoa has launched some programs to introduce recyclable steel abrasives conversion in the metal construction or in the pipe manufacturing industries with excellent results.
One of its biggest Russian customers in metal construction has converted from copper slag usage towards its Premium product Profilium with a drastic reduction of consumption, decrease in dust and waste generation.
Another of its French customers manufacturing steel pipes and tubes has been successfully converted from coal slag usage to Profililum thanks to the efficiency and the performance of this Premium product.

Steel pipes & tubes

Results

35 times less consumption with Profilium 45 (Profilum 45 : 0, 47 kg/m² Copper Slag : 16,67 kg/m²)

Dramatic decrease in dust and waste generation

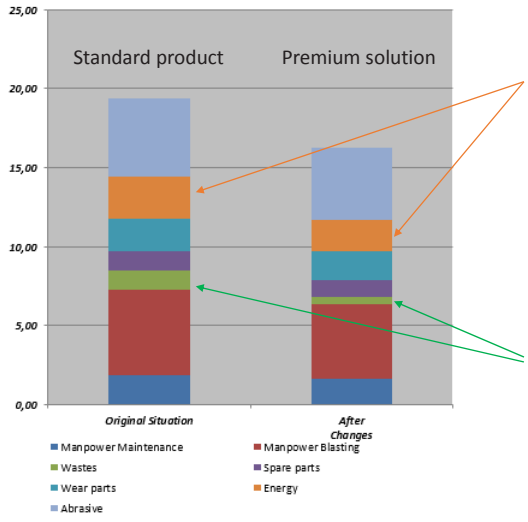
3-With respect to the environment, Winoa offers dedicated services and strengthens its proximity with its customers

Steel abrasives can also be used for on-site jobs with the use of the Productive Healthy Ecological New Itinerant Cleaning Solutions (PHENICS) system. Winoa provides not only high quality steel abrasives but also offers adapted equipments to their customers : the Phenics machines.
This innovative service dedicated to industrial painting contractors, brings a complete package to use recycled steel grit on jobs traditionally performed with mineral abrasives.
Steel abrasives can be recycled up to one hundred times and their impact on the environment is minimized. The particles of blasted media remain in the contained area and then are vacuumed, separated from contaminants and finally reused.
In the Ship Repair shipyards, a Spanish leading industrial painting contractor recently chose to blast with recyclable steel abrasives with Phenics vs. copper slags for the construction of an off-shore platform supply vessel after finding out salt contamination is significantly improved with steel abrasives from W Abrasives.
Another Italian industrial painting contractor working in shipyards and using recyclable garnet has decided to convert its process to Profilium and became convinced of the advantages of recycling and steel abrasives invested on Phenics XL units.
Winoa Steel abrasives' recyclability is another key factor contributing to the protection of the environment: it is why the group is involved in launching recycling programs:
- Its Japanese sister company collects waste shots & grits from its customers and re-uses them as briquettes. It is a way to develop innovative service intimacy and brings added value to the customers; in the same way, this approach illustrates the group's commitment to protecting the environment.
– Winoa is currently studying the feasibility to develop similar approaches of waste collection and valorization in other locations worldwide.

Phenics

Ship repair shipyards

True Cost per Unit of Production
Desanding Simulation



Better abrasives efficiency has also an impact on the environment: less energy consumed for the same quantity of parts produced

With increasing costs of waste disposals: a reduction in abrasive consumption create less waste therefore less cost and less pollution

4-The WA Cost technology supports customers by reducing waste and energy consumption in their blasting operation

By developing a new technology, the "WA Cost" Winoa supports its customers by decreasing their blasting cost and also demonstrates that the cost of the abrasive represents a small percentage of the total blasting costs. The largest part, the operational cost, is not visible and includes the Manpower for maintenance, Manpower for blasting, the Waste, the Spare parts, the Wear parts, and the Energy.
The expert technical teams raise awareness about the importance of each of these parameters in the blasting operation. Another way to work for preserving the environment !
And last but not least: a new visual corporate identity and baseline for Winoa "Preparing Tomorrow's Surfaces" addresses all the surface preparation actors with value-added solutions in the respect of the environment and testifies to its willingness to be "the green partner" of the profession.
Winoa, the example of a modern innovative and engaged group!

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