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AIRCHOC[®]
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wireless

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OPTIMIZATION OF CONVEYOR BELTS



INDUSTRIAL VACUUM CLEANING



MULTI AIR CANNON SYSTEM



INDUSTRIAL VACUUM CLEANING



**STANDARD
INDUSTRIE**
INTERNATIONAL

Innovative processes for bulk handling

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Standard-Industrie: Success with the AIRCHOC® air cannon

Standard Industrie International, founded in 1978, is involved in the design and manufacture of equipment that facilitates the storage, flow and conveyance of powders and bulk products. It has built its success on the air cannon AIRCHOC®, the global reference in terms of declogging.

Cleaning intervention: In order to solve its customers' blockages and concretion issues in a curative way, Standard Industrie International has reinforced its range with the GIRONET® and the POWERNET®. This is designed to complete the cleaning of storage units without any human intervention inside the units.

The range of products offered by Standard Industrie International meets the needs of many industries especially the cement industry. Indeed, bulk handling problems are numerous in the cement industry. They can interfere with the proper functioning of installations and can become a risk for the staff.

Concretion phenomenon in the cement-making process

Build-ups are a major obstacle at different points of the cement making process. They disrupt the function of the installations and, in order to limit their occurrence, cement plant operators regulate different parameters such as: The composition and particle size of material input feeds; Levels of chloride and sulphate levels of fuels; Combustion conditions at the tail pipe and; Kiln temperature.

Unfortunately these actions alone cannot completely avoid the concretion phenomenon in certain areas like the preheater tower with the kiln entry, the gas outlet pipe, the cyclones, the raw mill chute and the smoke chamber. Such measures cannot prevent concretion in the bypass, the cooler or tail pipe.

Reduction of operational risks

Some build-ups can be partially eliminated without stopping production. Unfortunately, this operation can



Above: The Standard Industrie AIRCHOC® Wireless air cannon.

For two decades, Standard Industrie has diversified and developed new products to the commercial market with four ranges:

Declogging of storage units: The AIRCHOC® and the MACSYS® (multi air cannon system) are preventive solutions that can overcome blockages of any kind and optimise productivity thanks to an almost entirely recovered storage capacity. Always willing to innovate, Standard Industrie International also developed the products of its declogging range into a wireless version.

Optimisation system for conveyor belts: The LIFTUBE® optimises the sealing of any conveyor belt, reducing dust emissions and maintenance costs while providing full safety.

Industrial vacuum cleaning: Cleaning systems with a range of products from 3-300HP, electric or diesel, fixed or mobile units or trucks. This range of industrial vacuum equipment is available to companies wishing to work in a clean and safe environment.

be a real danger for the operators and involves a temporary decrease in production capacity.

For some areas of the process, operators have the possibility to intervene after the problem occurs by using manual rammers or high-pressure lances. During such operations, the air goes into the process and generates chemical reactions that can contribute to the formation of other build-ups. This is a vicious circle that creates a further reduction in production capacity.

These interventions do not necessarily require the stopping of the installation but the operators take considerable risks in terms of exposure to high temperatures, high pressures and risks such as large blocks of material falling from equipment. A large number of incidents are reported every year but the implementation of an appropriate device like the AIRCHOC® enables these to be limited.

The AIRCHOC®: Power and precision for the customer

The AIRCHOC® is a pneumatic declogging device that is specially developed to break bridges and rat-holes in storage silos and hoppers. Its application has been broadened for more than 35 years to the removal of build-ups in technical processes such as cement plants, lime works, steelworks, incineration plants, power plants and other similar installations.

The AIRCHOC® uses a compressed air capacity of 1 - 400L according to the type of application. The air is released instantly through a large outlet that is directly connected to the storage unit. The obtained effect corresponds to a deflagration due to the brutal release of compressed air.

Standard Industrie International has also developed a wireless version of the AIRCHOC® in order to limit cable trays and control up to 128 AIRCHOC® units remotely from the same control panel.

The MACSYS® was also designed using AIRCHOC® technology. This multi-output air cannon, along with stainless steel reinforced hoses, enables operation in very hot or difficult-to-access areas while ensuring operator safety. A clever combination of the number of outputs and their nominal diameter helps to better apprehend the distance between the MACSYS® system and the area to unclog without loss of efficiency.

At customers' sites

Rida AHIB, Standard Industrie International's representative in the Middle East, recently sold four MACSYS® Wireless, two with eight heads and two others with five heads, to a Turkish cement plant operated by a large French cement manufacturing company.

After two visits, accompanied by the Export Manager and the Product Manager, the MACSYS® Wireless solution was chosen to end clogging issues on the riser duct. The centralised actions have considerable advantages in terms of maintenance, unlike other multi-output air cannons sold on the market.

Another argument is from a safety standpoint. Being away from the high temperature area provides protection for the staff and the equipment. Added to this is

the autonomy of the MACSYS®, which requires no pre-existing structure for installation.

The client, which already used an AIRCHOC® system in the past, is fully satisfied with the MACSYS®. The spare parts are the same for both products, which allows time saving in terms of supply and maintenance.

Recently, in Egypt and Tunisia, 20 AIRCHOC® and 40 AIRCHOC® Wireless were installed respectively in renowned cement plants. In recent years, the same plants had already been using AIRCHOC® technology to overcome blockages in their towers. Satisfied, they have renewed their collaboration with Standard Industrie International with the installation of air cannons in areas that were not previously covered.

These two customers, globally-recognised cement producers, also use the services of Standard Industrie International for their industrial vacuum units. They plan to assign other projects in terms of industrial cleaning and declogging of silos and coolers.

Conclusion

Installed at the largest cement manufacturers, but also in nearly 60 industries, the declogging devices of Standard Industrie International have been proven worldwide. The AIRCHOC® technology is now established as a benchmark.

Supplemented by three other lines, the solutions offered by Standard Industrie International answer all the bulk handling problems that may arise in the cement industry.



Below: A MACSYS® Wireless that was recently installed at a Turkish cement plant operated by a French company.

