NASH 2BE4

Case Study

World Renowned Packaging Company Relies on Nash to Boost the Efficiency & Reliability of their Molded Fiber Process

Faced with aging equipment that was impacting efficiency and productivity, one of the world's leading packaging companies turned to Gardner Denver Nash to provide a solution that would help get their facility back on track.

Our customer, one of the world's largest packaging companies, is a leading specialist in providing food packaging products and disposable tableware. The company has 100 years of experience in providing both plastic and fiber-based packaging solutions to a range of retail, fast food, and food and beverage production businesses around the globe.

One of the company's key products is molded fiber packaging for paper-based products such as egg packaging, hinged containers, and cup carriers that are typically used in the food service and packaged food industries. Created from recycled paper products, such as paperboard and newspaper, molded fiber packaging is biodegradable, and provides a more robust and environmentally friendly alternative to traditional plastic packaging products.

Overview

CLIENT
Global Packaging Company

LOCATION
United States

APPLICATION
Molded Fiber Packaging

PRODUCTS
- NASH 2BE4500-2 Liquid Ring Vacuum Pumps

CUSTOMER BENEFITS
- Stable Operation
- Highest Reliability
- Lower Total Cost of Ownership
- Peace of Mind

NASH
by Gardner Denver

THE RIGHT TECHNOLOGY FOR THE JOB

Similar to other paper and paper-based products, manufacturing of molded fiber packaging relies on a process called dewatering. A process that removes water from the liquid and pulp slurry to create the final product. The process involves applying varying levels of vacuum in the forming section of the paper machine, effectively removing a bulk of the water and moisture present in the raw material and forming the packaging.

Despite using a variety of technologies in the past, such as dry screw pumps, the company now exclusively relies on a fleet of liquid ring vacuum pumps installed on their paper machines to enable the dewatering process. Renowned for their energy efficiency and reliability, liquid ring vacuum pumps excel in applications that require positive backpressure; while their ability to use water as a seal liquid is crucial when manufacturing food grade products.

THE IMPACT OF AGING EQUIPMENT

During a regular inspection the customer noted that one of their liquid ring vacuum pumps, an aging NASH CL6000 attached to a machine that produces egg trays, was experiencing drops in efficiency and showing signs of wear.

Plant engineers noted that the machine was consuming increasing amounts of water and requiring a more energy to run. The machine also required frequent service and repair, extending downtime and impacting the plant's overall production efficiency. The decrease in water and energy efficiency, combined with the increase in downtime, was not only increasing the cost of production for one of the company's key products, but also negatively impacting the company's environmental credentials.

The company reached out to Gardner Denver Nash to investigate.

CHOOSING THE RIGHT SOLUTION

After inspecting the customer's installation and requirements, Nash's engineers proposed that the customer replace the aging pump with a new unit that would better meet the customer's application needs, as well as operational and maintenance requirements; namely, NASH's 2BE4500-2 liquid ring vacuum pump.

NASH's 2BE4 series provides robust, low-maintenance operation. Based on Nash's proven flat sided 2BE design, the 2BE4 series is equipped with a range of features such as variable porting, large differential pressure capabilities, and a high tolerance to carry over; providing the customer with proven performance, reliability, and total peace of mind.

Featuring a robust stainless steel construction (incl. pump body and internal components), the 2BE4500-2 supplied provides superior corrosion resistance with added protection and energy efficiency being provided by the polyisoprene lining that comes standard on the pump body. Powered by a Variable Speed Drive (VSD) v-belt skid, the 2BE4500-2 has allowed the customer to tailor motor output to meet production demand, increasing efficiency and reducing the pumps overall power consumption.

GETTING BACK ON TRACK

With the pump successfully running for more than a year, the customer has already noted significant benefits including improved productivity and efficiency, as well as a reduction in downtime as a result of the pumps improved reliability and increased capacity. Importantly, the pump has helped the customer significantly reduce both power and water consumption lowering the plants operating costs while also allowing them to operate more sustainably.

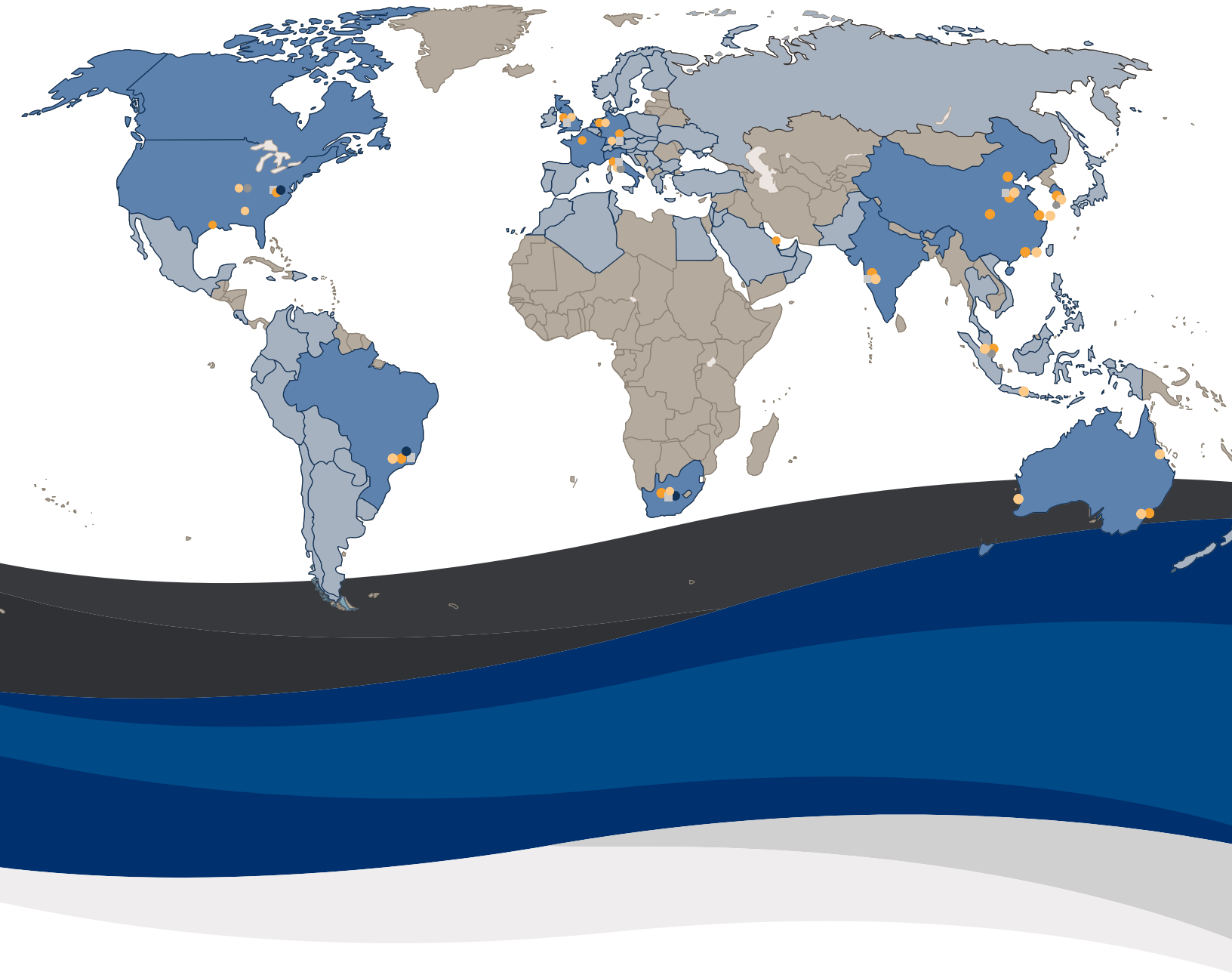
Combining proven performance and reliability with a world-class customer experience, Gardner Denver Nash was able to strengthen our ongoing relationship with the customer. By providing a tailored solution that delivered tangible results, the team has paved the way for future collaborations that will help our customer reduce operating costs, minimize downtime, and boost productivity across a range of locations.

TRUST THE EXPERTS

Using more than 100 years of experience and expertise, Gardner Denver Nash provides a wide range of liquid ring vacuum solutions. From pumps and compressors, to customer engineered-to-order solutions, we offer a comprehensive portfolio of products that can help you solve even the most complex challenges.

Backed by our NASH CERTIFIED™ Service offering, as well as a full range of OEM parts, spares, and aftermarket services, we can act as your trusted partner; protecting your investment and providing you with total peace of mind.

Contact your local sales representatives for more information on Gardner Denver Nash's range of liquid ring vacuum pumps and systems!



To find out more about Nash solutions
for Molded Fiber visit
www.GDNash.com

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Please recycle after use.