



Feeding Animals, Feeding the Future

Flowserve pumps enable production of sustainable, high-protein animal feed

Producing food — for people and animals — depends heavily on energy from fossil fuels. The agri-food chain accounts for 30 percent of the total energy used around the world.

Sustainable agricultural production that also meets ever-growing needs for food requires the optimization of:

- land use
- energy efficiency
- end of the use of fossil energy sources
- minimization of environmental impacts

In search for a sustainable animal feed solution, a new product has been developed that features an innovative approach to creating a protein-rich food. And with end-to-end solutions that support energy transition initiatives, Flowserve is helping agricultural producers protect the planet by increasing operational efficiency, productivity and profitability.

Increasing protein while reducing resource consumption

“Are you getting enough protein?” is a question people are often asked about their personal health. Just like humans, animals need the health benefits that protein offers for proper growth, strength and survival.

The transition to more sustainable production of animal feed does not require agricultural land, does not include plant or animal components, and uses relatively little water. Instead, it is produced through the fermentation of naturally occurring micro-organisms. The resulting food product has been shown to be safe and effectively sustain growth rates for livestock, fish, pets and other animal needs.

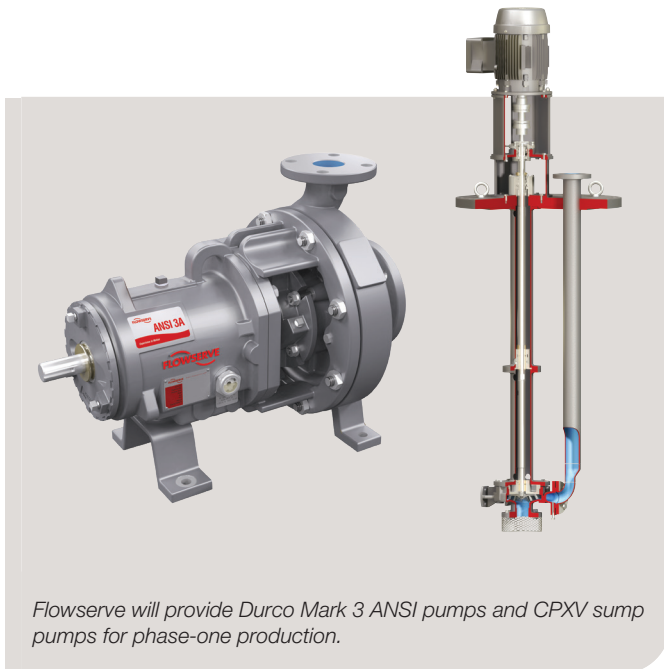


Protein-rich feed produced in a fermentation process instead of conventional agricultural methods will be used for fish (aquaculture), livestock feed, pet food and other needs.

Scalability for the future

The facility for producing the high-protein feed product is located in China; a leading engineering, procurement and construction (EPC) company was selected for its design and construction. Flowserve is supplying Durco® Mark 3™ ANSI pumps and CPXV sump pumps to support phase-one production scheduled in 2022. The pumps will deliver reliable performance and contribute to the food production facility's throughput.

The first of its kind in China, this facility will initially supply the country's aquaculture (fish) industry, and the market is expected to grow rapidly to include livestock feed, pet food and other products.



Flowserve will provide Durco Mark 3 ANSI pumps and CPXV sump pumps for phase-one production.

Feeding the animal world sustainably

The fermentation process is a novel solution to help meet the world's need for animal food without placing additional stress on scarce resources. At Flowserve, we want to support efforts like this that make the world better for everyone.

We can leverage our 225 years of flow control experience and a comprehensive portfolio of product and service solutions so our customers can diversify their energy mix, decarbonize their operations, and digitize their plant processes. As a partner, Flowserve enables companies to increase operational efficiency and achieve energy transition goals. And, in this case, meet critical needs to enhance agricultural sustainability.



Read Flowserve's approach to [energy transition](#).

Flowserve Corporation
 5215 North O'Connor Blvd.
 Suite 700
 Irving, Texas 75039-5421 USA
 Telephone: +1 937 890 5839

flowserve.com

PUSS000471-01 (EN/A4) February 2022

Flowserve Corporation has established industry leadership in the design and manufacture of its products. When properly selected, this Flowserve product is designed to perform its intended function safely during its useful life. However, the purchaser or user of Flowserve products should be aware that Flowserve products might be used in numerous applications under a wide variety of industrial service conditions. Although Flowserve can provide general guidelines, it cannot provide specific data and warnings for all possible applications. The purchaser/user must therefore assume the ultimate responsibility for the proper sizing and selection, installation, operation, and maintenance of Flowserve products. The purchaser/user should read and understand the Installation Instructions included with the product, and train its employees and contractors in the safe use of Flowserve products in connection with the specific application.

While the information and specifications contained in this literature are believed to be accurate, they are supplied for informative purposes only and should not be considered certified or as a guarantee of satisfactory results by reliance thereon. Nothing contained herein is to be construed as a warranty or guarantee, express or implied, regarding any matter with respect to this product. Because Flowserve is continually improving and upgrading its product design, the specifications, dimensions and information contained herein are subject to change without notice. Should any question arise concerning these provisions, the purchaser/user should contact Flowserve Corporation at any one of its worldwide operations or offices.

©2022 Flowserve Corporation. All rights reserved. This document contains registered and unregistered trademarks of Flowserve Corporation. Other company, product, or service names may be trademarks or service marks of their respective companies.