The Difference Between Artificial Rice and Real Ric

Introducción detallada :

The technological revolution behind a bowl of rice is quietly changing our dining table
the heart of this transformation is twin-screw extrusion technology, redefining the con
"staple food."

Self-heating rice convenience foods have quietly taken center stage on supermarket
shelves. Open the package, add water, and enjoy piping hot rice in just over ten minu
Behind this lies a major innovation in the modern food industry: artificial rice technolo
Unlike the "plastic rice" rumored online, true artificial rice is a nutritionally fortified foo
from natural grains through technological reconstruction.

Essential Differences: Innovations in Raw Materials an

Processing

The core differences between artificial rice and real rice lie in the nature of their raw materials and production processes. Real rice is derived directly from rice grains, pro through traditional processes like hulling and polishing, making it a gift from nature. Artificial rice, on the other hand, represents a breakthrough in food technology—it us natural grains as its primary raw material and is reconstructed through modern food engineering techniques.

The differences between the two are even more pronounced in their production proce

1. Raw Material Processing: Natural rice requires only the husk and some bran to be removed; artificial rice requires the grains to be ground into powder and mixed with ingredients such as corn starch and konjac flour.
2. Molding Technology: Artificial rice relies on high-temperature, high-pressure extrus reshape the rice grains, a process that requires precise control using specialized equ
3. Nutritional Fortification: During the production process, artificial rice can be fortifie nutrients such as vitamin B1, calcium, and lysine to compensate for the nutritional de of natural rice.

The twin-screw extrusion line developed by Shandong Loyal Industrial Co., Ltd. is the of its artificial rice production technology. By precisely controlling temperature, pressu shear force, this equipment transforms mixed raw materials into uniform, nutritious reconstituted rice grains.

Production Process: Technology Reshapes the Form o

Food

The creation of artificial rice is a precise experiment in food engineering. This process far beyond simple mixing and pressing, but rather involves a systematic engineering integrating multidisciplinary technologies. Shandong Loyal Industrial Co., Ltd.'s speci production line embodies this process. Mixing and proportioning raw materials is the step in producing artificial rice. After milling natural rice, manufacturers add water, ed starch (such as corn starch or konjac flour), and a small amount of food additives.

For fortified artificial rice, vitamins and other nutrients are also added. Shandong Loy Industrial Co., Ltd.'s fully automated batching system precisely controls the proportio trace ingredients, ensuring a balanced nutritional profile.

Extrusion is the core of the production process. The evenly mixed raw materials are f a twin-screw extruder, where they are reshaped into rice grains under high temperatu pressure.

The equipment's modular design meets the specific needs of different formulations. E adjusting process parameters, a variety of products, from standard reconstituted rice protein nutritious rice, can be produced.

Equipment Advantages, an Industry Model for Intellige

Manufacturing

Amid the transformation and upgrading of the grain processing industry, Shandong L
Industrial Co., Ltd. has become a leader in artificial rice production equipment, levera
technological innovation and accumulated expertise. Located in Jinan, Shandong Pro
the company boasts over 30 years of industry experience and sells its products to ov
countries and regions worldwide. Shandong Loyal Industrial Co., Ltd.'s twin-screw ex
represent the cutting-edge of the industry with their core technological advantages:
1. Diversity of Material Shapes: Capable of producing a variety of shapes and specia
shaped products, meeting market demand for diverse material shapes.
2. Raw Material Adaptability: Capable of processing a wide range of raw materials, b
through traditional limitations.
3. Intelligent Control System: Fully computerized, automatic control of material flow a
ratio, adjusting steam and water addition levels in real time.
Quality Assurance:
Shandong Loyal Industrial Co., Ltd.'s equipment utilizes a fully wear-resistant alloy sc
and extrusion chamber sleeve, significantly reducing wear and ensuring stable opera
high production capacity. All accessories adhere to international standards, ensuring
operation and effectively controlling noise.

The company also has a comprehensive food twin-screw extrusion technology engin
center, providing customers with a multi-functional research platform for production
equipment, process formula development, and application, truly achieving the integra
industry, academia, and research.

Industry Leadership, Innovation Drives a Healthy Futu

Shandong Loyal Industrial Co., Ltd., guided by the principle that quality equals value,
continuously advances innovation in artificial rice production technology. The compar
equipment has successfully expanded its applications from grain and oil products to h
value-added applications such as nutritious reconstituted rice, breakfast cereals, and
porridge and rice.

Shandong Loyal Industrial Co., Ltd.'s intelligent production line not only improves pro
quality but also reduces energy consumption through precise process control, achiev
green production. The company's equipment is equipped with a centralized control sy
and complete plant automation, significantly improving production efficiency and redu
labor costs.

In the future, as consumer demand for food nutrition and functionality increases, the a
rice market will see even greater growth. Shandong Loyal Industrial Co., Ltd. will con
invest in research and development to provide global customers with more advanced
efficient grain deep-processing solutions, driving the food industry towards nutrition,
diversification, and intelligent development.

Reference

The following are five authoritative foreign literature websites in the field of Industrial machinery:

1. Food Engineering Magazine

Website: https://www.foodengineeringmag.com/

2.Food Processing Magazine

Website: https://www.foodprocessing.com/

3.Journal of Food Engineering

Website:https://www.journals.elsevier.com/journal-of-food-engineering

4. Food Manufacturing Magazine

Website:https://www.foodmanufacturing.com/

5. International Journal of Food Science & Technology

Website:https://onlinelibrary.wiley.com/