

RHEON SPIRIT

Introduction of Rheon Automatic Machinery Co., Ltd.



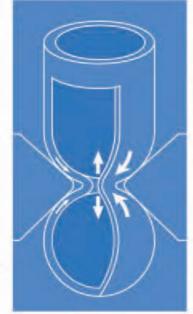
The Engineering of Rheology

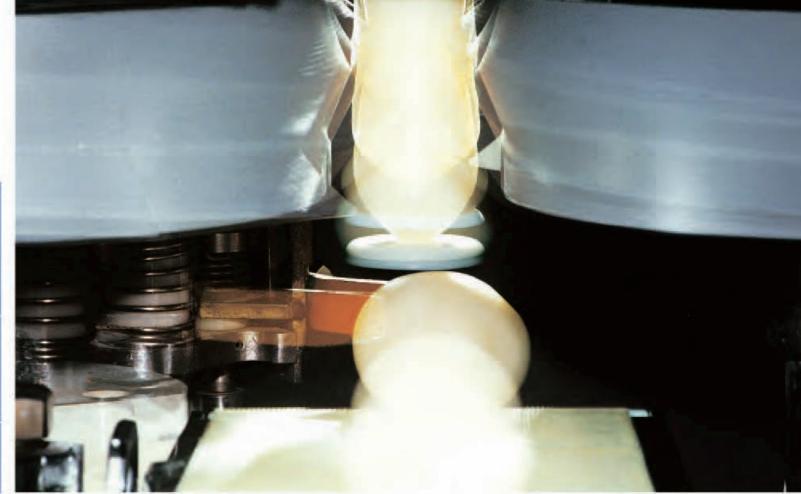
By incorporating the original technology of Rheology, Rheon invented the first Encrusting Machine in the world to further enhance the future of the Food Industry.

Our company name, "RHEON," was derived from the concept of Rheology. For several thousand years, man has shaped food in the palm of his hand, creating and shaping much of today's priceless culture. Rheology is the study of the flow and deformation of matter and Rheological Engineering is the shaping of food by skillfully controlling the "viscosity" and "elasticity", to maintain the delicate texture of food while locking the taste and aroma inside. Rheon has succeeded in automating the production of various ethnic foods worldwide through the theory of Rheology and Rheological Engineering. Today, Rheon stands as an internationally recognized company in the food processing machinery industry. The photo on the right demonstrates the action of the rotating discs, resembling that of a human palm. The skillful, accurate and high-speed production of "Manju" (Japanese cakes with sweet been-paste filling), truly demonstrates Rheon's principal of Rheological Engineering.

The outer circumference of each disc generates the calculated lateral stress and normal stress, brings the dough into the cutting section and automatically encrusts the filling. The dough is then molded into a circular shape. Traditional procedure, which required six processes can be completed in a single process through Rheon's technology.

Established in 1963, Rheon introduced the inductive shaping method to the world and brought attention to the Rheological Engineering as a new field of study. Today, we continue to develop valuable equipment for customers world wide.







"From Dough Sheet to Bread" - Stress Free System -

A wide variety of bread from around the world can now be produced on a single line with Rheon's unique progress!

Bread was the first processed food made by mankind. During the course of time, people developed various types of "cuisine" with new, original tastes. These creations have brought to us the value of the present food culture. The vast amount of cuisines from around the world continues to cultivate peace and love through the art of dining.

We must be grateful and respectful to the wisdom of our ancestors who first discovered this very complicated process of bread-making. Starting by cracking small and hard grains, flour is then grated and water is added to finally create dough. The dough rests overnight and formed into a small dough ball which is left for further fermentation to produce air bubbles. The dough is then ready for baking to create flavorful and nutritious bread with a long shelf life.

Numerous attempts have been made to facilitate the difficult process involved in bread making. Today, Rheon is the only company who offers the "Stress Free" bread-making technology.

Rheon strongly emphasizes that the purpose in automating bread production is not only to facilitate the entire production procedure, but also to preserve precious cultures of various countries by improving labor conditions as well as to acknowledge the value behind each culture.

If there is a flaw in any of the steps to automate the production, the original taste and shape of the product will be sacrificed, causing the culture to lose its genuine characteristics and the traditional food culture will eventually disappear.

To prevent this from happening, Rheon has developed the



system, "From Dough Sheet to Bread." Bread dough is conventionally formed by dividing a large dough block into small portions to form round, bar, or even flat shapes. However, this process applies stress to the dough during the dividing process, greatly damaging the gel and cell structures. Dough will not be able to produce air bubbles, resulting in poor-quality bread. To avoid this, it has been critical to use some chemical additives to strengthen the dough structure and to undertake extra processing to recover the damaged dough structure after dividing. Rheon eliminated this time consuming process by forming continuous thin dough sheets prior to the dividing process. While forming the dough into thin layers, the dough binding is strengthened to create any form of bread product. This is the "Stress Free System."



Rheon supports all customers in operations through extensive skill and knowledge.

As a food processing equipment maker, we develop our original equipment, put them on the market and provide customer service to ensure satisfaction to our customers.

Research and Development



Service

We provide various services such as products tests, explanation of machine operation and after-sales service to guarantee customer satisfaction and needs.



Detailed technical explanation







Second Plant in Kamikawachi



Development of Food Processing Machines

Based on Rheon's unique technology through Rheological Engineering, Rheon has developed various types of equipment from compact Encrusting Machines to large automated confectionery and bread production lines.



Design for Production System and Plant Facilities We recommend the most efficient production line based

upon the customer's demands from beginning to the end.



Support for Food Production

We conduct machine application tests, new product development and offer product tests for customers, including Japanese and Western confectioneries, Savory food and Bread. Machine demonstrations, pre-delivery inspections and installation including after-sales service is performed by our technical team.

Complete After-sales Service

To ensure safety and smooth operation, we perform repairs and inspections to maintain customers' equipment running at the best possible level.

Pre-delivery Inspection

This facility is used for production tests and conducts the final confirmation with customers prior to delivery.



Rheon Headquarters (Main Building)

Sales



Offering the most suitable equipment for customers

Customer Consultation

There are two sales divisions; the Domestic Sales and the Overseas Sales departments. While the Head Office and Sales Branches cooperate in maintaining customer satisfaction, the Domestic Sales department offers the most suitable equipment for customers and provides after-care services. They also hold numerous seminars and exhibitions so the customers are up to date with the latest technology while gaining customer confidence. This department also guides customers to the U.S.A. to visit the model plant as well as showing actual operations of the latest production

Manufacturing

We handle making parts, assembling, inspection and shipment of the machines. All parts use the new DNC (a machine that processes parts on its own, completely unattended for up to 48 hours) and laser compound processing machines (a machine that processes a precise sheet metal). A new factory began operations in 2009. High quality machines are shipped to Japan and every part of the world.



ISO9001-certified factory



This was introduced along with the opening of the new factory and operates at optimal mechanization, reaching the highest quality.



Specialists are assigned to certain sections to perform most effectively in the production process.



Laser & Turret Punch Press Compound Machine This produces parts from the CAM data, converted from the drawing of the CAD data.

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RHEON AUTOMATIC MACHINERY GmbH



Rheon Automatic Machinery GmbH located in Düsseldorf, Germany provides high quality customer service over Europe, Africa, and the Middle East.

RHEON U.S.A.

Rheon U.S.A. located in Irvine, California provides high quality customer service all across North, Central and South America.

RHEON AUTOMATIC MACHINERY GmbH ULM BRANCH



The office is located in Ulm, the major urban city in south Germany, and is the base operation office for the southern Germany and neighboring countries such as Austria and Switzerland. At the same time, they research the expansion of the applied use of Rheon machines and further enhancement of technical services by collecting the information on European Foods.

RHEON U.S.A. NJ BRANCH



Rheon U.S.A. NJ Branch has established in Teterboro, New Jersey in June 2007 to serve throughout the entire U.S.A.. The office has started operation as the base office in eastern U.S.A. and Canada.

日商雷恩自動機股份有限公司 台灣分公司 RHEON AUTOMATIC MACHINERY CO., LTD. TAIWAN BRANCH

Promotes sales operation based in Taipei. In the test laboratory, they hold seminars and run individual testings to offer the optimum production process through the eyes of customers.





日本雷恩自动机株式会社 上海代表处 RHEON AUTOMATIC MACHINERY CO., LTD. SHANGHAI OFFICE



Based in Shanghai, promotes widespread marketing activities all across China.

Orange Bakery

There are three Orange Bakery Plants in Irvine, California and one in Charlotte, North Carolina. The first plant which also is the Headquarters, produces various frozen pastries, the second produces frozen croissants and confectionaries. The third in NC applies Rheon's original pre-proofed frozen dough technology to produce frozen croissants and Danish pastries and bread. And finally, the fourth plant produces various par-baked loaf breads.



RHEON IRVINE MODEL PLANT / ORANGE BAKERY, INC. (Headquarters/1st Plant)

The first plant of Orange Bakery was established as a Model Plant for frozen pastry production in Irvine, California in July 1979. It demonstrates Rheon's latest production system as a bakery and sells its products to super markets and bakeries all across the United States. It was Orange Bakery's success with Croissants that brought about the 'Croissant Boom' in the 1980s, making Rheon a house-hold name.

RHEON EL TORO MODEL PLANT / ORANGE BAKERY, INC. (2nd Plant)



Orange Bakery 2nd plant is the model plant established in October 1985 for the same purpose as Orange Bakery 1st plant. It demonstrates the production of high quality pastries such as danish pastry and Croissant by Stress Free HM Line, and also the production of high-valued cookies by Multi Co-Extruder.

RHEON CHARLOTTE MODEL PLANT / ORANGE BAKERY, INC. (3rd Plant)



Orange Bakery 3rd plant introduces pre-proof concept involving dough fermenting and freezing, uniquely developed by Rheon, to the U.S. market. Production technology and product know-how are also provided. Computerized plant management information, from received orders management to product quality management, is also available to customers.

RHEON PARKER MODEL PLANT / ORANGE BAKERY, INC. (4th Plant)



Orange Bakery 4th plant demonstrates the Stress Free System and creates various products with high quality.

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