

The General Packaging Industry



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<http://www.rengo.co.jp/english/index.html>



The General Packaging Industry



The Rengo corporate logo has its origins in a stylized version of the Japanese characters "san" (three) and "sei" (achieve) used in the original name of the company, "Sanseisha," when it was first founded by Teijiro Inoue in 1909. Use of the original symbol continued even after the successor company, Rengo Shiki K.K., was established, since it was considered to be graphically representative of the characters for "ren" (continuous) and "go" (putting together) in the context of corrugated materials. The Rengo corporate logo is thus a symbol of our history and identity.

Growing beyond Packaging through Innovation

“General Packaging Industry (GPI)” Rengo

Since manufacturing the first corrugated board in Japan in 1909, the Rengo Group has striven to respond to the needs of customers for value-added packaging, as well as contribute to society by helping to optimize the flow of products through the distribution process.

Recent years have seen packaging requirements become more diversified and demanding as the lifestyles of people change and their environmental awareness increases. Based on a wide-ranging product lineup, a highly refined service network, and a wealth of packaging technologies built up over the years, the Rengo Group has continued to study the most efficient, optimal forms of packaging for our customers.

We employ a reliable, fully integrated production system, from paperboard to corrugated packaging. Our business domains cover folding cartons, flexible packaging and other forms of packaging for consumers, as well as heavy duty packaging used in a wide variety of different industries, and even extend to cater to overseas markets. This structure allows us to achieve substantial synergistic effects and deliver diverse packaging solutions.

Intrinsically suited to recycling, corrugated board primarily utilizes recovered paper, which is recyclable and eco-friendly, as its raw material. As the birthplace of corrugated board in Japan, the Rengo Group considers the concept of “always caring about people and the environment” as the cornerstone of our business activities.

Not only do we maintain strict controls with respect to air and water pollution, but we also proactively seek to use energy and resources as efficiently as possible while giving consideration at all times to the minimization of environmental impact and reduction of CO₂ emissions.

Over time, in addition to their fundamental functions of product packaging and protection, corrugated board and other packaging materials have incorporated decoration and printed information on their surfaces. As such, they have the potential for further advances in the future as tools enabling people to communicate with one another.

The Rengo Group defines itself as a “General Packaging Industry” that creates new value in packaging in a wider range of fields and actively proposes solutions to fulfill all the packaging needs of various industries through continual changes in thinking and innovation. With our eyes on further enhancement of our overseas operations in the light of advancing globalization, Rengo will continually commit to being active and taking on new challenges, both in Japan and worldwide, thus promoting the sustainable development of the economy and society and enriching more comfortable lifestyles.



A handwritten signature in black ink, appearing to read 'Kiyoshi Otsubo'.

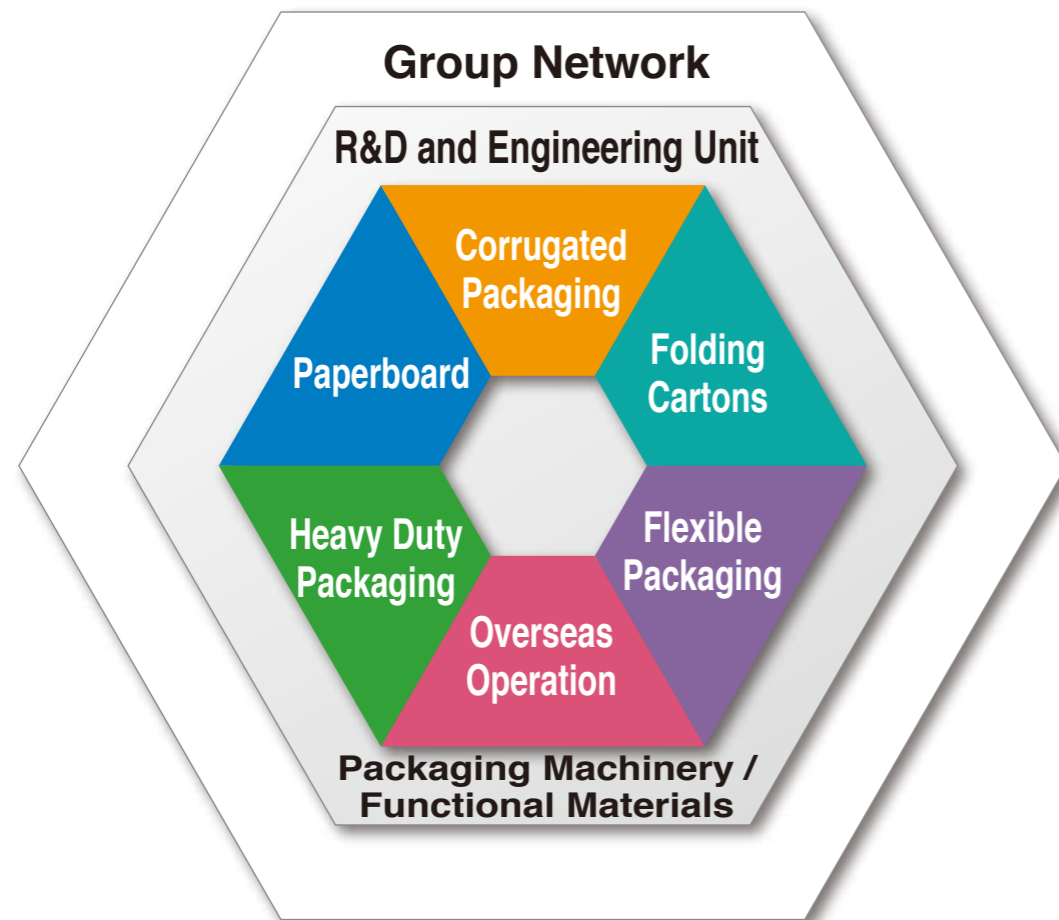
Kiyoshi Otsubo
Chairman, President & CEO

We are a comprehensive packaging provider that actively proposes solutions to fulfill all the packaging needs of various industries

The Rengo Group has provided optimized solutions to packaging needs through comprehensive capabilities that employ the group's packaging technology and expertise accumulated over many years. Today, the Rengo Group is conducting diverse business in six core fields: paperboard, corrugated packaging, folding cartons, flexible packaging, heavy duty packaging, and overseas business.

By acting as an accomplished packaging partner, the Rengo Group seeks to become a packaging provider that proposes comprehensive solutions to fulfill all the packaging needs of various industries through continual changes in thinking and innovation. In order to achieve this goal, Rengo is defining itself as a "General Packaging Industry," and as such we are committed to staying one step ahead of the times so we can create meaningful packaging with true value that is friendly to people and the environment.

The General Packaging Industry



Group Network

Our production network is expanding both domestically and overseas. Our sales representatives positioned throughout the network gauge customer needs in their respective regions and provide reliable responses.

Domestic Network (directly managed plants)

- Paper mill 5
- Folding carton plant 3
- Corrugated plant 25
- Other 1

Rengo Group Companies in Japan

- Paper / Paperboard Marusan Paper Mfg. Co., Ltd. / Osaka Paper Co., Ltd.
- Corrugated packaging / Folding cartons Yamato Shiki Co., Ltd. / Settsu Carton Co., Ltd. / Tokai Shiki Co., Ltd. / Hinode Shiki Kogyo Co., Ltd. and 38 other companies
- Flexible packaging Howa Sangyo Co., Ltd. and one other company
- Heavy duty packaging Nihon Matai Co., Ltd. / Tri-Wall Japan Co., Ltd. and one other company
- Other businesses Rengo Logistics Co., Ltd. / Rengo Nonwoven Products Co., Ltd. and 17 other companies

Rengo Group Companies Overseas

- Asia / Europe / Middle East / U.S.
- Total of 125 plants and 20 representative offices / sales companies



Product Lineup

Makes it possible to propose a wide range of products to customers, including not only corrugated boxes, but everything from folding cartons to film packaging that directly wraps individual products.



Paperboard

- Containerboard
- Boxboard
- Tube board
- Chipboard
- Processed paper

Folding Cartons

- General-purpose cartons
- Gift packaging
- Multi-packs
- Micro-flute corrugated board
- FLUTEPRESS

Heavy Duty Packaging

- Flexible bulk containers
- Heavy duty polyethylene bags
- Kraft paper bags
- Heavy duty corrugated packaging

Functional Materials

- Viscopearl beads
- Wasaveil, WaSAAce
- Cellgaia
- Viscose-processed paper
- Tinted film

Corrugated Packaging

- General-purpose corrugated packaging
- Fire-retardant corrugated board
- Water-resistant and moisture-proof corrugated packaging
- Freshness retaining / Insect repelling corrugated packaging
- Antirust and antistatic corrugated packaging
- Decorative corrugated packaging
- Corrugated pallets

Flexible Packaging

- Film wraps
- Labels
- Cellophane
- Molded packaging
- Cleantainer

Sales Promotion Tools

- POP advertisements
- Other tools

Packaging Machinery

- Packaging systems
- Casers
- Case/tray erectors
- Sealing machines

Other

- Resin processed products, laminated products
- Nonwovens
- Adhesive tape, hot-melt adhesive
- Logistic services / other

Research & Development

Rengo provides comprehensive support for the entire packaging process of products in order to meet the packaging needs of customers, while taking into consideration sales promotion benefits and overall cost.



Packaging Technical Department

- Designs transport packaging and cushioning materials, conducts various packaging tests, and develops packaging technology such as no-staple corrugated boxes and Universal Design products.

Design and Marketing Center

- Devises product promotion plans and proposes packaging designs and sales promotion tools based on marketing concepts.

Central Laboratory

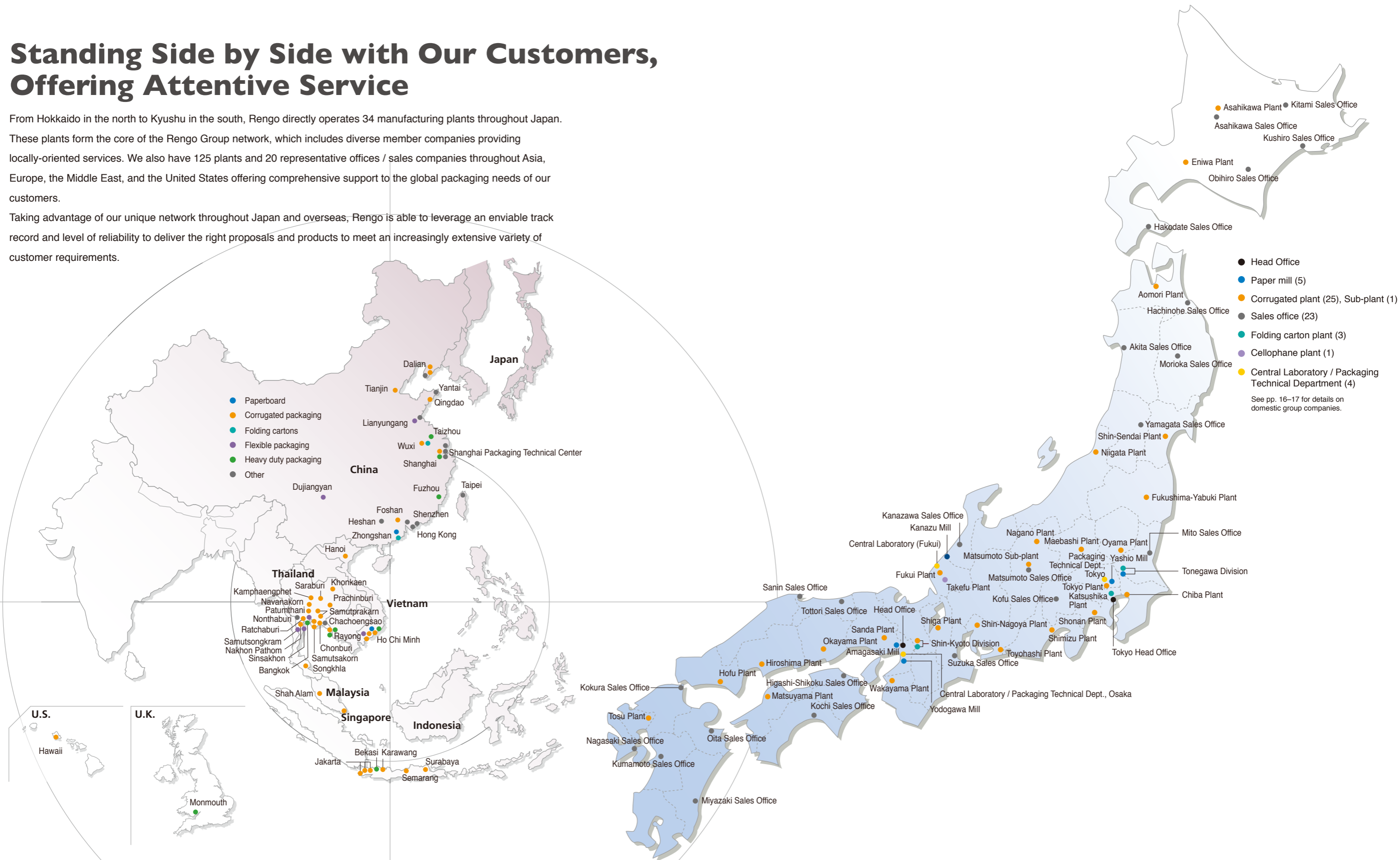
- Conducts research on materials and production methods for paperboard and corrugated board, and develops new functions and new products.

Standing Side by Side with Our Customers, Offering Attentive Service

From Hokkaido in the north to Kyushu in the south, Rengo directly operates 34 manufacturing plants throughout Japan.

These plants form the core of the Rengo Group network, which includes diverse member companies providing locally-oriented services. We also have 125 plants and 20 representative offices / sales companies throughout Asia, Europe, the Middle East, and the United States offering comprehensive support to the global packaging needs of our customers.

Taking advantage of our unique network throughout Japan and overseas, Rengo is able to leverage an enviable track record and level of reliability to deliver the right proposals and products to meet an increasingly extensive variety of customer requirements.





“Less is more.”

The base concept behind Rengo’s packaging innovations.

“Less energy consumption”

“Less carbon emissions”

“High quality products with more value-added”



The Beginning of the Age of “L”

Shin-Nagoya Plant

A Leading-edge Corrugated Plant Thoroughly Dedicated to the Concept of “Less is More.”

Always at the leading edge.

At the Rengo Group, that is one of our missions as a company that contributes to society through packaging.

The Shin-Nagoya Plant, which began operations in January 2014, is a new initiative focusing on the coming age of linear motors.

The new plant is full of many leading edge technologies and various techniques for environmental conservation injected with the pride of being a pioneer in corrugated packaging.

As the leading company in the packaging industry, under the key phrase of “Less Weight, Less Carbon,” we have worked to use less carbon in corrugated packaging by making it more lightweight through technology such as Less Caliper & Carbon (LCC) containerboard and *Delta Flute*.

We will now open up the future of packaging by pioneering a completely new corrugated plant that creates great value with fewer resources, in other words, “Less is more.”



● Bird's-eye view of the Shin-Nagoya Plant



● Photovoltaic panels on the plant building roof



● Rack-type, seismically isolated automated warehouse



● Automatic guided vehicle



● Panoramic view of the corrugator



● Converting equipment



Rengo's Domestic Production Plants

Paper Mills

Top containerboard production volume in Japan Yashio Mill

The Yashio Mill is a highly efficient mill located in the Tokyo metropolitan area that provides a wide range of products for this massive market, including corrugating medium, linerboard, tube board, and chipboard. This is the number one mill in Japan in terms of the production volume of paperboard. Most of the raw material for the paperboard comes from recovered paper collected in the metropolitan area. The mill is also considerate to the local environment, having undertaken such measures as a major reduction in CO₂ emissions through the introduction of energy-efficient facilities that generate electricity such as biomass boiler and other methods.

- Location 330 Nishibukuro, Yashio-shi, Saitama Prefecture, Japan 340-0833
Tel: +81-48-922-1131 Fax: +81-48-924-8639
- Operations commencement April 1964



Diverse functions, from paperboard production to printing and converting Tonegawa Division

The Tonegawa Division has diverse functions, from paperboard production to printing and converting. The paper mill is the flagship plant for Rengo's paper business, not only in terms of scale and facilities, but from the perspective of production volume and developmental prowess as well. Equipped with a No. 1 paper machine for boxboard and a No. 4 paper machine for linerboard production, the plant manufactures a broad range of products. Meanwhile, the printing and converting business is becoming the supply base for Eastern Japan in terms of processed paper for decorative corrugated packaging. It is also becoming the main base responsible for the production of multi-pack products, particularly canned beer six-packs.

- Location 5269 Iwai, Bando-shi, Ibaraki Prefecture, Japan 306-0631
Tel: +81-297-35-2301 Fax: +81-297-35-1484
- Operations commencement
Paper mill: October 1961; Folding carton plant: April 1999; Printing and converting plant: July 1987



Corrugated Plants

Flagship plant for corrugated packaging Tokyo Plant

The Tokyo Plant, which is located within the greater Tokyo metropolitan area, the primary region of demand within Japan, is our flagship plant for corrugated packaging, equipped with one of the largest corrugators in Japan. With a veritably long history among our manufacturing facilities, the Tokyo Plant brings together outstanding engineering and know-how to meet the diverse needs of the Tokyo metropolitan market. All of the processes—from receiving the paper roll to corrugating, converting, and shipment—are uniformly managed under an integrated production management system called COMETS, increasing productivity and thoroughly ensuring improved quality and service.

- Location 5-14-8 Ryoke, Kawaguchi-shi, Saitama Prefecture, Japan 332-0004
Tel: +81-48-225-7111 Fax: +81-48-223-7163
- Operations commencement February 1937



Plant that symbolizes the concept of “Less Weight, Less Carbon” Fukushima-Yabuki Plant

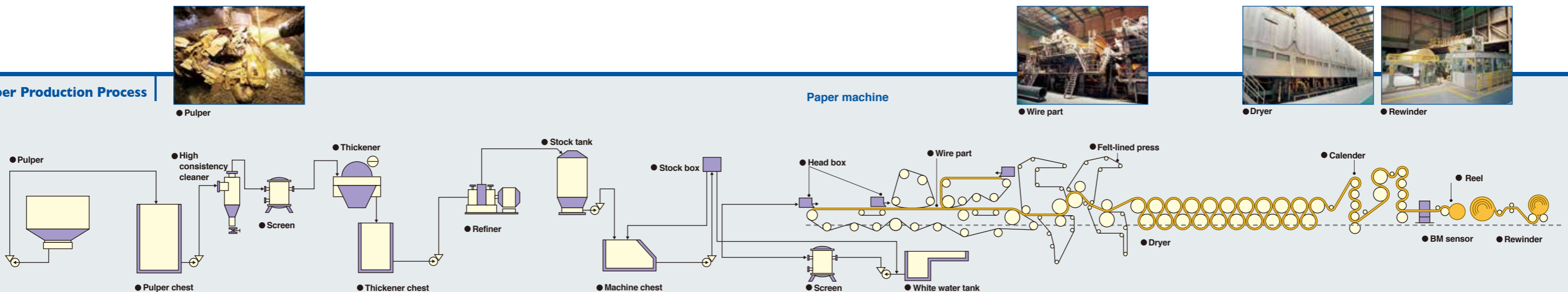
Featuring a total of around 9,000 photovoltaic panels—which supply all of the plant's daytime electricity needs and make this one of the largest projects of its kind in Japan—alongside use of clean energy in the form of liquid natural gas (LNG), and a diverse range of energy-saving equipment, the Fukushima-Yabuki Plant is the ideal corrugated plant for the 21st century and represents the crystallization of all the expertise in environmental technology that Rengo has accumulated up to now. By making maximum use of naturally available resources and promoting energy recovery and recycling, we have achieved a CO₂ emissions reduction of around 40% compared to the previous plant. It is an eco-friendly plant that quite literally embodies the concept of Less Weight, Less Carbon.

- Location 115-1 Suwanomae, Yabuki-machi, Nishishirakawa-gun, Fukushima Prefecture, Japan 969-0247
Tel: +81-248-41-2055 Fax: +81-248-41-2066
- Operations commencement May 2010



Paper Production Process

Paper machine





Paper Mills



Kanazu Mill
 ●Location
 1-8-10 Jiyugaoka, Awara-shi, Fukui Prefecture, Japan 919-0698
 Tel: +81-776-73-1234 Fax: +81-776-73-7038
 ●Operations commencement
 May 1961



Yodogawa Mill
 ●Location
 4-1-186 Ohiraki, Fukushima-ku, Osaka, Japan 553-0007
 Tel: +81-6-6465-5065 Fax: +81-6-6462-2806
 ●Operations commencement
 January 1936



Amagasaki Mill
 ●Location
 1-4-1 Minamishin-machi, Kuise, Amagasaki-shi, Hyogo Prefecture, Japan 660-0822
 Tel: +81-6-6488-2561 Fax: +81-6-6489-1122
 ●Operations commencement
 April 1948

Corrugated Plants



Eniwa Plant
 ●Location
 193-3 Toiso, Eniwa-shi, Hokkaido, Japan 061-1405
 Tel: +81-123-39-3211 Fax: +81-123-32-0127
 ●Operations commencement
 January 1999



Asahikawa Plant
 ●Location
 2-2-31 Kogyo Danchi 2-jo, Asahikawa-shi, Hokkaido, Japan 078-8272
 Tel: +81-166-36-3622 Fax: +81-166-36-4280
 ●Operations commencement
 April 1994



Aomori Plant
 ●Location
 48-1 Shina, Hamadate, Aomori-shi, Aomori Prefecture, Japan 030-0947
 Tel: +81-17-742-2331 Fax: +81-17-743-5311
 ●Operations commencement
 September 1970



Shin-Sendai Plant
 ●Location
 6-3-2 Matsusakadaira, Taiwa-cho, Kurokawa-gun, Miyagi Prefecture, Japan 981-3408
 Tel: +81-22-344-0070 Fax: +81-22-344-0071
 ●Operations commencement
 April 2012



Oyama Plant
 ●Location
 1260 Kayabashi, Oyama-shi, Tochigi Prefecture, Japan 323-0804
 Tel: +81-285-49-2211 Fax: +81-285-49-1771
 ●Operations commencement
 May 1980



Maebashi Plant
 ●Location
 1144 Amagawaoshima-machi, Maebashi-shi, Gunma Prefecture, Japan 379-2154
 Tel: +81-27-263-1611 Fax: +81-27-263-1619
 ●Operations commencement
 November 1961



Chiba Plant
 ●Location
 1-7-1 Osaku, Sakura-shi, Chiba Prefecture, Japan 285-0802
 Tel: +81-43-498-2331 Fax: +81-43-498-1541
 ●Operations commencement
 September 1985



Shonan Plant
 ●Location
 3155 Miyayama, Samukawa-machi, Koza-gun, Kanagawa Prefecture, Japan 253-0106
 Tel: +81-467-74-5112 Fax: +81-467-75-5600
 ●Operations commencement
 October 1971



Niigata Plant
 ●Location
 2885 Sasaki, Shibata-shi, Niigata Prefecture, Japan 957-0082
 Tel: +81-254-27-3481 Fax: +81-254-27-3484
 ●Operations commencement
 April 1994



Nagano Plant
 ●Location
 1731 Hizumeeki, Inaba, Nagano-shi, Nagano Prefecture, Japan 380-0912
 Tel: +81-26-221-2135 Fax: +81-26-221-0672
 ●Operations commencement
 April 1964



Shimizu Plant
 ●Location
 200 Shibukawa, Shimizu-ku, Shizuoka-shi, Shizuoka Prefecture, Japan 424-0053
 Tel: +81-54-348-5100 Fax: +81-54-345-6454
 ●Operations commencement
 April 1957



Toyohashi Plant
 ●Location
 1 Oike, Nakahara-cho, Toyohashi-shi, Aichi Prefecture, Japan 441-3106
 Tel: +81-532-41-3151 Fax: +81-532-41-3129
 ●Operations commencement
 October 1972

Corrugating Process

Corrugator



●Single facer



●Paper roll and reel stand



●Glue machine



●Double facer



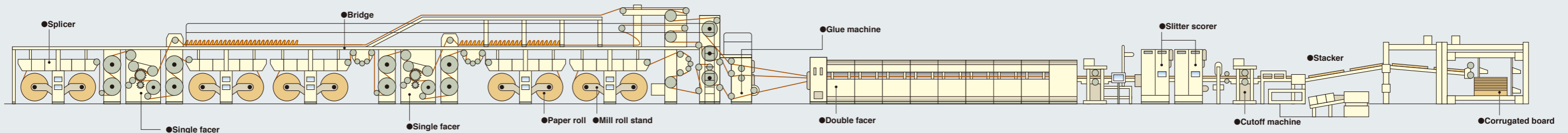
●Slitter scorer



●Cutoff machine



●Stacker





Corrugated Plants



Shin-Nagoya Plant
 ●Location
 1514-82 Tonmei, Akechi-cho, Kasugai-shi, Aichi Prefecture, Japan 480-0303
 Tel: +81-568-93-1670 Fax: +81-568-93-1728
 ●Operations commencement
 January 2014



Wakayama Plant
 ●Location
 1758-3 Tsukatsuki, Momoyama-cho, Kinokawa-shi, Wakayama Prefecture, Japan 649-6112
 Tel: +81-736-66-2811 Fax: +81-736-66-9909
 ●Operations commencement
 October 1993



Tosu Plant
 ●Location
 950-1 Todoroki-machi, Tosu-shi, Saga Prefecture, Japan 841-0061
 Tel: +81-942-83-3155 Fax: +81-942-83-2577
 ●Operations commencement
 April 1962

Cellophane Plant



Takefu Plant
 ●Location
 39-1-2 Kamimakara-cho, Echizen-shi, Fukui Prefecture, Japan 915-0011
 Tel: +81-778-27-1111 Fax: +81-778-27-1114
 ●Operations commencement
 March 1934



Fukui Plant
 ●Location
 18-1 Uryu-cho, Echizen-shi, Fukui Prefecture, Japan 915-0096
 Tel: +81-778-24-1361 Fax: +81-778-24-1427
 ●Operations commencement
 July 1980



Okayama Plant
 ●Location
 900 Kuboki, Soja-shi, Okayama Prefecture, Japan 719-1112
 Tel: +81-866-92-2331 Fax: +81-866-92-1228
 ●Operations commencement
 July 1968

Folding Carton Plants



Katsushika Plant
 ●Location
 4-2-15 Kosuge, Katsushika-ku, Tokyo, Japan 124-0001
 Tel: +81-3-3601-2111 Fax: +81-3-3601-7208
 ●Operations commencement
 April 1970



Shiga Plant
 ●Location
 565 Tsuji, Ritto-shi, Shiga Prefecture, Japan 520-3042
 Tel: +81-77-552-2331 Fax: +81-77-552-2344
 ●Operations commencement
 May 1964



Hiroshima Plant
 ●Location
 1-77 Minamimyojin-machi, Kaita-cho, Aki-gun, Hiroshima Prefecture, Japan 736-0055
 Tel: +81-82-822-3121 Fax: +81-82-823-4922
 ●Operations commencement
 December 1961



Tonegawa Division
 ●Location
 5269 Iwai, Bando-shi, Ibaraki Prefecture, Japan 306-0631
 Tel: +81-297-35-2307 Fax: +81-297-35-2600
 ●Operations commencement
 April 1999



Shin-Kyoto Division
 ●Location
 1 Hattanda, Shoryuji, Nagaokakyo-shi, Kyoto Prefecture, Japan 617-0836
 Tel: +81-75-954-2121 Fax: +81-75-955-5652
 ●Operations commencement
 September 1975



Matsuyama Plant
 ●Location
 1861 Minamiyoshida-machi, Matsuyama-shi, Ehime Prefecture, Japan 791-8042
 Tel: +81-89-972-0511 Fax: +81-89-972-1478
 ●Operations commencement
 October 1959



Shin-Kyoto Division
 ●Location
 1 Hattanda, Shoryuji, Nagaokakyo-shi, Kyoto Prefecture, Japan 617-0836
 Tel: +81-75-954-2121 Fax: +81-75-955-5652
 ●Operations commencement
 April 2008



Sanda Plant
 ●Location
 19-1 Techno Park, Sanda-shi, Hyogo Prefecture, Japan 669-1339
 Tel: +81-79-568-5111 Fax: +81-79-568-5564
 ●Operations commencement
 April 1993



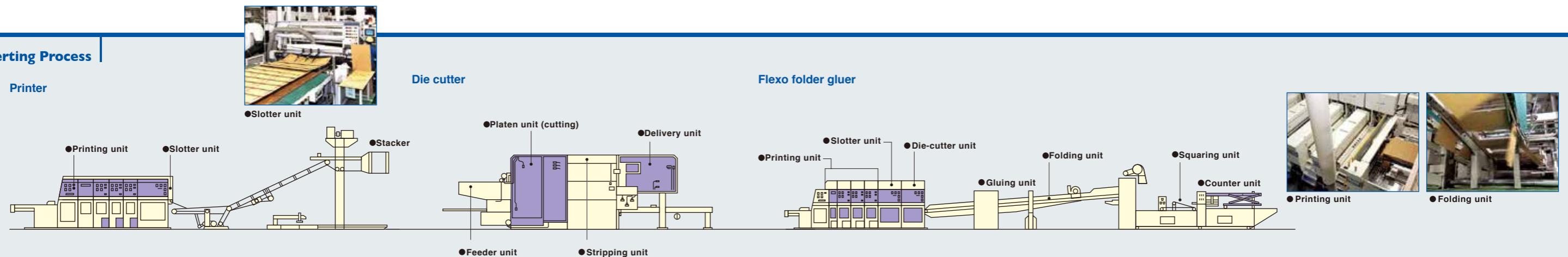
Hofu Plant
 ●Location
 1-1 Yokoirikawa, Kohama, Hamakata, Hofu-shi, Yamaguchi Prefecture, Japan 747-0833
 Tel: +81-835-38-0655 Fax: +81-835-38-0658
 ●Operations commencement
 April 1984

Rengo acquires FSC® certification for its products from paperboard to corrugated packaging and folding cartons.



Rengo's corrugated packaging and folding cartons have been recognized for their contribution to the conservation of sustainable forest resources. The Forest Stewardship Council® (FSC) certification can now be applied to almost all corrugated packaging and folding cartons that use the paperboard produced at Rengo mills.

Converting Process



Comprehensive Capabilities Supported by Locally-oriented Group Enterprises in Japan

Rengo Group Companies in Japan

Efficiently divided work responsibility between directly managed plants and group companies is essential to the strength of the Rengo Group in terms of integrated manufacturing ranging from paperboard to corrugated packaging. At the same time, cooperation within the group is also crucial to the effective development of non-corrugated businesses such as folding cartons, flexible packaging and heavy duty packaging. An extensive network of locally-oriented group enterprises in Japan, each having its own technology and expertise, is what supports the comprehensive capabilities of the Rengo Group.



Paper / Paperboard

Marusan Paper Mfg. Co., Ltd.

● **Location**
Minamisoma-shi, Fukushima Prefecture Tel: +81-244-22-3111 Fax: +81-244-22-0650

● **Main products**
Containerboard, special paper

Osaka Paper Co., Ltd.

● **Location**
Nishiyodogawa-ku, Osaka Tel: +81-6-6472-6331 Fax: +81-6-6474-6431

● **Main products**
Boxboard



Corrugated Packaging / Folding Cartons

Yamashi Shiki Co., Ltd.

● **Location**
Ibaraki-shi, Osaka Prefecture Tel: +81-72-624-1101 Fax: +81-72-621-0954

● **Main products**
Corrugated packaging, fiber containers

Tokai Shiki Co., Ltd.

● **Location**
Nagoya-shi, Aichi Prefecture Tel: +81-52-691-3121 Fax: +81-52-692-7521

● **Main products**
Corrugated packaging

Settsu Carton Co., Ltd.

● **Location**
Itami-shi Hyogo Prefecture Tel: +81-72-784-6001 Fax: +81-72-784-6688

● **Main products**
Corrugated packaging

Hinode Shiki Kogyo Co., Ltd.

● **Location**
Hioki-shi, Kagoshima Prefecture Tel: +81-99-273-9100 Fax: +81-99-273-9112

● **Main products**
Corrugated packaging, decorative folding cartons

Asahi Danboru Co., Ltd.
 Asahi Shiko Co., Ltd.
 Awaji Shiko Co., Ltd.
 Daimaru Itagami Kako Co., Ltd.
 Edogawa Danboru Co., Ltd.
 Engei Shizai Center Co., Ltd.
 Fuji-Hoso Shiki Co., Ltd.
 Hakata Danboru Co., Ltd.
 Hirooka Shiki Co., Ltd.
 Hokkoku Hoso Kizai Co., Ltd.
 Hokuriku Shiki Corporation
 Ihara Shiki Co., Ltd.
 Kato Danboru Co., Ltd.
 Kendan Co., Ltd.
 Kofu Daiichi-Jitugyo Co., Ltd.
 Kowa Sangyo Co., Ltd.
 Kyoei Danboru Co., Ltd.
 Kyowa Shigyo Co., Ltd.
 Kyushu Carton Co., Ltd.
 Matai Shiko Co., Ltd.

Miyazawa Corporation
 Nichidan Co., Ltd.
 Nitto Shiki Kogyo Co., Ltd.
 Otsu Seikan Co., Ltd.
 Rengo Riverwood Packaging, Ltd.
 Sakaiminato Gyokan Co., Ltd.
 Sakai Shoten Co., Ltd.
 Sanko Co., Ltd.
 Sankyo Danboru Co., Ltd.
 Shinwa Shiki Co., Ltd.
 Tachikawa Danboru Kogyo Co., Ltd.
 Taiyo Industry Co., Ltd.
 Taiyo Shigyo Co., Ltd.
 Tohoku Asahi Danboru Co., Ltd.
 Tohoku Carton Co., Ltd.
 Tohoku Kogyo Co., Ltd.
 Tohoku Shiki Co., Ltd.
 Toyotsu New Pack Co., Ltd.
 Yamatoya Co., Ltd.
 Yoshikawa Shigyo Co., Ltd.



Flexible Packaging

Howa Sangyo Co., Ltd.

● **Location**
Funabashi-shi, Chiba Prefecture Tel: +81-47-456-5011 Fax: +81-47-456-5080

● **Main products**
Flexible packaging made from plastic films and paper, etc.

Heavy Duty Packaging

Nihon Matai Co., Ltd.

● **Location**
Taito-ku, Tokyo Tel: +81-3-3843-2111 Fax: +81-3-3843-1624

● **Main products**
Highly functional resin products, containers including synthetic resin bags, heavy duty packaging

Sun-Tox Co., Ltd.

Tri-Wall Japan Co., Ltd.

● **Location**
Minato-ku, Tokyo Tel: +81-3-6433-0755 Fax: +81-3-6433-0796

● **Main products**
Heavy duty corrugated packaging

Other

Rengo Logistics Co., Ltd.

● **Location**
Nishiyodogawa-ku, Osaka Tel: +81-50-3381-0150 Fax: +81-6-6473-0447

● **Main services**
General truck transport, warehousing, insurance, real estate

Rengo Nonwoven Products Co., Ltd.

● **Location**
Soja-shi, Okayama Prefecture Tel: +81-866-93-9481 Fax: +81-866-93-9672

● **Main products**
Nonwovens

Biotech Co., Ltd.
 Green Omoto Co., Ltd.
 Green Recycle Co., Ltd.
 Ishikawa Seisakusho, Ltd.
 RE Omoto Co., Ltd.

Rengo Paper Business Co., Ltd.
 Sanyo Jidosha Unso Co., Ltd.
 WiLLife K.K.
 Yamada Kikai Kogyo Co., Ltd.



Contributions to Development in Asia by Group Enterprises Overseas

Rengo Group Companies Overseas

As our customers' production locations are expanding throughout Asia, requirements are also expanding for local availability of high quality corrugated materials. Rengo's response to these overseas requirements has been to expand our packaging solutions network overseas in a similar way to how we have expanded our network in Japan. Leveraging our time-tested, first class packaging technology, we are working to meet our customers' requirements overseas while contributing to economic development and packaging in Asia.



Paperboard

China

- Zhongshan Rengo Hung Hing Paper Manufacturing Co., Ltd.

Vietnam

- Vina Kraft Paper Co., Ltd.

Corrugated packaging / Folding cartons

China

- Dalian Rengo Packaging Co., Ltd.
- Dalian Guoli Packaging Co., Ltd.
- Tianjin Rengo Packaging Co., Ltd.
- Qingdao Rengo Packaging Co., Ltd.
- Wuxi Rengo Packaging Co., Ltd.
- Shanghai Rengo Packaging Co., Ltd.
- Guangdong Rengo Packaging Co., Ltd.
- Hung Hing Printing Group Limited



- Hong Kong Head Office
- Shenzhen Manufacturing Facility
- Heshan Manufacturing Facility
- Wuxi Manufacturing Facility
- Zhongshan Manufacturing Facility

Thailand

- Thai Containers Group Co., Ltd.



- Navanakorn Plant
- Samutprakarn Plant
- Ratchaburi Plant
- Prachinburi Plant
- Chonburi Plant
- Patumthani Plant
- Songkhla Plant
- Saraburi Plant
- Kamphaengphet Plant

- Thai Containers Rayong Co., Ltd.
- Thai Containers Khonkaen Co., Ltd.
- Tawana Container Co., Ltd.
- Dyna Packs Co., Ltd.
- Orient Containers Co., Ltd.
- D-In Pack Co., Ltd.

Singapore

- TCG Rengo (S) Ltd.

Malaysia

- Rengo Packaging Malaysia Sdn. Bhd.

Indonesia

- PT Surya Rengo Containers



- Head Office/ Jakarta Factory
- Karawang Factory
- Surabaya Factory
- Semarang Factory
- PT Indoris Printingdo
- PT Primacorr Mandiri

Vietnam

- Settsu Carton Vietnam Corporation
- New Asia Industries Co., Ltd.
- Alcamax Packaging (Vietnam) Co., Ltd.
- AP Packaging (Hanoi) Co., Ltd.

U.S.

- Rengo Packaging, Inc.

Flexible packaging

China

- Jiangsu Zhongjin Matai Medicinal Packaging Co., Ltd.
- Sichuan Zhongjin Medicinal Packaging Co., Ltd.



Thailand

- TC Flexible Packaging Co., Ltd.
- Prepack Thailand Co., Ltd.
- Head Office / Sinsakhon Factory
- Samutsongkram Factory

Vietnam

- Tin Thanh Packing Joint Stock Company (BATICO)

Heavy duty packaging

China

- Tri-Wall Limited
- Tri-Wall Packaging (Jiangsu) Co., Ltd.
- Tri-Wall Packaging (Fuzhou) Co., Ltd.
- Shanghai Shengyuan Packaging Co., Ltd.

Thailand

- Tri-Wall Packaging (Thai) Ltd.
- Thai Marsol Co., Ltd.
- Prepack Thailand Co., Ltd.
- Rayong Factory

Indonesia

- PT Marsol Abadi Indonesia
- PT Taiyo Marsol Indonesia

Vietnam

- Matai (Vietnam) Co., Ltd.

U.K.

- Tri-Wall Europe Limited

Other

China

- Rengo Co., Ltd.
- Shanghai Packaging Technical Center
- Howa (Shanghai) Co., Ltd.
- Shanghai Matai Trading Co., Ltd.;
- Lianyungang Benyi Chemicals Co., Ltd.
- Dalian Marsol Trading Co., Ltd.;
- Yantai Marsol Co., Ltd.

Taipei

- Howa Taiwan Co., Ltd.

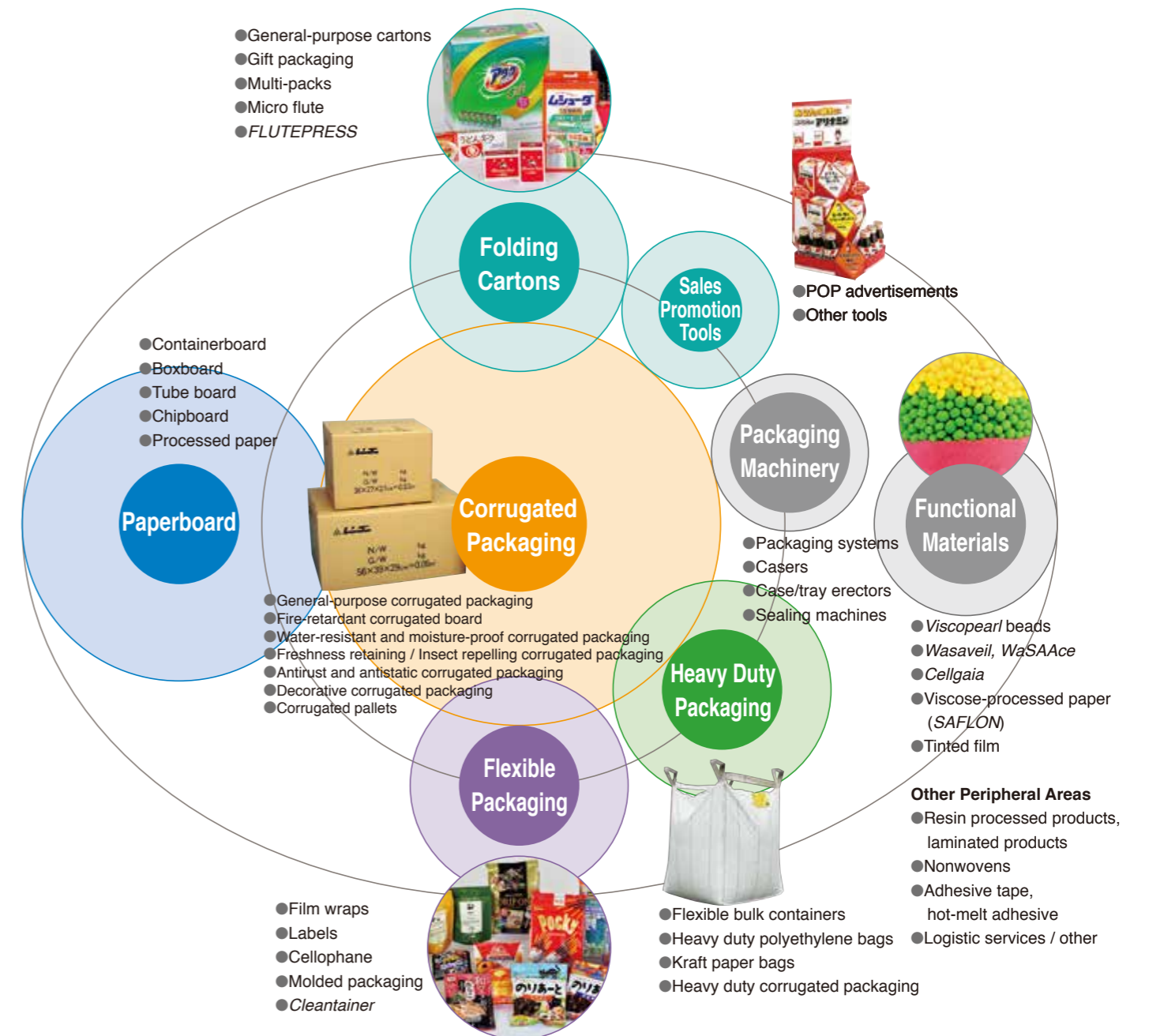
Thailand

- Pal Tech (ASIA) Co., Ltd.
- Yamoto-Shiki (Thailand) Co., Ltd.



A Diverse Product Lineup to Meet Every Packaging Need

Corrugated materials are an important part of daily life, given their ability to safely protect and attractively present the products they contain, as well as their intrinsic functionality and suitability for recycling. Rengo, always a leader in the history of corrugated packaging in Japan, has created an integrated manufacturing system for a range of materials from paperboard to corrugated packaging. This system has enabled us to develop our business according to our customers' requirements, as well as as facilitated a wide-ranging lineup of products. All of the products we handle, starting with corrugated materials and extending to paperboard, folding cartons, flexible packaging, heavy duty packaging, packaging machinery and functional materials, represent Rengo solutions to customer requirements. Within them can be found a broad spectrum of knowledge and technology based on nearly a century of experience.



From containerboard to boxboard, tube board, chipboard, and processed paper Paperboard

In order to supply user-oriented products, we are expanding our business toward the area of paper manufacturing. As a manufacturer of top-class paperboard, we are engaged in the production and sale of a wide range of products covering everything from containerboard such as linerboard and corrugating medium, to boxboard and tube board, chipboard, and processed paper.



●Types of paperboard

●Processed paper

From water-resistant, freshness retaining, and antirust materials to decorative printing Corrugated Packaging

In addition to our general-purpose corrugated packaging, which retains freshness and excels at water and rust resistance, we also offer corrugated packaging for a wide range of special uses, from functional corrugated packaging to decorative printing to enhance sales of the customer's product. All of our corrugated packaging is recyclable.



Functional Corrugated Packaging

Water-resistant and moisture-proof corrugated packaging
 ● **RENCOAT** (low to medium water resistance), **HIGH RENCOAT** (high water resistance), and **ULTRA RENCOAT** (super water resistance and high moisture prevention)

Water-resistant and moisture-proof corrugated packaging that combines a high level of resistance to water, comparable to wax dipped corrugated packaging, and a high level of recyclability.

Cold storage box

● **RECYCOOL** (cold storage / freshness retention)
 Corrugated packaging with a specially coated bottom liner for cool insulation, ideal for the refrigerated transport of items such as fruit and vegetables, processed marine and meat products, and alcoholic beverages.



● **HIGH NEW RENCOAT**

● **RECYCOOL**

Fire-retardant corrugated board

● **RAFEP**
 Corrugated board that cannot be easily ignited, and ensures flames do not spread.



● **RAFEP**

Antirust corrugated packaging

● **GASTORD, SAVINDE**
 Corrugated packaging with special coating to prevent rust on metallic surfaces. Ideal for inhibiting rust formation on electronic components, silverware, and other metallic items.



● **GASTORD**

Moisture-proof corrugated packaging and freshness retaining agent to maintain the freshness of vegetables

● **Damp-proof** (moisture prevention / freshness retention)
 Specially coated linerboard ideal for packaging of fruit and vegetables, as it suppresses both "product breathing" and evaporation.

● **Greenpack** (freshness retention)

Ethylene elimination and gas composition control help to ensure that fruit and vegetables remain fresh.

● **COSREN** (low friction corrugated packaging)

Corrugated packaging with reduced frictional resistance of surfaces that reduces film wrap pinholes and the rubbing of paper labels caused by vibration during transportation.



● **Damp-proof**

● **COSREN**

Conductive corrugated packaging

● **AS Black**
 This conductive corrugated packaging is ideal for protecting electronic components from potential damage by electrostatic discharge.



● **AS Black**

Insect-resistant corrugated packaging

● **BUGLESS**
 A special mixture of ink and varnish coating on corrugated boards repels insects, discouraging them from entering the box.

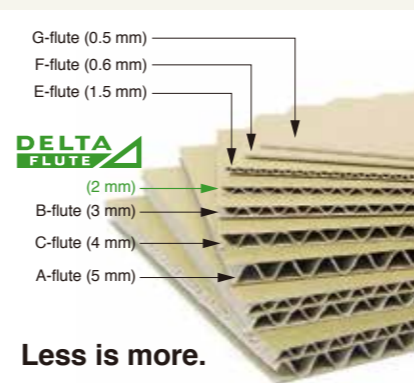


● **BUGLESS**

Delta Flute Corrugated Board

Delta Flute, an original Rengo product, is a brand new corrugated board that has never existed. Based on the concept of "Less is more," this new GPI Rengo innovation in corrugated board creates great value with few resources, reduces impact on the environment and is both more lightweight and more functional.

- Features
- 1 Offers greater transportation and storage efficiency than B-flute, accomplishing the further optimization and streamlining of packaging.
 - 2 CO₂ emissions are reduced and impact on the environment is mitigated through further reduction of corrugated board weight.
 - 3 *Delta Flute* has greater flat crush strength than B-flute. It makes printing possible that is sharper and more beautiful.
 - 4 Because *Delta Flute* is stronger than E-flute, it can be used as outer corrugated packaging with the functions of inner boxes.



Decorative Corrugated Packaging

- **CORFLEX**
- **RENPRINT-GRAVIAN**
- **UNIMARKY**



● **CORFLEX**

For Distribution and Shipping

- **RECO Pallets**
- **Slip Guards**
- **Sheet Pallets**



● **RECO Pallets**

Various Types of Packaging

High Value Package



● **High Dispo**

● **Stacked Otor 8**

The High Value Package is a corrugated outer packaging for a new era that creates high value at every stage, from packaging all the way to storage, transportation, and retail spaces. Made by using dedicated machinery to apply blank sheet to a special form known as a mandrel, the resulting increase in corner surfaces not only has advantages in sales promotion, it also has superior environmental performance and realizes cost savings through its reduction in used sheet material.



Corrugated cushioning materials



● **Zigzag cut cushion**



● **Compact design side/back cushion**

Corrugated packaging for fruit and vegetables



● **Suspended trays - to protect strawberries from impact**



● **RakuPPA! - easy-to-assemble trays**

RSDP Retail Mate® Series

Packaging with a new concept, developed from a retailer's point of view

Until now, conventional corrugated packaging has been designed with a focus on "protecting" and "transporting" their contents. The *Retail Mate* series is a corrugated packaging series with a new concept developed from a retailer's point of view that addresses issues in retail outlets, pursuing ease of opening, display performance, and sales promotion. As well as achieving increased efficiency in backyard operations and in-store sales promotion through stand-out displays, this series also plays a big role in improving efficiency of product sorting in warehouses. A range of packaging options are available to suit different products' specifications, characteristics, and sales approaches.



● **Rengo Smart Display Packaging (RSDP)**



Bolster sales promotion Folding Cartons

We provide a wide array of folding cartons which enhance marketing efforts by presenting products such as confectionaries, foods, beverages, and sundries in an attractive way. Our service covers everything from planning and designing to manufacturing.

●**General-purpose cartons and gift packaging** We offer general-purpose cartons for individual and inner boxes, as well as gift packaging.

●**POP displays** Eye-catching POP displays that are tailored to the sales location and highlight the product's special characteristics assist sales promotions at stores.

●**Multi-packs** Used to package together multiple units of a product, such as cans or glass bottles. In addition to being ideal for sales of multiple product units packed together, multi-packs are easy to handle and offer display benefits through attractive printing. *CAP-IT* is the new face of PET bottle multipacks.



●General-purpose cartons



●POP display



●Multi-packs



●CAP-IT multi-packs

Beautifully wrapped; superior protection Flexible Packaging

We offer a lineup of flexible packaging, including film wraps, cellophane, and molded packaging, which covers items attractively and offers outstanding protection.

●**Film wraps and labels** Centered around Howa Sangyo Co., Ltd., we offer various types of flexible packaging and a wide range of labels and stretch film perfect for PET and glass bottles.

●**Cellophane** An old standard, this transparent wrapping is a cellulose film manufactured from wood pulp. Cellophane is readily biodegradable and is friendly to the environment, emitting no noxious gases even when burned. It remains an ideal wrapping for food items and pharmaceuticals.

●**Molded packaging** Can be used for individual compartments for trays, cups, and gift sets; available in a variety of different materials.

●**Cleantainer bag-in-box** Strong, protective "bag-in-box" containers consist of an inner plastic bag with a corrugated outer box. Select from various materials and configurations to suit the contents and usage conditions. We offer a full package processing system, including filling machines.



●Film wraps



●Labels



●Cleantainer

Packaging line has become automated and energy efficient Packaging Machinery

In addition to packaging, Rengo offers systems that make the packaging line more efficient.

- Packaging systems
- Casers
- Case/tray erectors
- Sealing machines
- Ink-jet printers
- Packing machines



●Gemini Packaging System

Any height you wish. A revolution in mail-order packaging.

- Gemini Packaging System
- I-Pack system
- e-Cube system
- Ultipack system

Supporting wide array of industries Heavy Duty Packaging

With a diverse product lineup, we answer all needs in areas from agriculture to food products and industrial raw materials.

●**Flexible bulk containers** Our highly functional, high quality, clean flexible bulk containers are produced by Nihon Matai, a Rengo Group company with the largest market share in Japan for flexible bulk containers. With manufacturing technology accumulated over many years and complete quality control system, Nihon Matai produces a diverse range of flexible bulk containers in Japan and other Asian countries. We offer order-made ideal products to meet the customer requirements both in Japan and abroad.

●**Heavy duty polyethylene bags** Our heavy duty polyethylene bags, suitable for a wide variety of applications, from fertilizers to chemical products, gardening products, and foodstuffs, are made by Nihon Matai, a pioneer of polyethylene bags in Japan with the largest market share in the industry. Consistently seeking to expand into new fields, we are the first in the industry to have developed gusseted

heavy duty polyethylene bags for synthetic resins, and meet the full range of customer requirements.

●**Kraft paper bags** The multi-ply kraft paper bag (1-ply to 4-ply) is a packaging material ideal for product transportation and storage. Nihon Matai's large kraft paper bags, developed with unique technology accumulated over many years, have earned the trust of customers across many industries for their high quality and added value. By pursuing quality control measures such as insect control and foreign material prevention, we ensure the manufacture of hygienically reliable products.

●**Tri-Wall Pak, Bi-Wall Pak** Heavy duty corrugated packaging refers to triple or double wall corrugated board made from high-strength containerboard. It is used for packaging of products including automobile components, aircraft components, electrical machinery, mechanical equipment, electrical components, and glass products.



●Flexible bulk containers



●Heavy duty polyethylene bags



●Kraft paper bags



●Tri-Wall Pak

Making life more comfortable Functional Materials

As exemplified by the development of cellulose, Rengo constantly works to develop new functional materials utilizing the manufacturing know-how we have built up over many years. By combining packaging types, we are not only achieving higher functionality but are also contributing to making life a little easier.

●**Viscopearl (porous cellulose beads)** These cellulose beads, manufactured from wood pulp, offer excellent porosity and can provide gradual-release action for medicines and other such products. Used for enclosing other functional materials such as aromatic agents and activated carbon.

●**Cellgaia** A tightly integrated mixture of two natural substances: biodegradable cellulose fibers and the mineral zeolite. The material has outstanding properties in terms of absorbing gas, preventing mold, and absorbing/retaining water, and it is used with non-woven fabric in various types of filters and diapers, etc.

●**Viscose-processed Paper (SAFLON)** Processed paper coated with viscose obtainable from high-grade cellulose pulp such as paper and nonwovens. Offers controlled air permeability, excellent resistance to hot water, and remains strong even when damp, making it ideal for packaging such items as insecticides, medicines, and foodstuffs.

●**Wasaveil and WaSAAce (natural anti-bacterial/anti-mold agents)** Employing wasabi and mustard constituents, these products are used as anti-bacterial and anti-mold agents. When processed into a film, in addition to prolonging the shelf life of foods, they can be placed in shoes and bags to prevent mold.

●**Water-absorbent mats and sheets** These "spunbond" materials, produced by thermally binding fibers using heat rollers or hot air, are used as surface materials for sanitary-related products, primarily diapers, as well as in other materials to retain freshness by absorbing the water or dew from fruit and vegetables, fish, and the like.

●**Tinted film** Sunlight-inhibiting film used for automobiles and building windows. Available in dark tint, light tint, and a variety that blocks ultraviolet light.



●Viscopearl



●Cellgaia



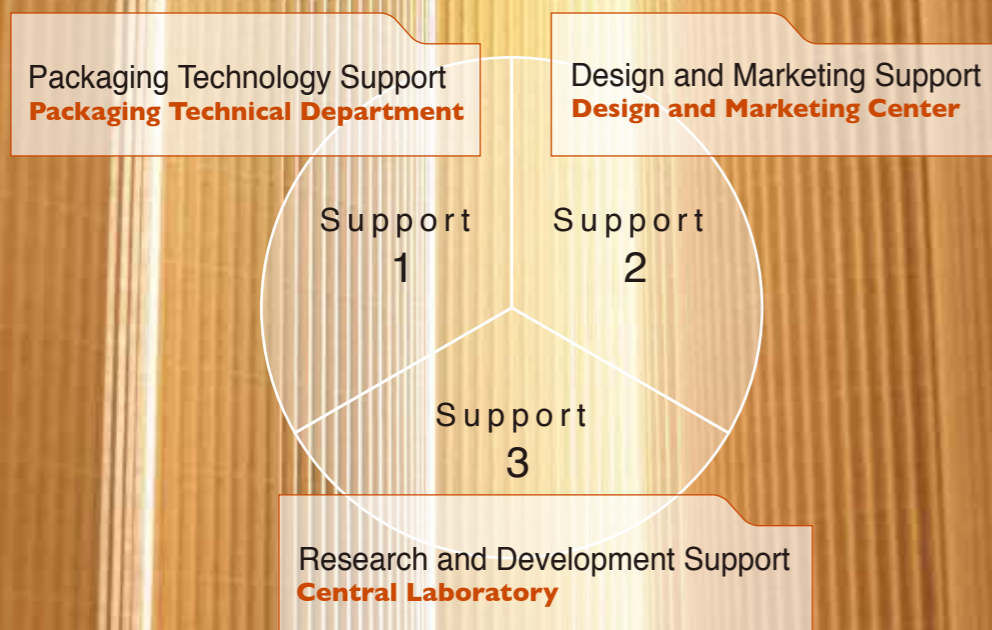
●Viscose-processed Paper (SAFLON)



●Wasaveil

Offering Solutions to Packaging Issues through a 3-pronged Support Framework

Packaging serves multilateral functions. It must protect products, present them attractively, convey information, and not have an adverse impact on people or the environment. Packaging is constantly evolving as a medium that links our customers to the end user. Rengo helps provide solutions to all manner of packaging-related issues from three perspectives: packaging technology, design marketing, and research and development. The wealth of packaging technology we have accumulated forms the base of our "total solutions" to our customers for every scenario in the creation of a product, from product development, packaging and distribution to store sales promotions.



Support 1

Packaging Technology Support Packaging Technical Department

Packaging sales specialists collaborate with the Packaging Technical Department in providing support on packaging technology issues

For a customer's product to arrive safely in the hands of consumers, the right packaging needs to be selected in terms of type, dimensions and material in accordance with product characteristics and distribution conditions such as transportation and storage. Rengo offers in-depth support on packaging technology issues through close coordination between sales personnel, who also hold professional packaging qualifications, and our nationwide network of

packaging engineers with the Packaging Technical Department as its hub. It is our job to submit proposals for safe packaging and we also suggest optimal designs that take into account the ability to recycle, ease-of-use, transportation efficiency and cost performance. Additionally, we implement material and package tests. We are also engaged in the development of new packaging technologies and impart timely information on packaging and distribution.



Features of packaging design

The Packaging Technical Department develops optimal specifications for the customer through a combination of "dimension design," used to determine the best dimensions to match the contents and the shape of the box, "strength design," for determining appropriate material properties for the specific distribution conditions, and "package testing," for checking for faults in the designed packaging.

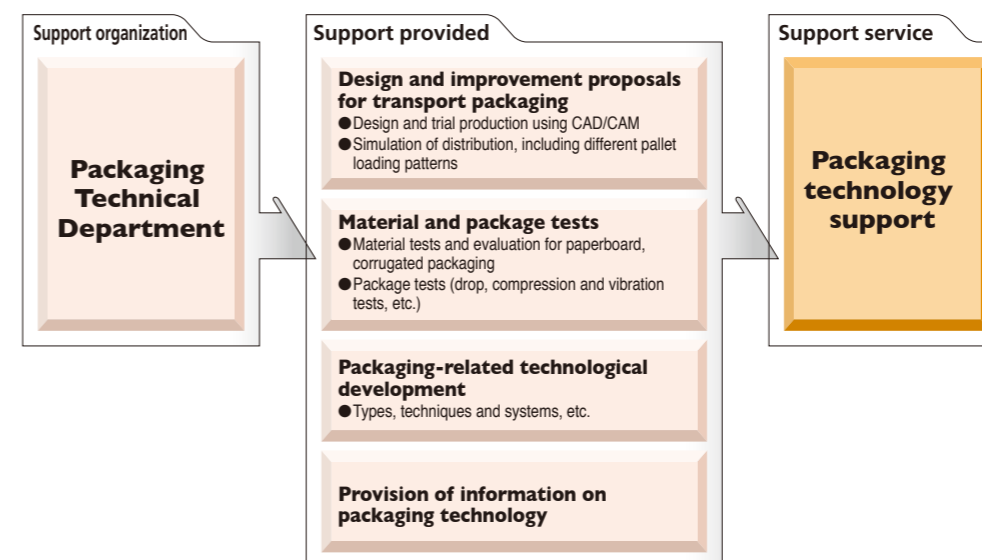


Packaging Technical Center



Facilities for verifying packaging safety and functionality

The department uses controlled atmosphere rooms for recreating temperature and moisture conditions during the distribution process, as well as vibration testing machines and other facilities to scientifically analyze the safety and functionality of packaging.



Proposals for new corrugated cushioning materials

A wealth of know-how relating to corrugated packaging design that has been developed over the years is tapped in order to come up with new cushioning products made from corrugated board as opposed to polystyrene.

Support 2

Design and Marketing Support

Design and Marketing Center

To create “top-selling” products, the Design and Marketing Center provides support ranging from product planning, package design to store sales promotions

Rengo’s Design and Marketing Center (DMC) is a team specializing in the consultation and the proposal of designs as a partner of customers. It provides real time marketing-based consulting and proposals in a wide variety of areas. While they of course handle topics such as product planning and packaging design, they also look beyond outer packaging, such as corrugated boxes and

inner boxes, as simply a medium for transportation, and embrace it for its value in in-store promotions. Through packaging, the DMC makes proposals that cover everything from customers’ product development to sales promotions in order to explore and realize the latent possibilities for better selling products.



Provision of detailed marketing information

Consumption trend forecasts and analyses, consumer demand and acceptability surveys, and studies on package display in stores are examples of the marketing information provided, and on which premises for top-selling products are based.



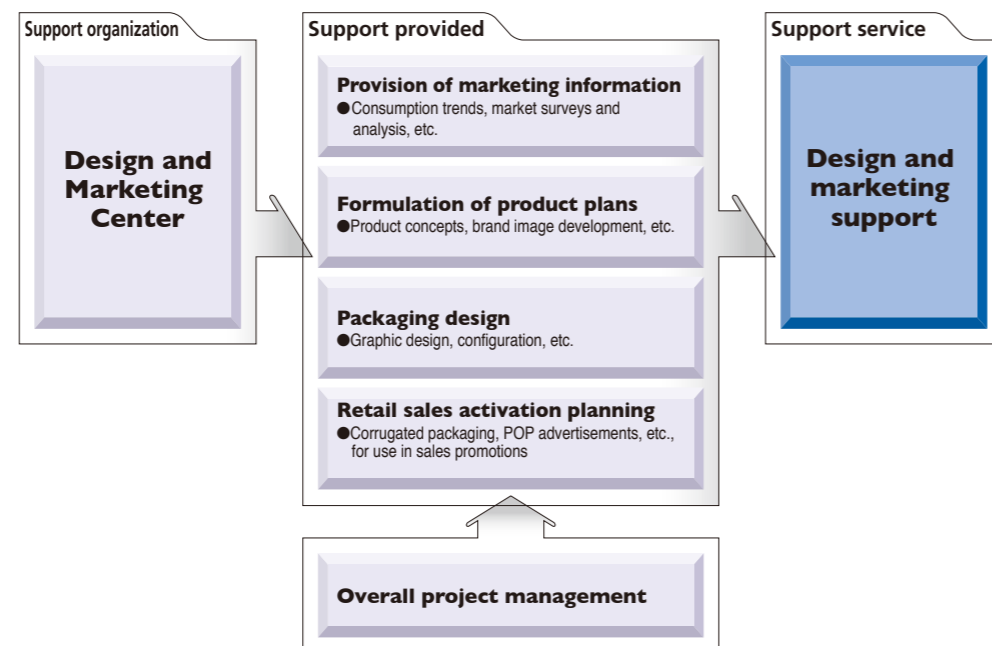
● Tiotamin-D2, a design that won the Bronze Award in the Pentawards 2016

Planning products that lead directly to sales

The Design and Marketing Center utilizes the survey findings in the formulation of product proposals that will capture the interest of consumers. Plans cover user settings, naming, packaging design, store displays as well as brand strategy for ongoing development of the products.



Design and Marketing Center



Support 3

Research and Development Support

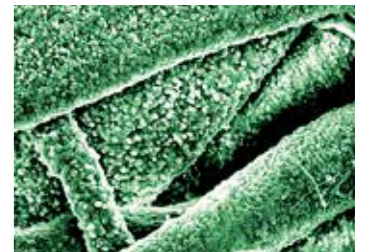
Central Laboratory

As a pioneer in corrugated packaging, Rengo creates new products through research and development of raw materials and manufacturing methods

Rengo was the first company in Japan to become involved in the corrugated business and has been successful in making one innovative product after another. The driving force behind this is Rengo’s research and development structure led by the Central Laboratory. The Central Laboratory carries out research and development in a broad range of fields that deal with Rengo’s main products. The research covers an extremely varied field from the realization of a wide range of packaging functions, such as water resistance,

moisture prevention and freshness retention, to the development of environmentally friendly products and new functional materials such as Cellgaia. The laboratory also undertakes development of energy-saving and resource-efficient manufacturing methods and waste recycling technology, as well as research involving chemical analysis relating to product safety and quality and environmental analysis aimed at protecting the environment.

Central Laboratory’s Cellgaia functional material



● Cellgaia
The adhesion rate of zeolite has been dramatically enhanced compared to earlier methods

Products that use Cellgaia



● GasQ gas adsorption sheets for cultural property protection



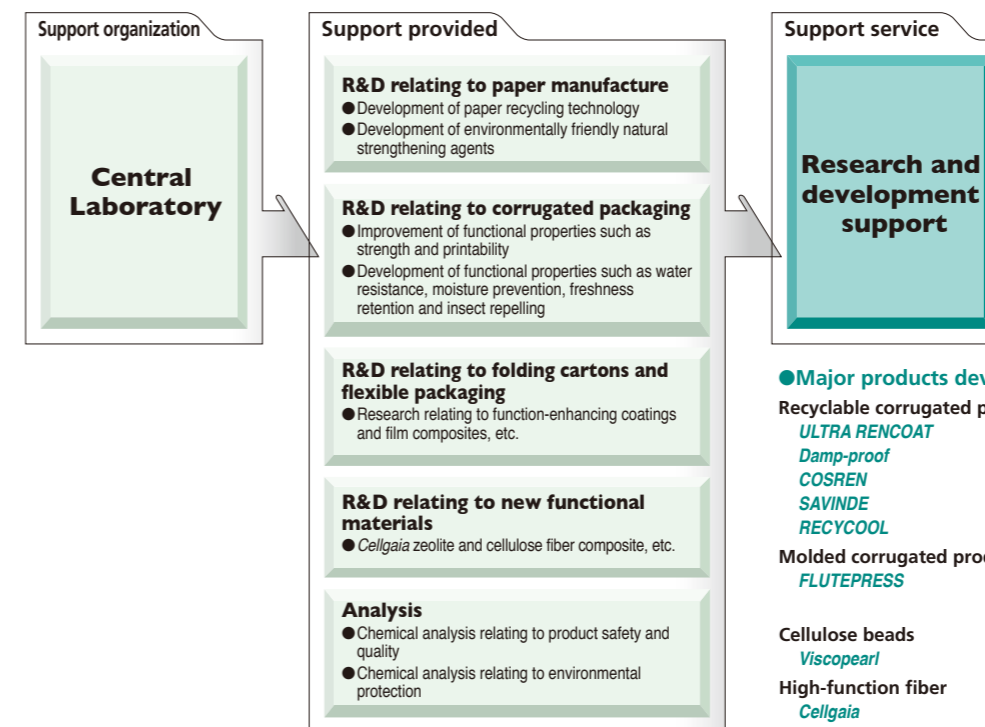
● Full Guard Cloth Pro antibacterial cloth with no odor



● Gaiaphoton, a phosphor that does not contain any rare earth element



Central Laboratory



Major products developed by the Central Laboratory

- Recyclable RENCOAT**
 - ULTRA RENCOAT: Water-resistant corrugated packaging
 - Damp-proof: Moisture-proof corrugated packaging
 - COSREN: Low friction corrugated packaging
 - SAVINDE: Corrugated packaging with antitrust protection
 - RECYCOOL: Corrugated packaging for chill and freshness retention
- Molded corrugated products**
 - FLUTEPRESS: 100% paper molded product made by thermoforming corrugated board
- Cellulose beads**
 - Viscopearl: Porous cellulose beads
- High-function fiber**
 - Cellgaia: Highly functional fiber combining zeolite with cellulose fiber



Less Weight, Less Carbon

Our key phrase in environmental initiatives focused on the future of people and the planet

Having cultivated an entire business around corrugated packaging, which is considered a “role model” for recycling, Rengo maintains a corporate culture of looking after the earth’s resources. We clarified that stance in 1999 by establishing the Environmental Charter and setting up the Environment Committee. The CSR Committee was formed in 2005, putting in place a framework for collective efforts to fulfill our social responsibility beyond just the sphere of environmental protection. ISO 14001 certification, the international standard for environmental management, has already been acquired by all plants. Rengo believes an environmentally considerate style of management is essential for sustainable growth, and intends to achieve this through ongoing, companywide initiatives, performed under the key phrase “Less Weight, Less Carbon,” that include promoting utilization of recovered paper, installing energy-efficient facilities, converting to fuels that emit low levels of CO₂, and recycling waste.

Promotion of CSR Management

Rengo has set up five subcommittees within the CSR Committee through which to promote CSR management. Seeking to fulfill our responsibility to society as a good corporate citizen, the subcommittees will pursue activities targeting all the various stakeholders, including shareholders, customers and suppliers, local communities, and employees.



● Dawn breaks over the Fukushima-Yabuki Plant

Eco-friendly Production Systems—Less Weight, Less Carbon

27% reduction in CO₂ emissions

Rengo is actively introducing energy-efficient facilities and adopting less harmful, clean energy sources, as part of its efforts to reduce CO₂ emissions, which have a significant impact on the global environment. In addition to the installation of gas engines that are highly energy efficient, as well as biomass boilers fueled by manufacturing waste, Rengo is also actively converting other boilers from fuel oil to liquefied natural gas (LNG) or processed natural gas, which have a lower CO₂ conversion coefficient than fuel oil. Furthermore, with the adoption of a large-scale photovoltaic power generation system at one of its plants, a first in the corrugated industry in Japan, and other initiatives, Rengo is most likely to achieve a 27% reduction in CO₂ emissions for 2015 compared to 1990 levels. Going forward, Rengo has set group-wide CO₂ emission reduction goals of 32% by 2020 and 50% by 2050.

Waste reduction

Trimming waste, the most common type of waste generated by corrugated plants, is recycled back into containerboard at Rengo’s paper mills. This contributed to Rengo’s 98.3% recovered paper utilization ratio in 2015. Ragger rope shredding and sorting machines have also been installed. These enable ragger rope to be broken up and separated into iron and plastic scrap, whereas it used to be disposed of as waste in the past.

Prevention of air and water pollution

Water is a vital resource used in the production of paperboard. We have long been looking into ways to utilize water effectively at our paper mills, where water is currently used for ten cycles on average. Water that has been used repetitively like this is then returned to a state below maximum regulation levels before being released into river systems. Air pollution prevention measures include converting to clean energy sources as well as working to reduce levels of SO_x and NO_x through the installation of flue gas desulfurization and denitration systems.



● Photovoltaic power generation system



● Wood chip biomass power plant



● Recovered corrugated board awaiting recycling



Eco-friendly Packages—Less Weight, Less Carbon

Environmentally-friendly C-flute and Delta Flute

The flute height of C-flute and Delta Flute is about 1 mm thinner than conventional corrugated boards. The corrugated board is thinner and therefore improves load efficiency and saves on storage space. Along with the synergetic effects of lightweight Less Caliper & Carbon (LCC) containerboard, it greatly reduces CO₂ emissions. Rengo is working on research, development and design of eco-friendly products based on a policy of “Reduce, Reuse, Recycle.”

Corrugated Recycles symbol

The *Corrugated Recycles* symbol is a mark used worldwide as designated by the International Corrugated Case Association. The Rengo Group is actively involved in promotion and education relating to the symbol and has proposed that recyclable products should display the symbol in order to encourage the proper reusing of used corrugated boxes. As a result of these efforts, domestic recovery rate of corrugated packaging has reached 97.2%* as of 2015.

*Corrugated Packaging Recycling Council



Rengo’s social contribution activities

Support to the Antarctica Expedition

Rengo has been supporting scientific research by the Antarctica Expedition since its inauguration, providing corrugated boxes for packing materials and goods.

Support for the Orchestra Ensemble Kanazawa

The Orchestra Ensemble Kanazawa is constantly breathing new life into Japan’s classical music circles as an orchestra of international standing. Rengo offers ongoing support, for example by lending a Stradivarius violin to the orchestra and sponsoring concerts.

Tonegawa Summer Evening Festival

The Tonegawa Division invites members of the local community to its annual Summer Evening Festival. Nearly 3,000 people turn up each year to take part.



Rengo and Corrugated Board—A Shared History

Teijiro Inoue, founder of Rengo, shaped the history of corrugated board in Japan

The history of Rengo can be said to be synonymous with the history of the development of corrugated board in Japan.

In 1909, Teijiro Inoue, the founder of Rengo, established Sanseisha (predecessor of Rengo), marking the beginning of commercial production of corrugated board in Japan. The origin of the corrugated board business can be traced back to the moment when Inoue, after a long and difficult effort, completed a “layered (dan) corrugated cardboard (boru-gami)” product that he called “danboru.” He thought that the name sounded good and was easy to remember.

The advantages of corrugated board are that it is light, sturdy, and inexpensive, and can be mass-

produced and printed upon. On top of this, it can be folded up and recycled. Demand for corrugated board instantly grew, replacing wooden boxes and other containers, which had been the mainstream for packaging materials used in distribution.

In 1920, Inoue established Rengo Shiki K.K. to begin full-scale production. The name meant a company that produced packaging containers by employing sheets of paper layered on top of one another. In 1923 when the Great Kanto Earthquake struck the Tokyo area, the company overcame the disaster and established an integrated production system covering the production of containerboard, corrugated board and boxes. Indeed, it could be said that this laid the foundation for the development of the corrugated board industry in Japan.

Later, Rengo Shiki began to

construct a modern large plant capable of producing all products—from containerboard to corrugated boxes—in a streamlined, integrated manner, and completed the Yodogawa Mill, then the largest in Asia, in 1936. Meanwhile, from the end of the Taisho period (1912–26) to the beginning of the Showa period (1926–89), the company continually developed and introduced new technologies for production equipment and systems and created corrugated packaging solutions to pack light bulbs, canned foods, bottled beer, ceramics, clothes, and other products.

As a result of these steady efforts, Rengo Shiki’s network of operations sites extended to other East Asian countries, paving the way for today’s Rengo Group, which leads the industry as the largest manufacturer.

Promoting the expansion and modernization of equipment in line with growing postwar demand for corrugated box

After World War II, Rengo Shiki strove to establish a nationwide supply network centered on the Yodogawa Plant, which had suffered relatively slight damage. The company also pushed forward with aggressive business development, including the consolidation of major plants, the opening of local sales

offices, plants and branches, and the establishment of affiliated companies. The company built up a firm position in the industry by meeting growing demand for corrugated packaging as Japan’s exports rose. At the time, Rengo Shiki produced almost all corrugated boxes for marine products, particularly frozen fish, and its corrugated boxes were used for a wider range of products that included ceramics, canned foods, and fruit.

Amidst the rapid growth in postwar demand for corrugated boxes, the company imported and introduced a cutting-edge corrugated board manufacturing machine, called the “corrugator,” into its Tokyo Plant I in 1953, ahead of other industry players. In this way, Rengo Shiki led the way in expanding and modernizing production equipment, while in subsequent years constantly leading the industry in developing corrugated board production technologies, including high-speed corrugators.

In 1961, the company opened the large Tonegawa Mill to increase the production of containerboard to be used at its own corrugated plants. The paper mill, equipped with the latest paper machine and other necessary equipment, doubled in-house containerboard production, and

combined with the establishment of new corrugated plants nationwide it further upgraded the company’s integrated production system.

Establishing its position as a comprehensive packaging company by meeting diversifying packaging needs

In 1970, Rengo Shiki, not satisfied with the modernization of production equipment alone, proposed the “total packaging system,” which laid the foundation for today’s Rengo as a comprehensive packaging company. The aim was to provide the optimal packaging systems by participating in customers’ product planning from the choice of packaging materials and design to the delivery methods.

In 1972, the company changed its name from Rengo in Chinese characters to Rengo in katakana to create a more approachable and likeable image. This name change indicated the company’s intention of expanding into new fields, with corrugated packaging as its core business, in order to establish itself as a comprehensive packaging company.

As needs for decorative packaging grew along with the maturing of the

consumer society, Rengo developed high-precision printing technologies, such as pre-printed CORFLEX corrugated boxes that are made using printed paperboard. Along with the innovative advancement of corrugated board production technologies, specifically the achievement of continuous corrugator operation, these printing technologies opened up a new world for corrugated board and other packaging materials.



Founder Teijiro Inoue



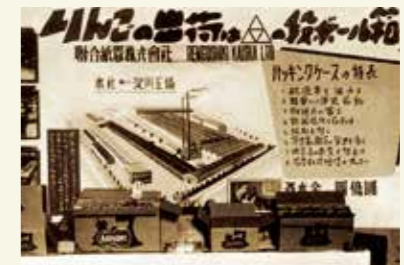
First corrugated board manufacturing machine (replica)



Yodogawa Plant when completed in 1936



Corrugator at the Tokyo Plant I



Advertising in an apple producing region



Corrugated boxes in 1940

“Kintoma”: Management philosophy of the founder Teijiro Inoue

Teijiro Inoue created corrugated board after a great deal of effort as well as trial and error. He is the person who came up with the name “danboru” for corrugated board, which is now a household term. After experiencing many difficulties, he developed his own management philosophy, called “Kintoma.”

Written in hiragana, the term “Kintoma” consists of:

- “kin,” which indicates “money” and “iron will,” and
- “ma,” which means “sincerity” and “timing.”
- “to” is a conjunction that connects “kin” and “ma.”

The Chinese character meaning “ma” can be combined with other Chinese characters to create other words that variously mean “time,” “space” or “human being.”

In short, “Kintoma,” coined by Teijiro, indicates an invariable principle of business. In line with this principle, he tells businesspeople that once they have acquired “iron will,” “money,” “sincerity” and “timing” they should hold onto these qualities for life. He emphasizes that they should grasp business opportunities in a timely manner and value personnel, equipment, capital, and sincerity when managing their business. A modern translation of “Kintoma” would be that “businesspeople, having money and a strong will, must engage in the management of their business with sincerity while placing an emphasis on personnel, time, and equipment.” Since the foundation of Rengo, the “Kintoma” philosophy has been handed down from generation to generation as a guiding principle and code of conduct.



Sanseisha company



Expanding production systems for packaging in a new age

In the 1980s, as Japan entered the full-fledged information age, Rengo led the industry in working to establish computerized systems. Rengo also branched out into peripheral areas to meet the increasingly diversified packaging needs of users. Some of the business areas related to corrugated packaging into which the company made inroads were folding cartons (including offset printing); nonwovens, which were in greater demand because of their use in disposable diapers; processed paper, such as printed paper and aluminum or film laminated paper; flexible packaging and multi-packs closer to consumer packaging; and packaging machinery.

Furthermore, with the economic growth of Southeast Asian countries and China, Rengo expanded into overseas markets earlier than anyone else in the paper and packaging industries. Starting in 1990 with the opening of a joint-venture corrugated plant in Malaysia, the company developed its business in Singapore, Thailand,

Indonesia, China, Vietnam, and the United States, and now boasts an unrivaled network.

In line with the expansion of its business domains and the discovery of larger markets overseas, the company established the Central Laboratory and the Packaging Technical Center in 1990 to improve its research and development structure. At the same time, Rengo acquired Fukui Chemical Industry, a paperboard manufacturer in 1991, and relocated old plants, including the Osaka (currently located in Sanda) plant, installing the latest machinery at that time. In this way, Rengo steadily reorganized and upgraded its production structure.

Bolstering the integrated production system through acquisition of Settsu

In 1999, Rengo acquired Settsu Corporation, a major paperboard manufacturer. This helped Rengo establish itself as an integrated manufacturer of both paperboard and corrugated board in both name and substance.

In acquiring Settsu, the company consolidated the paper machines to establish a new production structure that suited the level of demand, spun off Settsu's corrugated business unit as Settsu Carton Corporation, and reorganized other group companies engaged in the corrugated business, leading an industry-wide structural reform.

These steps taken by Rengo greatly helped reform the industry in all three areas—recovered paper, paperboard, and corrugated packaging—and significantly improve its status.

“General Packaging Industry (GPI)” Rengo

In 2009, the year of Rengo's 100th anniversary, the Rengo Group added as a subsidiary Nihon Matai Co., Ltd, a heavy duty packaging and synthetic resin product manufacturer, and in 2013, added Marsol Holdings Co., Ltd. (merged with Nihon Matai), complementing its list of existing products—paperboard, corrugated packaging, folding cartons, and flexible packaging, with heavy duty packaging. This addition further enhanced Rengo's structure, making it capable of meeting all its customers' packaging needs.

The Rengo Group now defines itself as a “General Packaging Industry” that creates new value in packaging in a wider range of fields and actively proposes solutions to fulfill all the packaging needs of various industries through continual changes in thinking and innovation. With our eyes on further enhancement of our overseas operations in the light of advancing globalization of the economy and society, Rengo will, over the next 100 years, continually commit to being active and taking on new challenges, both in Japan and worldwide.



Corru-Air Duct, an air-conditioning duct made of corrugated board



No. 7 paper machine at Yashio Mill

Rengo and corrugated packaging

- 1909** *World War I* Teijiro Inoue made up his mind to become an independent self-employed businessman (and later made the day of his decision the company's Foundation Day)
Establishment of various new Day
industrial facilities Established Sanseisha in Shinagawa, Tokyo, setting up Japan's first corrugated board business
Coining of the Japanese term for corrugated board, "danboru" which is still used today
- 1920** *Great Kanto Earthquake* Five companies merged to form Rengo Shiki K.K., capitalized at ¥2 million
Acquired Nippon Seishi and renamed it the Chifune Plant
Taisho Democracy The head office, Tokyo Plant and other facilities were destroyed by fire after the earthquake, and the head office was relocated to Osaka
- 1930** *Expansion of exports* Completed construction of the Yodogawa Plant, which produced all products in an integrated manner, from containerboard to corrugated board
"February 26 Incident"
World War II Met a wider range of demand that included home appliances, canned foods, bottled beer, ceramics, and clothing
Established new plants and subsidiaries in China, Taipei and Korea
Formed a capital tie-up with Tokyo Electric (now Toshiba)
- 1940** *Pacific War* Six domestic plants were destroyed by fire during air raids, and overseas assets were lost
Promulgation of the Constitution of Japan Resumed production to meet consumer needs and developed new demand for corrugated board used to package frozen whale meat and canned foods
Outbreak of the Cold War Production to meet military demand
Obtained a listing at stock exchange and increased capital to ¥10 million under wartime economic control
- 1950** *San Francisco Peace Treaty* Corrugated packaging was increasingly used for mandarin oranges, apples, and frozen fish
"We are no longer in the postwar period." Developed new corrugator and printing machine models
Modernized production equipment to meet growing demand
Home electric appliance boom Opened Research Laboratory (later, Central Laboratory)
"Ruten" boom as Teijiro Inoue's autobiography was adapted for TV and film
- 1960** *Trade liberalization* Built Tonegawa Mill, as well as new corrugated plants
Tokyo Olympic Games Introduced technology from the United States as the functions of corrugated boxes diversified
Japan attains world's second largest GNP Developed GRAVIAN and other pre-printed corrugated boxes
Technological innovations for production equipment advanced
- 1970** *Japan World Exposition Plan for the remodeling of the Japanese archipelago* Rengo Shiki K.K. renamed Rengo Co., Ltd.
Developed CORFLEX five-color pre-printed corrugated box
Installed No. 4 paper machine at Tonegawa Mill
First Oil Crisis Developed continuous running technology for corrugator operation
Second Oil Crisis Developed and commercialized "Fingerless Single Facer"
Exported Rengo's technologies for producing paperboard and corrugated board
- 1980** *Recession caused by the strong yen* Expanded business to cover nonwovens and other peripheral areas
Opened new office in Singapore for overseas expansion
Prolonged economic boom Established new joint-venture corrugated packaging companies in Malaysia, Singapore, and Thailand
Cold War ends with collapse of the Berlin Wall
- 1990** *End of "bubble economy"* Opened Packaging Technical Center
Multiple recessions Acquired Fukui Chemical Industry, an affiliated company
Great Hanshin-Awaji Earthquake Completed an integrated production management system using computers
Set up new containerboard and corrugated packaging joint venture companies in China, Indonesia, and the Philippines
Creation of the euro currency
Incorporated Howa Sangyo into the Rengo Group to enter the flexible packaging business
"Lost Decade" and zero interest policy Acquired Settsu to reinforce the integrated paper and corrugated board production system
- 2000** *"No-holds-barred structural reforms"* Made Marusan Paper Mfg. Co., Ltd. a group affiliate
Commenced reforms in the paperboard and corrugated board industries
Terrorist attacks on the United States Introduced C-flute corrugated board
Bolstered energy conservation equipment, including biomass incineration power plant
Massive tsunami off Sumatra All paper mills and corrugated plants acquired ISO 14001 environmental management certification
Beijing 2008 Olympics Installed a photovoltaic power generation system at the Kyoto Plant
Steep rise in the prices of crude oil and other resources Shin-Kyoto Plant commenced integrated production of corrugated board/boxes and folding cartons after merger of the Kyoto and Katsura plants
Global financial crisis Rengo's 100th anniversary
Global recession Made Nihon Matai Co., Ltd. a group affiliate
- 2010** *World Expo 2010 Shanghai* New paper mill, a joint venture in Vietnam, begins full-scale operation
Completed construction of the Fukushima-Yabuki Plant that cuts CO₂ emissions by 40% compared to its predecessor
Great East Japan Earthquake
Abenomics Completed construction of the Shin-Sendai Plant in about a year after its predecessor, the Sendai Plant, suffered extensive damage in the Great East Japan Earthquake
Developed Delta Fulle, a new standard for corrugated board
Made Marsol Holdings Co., Ltd. (merged with Nihon Matai) a group affiliate
Completed construction of the Shin-Nagoya Plant—which features one of Japan's largest seismically isolated automated warehouses—in Kasugai-shi, Aichi Prefecture
Completed PM8 for linerboard production at Marusan Paper Mfg.
Made Tri-Wall Holdings Limited a group affiliate

Corporate Profile

Company Name	Rengo Co., Ltd.
Head Office	Nakanoshima Central Tower, 2-2-7 Nakanoshima, Kita-ku, Osaka, Japan 530-0005 Tel: +81-6-6223-2371
Tokyo Head Office	Shinagawa Season Terrace, 1-2-70 Konan, Minato-ku, Tokyo, Japan 108-0075 Tel: +81-3-6716-7300
Website	http://www.rengo.co.jp/english/index.html
Founded	April 12, 1909
Incorporated	May 2, 1920
Business Scope	<ol style="list-style-type: none">1. Manufacturing and sales of corrugated board, corrugated boxes, folding cartons and other paper products2. Manufacturing and sales of paperboard (containerboard, boxboard and tube board, etc.)3. Manufacturing and sales of flexible packaging and cellophane4. Manufacturing and sales of heavy duty packaging (heavy duty polyethylene bags, kraft paper bags and container bags, etc.) and highly functional resin products5. Sales of packaging-related machinery6. Manufacturing and sales of a variety of functional materials (porous beads made from cellulose, high-performance zeolite pulp, natural antibacterial agent made from wasabi and mustard, etc.)7. Manufacturing and sale of nonwovens, paper converting machinery, and transportation business, etc.

Laboratories / Packaging Technical Departments

Central Laboratory
Central Laboratory (Fukui)
Packaging Technical Department, Tokyo
Packaging Technical Department, Osaka
Shanghai Packaging Technical Center

Mills and Plants / Sales Offices

■Paper mills Tonegawa Division Yashio Mill Kanazu Mill Yodogawa Mill Amagasaki Mill	■Sales offices Hakodate Sales Office Obihiro Sales Office Kitami Sales Office Asahikawa Sales Office Kushiro Sales Office Hachinohe Sales Office Akita Sales Office Yamagata Sales Office Morioka Sales Office Mito Sales Office Kofu Sales Office Matsumoto Sales Office Suzuka Sales Office Kanazawa Sales Office Tottori Sales Office Sanin Sales Office Higashi-Shikoku Sales Office Kochi Sales Office Nagasaki Sales Office Kumamoto Sales Office Miyazaki Sales Office Oita Sales Office Kokura Sales Office
■Corrugated plants Eniwa Plant Asahikawa Plant Aomori Plant Shin-Sendai Plant Fukushima-Yabuki Plant Oyama Plant Maebashi Plant Tokyo Plant Chiba Plant Shonan Plant Niigata Plant Nagano Plant Matsumoto Sub-Plant Shimizu Plant Toyohashi Plant Shin-Nagoya Plant Fukui Plant Shiga Plant Shin-Kyoto Division Sanda Plant Wakayama Plant Okayama Plant Hiroshima Plant Matsuyama Plant Hofu Plant Tosu Plant	■Folding carton plants Katsushika Plant Tonegawa Division Shin-Kyoto Division
	■Cellophane plant Takefu Plant

Rengo Group Companies in Japan

●Paperboard: 2 ●Corrugated packaging / Folding cartons: 42 ●Flexible packaging / Heavy duty packaging: 5 ●Other: 19

Rengo Group Companies Overseas

●Asia / Europe / Middle East / U.S.
125 plants and 20 representative offices / sales companies