



# Leading Value Chain with GX (Green Transformation) and DX (Digital Transformation) in China

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# Tri-Wall Group Introduction



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# One World, One Tri-Wall



For over 60 years now, Tri-Wall has been synonymous with heavy-duty, high performance packaging for the automotive, aerospace, military and many other medium and heavy industry sectors worldwide.

The name 'Tri-Wall' came into existence in the early 1950's when Abe Goldstein, a small box maker in New Jersey, USA, invented the manufacturing process for a new, heavy-duty corrugated material he dubbed 'Tri-Wall Pak®'.

Tri-Wall Limited is the Hong Kong parent company of a group of over 100 facilities spanning across China, Japan, Southeast Asia, India, Europe, and North America.



# Tri-Wall Today



With the backing of Japan's largest corrugated container company, Rengo Co. Ltd, the Tri-Wall Group delivers high quality and service-oriented packaging to the global market.

More than 100 locations in  
over 20 countries across Asia,  
Europe, and North America



6,000 + employees



2024 Sales  
HKD 6.3 billion  
≈ USD80 million



# Global Network



Tri-Wall Group Headquarters



Tri-Wall Fabricators & Sales Offices



Corrugating Plant



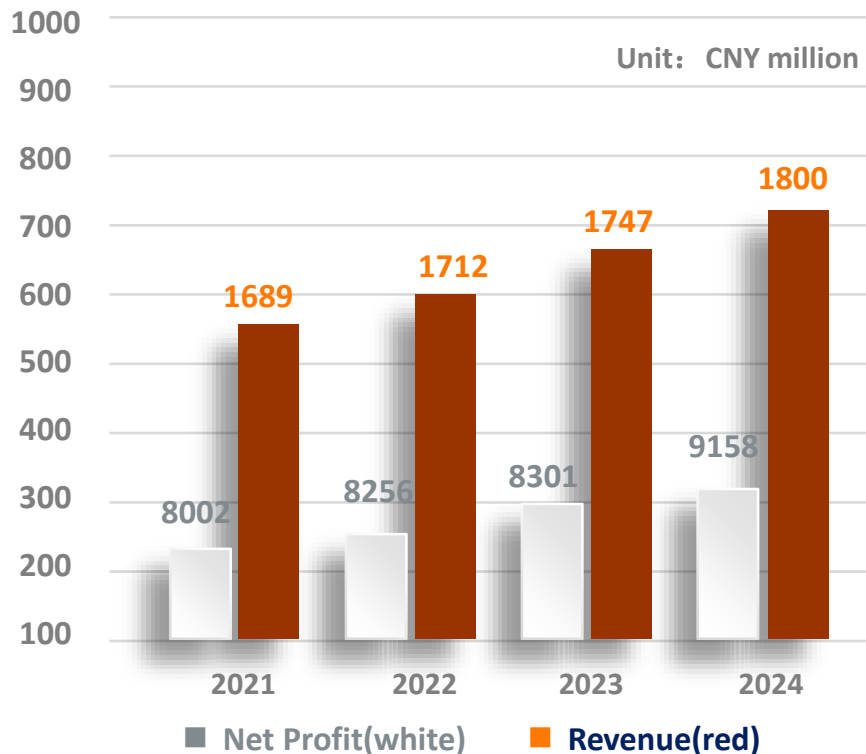
Independent Fabricators



R&D Centres

More than 100 locations in 20+ countries across Asia, Europe and North America.

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### Tri-Wall China Achievement

Since its establishment in 1999, Tri-Wall China has expanded to over 70 subsidiaries in China, including 6 corrugators.

with cumulative revenue: 17 billion RMB

With cumulative net profit: 950 million RMB

# Offerings



- Standard pallet packs
- Bespoke designed die-cut packaging
- Pre-production prototypes for transit trials
- Pre-approved dangerous goods packs
- Dangerous goods packaging testing
- Total supply chain auditing
- Multi-material packaging
- JIT / JIS deliveries
- VMI / Consignment stock





- Environmental Initiatives
  - The application of digital printing technology
- in China corrugated industry



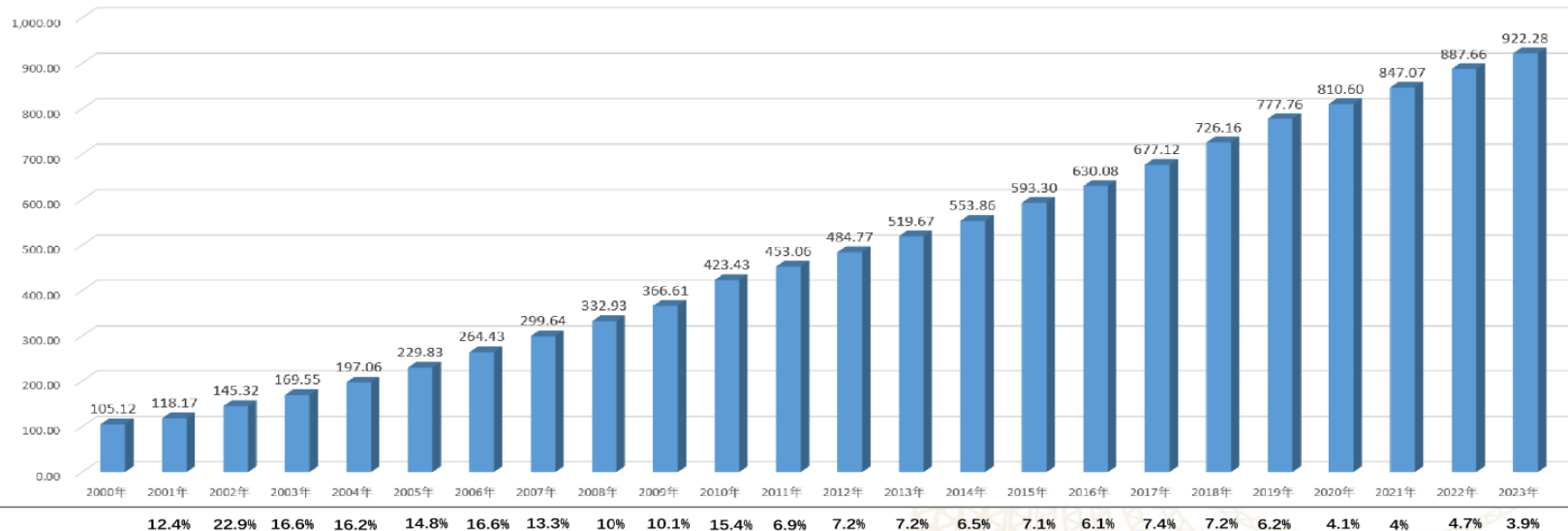


# Current Status of China's Corrugated Packaging Industry



- In 2023, China's corrugated packaging industry reached an annual production output of approximately **92 billion square meters**, with continued expansion in market scale. The sector maintains a solid foundation and demonstrates **healthy, steady growth**.

中国2000年-2023年瓦楞纸板增长量（单位：亿平方米）



# Environmental Initiatives in China's Corrugated Industry



## Green and Low-Carbon Transformation

- Under the guidance of the “Dual Carbon” strategy (carbon peak and carbon neutrality), the Chinese government and the China Packaging Association have placed high importance on green and sustainable development, actively promoting the industry's transition toward environmental protection and low-carbon practices.



# Environmental Initiatives in China's Corrugated Industry



China's corrugated packaging industry has made remarkable progress in environmental protection, major reflected in the following aspects: :

## 1. Continuous Improvement in Wastewater Treatment Facilities

- Increased emphasis on production wastewater management
- Gradual construction and optimization of wastewater treatment systems
- Ensured compliance with discharge standards to minimize environmental impact

## 2. Enhanced Waste Paper Recycling and Baling Efficiency

- Established comprehensive waste paper collection and baling systems
- Improved recyclable utilization of raw materials
- Promoted resource conservation and reuse in line with circular economy principles

## 3. Adoption of Energy-Saving Equipment

- Energy-efficient steam equipment widely used in the industry
- Japan 's Miura boilers(三浦) hold a significant market share in China's corrugated packaging sector



# Environmental Initiatives in China's Corrugated Industry



## 4. Gradual Expansion of Clean Energy Usage

- A growing number of corrugators are installing photovoltaic (PV) power generation systems on factory rooftops.
- Solar energy is utilized for self-consumption or grid-connected power generation, reducing reliance on traditional energy sources and driving green transformation.

## 5. Improvements in Factory Working Environments

- **Southern China:** Benefiting from mild climates and substantial environmental investments, corrugators generally maintain better working conditions.
- **Northern China:** Challenges such as sandstorms, arid climates, and insufficient environmental infrastructure in some areas result in comparatively poorer working environments than in the south.

# Current Application of Digital Printing Technology



## 1. Overview of the Industry Development

The application of digital printing technology in China's corrugated packaging industry continues to expand.

It is not only suitable for personalized customization and small-batch order production but has also extended to medium and large-volume manufacturing, becoming a crucial driving force for the industry's transformation and upgrading.



### *Industry Trends Reflected by Exhibitor Data*

*According to exhibitor statistics from the "2025 China International Corrugated Exhibition," the number of major digital printing equipment exhibitors has reached approximately 40. About half of these companies originally specialized in ceramic industry digital printing and have successfully transitioned into the corrugated packaging market in recent years.*

# Current Application of Digital Printing Technology



## 2. Application Levels and Development Trends

Currently, a significant number of **fabricators** have actively adopted digital printing equipment. In the coming years, as digital printing technology further matures and equipment costs continue to optimize, digital printing is expected to gradually become a **standard configuration** in **corrugators**.

## 3. Technological Advancements

In recent years, digital printing equipment has achieved breakthroughs in:

- Printing speed
- Precision
- Equipment reliability

Concurrently, advancements in **digital ink manufacturing technology** have significantly reduced ink costs, further accelerating the adoption of digital printing in the corrugated packaging industry.



*(Continued on next page)*



# Current Application of Digital Printing Technology



## 4. Current Status of Core Component Suppliers

The core component of corrugated packaging digital printing equipment—**inkjet printheads**—is primarily supplied by leading Japanese brands, including:

- **Kyocera**(京瓷)
- **Epson**(爱普生)
- **Seiko**(日本精工)

## 5. Trend Toward Integrated Production

To enhance overall production efficiency and automation, digital printing equipment is evolving toward **integration with printing production lines**. In the future, **comprehensive solutions combining digital printing with high-speed printing lines** will become the industry's dominant production model, enabling factories to achieve **higher efficiency and greater production flexibility**.



# Thank you