

# Global Industrial Defrosting Equipment Supply, Demand and Key Producers, 2026-2032

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## Abstracts

The global Industrial Defrosting Equipment market size is expected to reach \$ 4266 million by 2032, rising at a market growth of 5.5% CAGR during the forecast period (2026-2032).

Industrial defrosting equipment refers to comprehensive equipment and control solutions used in low-temperature systems such as cold storage, freeze-drying/quick-freezing, food processing, and pharmaceutical cold chain to defrost and de-ice heat exchange components such as evaporators, coils, and fan coolers. The core components include a defrosting method execution unit (electric/hot gas/hot water/steam/pulse, etc.), valve groups and pipelines (hot gas bypass, liquid separation, gas return, drainage), defrosting drainage and antifreeze structures (drip trays, drainage heating belts, water collection systems), and a defrosting control system (timed/temperature control/differential pressure/intelligent adaptive). It is used to restore heat exchange efficiency, reduce air resistance and pressure drop, control temperature and humidity fluctuations within the storage facility, and reduce equipment damage and safety risks caused by icing.

In 2025, the global average price of industrial defrosting equipment was US\$3,560 per unit, with sales of approximately 801,300 units and a global production capacity of 840,000 units. The industry profit margin reached 26%.

Global Regional Market Landscape

Europe: Strong regulations and energy conservation awareness, high requirements for energy efficiency and refrigerant management, more refined defrosting control, and a large proportion of retrofit projects; North America: Dense concentration of 3PL and food processing cold storage, emphasizing operational continuity and food safety,

favoring low-fluctuation and high-reliability solutions; Asia Pacific: Fastest growth, with China and Southeast Asia experiencing rapid expansion driven by fresh food e-commerce, pharmaceutical cold chain, and new cold storage construction. The focus of competition is 'delivery cycle + system integration + local operation and maintenance'; Emerging Markets: Primarily focused on basic cold storage and food processing, with the penetration rate of standardized defrosting solutions gradually increasing as cold chain construction progresses.

### Upstream and Downstream Industry Chain

Upstream: Refrigeration compressors and valves, heat exchangers (evaporators/fan coolers), electric heating elements and heating tapes, sensors (temperature/differential pressure/humidity/door magnets), controllers and software platforms, piping and valve assemblies and insulation materials, drainage and antifreeze structures, installation, commissioning, and maintenance spare parts. Typical downstream customers: Cold storage owners and 3PL cold chain logistics providers, food processing companies (meat/seafood/baked goods/pre-prepared meals), fresh produce distribution centers and supermarket cold chain logistics, pharmaceutical cold chain warehouses and vaccine storage facilities, and cold chain EPC and refrigeration system integrators.

### Real Procurement Logic Changes

Real Pain Points: Evaporator frosting leads to decreased heat exchange efficiency, increased compressor load, and soaring energy consumption; incomplete defrosting causes secondary icing, fan icing, noise, and blade damage; excessive defrosting causes temperature fluctuations and surface condensation on goods; poor drainage leads to frozen drip trays and ice accumulation on the floor, posing safety risks; frequent door openings and high humidity operations cause uncontrolled defrosting frequency, affecting sorting cycle time. Key Focus Shifts: Defrosting efficiency and thoroughness, temperature fluctuation range, energy consumption per unit storage capacity, drainage and antifreeze reliability, valve assembly and control logic stability, impact on goods and operations, and spare parts availability and maintenance response.

### Technological Trends and Innovations

1) Intelligent Adaptive Defrosting: Moving from 'timed' to 'frost quantity/load-triggered' defrosting, combining coil temperature, differential pressure, access control frequency, and humidity models to reduce ineffective defrosting and lower energy consumption; 2) Low Fluctuation and Product Compatibility: Optimized hot/electric heating strategies,

shortened defrosting time, and controlled temperature recovery reduce condensation and quality risks, especially suitable for pharmaceuticals and high-value foods; 3) Drainage and Safety Engineering: Anti-freezing drip trays and drain pipes, anti-slip and flow-guiding designs, and comprehensive defrosting interlocks (fans/valves/alarms) reduce icing accidents and downtime losses.

## Policy and Compliance

Industrial defrosting involves food safety and temperature control compliance (cold chain records, traceability), electrical and pressure system safety, and low-temperature operation safety (anti-slip, anti-icing). For overseas and chain customers, certification documents, change management, installation acceptance, temperature control records, and regular inspections are key to audit pass rates and liability risks. Future Outlook: As competition in the cold chain shifts from 'storage capacity' to 'turnover efficiency and energy consumption,' industrial defrosting equipment is becoming a quantifiable operational asset: it impacts evaporator efficiency, compressor load, storage temperature fluctuations, operational continuity, and accident rates. The winners of the future will often not be the cheapest individual equipment, but rather the supply chain that can deliver a complete package including refrigeration systems, defrosting control strategies, drainage and antifreeze measures, and maintenance diagnostics, enabling customers to achieve 'more stable temperatures, lower energy costs, fewer downtimes, and fewer accidents.'

This report studies the global Industrial Defrosting Equipment production, demand, key manufacturers, and key regions.

This report is a detailed and comprehensive analysis of the world market for Industrial Defrosting Equipment and provides market size (US\$ million) and Year-over-Year (YoY) Growth, considering 2025 as the base year. This report explores demand trends and competition, as well as details the characteristics of Industrial Defrosting Equipment that contribute to its increasing demand across many markets.

## Highlights and key features of the study

Global Industrial Defrosting Equipment total production and demand, 2021-2032, (Units)  
Global Industrial Defrosting Equipment total production value, 2021-2032, (USD Million)  
Global Industrial Defrosting Equipment production by region & country, production, value, CAGR, 2021-2032, (USD Million) & (Units), (based on production site)  
Global Industrial Defrosting Equipment consumption by region & country, CAGR, 2021-2032 & (Units)

U.S. VS China: Industrial Defrosting Equipment domestic production, consumption, key domestic manufacturers and share

Global Industrial Defrosting Equipment production by manufacturer, production, price, value and market share 2021-2026, (USD Million) & (Units)

Global Industrial Defrosting Equipment production by Type, production, value, CAGR, 2021-2032, (USD Million) & (Units)

Global Industrial Defrosting Equipment production by Application, production, value, CAGR, 2021-2032, (USD Million) & (Units)

This report profiles key players in the global Industrial Defrosting Equipment market based on the following parameters - company overview, production, value, price, gross margin, product portfolio, geographical presence, and key developments. Key companies covered as a part of this study include GEA Group, Johnson Controls, Danfoss, Mayekawa, BITZER, LU-VE Group, EVAPCO, Kelvion, Frascold, Star Refrigeration, etc.

This report also provides key insights about market drivers, restraints, opportunities, new product launches or approvals.

Stakeholders would have ease in decision-making through various strategy matrices used in analyzing the World Industrial Defrosting Equipment market

### **Detailed Segmentation:**

Each section contains quantitative market data including market by value (US\$ Millions), volume (production, consumption) & (Units) and average price (US\$/Unit) by manufacturer, by Type, and by Application. Data is given for the years 2021-2032 by year with 2025 as the base year, 2026 as the estimate year, and 2027-2032 as the forecast year.

Global Industrial Defrosting Equipment Market, By Region:

United States

China

Europe

Japan

South Korea

ASEAN

India

Rest of World

#### Global Industrial Defrosting Equipment Market, Segmentation by Type:

Freestanding Industrial Defrosting Equipment

Built in Industrial Defrosting Equipment

#### Global Industrial Defrosting Equipment Market, Segmentation by Compatible Systems:

Freon Refrigeration System Defrosting Equipment

Ammonia Refrigeration System Defrosting Equipment

CO<sub>2</sub> Refrigeration System Defrosting Equipment

Cascade Refrigeration System Defrosting Equipment

#### Global Industrial Defrosting Equipment Market, Segmentation by Defrosting Principle:

Electric Heating Defrosting

Hot Gas (Hot Freon) Defrosting

Hot Water Defrosting

Pulse Airflow Defrosting

Others

## Global Industrial Defrosting Equipment Market, Segmentation by Application:

Food Processing

Supermarkets

Pharmaceutical Cold Chain

Other

## Companies Profiled:

GEA Group

Johnson Controls

Danfoss

Mayekawa

BITZER

LU-VE Group

EVAPCO

Kelvion

Frascold

Star Refrigeration

## Key Questions Answered:

1. How big is the global Industrial Defrosting Equipment market?
2. What is the demand of the global Industrial Defrosting Equipment market?

3. What is the year over year growth of the global Industrial Defrosting Equipment market?
4. What is the production and production value of the global Industrial Defrosting Equipment market?
5. Who are the key producers in the global Industrial Defrosting Equipment market?
6. What are the growth factors driving the market demand?

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