



World Commercial Refrigeration Equipment

Industry Study with Forecasts for **2012 & 2017**

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www.freedoniagroup.com



The Freedonia Group

767 Beta Drive

Cleveland, OH • 44143-2326 • USA

Toll Free US Tel: 800.927.5900 or +1 440.684.9600

Fax: +1 440.646.0484

E-mail: info@freedoniagroup.com

Table of Contents

EXECUTIVE SUMMARY

MARKET ENVIRONMENT

General	4
World Population Outlook	5
World Urbanization Patterns	7
World Economic Outlook	8
Recent Macroeconomic Performance	9
Macroeconomic Outlook	12
Fixed Investment Trends	15
Personal Income & Expenditure Trends	20
World Food & Beverage Manufacturing Outlook	21
Nonresidential Building Expenditures	24
Pricing Patterns	26
Legal & Regulatory Issues	27
Montreal Protocol	28
Kyoto Protocol	30
Technology & Product Innovation	32

OVERVIEW

General	34
Regional Markets	35
Products	39
Reach-In & Walk-In Coolers & Freezers	41
Display Cases	43
Beverage Refrigeration Equipment	45
Ice Machines	47
Parts & Other	49
Production	51
International Trade Flows	52

NORTH AMERICA

Supply & Demand	55
Outlook & Suppliers	57
United States	59
Canada	63
Mexico	68

WESTERN EUROPE

Supply & Demand	74
Outlook & Suppliers	77
Austria	79
Belgium	83
France	87
Germany	91
Italy	96
Netherlands	101
Spain	105
Sweden	110
Switzerland	114
United Kingdom	118
Other Western Europe	122

ASIA/PACIFIC

Supply & Demand	127
Outlook & Suppliers	131
Australia	132
China	136

India	141
Indonesia	146
Japan	151
South Korea	156
Taiwan	161
Thailand	165
Other Asia/Pacific	169

OTHER REGIONS

Latin America	175
Argentina	179
Brazil	182
Other Latin America	187
Eastern Europe	192
Poland	196
Russia	199
Other Eastern Europe	204
Africa/Mideast	208
South Africa	212
Turkey	215
Other Africa/Mideast	220

INDUSTRY STRUCTURE

General	225
Industry Composition	226
Market Share	229
United Technologies	230
Ingersoll-Rand	230
Manitowoc	230
Hoshizaki	231
Other Leaders	231
Mergers/Acquisitions/Industry Restructuring	232
Product Development & Manufacturing	237
Marketing & Distribution	239
Cooperative Agreements	241

COMPANY PROFILES

AHT Cooling Systems	249
Air Products and Chemicals	251
Ali SpA	252
Berjaya Corporation Berhad	257
Bundy Refrigeration	258
Celli SpA	260
Crane Company	261
Daikin Industries	263
Daiwa Industries	266
Dalian Bingshan Group	267
Danfoss A/S	270
Dover Corporation	273
Dunham-Bush Holding Berhad	276
Electrolux AB	279
Emerson Electric	281
FMC Technologies	286
Fomento Economico Mexicano	287
Frigoglass SAIC	288
Fukushima Industries	289
GEA Group	291
Hoshizaki Electric	294
Illinois Tool Works	297
IMI plc	299
Jiangsu Shuangliang Group	308
John Bean Technologies	309
Johnson Controls	310

Lennox International	314
Linde Group	318
Manitowoc Company	320
Metalfrio Solutions	330
Mueller (Paul) Company	332
Nakano Refrigerators	333
Parker-Hannifin Corporation	335
Perlick Corporation	337
Sanden Corporation	338
SANYO Electric	341
SPX Corporation	344
Standex International	346
Tecumseh Products	349
Thermo Fisher Scientific	352
TI Automotive	355
United Technologies	356
Vector Industries	364
Voltas Limited	366
Whirlpool Corporation	368
Yantai Moon Group	370
Zhejiang Lianfeng	372

List of Tables/Charts

EXECUTIVE SUMMARY

1 Summary Table	3
-----------------------	---

MARKET ENVIRONMENT

1 World Population by Region	6
2 World Urban Population by Region	8
3 World Gross Domestic Product by Region	14
4 World Fixed Investment by Region	17
Cht Relationship between per Capita Fixed Investment & per Capita Commercial Refrigeration Equipment Demand, 2007-19	19
5 World per Capita GDP by Region	21
6 World Food & Beverage Manufacturing Value Added by Region	24
7 World Nonresidential Construction Expenditures by Region	25
8 Commercial Refrigeration Equipment Pricing	27

OVERVIEW

1 World Commercial Refrigeration Equipment Demand by Region	37
Cht Commercial Refrigeration Equipment Demand by Region, 2007	38
Cht Additional Commercial Refrigeration Equipment Demand 2007 Vs. 2012	39
2 World Commercial Refrigeration Equipment Demand by Product	41
3 World Reach-in & Walk-in Cooler & Freezer Demand by Region	43
4 World Refrigerated Display Case Demand by Region	45
5 World Beverage Refrigeration Equipment Demand by Region	47

(continued on next page)

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List of Tables/Charts

(continued from previous page)

- 6 World Ice Machine Demand by Region49
- 7 World Parts & Other Refrigeration Equipment Demand by Region50
- 8 World Commercial Refrigeration Equipment Production by Region52
- 9 World Commercial Refrigeration Equipment Net Exports by Region54

NORTH AMERICA

- 1 North America Commercial Refrigeration Equipment Supply & Demand57
- 2 North America Commercial Refrigeration Equipment by Type59
- 3 United States Commercial Refrigeration Equipment Supply & Demand61
- 4 United States Commercial Refrigeration Equipment by Type63
- 5 Canada Commercial Refrigeration Equipment Supply & Demand66
- 6 Canada Commercial Refrigeration Equipment Demand by Type68
- 7 Mexico Commercial Refrigeration Equipment Supply & Demand71
- 8 Mexico Commercial Refrigeration Equipment Demand by Type73

WESTERN EUROPE

- 1 Western Europe Commercial Refrigeration Equipment Supply & Demand77
- 2 Western Europe Commercial Refrigeration Equipment by Type78
- 3 Austria Commercial Refrigeration Equipment Supply & Demand81
- 4 Austria Commercial Refrigeration Equipment Demand by Type82
- 5 Belgium Commercial Refrigeration Equipment Supply & Demand85
- 6 Belgium Commercial Refrigeration Equipment Demand by Type86
- 7 France Commercial Refrigeration Equipment Supply & Demand89
- 8 France Commercial Refrigeration Equipment Demand by Type91
- 9 Germany Commercial Refrigeration Equipment Supply & Demand94
- 10 Germany Commercial Refrigeration Equipment Demand by Type96
- 11 Italy Commercial Refrigeration Equipment Supply & Demand99
- 12 Italy Commercial Refrigeration Equipment Demand by Type101
- 13 Netherlands Commercial Refrigeration Equipment Supply & Demand103
- 14 Netherlands Commercial Refrigeration Equipment Demand by Type105
- 15 Spain Commercial Refrigeration Equipment Supply & Demand108

- 16 Spain Commercial Refrigeration Equipment Demand by Type110
- 17 Sweden Commercial Refrigeration Equipment Supply & Demand112
- 18 Sweden Commercial Refrigeration Equipment Demand by Type113
- 19 Switzerland Commercial Refrigeration Equipment Supply & Demand116
- 20 Switzerland Commercial Refrigeration Equipment Demand by Type117
- 21 United Kingdom Commercial Refrigeration Equipment Supply & Demand120
- 22 United Kingdom Commercial Refrigeration Equipment Demand by Type122
- 23 Other Western Europe Commercial Refrigeration Equipment Supply & Demand124
- 24 Other Western Europe Commercial Refrigeration Equipment Demand by Type & Country126

ASIA/PACIFIC

- 1 Asia/Pacific Commercial Refrigeration Equipment Supply & Demand130
- 2 Asia/Pacific Commercial Refrigeration Equipment Demand by Type132
- 3 Australia Commercial Refrigeration Equipment Supply & Demand134
- 4 Australia Commercial Refrigeration Equipment Demand by Type136
- 5 China Commercial Refrigeration Equipment Supply & Demand139
- 6 China Commercial Refrigeration Equipment Demand by Type141
- 7 India Commercial Refrigeration Equipment Supply & Demand144
- 8 India Commercial Refrigeration Equipment Demand by Type146
- 9 Indonesia Commercial Refrigeration Equipment Supply & Demand149
- 10 Indonesia Commercial Refrigeration Equipment Demand by Type150
- 11 Japan Commercial Refrigeration Equipment Supply & Demand154
- 12 Japan Commercial Refrigeration Equipment Demand by Type156
- 13 South Korea Commercial Refrigeration Equipment Supply & Demand159
- 14 South Korea Commercial Refrigeration Equipment Demand by Type160
- 15 Taiwan Commercial Refrigeration Equipment Supply & Demand163
- 16 Taiwan Commercial Refrigeration Equipment Demand by Type164
- 17 Thailand Commercial Refrigeration Equipment Supply & Demand167
- 18 Thailand Commercial Refrigeration Equipment Demand by Type169
- 19 Other Asia/Pacific Commercial Refrigeration Equipment Supply & Demand172
- 20 Other Asia/Pacific Commercial Refrigeration Equipment Demand by Type & Country174

OTHER REGIONS

- 1 Latin America Commercial Refrigeration Equipment Supply & Demand177
- 2 Latin America Commercial Refrigeration Equipment Demand by Type178
- 3 Argentina Commercial Refrigeration Equipment Supply & Demand181
- 4 Argentina Commercial Refrigeration Equipment Demand by Type182
- 5 Brazil Commercial Refrigeration Equipment Supply & Demand185
- 6 Brazil Commercial Refrigeration Equipment Demand by Type187
- 7 Other Latin America Commercial Refrigeration Equipment Supply & Demand190
- 8 Other Latin America Commercial Refrigeration Equipment Demand by Type191
- 9 Eastern Europe Commercial Refrigeration Equipment Supply & Demand194
- 10 Eastern Europe Commercial Refrigeration Equipment Demand by Type196
- 11 Poland Commercial Refrigeration Equipment Supply & Demand198
- 12 Poland Commercial Refrigeration Equipment Demand by Type199
- 13 Russia Commercial Refrigeration Equipment Supply & Demand202
- 14 Russia Commercial Refrigeration Equipment Demand by Type203
- 15 Other Eastern Europe Commercial Refrigeration Equipment Supply & Demand206
- 16 Other Eastern Europe Commercial Refrigeration Equipment Demand by Type207
- 17 Africa/Mideast Commercial Refrigeration Equipment Supply & Demand210
- 18 Africa/Mideast Commercial Refrigeration Equipment Demand by Type212
- 19 South Africa Commercial Refrigeration Equipment Supply & Demand214
- 20 South Africa Commercial Refrigeration Equipment Demand by Type215
- 21 Turkey Commercial Refrigeration Equipment Supply & Demand218
- 22 Turkey Commercial Refrigeration Equipment Demand by Type220
- 23 Other Africa/Mideast Commercial Refrigeration Equipment Supply & Demand223
- 24 Other Africa/Mideast Commercial Refrigeration Equipment Demand by Type224

INDUSTRY STRUCTURE

- 1 Revenue Data: Selected Commercial Refrigeration Equipment Suppliers, 2007228
- Cht World Commercial Refrigeration Equipment Market Share by Company, 2007229
- 2 Selected Acquisitions & Divestitures.....234
- 3 Selected Cooperative Agreements.....244

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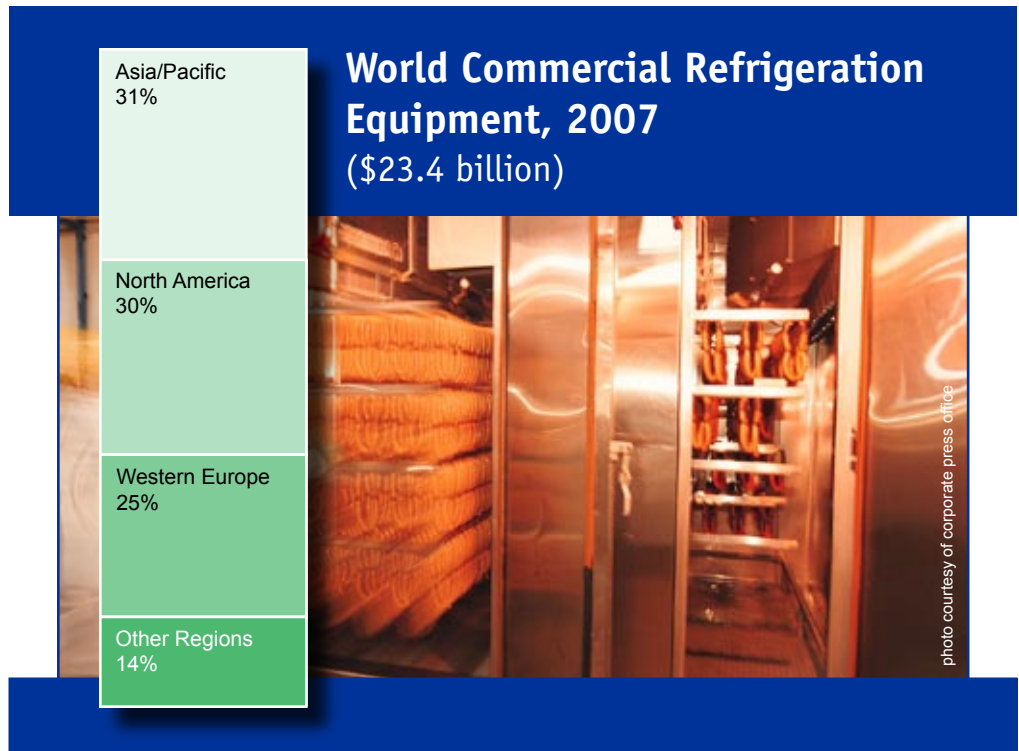
A growing number of food retailers and restaurants -- especially fast food chains -- will contribute to growth, since these outlets utilize a wide range of commercial refrigeration equipment.

Global demand to rise 4.6% yearly through 2012

World demand for commercial refrigeration equipment is projected to rise 4.6 percent per year (including price increases) through 2012 to \$29.3 billion, with developing nations expected to register the strongest gains. A growing number of food retailers and restaurants will contribute to growth. The ongoing expansion of fast food chains will be especially beneficial, since these outlets utilize a wide range of commercial refrigeration equipment.

Reach-in, walk-in coolers to be fastest growing

Reach-in and walk-in coolers and freezers are expected to be the fastest growing product group, due to their widespread use in all of the major markets. These appliances are used by food processors, restaurants and food retailers, and are expected to post solid gains in developing regions. Display cases will benefit from a growing middle class, which will spur gains in the food and beverage retail segment. Growth in demand for ice machines will be due to the increasing number of restaurants globally. Beverage equipment demand will benefit from a growing number of restaurants, especially in the fast food segment, and from continued gains in nonresidential building construction, which will boost demand for refrigerated water coolers.



Strongest opportunities in Latin America, Asia

Strongest opportunities are in Latin America and Asia, where faster population growth and improved standards of living will stimulate demand for commercial refrigeration equipment in markets such as food and beverage distribution, retailing and restaurants. China will record some of the strongest increases, with demand rising nearly ten percent annually through 2012. India will also post strong gains, as the nation improves the efficiency of its food distribution network.

The developed nations of North America, Western Europe, and the Asia/Pacific

region (i.e., Australia, Hong Kong, Japan, New Zealand, Singapore, South Korea) comprise mature markets for commercial refrigeration equipment. The US will remain the largest market in the world, as replacement demand continues to create opportunities. Japan and Western Europe will register below average gains through 2012, although Japan will see improvement over its performance in the 2002-2007 period.

The fastest growth in production will be in industrializing parts of the world. China has been posting the strongest annual output gains, a trend that is expected to continue due both to rising domestic demand and increasing exports.

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Sample Text, Table & Chart

ASIA/PACIFIC

gradual maturing of the Chinese market, but the country will outpace the average rate of increase worldwide. Ongoing improvements in the standard of living and a growing middle class will create present opportunities.

Opportunities will exist in the hotel and motel market, national tourism will boost gains. China has become a major destination for business travelers due to its impressive economic growth, recreational tourism is expected to benefit from the excitement China gained during the 2008 Beijing Olympics.

Shipments of commercial refrigeration equipment from China will increase through 2012 to \$1.5 billion, continuing to outpace the rest of the world, resulting in a growing trade surplus. China's economic growth will be fueled by healthy domestic market conditions and increasing demand in a number of export markets. Foreign multinationals in China and Chinese commercial plants will also help boost domestic manufacturing.

Among the major domestic manufacturers are Dalian Bingshan, Yantai Moon and Zhejiang Lianfeng. Companies that maintain manufacturing activities in China include Ali SpA, Daikin, Danfoss, Dunham-Bush, Emerson Electric, Fukushima, GEA, IMI, Ingersoll-Rand (via Hussmann), John Bean Technologies, Johnson Controls, Manitowoc, Parker-Hannifin, Sanden, SANYO and Tecumseh. In October 2007, Frigoglass SAIC opened a plant in Guangzhou, Guangdong that has an annual production capacity of 120,000 merchandisers. Multinationals often participate in China through the use of joint ventures. For example, Dalian and SANYO have a joint venture which produces refrigerated food retail equipment and biomedical refrigeration equipment.

TABLE VI-5

CHINA COMMERCIAL REFRIGERATION EQUIPMENT SUPPLY & DEMAND (million dollars)

Item	1997	2002	2007	2012	2017
Population (million persons)					
per capita GDP					
Gross Domestic Product (bil 2006\$)					
% GFI					
Gross Fixed Investment (bil 2006\$)					
\$ comm refriger equip/capita					
\$ comm refriger equip/000\$ GDP					
\$ comm refriger equip/000\$ GFI					
Comm Refrigeration Equip Demand					
net exports					
Comm Refrigeration Equip Shipments					

SAMPLE TABLE

SAMPLE TEXT

CHART VIII-1

COMMERCIAL REFRIGERATION EQUIPMENT MARKET SHARE BY COMPANY, 2007 (\$23.4 billion)

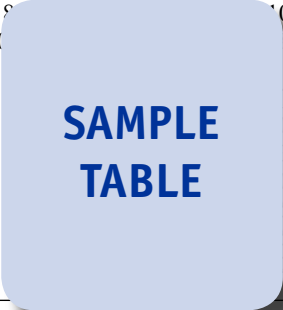


SAMPLE CHART

Sample Profile, Table & Forecast

TABLE VI-6
CHINA COMMERCIAL REFRIGERATION EQUIPMENT DEMAND BY TYPE
 (million dollars)

Item	1997	2002	2007	2012	2017
Gross Fixed Investment (bil 2006\$)					105
\$ comm refrig/000\$ GFI					81
Commercial Refrig Equip Demand					70
Reach-in & Walk-ins					35
Display Cases					35
Beverage Refrigeration Equip					35
Ice Machines					50
Parts					50
Others					25



COMPANY PROFILES

Frigoglass SAIC
 15, A. Metaxa Street
 145 64 Kifisia, Athens
 Greece
 30-210-6
 http://ww

Sales: \$
 Employr
 Key Proc

SAMPLE PROFILE

Frigoglass manufactures commercial refrigeration equipment, packaging materials and other products. The Company operates through four segments: Ice Cold Merchandise (ICM) Operation; Glass Operation; Plastic Operation; and Crowns, PET and Other Operation.

The Company participates in the world commercial refrigeration equipment market via the ICM Operation segment. In 2007, the segment generated sales of \$537 million, including intersegment eliminations, of which Europe represented 82 percent, Africa/Mideast accounted for twelve percent, Asia represented six percent, and other regions accounted for less than one percent. Among the products manufactured by Frigoglass through the ICM Operation segment are refrigerated display merchandisers.

Frigoglass' display merchandisers are employed by the retail beverage industry, and are marketed worldwide under such brand names as FRIGOREX, NORCOOL and COLDWELL. The Company also markets certain merchandisers under the HUSKY brand name in Africa. Examples of the Company's display merchandisers are countertop,

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“Demand for commercial refrigeration equipment in China is projected to grow at a 10.6 percent annual pace through 2012 to \$3.3 billion. Annual gains will slow from the 2002-2007 period, reflecting a moderation in fixed investment spending and the ...”

--Section VI, pg. 139

OTHER STUDIES

World Insulation

This study analyzes the global insulation industry. It presents historical demand data for the years 1997, 2002 and 2007 and forecasts for 2012 and 2017 by insulation material (e.g., foamed plastic, fiberglass, mineral wool), market (construction; industrial, HVAC and OEM), world region (e.g., North America, Asia/Pacific, Western Europe) and major national market. The study considers market environment factors, details industry structure, evaluates company market share and profiles industry players.

#2434 01/2009..... \$5800

World Electric Lighting

This study analyzes the global market for electric lighting. It presents historical demand data (1997, 2002, 2007) and forecasts for 2012 and 2017 by type (e.g., incandescent lamps, fluorescent lamps, HID and other discharge lamps, LEDs), market (construction, manufactured goods), world region (e.g., Asia/Pacific, North America, Western Europe) and major national market. The study also considers market environment factors, details industry structure, evaluates market share and profiles competing manufacturers.

#2442 12/2008..... \$5600

Commercial Refrigeration Equipment

US commercial refrigeration equipment demand will rise 3.9% yearly through 2012, driven in part by the ongoing addition of foodservice operators and food retailers. Foodservice will remain the largest market, while food and beverage distribution grows the fastest. Cryogenic equipment and display cases are among the best opportunities. This study analyzes the \$7.6 billion US commercial refrigeration equipment industry, with forecasts for 2012 and 2017 by market and product. It also details market share and profiles industry players.

#2365 07/2008..... \$4500

World HVAC Equipment

Global demand for HVAC equipment will rise 5.8% annually through 2012. Demand in the Asia/Pacific region will outpace the world average, led by China and India. Opportunities also exist in developed areas, most notably the US and Western Europe. Cooling equipment will continue to outpace heating equipment. This study analyzes the \$63.1 billion world HVAC equipment industry, with forecasts for 2012 and 2017 by product, world region and for 18 countries. It also evaluates market share and profiles 30 industry participants.

#2336 05/2008..... \$5600

World Major Household Appliances

Global white goods demand will grow 3.1% yearly through 2011. India will lead gains based on low penetration rates and rising living standards. Replacement demand will spur growth in developed areas as users replace broken appliances and trade up for newer models like more efficient "green" types. This study analyzes the 413 million unit world white goods industry, with forecasts for 2011 and 2016 by product, world region and for 25 countries. It also evaluates market share and profiles major players.

#2279 01/2008..... \$5800

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