

## Analysis of Japanese Commercial Refrigerator/Freezer Market

**Scope:**

Commercial refrigerators/freezers for cold food storage within the scope of NSF/ANSI Standard 7

**Data:**

Market data were collected from the Ministry of Economy, Trade and Industry (METI) database and the Japan Refrigeration and Air Conditioning Industry Association (JRAIA) publications.

A data category including all commercial refrigerator types for cold food storage was identified. Some product types listed under the category, however, did not meet the scope of NSF/ANSI Standard 7. The components of the data category were:

- Freezers (NSF/ANSI Standard 7)
- Display showcases (NSF/ANSI Standard 7)
- Ice-making equipment (NSF/ANSI Standard 12);
- Water coolers (NSF/ANSI Standard 61); and
- Other units.

**Findings:**

- Display showcases represented 40-46% (\$530-999 millions) of the total annual production under the category during the period 1992-2005 (Fig. 1).
- In 1996, there was a surge of demands for refrigerators in response to the widely-spread E. Coli O-157 food poisoning incident.

(\$ Millions)

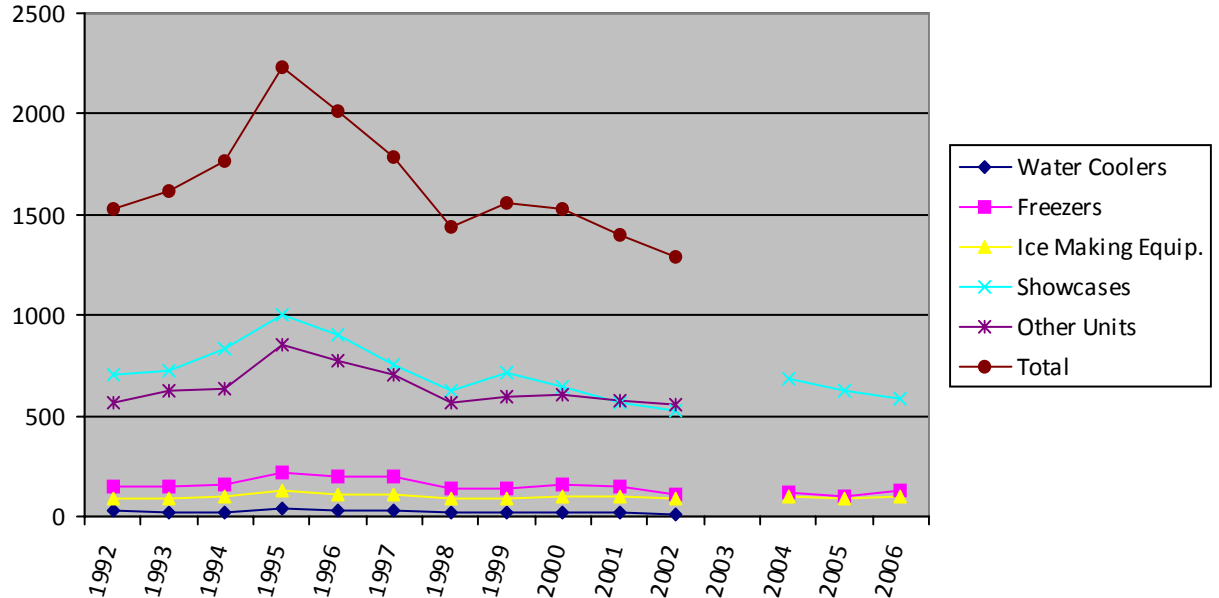


Figure 1: Amount of production of different types of commercial refrigerators/freezers

- The Japanese market for commercial refrigerators is maturing. The lowered demands for display showcases at supermarkets and convenience stores, increased raw material costs and new regulations are all contributing to the weakened profitability of refrigerator manufacturers. The new regulations

(Home Appliance Recycling Law, Freon Collection and Destruction Law and Energy Conservation Law) are forcing more manufacturers to engage in new product development (e.g. alternate coolants) and seek environmental certification (e.g. ISO 14001). The heightened food safety concerns are creating new opportunities for product lines used in the “cold chain” supply systems.

- The Chinese market for display showcases and vending machines is expanding; further growth is expected before the 2008 Beijing Olympics. As a result, more Japanese refrigerator manufacturers are seeking joint ventures in China and Southeast Asia.

#### Major Display Showcase Manufacturers in Japan (in alphabetical order)

1. Daiwa Reiki ([www.drk.co.jp](http://www.drk.co.jp))
  - a. Employee: 2,434
  - b. Annual Sales: \$327 Million
  - c. Core Business: Commercial refrigerators/freezers
2. Fuji Electric Retail Systems ([www.frsys.co.jp](http://www.frsys.co.jp))
  - a. Employee: 2,604
  - b. Annual Sales: \$1.6 Billion
  - c. Core Business: Vending machines
3. Fujimak ([www.fujimak.co.jp](http://www.fujimak.co.jp))
  - a. Employee: 680
  - b. Annual Sales: \$325 Million
  - c. Core Business: Commercial kitchen equipment
4. Fukushima Kogyo ([www.fukushima.co.jp](http://www.fukushima.co.jp))
  - a. Employee: 871
  - b. Annual Sales: \$283 Million
  - c. Core Business: Commercial temperature-controlling food equipment
5. Hitachi Appliance ([www.hitachi-ap.co.jp](http://www.hitachi-ap.co.jp))
  - a. Employee: 17,000 (group total: 7,883)
  - b. Annual Sales: No information
  - c. Core Business: Electric home appliances, commercial AC compressors
6. Hoshizaki ([www.hoshizaki.co.jp](http://www.hoshizaki.co.jp))
  - a. Employee: 1,284
  - b. Annual Sales: \$618 Million
  - c. Core Business: Commercial kitchen equipment
7. Matsushita Reiki ([http://panasonic.co.jp/appliance/company/index\\_03.html](http://panasonic.co.jp/appliance/company/index_03.html))
  - a. Employee: 2,200
  - b. Annual Sales: No information
  - c. Core Business: Consumer electric appliances, commercial AC equipment
8. Nakano Reiki ([www.nakano-reiki.com](http://www.nakano-reiki.com))
  - a. Employee: 495
  - b. Annual Sales: \$251 Million
  - c. Core Business: Commercial refrigerators/freezers
9. Nippon Kentetsu ([www.kentetsu.co.jp](http://www.kentetsu.co.jp))
  - a. Employee:
  - b. Annual Sales:
  - c. Core Business: Showcases and laundry equipment
10. Nissin Kogyo ([www.nissinkogyokk.co.jp](http://www.nissinkogyokk.co.jp))
  - a. Employee: 72
  - b. Annual Sales:
  - c. Core Business: Showcases and general food equipment
11. Okamura ([www.okamura.co.jp](http://www.okamura.co.jp))
  - a. Employee: 2,679
  - b. Annual Sales: \$2.0 Billion
  - c. Core Business: Office furniture, retail furniture and distribution systems

12. Sanden ([www.sanden.co.jp](http://www.sanden.co.jp))
  - a. Employee: 2,810 (group total: 7,883)
  - b. Annual Sales: \$2.3 Billion (group total)
  - c. Core Business: Car air-conditioning compressor, heat exchangers
13. Sanyo Electric ([www.sanyo.co.jp](http://www.sanyo.co.jp))
  - a. Employee: 14,137 (106,389 as a group)
  - b. Annual Sales: \$24 Billion (group total)
  - c. Core Business: Consumer & commercial electronic products
14. Toshiba Carrier ([www.toshiba-carrier.co.jp](http://www.toshiba-carrier.co.jp))
  - a. Employee:
  - b. Annual Sales:
  - c. Core Business: Commercial ACs; commercial refrigerators/freezers