

QUEEN
HD
9505
.C3
I5
F5
1988
c.2

I N D U S T R Y P R O F I L E

IC

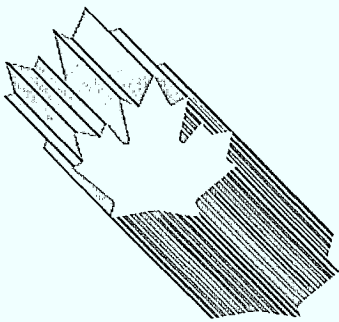


Industry, Science and
Technology Canada

Industrie, Sciences et
Technologie Canada

Food Processing Equipment

Canada



INDUSTRY PROFILE

FOOD PROCESSING EQUIPMENT

INDUSTRIAL EXPANSION
LIBRARY

JAN 5 1989

1988

BIBLIOTHEQUE
MINISTÈRE DE L'EXPANSION
INDUSTRIELLE REGIONALE

FOREWORD

.....

In a rapidly changing global trade environment, the international competitiveness of Canadian industry is the key to survival and growth. This Industry Profile is one of a series of papers which assess, in a summary form, the current competitiveness of Canada's industrial sectors, taking into account technological and other key factors, and changes anticipated under the Canada-U.S. Free Trade Agreement. Industry participants were consulted in the preparation of the papers.

The series is being published as steps are being taken to create the new Department of Industry, Science and Technology from the consolidation of the Department of Regional Industrial Expansion and the Ministry of State for Science and Technology. It is my intention that the series will be updated on a regular basis and continue to be a product of the new department. I sincerely hope that these profiles will be informative to those interested in Canadian industrial development and serve as a basis for discussion of industrial trends, prospects and strategic directions.

Minister

1. Structure and Performance

Structure

This sector includes manufacturers of machinery, ancillary equipment, controls, and inspection equipment for sale to the food industry. The machinery in this sector is primarily used for processing edible foods such as meat, poultry and fish, baked goods, milk products, beverages and fresh produce. The principal users of this equipment are the food and beverage processors.

As the sector's firms serve many other markets, the sector cannot be easily grouped into a homogeneous structure. Many products used by food processors, such as mixers, cookers, freezers, weighers, filters, instrumentation, materials handling and packaging equipment etc., are also used by other processing industries and are not covered by the data in this profile. Information on the sector, therefore, is derived from company data and should be taken only as indicators.

There are approximately 130 establishments manufacturing food processing equipment in Canada. The sector employs an estimated 2000 persons, and in 1986 shipments were valued at \$71 million, of which exports accounted for \$42 million. The United States is Canada's principal export market, although isolated exports of bakery equipment have gone to such countries as China, Algeria, Jordan and Indonesia. In 1986, imports to Canada totalled \$202 million. Over the past six years, the United States and the European Community (E.C.) have accounted for an average of 68 and 27 percent respectively of imports.

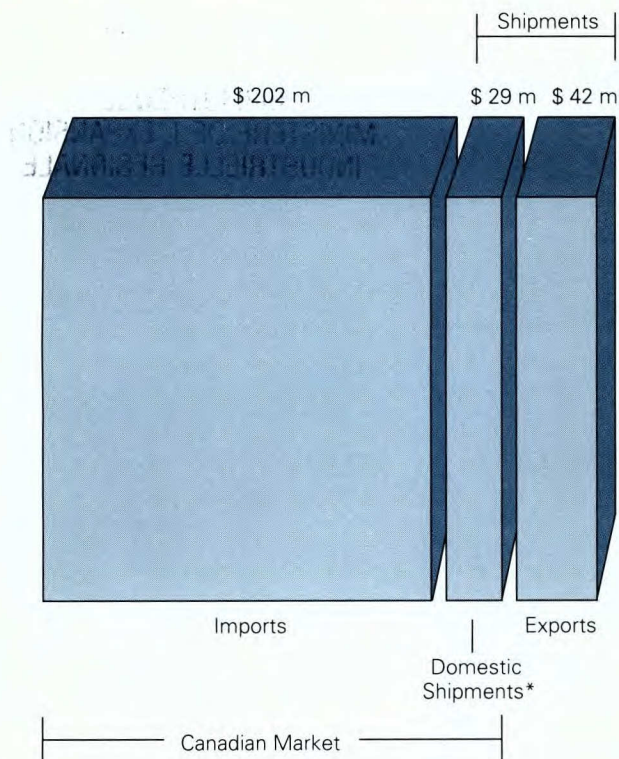
Manufacturers in this industry are small, and have an average of 15 to 25 employees, except for the four companies who have more than 100 employees. In 1986, the four largest firms, TCI-Superior, Division of Mueller Canada Ltd.; L and M Manufacturing Co. Ltd.; Food Machinery Engineering and Knud Simonsen Industries Ltd., accounted for approximately 20 percent of the sector's employment, 50 percent of its shipments and 30 percent of its exports. Of the 130 establishments operating in Canada, approximately 90 are Canadian-owned. Seventy-four percent of the firms are located in Ontario and Quebec, 16 percent in the western provinces and 10 percent in the Atlantic provinces. The latter are mainly fish processing equipment producers.

Canada



Industry, Science and
Technology Canada

Industrie, Sciences et
Technologie Canada



**Imports, Exports and Domestic Shipments
1986**

* Estimated.

Canadian capability in the manufacture of food processing equipment is specialized. Most firms produce one or two "niche" type products, with the strongest manufacturing capability being in the bakery, meat and poultry, fish, and milk processing equipment sub-sectors. Thirty-two manufacturers of bakery equipment supply a wide range of standard and custom-engineered machinery ranging from pizza ovens to complete mobile bakeries for military field camps. Twenty-one manufacturers of meat and poultry processing equipment supply a limited range of machinery, including smoke houses, meat cutting bandsaws and continuous sausage processing systems. Twelve manufacturers of fish processing equipment produce machinery such as fish unloaders and automatic fish descalers. The remaining firms manufacture a very diverse range of equipment which cannot be grouped into sub-sectors. As a general rule, there are few imported components in the equipment manufactured in Canada.

Canada has a limited production capability in flour and gristmilling machinery, distilling and brewing equipment, pasta processing and confectionery equipment.

The structure of the Canadian industry is similar, but on a much smaller scale than that of the United States. For example, in the United States there are approximately 800 manufacturers of food processing equipment, employing an estimated 90 000, with annual shipments of some US\$5.6 billion (1985 Data). About a dozen large companies supply approximately 20 percent of the U.S. market for food processing equipment.

Performance

The performance of the industry is linked to investments by food and beverage processors, whose level of activity is mainly influenced by population growth and consumer food preferences. As such, the sector is relatively mature with production growing slowly but consistently. Between 1971 and 1986, shipments increased at an average annual rate of 2.5 percent in real terms.

The sector has a high export orientation relative to its shipments, averaging 66 percent annually since 1980, as compared with a level of below 50 percent in the 1970s. This reflects a trend towards specialized equipment design, particularly by a small number of firms who have successfully adapted their operations to focus on specific export markets in product areas such as bakery and meat processing equipment. The majority of the smaller firms primarily serve the domestic market.

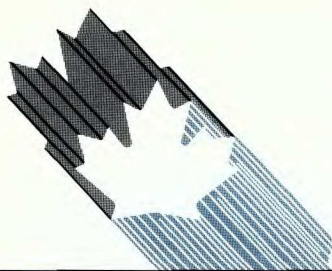
Imports have consistently captured a significant share of the Canadian market, averaging well over 90 percent in the last 10 years. Approximately half of the imports of food processing machinery and components are in product areas where no Canadian manufacturing capability exists. Even within the bakery, meat, fish and dairy equipment sub-sectors, areas where Canadian capability is strongest, there are imports of specialized equipment which are not produced in Canada.

Because all companies in the sector are privately owned, financial information is not available. However, the relatively small Canadian food processing equipment firms generally lack the financial strength of the large international competitors with which they compete in both the Canadian and export markets.

2. Strengths and Weaknesses

Structural Factors

Although, on a currency-adjusted basis, Canadian labour and material costs are comparable with those of U.S. manufacturers, the competitiveness of producers is usually influenced by factors other than price, such as quality, design, efficiency, after-sales service and ease of maintenance.



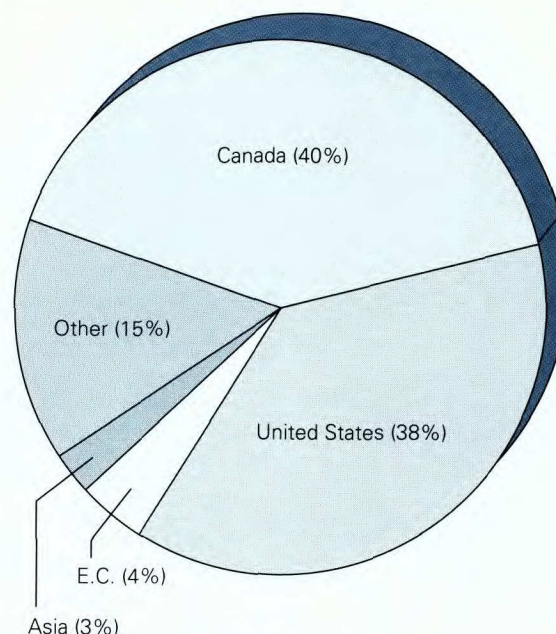
In common with most other machinery sectors, Canadian capability in processing equipment tends to be selective in the type and size of equipment produced. As noted previously, there are many areas where there are either narrow or non-existent production capabilities. The sub-sectors with the broadest capabilities are bakery, meat and poultry, fish, and milk processing equipment. In these and other product areas, there are a small number of manufacturers which are competitive in certain "niche" product lines, such as milk sterilization systems, bakery ovens, continuous sausage processing systems, and meat and fish processing equipment. These firms are generally successful in the domestic and export markets because their products carry out unique functions, they have distinctive designs, or they serve localized or particular user-needs.

The high degree of import penetration rate primarily reflects the following factors:

- the extremely wide range of sizes and types of machinery required by the food industry, often in small quantities, with the result that it is uneconomical for the sector to attempt to produce all requirements;
- the tendency of subsidiary firms in the food industry to purchase their machinery requirements on the basis of what is currently in place in the parent's facilities;
- the established reputation of many foreign competitors with well-developed distribution and service networks in Canada; and
- the fact that Canadian manufacturers do not supply complete lines of equipment in many areas.

When compared to competitors in the European Community (E.C.) and the United States, Canadian equipment producers lack the financial strength, the economies of scale, the technology, the marketing impact or the after-sales service to compete on world markets. Cash-flow problems are common, and many companies are unable to undertake product development, or to afford a level of promotional activity and a distribution network comparable to that of larger firms. These factors have tended to limit their acceptance by major domestic and international food companies.

A particular weakness of the sector is that few Canadian manufacturers are large enough to be able to commit themselves to contracts containing process performance clauses. In addition, food product companies are building large, integrated plant installations. In Canada there are only four equipment manufacturers capable of undertaking these turnkey projects which require the installation of structural, mechanical, electrical and computerized process control systems. The majority of manufacturers in Canada specialize in only one or two kinds of food processing equipment and they do not have complete processing lines.



Domestic Shipments	\$29 m, 40%
Exports	\$42 m, 60%

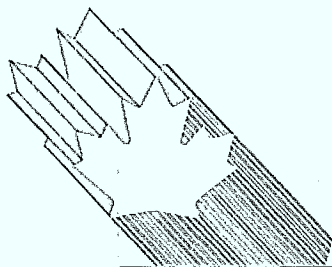
Total Shipments By Destination, 1986*
(\$71 million)

* Estimated

Trade-related Factors

Most food processing equipment is imported into Canada under a Most Favoured Nation (MFN) rate of 9.2 percent. However, under the federal Machinery Program, the duty otherwise payable on imports of machines, replacement parts, controls, attachments and accessories may be remitted if equivalent machinery is not available from Canadian production. Most food processing equipment imported into the United States is subject to a duty of four percent. Equipment imported into the E.C. is subject to a duty of 3.8 percent. There are no non-tariff barriers which constitute a significant barrier to trade with the United States or Europe. The Japanese tariff ranges from 4.2 to 6.0 percent.

Under the terms of the Canada-U.S. Free Trade Agreement (FTA), duties are to be eliminated over a five-year period, beginning January 1, 1989. The agreement also provides for increased cross-border mobility for Canadian service personnel which has been a problem at times for Canadian exporters attempting to service their machines in the United States.

**Technological Factors**

As most equipment is custom-designed to a user's requirements, product technology is a more significant factor than process technology. However, the design and development of new food processing machinery in Canada is quite limited. Only a few Canadian equipment manufacturers are capable of independently conducting their own product development; in general, the United States and the E.C. manufacture products with more advanced designs. In an effort to increase efficiency and productivity, major food processing companies are demanding product designs characterized by higher speeds, automation, ease of maintenance and high sanitary standards. Most Canadian manufacturers are restrained by their size and undercapitalization from carrying out research and development (R&D) projects that could improve product quality and performance. New technologies, if developed at all, are generated in-house; licensing agreements or technology exchanges are concluded infrequently.

3. Evolving Environment

In the future, food processing equipment design will incorporate new technologies in such areas as ultrafiltration, gamma irradiation, micro-electronics, microwave food containers, biotechnology, and technology for low-calorie, ethnic and convenience foods. These new technologies are creating opportunities and challenges for Canadian manufacturers to design and supply machinery. Canadian equipment manufacturers have a limited capability in these emerging technologies and it is likely that they will lag behind their competitors in this area.

The North American market for food processing equipment is expanding again, after suffering a downturn in the 1981-82 recession. Three factors are creating a positive impact on equipment demand, namely, the general economic recovery in the United States; the increase in food consumption due to population growth; and, the ongoing commitment in most segments of the industry to higher productivity and integrated processing and packaging systems. The U.S. market is expected to remain strong into the 1990s. Annual sales are expected to increase by more than 10 percent to reach the \$10 billion level by 1995. In Canada, similar market trends are expected to prevail.

For the limited number of export-oriented firms in Canada, the elimination of tariffs under the FTA is not likely to lead to significant new opportunities in the United States, but could generally support ongoing export activities in that market. For the majority of the firms (small and domestically oriented), the elimination of tariffs is not likely to provide significant incentives to pursue markets in the United States because they do not possess the human and financial resources to capitalize on the opportunities. However, while many firms have already specialized in response to import competition, Canadian tariffs have assisted them to maintain their market share in Canada. Elimination of the remaining tariffs could prove troublesome to a number of smaller firms, and could limit their growth. Overall, a marginal increase in imports from the United States is anticipated as a result of the FTA.

For a discussion of the agreement's impact on the principal users of food processing equipment products, refer to the Industry Profiles covering meat, poultry, fish, baked goods, milk products, beverages and fresh produce.

**4. Competitiveness
Assessment**

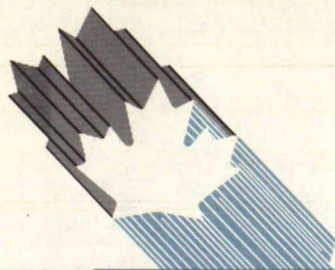
A small number of Canadian food processing equipment manufacturers are competitive in certain "niche" product lines. They are active in both domestic and export markets and are internationally competitive. Overall, however, the sector is composed of small firms, with limited financial resources, which are under pressure to maintain adequate levels of marketing, technical and service support in an international marketplace dominated by large multinational corporations.

As tariffs are reduced under the FTA, competitive pressure is expected to increase on Canadian firms, particularly the smaller and domestically oriented ones.

For further information concerning the subject matter contained in this profile, contact:

Surface Transportation and Machinery Branch
Industry, Science and Technology Canada
Attention: Food Processing Equipment
235 Queen Street
Ottawa, Ontario
K1A 0H5

(613) 954-3220



PRINCIPAL STATISTICS

SIC(s) COVERED: Part of 3199 (1980)

	1974*	1982	1983	1984	1985**	1986**
Establishments	N/A	N/A	N/A	N/A	115	133
Employment	N/A	N/A	N/A	N/A	2 000	2 000
Shipments (\$ millions)	25	52	47	55	66	71

TRADE STATISTICS

	1974**	1982	1983	1984	1985	1986
Exports (\$ millions)	6	27	44	28	44	42
Domestic shipments (\$ millions)	19	25	3	27	22	29
Imports (\$ millions)	53	134	143	180	181	202
Canadian market (\$ millions)	72	159	146	208	203	230
Exports as % of shipments	24	52	93	51	66	60
Imports as % of domestic market	74	84	98	87	89	88
Source of imports (% of total value)			U.S.	E.C.	Asia	Others
		1981	73	22	—	5
		1982	70	25	—	5
		1983	70	26	—	4
		1984	69	26	1	4
		1985	65	29	2	4
		1986	63	30	1	6
Destination of exports (% of total value)			U.S.	E.C.	Asia	Others
		1981	54	4	2	40
		1982	59	4	8	29
		1983	39	5	11	45
		1984	70	11	1	18
		1985	66	4	16	15
		1986	64	7	4	25

REGIONAL DISTRIBUTION — Average over the last 3 years

	Atlantic	Quebec	Ontario	Prairies	B.C.
Establishments — % of total	10	24	50	10	6

MAJOR FIRMS

Name	Ownership	Location of Major Plants
TCI-Superior, Div. of Mueller Canada Ltd.***	American	Toronto, Ontario
L and M Manufacturing Co. Ltd.	American	Toronto, Ontario
Food Machinery Engineering	American	Toronto, Ontario
Knud Simonsen Industries Ltd.	Canadian	Toronto, Ontario

* 1973 data not provided due to a data base change

** Estimated (Industry, Science and Technology Canada)

*** In July 1988, it was announced that the TCI-Superior manufacturing plant in Mississauga was being closed.

Regional Offices

Newfoundland

Parsons Building
90 O'Leary Avenue
P.O. Box 8950
ST. JOHN'S, Newfoundland
A1B 3R9
Tel: (709) 772-4053

Prince Edward Island

Confederation Court Mall
Suite 400
134 Kent Street
P.O. Box 1115
CHARLOTTETOWN
Prince Edward Island
C1A 7M8
Tel: (902) 566-7400

Nova Scotia

1496 Lower Water Street
P.O. Box 940, Station M
HALIFAX, Nova Scotia
B3J 2V9
Tel: (902) 426-2018

New Brunswick

770 Main Street
P.O. Box 1210
MONCTON
New Brunswick
E1C 8P9
Tel: (506) 857-6400

Quebec

Tour de la Bourse
P.O. Box 247
800, place Victoria
Suite 3800
MONTRÉAL, Quebec
H4Z 1E8
Tel: (514) 283-8185

Ontario

Dominion Public Building
4th Floor
1 Front Street West
TORONTO, Ontario
M5J 1A4
Tel: (416) 973-5000

Manitoba

330 Portage Avenue
Room 608
P.O. Box 981
WINNIPEG, Manitoba
R3C 2V2
Tel: (204) 983-4090

Saskatchewan

105 - 21st Street East
6th Floor
SASKATOON, Saskatchewan
S7K 0B3
Tel: (306) 975-4400

Alberta

Cornerpoint Building
Suite 505
10179 - 105th Street
EDMONTON, Alberta
T5J 3S3
Tel: (403) 420-2944

British Columbia

Scotia Tower
9th Floor, Suite 900
P.O. Box 11610
650 West Georgia St.
VANCOUVER, British Columbia
V6B 5H8
Tel: (604) 666-0434

Yukon

108 Lambert Street
Suite 301
WHITEHORSE, Yukon
Y1A 1Z2
Tel: (403) 668-4655

Northwest Territories

Precambrian Building
P.O. Bag 6100
YELLOWKNIFE
Northwest Territories
X1A 1C0
Tel: (403) 920-8568

*For additional copies of this
profile contact:*

*Business Centre
Communications Branch
Industry, Science and
Technology Canada
235 Queen Street
Ottawa, Ontario
K1A 0H5*

Tel: (613) 995-5771