

Industry Profiles

Manufacturing Industry

Revised: February 2008

A woman wearing a white lab coat and a white hairnet is looking down at a computer keyboard. She is holding a small white object in her hand. The background is a light blue gradient.

Alberta

Employment, Immigration
and Industry

Overview:

The Manufacturing industry¹ in Alberta includes establishments involved in:

- food manufacturing;
- beverage and tobacco product manufacturing;
- textile, textile product mills and clothing manufacturing;
- petroleum and coal products manufacturing;
- chemical, plastics and rubber manufacturing;
- computer and electronic products manufacturing; and
- other manufacturing.

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¹ North American Industry Classification System (NAICS) groups 311 and 339

Section A: Business Environment

1. 2006 Employment and Unemployment Numbers and Rates:

	Alberta	Manufacturing Industry
Number of employed	1,870,700	137,500
Percent employed in the industry		7.4%
Number of unemployed	66,800	3,200
Unemployment rate	3.4%	2.2%

For more information on employment numbers or for a historical comparison, go to the [Labour Force Survey](#) or [Statistics Canada](#) websites.

2. Industry Growth:

- The Manufacturing industry is expected to grow on average 1.7% annually from 2006 to 2011.
- Approximately 11,759 jobs will be created in the forecast period. Employment is expected to increase to 148,467 by 2011.
- This industry is expected to provide 5% of all new job creations in Alberta between 2006 and 2011.

For more information, see the [Alberta Modified Canadian Occupational Projection System Outlook](#) (2006-2011) online and the [Alberta Learning Information Service \(ALIS\)](#) website's industry descriptions.

Outlook

Amid rapidly expanding demand emerging from the oil sands projects and an ongoing labour shortage in the province, Alberta's manufacturing companies are partnering with central and Atlantic Canadian provinces and companies to expand their labour supply and supply chains. This process is also supported by a wide variety of public sector interests and professional associations.

Based on more than \$30 billion worth of manufacturing projects that are expected to take place in the next 20 years to support the oil sands development, projects like the Edmonton-area bitumen upgraders, Alberta will quickly become one of Canada's major manufacturing centers-behind Ontario and Quebec. The metal fabrication and machinery industry plays a critical role in the development of oil sands and downstream processing, and is expected to maintain significant growth with strong demand domestically and from the U.S. As long as the world price for oil remains moderately high, manufacturing in Alberta is likely to grow.

According to Alberta Advanced Education, nanotechnology is poised to become the next revolution in technology. Nanotechnology is expected to play a major role in the development of health, computing science, energy, biotechnology, education, manufacturing and engineering sectors. With the University of Alberta being the home of the National Institute of Nanotechnology, it is expected that Alberta will attract leading scientists from multiple disciplines. The potential in a \$120 million jointly-funded institute by the Government of Alberta and National Research Council, the National Institute of Nanotechnology is expected to establish Alberta as one of the top five research facilities in the world with the goal of capturing a \$20 billion market share of the world's nanotechnology market by 2020.

Petrochemicals continue to be one of the largest manufacturing segments in Alberta. With declining natural gas output, and less ethane for petrochemical companies to use as feedstock, several upgrader projects are expected to create growing opportunities for midstream companies to extract ethane from exhaust or off-gas produced in the upgrading process.

Food and beverage processing establishments remain one of Alberta's largest manufacturing sectors in terms of employment and products generated. Manufacturing activity is concentrated in two segments, meat and meat products, and dairy. However, due to increasing health awareness, organic goods are becoming a fast growing market.

3. Company Size

Establishment Size	Alberta Businesses		Manufacturing	
	Number of Employees	%	Number of Employees	%
Less than 20 employees	525,000	34.1%	27,100	20.9%
20 to 99 employees	543,600	35.3%	46,000	35.5%
100 to 500 employees	292,400	19.0%	40,100	30.9%
Over 500 employees	178,900	11.6%	16,400	12.6%

Data Source: Labour Force Historical Review 2006, Statistics Canada

Section B: Human Resources Profile

1. Occupational Information:

Some examples of occupations that can be found in the Manufacturing industry include:

- meat cutter;
- machinist;
- manufacturing engineer;
- sawmill machine operator; and
- instrument technician.

For a complete listing of all occupations related to this industry as well as detailed information on education and skill requirements, visit the [Alberta Occupational Profiles](#) website.

2. Demographics: Age and Gender

According to the Labour Force Survey, the gender break-down in Alberta's manufacturing industry is as follows:

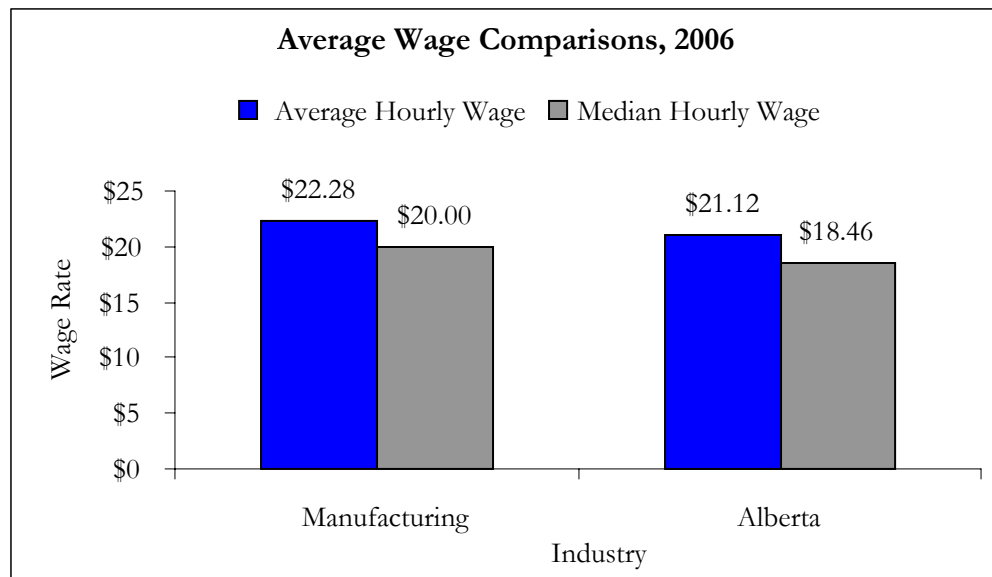
- women employed: 32,500 people, or 23.6%
- men employed: 105,000 people, or 76.4%

In comparison, women accounted for 45.3% and men made up 54.7% of the total employed in Alberta.

Age Characteristics	Alberta Employees		Manufacturing	
	Number	%	Number	%
15-24 years	329,600	17.6%	17,100	12.4%
25-54 years	1,286,500	68.8%	104,600	76.1%
55 years and over	254,600	13.6%	15,900	11.6%

Data Source: Labour Force Historical Review 2006, Statistics Canada

3. Wages:



Data Source: Labour Force Historical Review 2006, Statistics Canada

Wage and Salary Information for Selected Occupations

Occupation	Average Hourly Wage			Average Annual Salary
	Starting	After 3 years	Top	
Industrial engineering and manufacturing technologists and technicians	\$ 17.82	\$ 23.41	\$ 35.44	\$ 69,476
Manufacturing managers	\$ 25.77	\$ 27.06	\$ 35.69	\$ 66,778
Facility operation and maintenance managers	N/A	\$ 23.28	\$ 28.61	\$ 52,583
Plastic products assemblers, finishers and inspectors	\$ 9.44	\$ 14.55	\$ 17.05	\$ 28,673
Industrial butchers and meat cutters, poultry preparers and related workers	\$ 10.13	\$ 12.44	\$ 15.98	\$ 26,135
Sewing machine operators	\$ 10.44	\$ 10.15	\$ 11.31	\$ 21,984

Data Source: 2005 Alberta Wage and Salary Survey

Note: N/A due to insufficient response.

For more information on wages, refer to the [WAGEinfo](#) webpage. For job descriptions, duties, required skills and education for specific occupations in the Manufacturing industry, visit the [ALIS](#) website.

Section C: Additional Information

1. Links to Selected Industry Associations:

Food and Beverage:

- [Alberta Food Processors Association](#)
- [Brewers Association of Canada](#)
- [Food Processors of Canada](#)
- [Canadian Poultry and Egg Processors Council](#)

Wood Product and Paper Manufacturing:

- [Alberta Forest Products Association](#)

Rubber, Plastic, and Chemical Manufacturing:

- [Canadian Plastics Industry Association](#)
- [Canadian Chemical Producers Association](#)
- [Canadian Petroleum Products Institute](#)

Metals Fabrication and Machinery

- [Society of Manufacturing Engineers](#)
- [Canadian Machinery and Metal Working Magazine](#)

Other Manufacturing:

- [Canadian Manufacturers and Exporters](#)

2. Link to Government Library Database:

<http://www.servicelink.gov.ab.ca/libraries/workplace/>