



2021 Alberta Wage and Salary Survey

Manufacturing industry summary report

Overview

The Alberta Wage and Salary Survey is undertaken by the Alberta government to provide current wage rates and skill shortage information on various occupations in Alberta, and in specific industries and economic regions. This labour market information helps Alberta employers to fine-tune their compensation and recruitment strategies, helps individuals make career and education choices, and aids the provincial government in developing effective policies and providing services.

Survey results

The survey was completed with 685 employers in the Manufacturing sector who provided information on over 26,189 employees in various occupational classifications¹. Survey data were collected between January and August 2021. Alberta Wage and Salary Survey results by four-digit National Occupational Classification (NOC) for all of Alberta, by industry group, and by geographic area can be found at www.alis.alberta.ca/occinfo

Wages for selected occupations

The following table illustrates the wage survey results associated with some common occupations within this industry². The tables below present results for three-digit NOC minor groups and for four-digit NOCs.

¹The estimated sample error at the establishment level for overall results for this industry is estimated to be $\pm 3.6\%$ at a 95% confidence level (i.e., 19 times out of 20) taking into account the sample design effect associated with over/under sampling and data weighting.

²Occupations were selected as the top occupations in terms of number of employees as per Statistics Canada 2016 Census for this industry and supplemented by other occupations frequently reported by industry employers. Only occupations with a minimum number of reportable observations were selected. Some occupations common to this industry may not be listed if sufficient reliable data were not available.

MANUFACTURING INDUSTRY Selected Occupations (4-Digit NOC)	Employers Reporting (n)	# of Employees	Data Reliability Code	Avg. Hours Worked per Week	Avg. Starting Pay	Avg. Top Pay	Overall Average Pay for All Employees
Common Business, Managerial, Administrative, and Clerical Occupations							
001 Legislators and senior management	83	183	A	39.8	\$72.18	\$94.01	\$81.98
0016 Senior managers - construction, transportation, production and utilities	80	175	A	39.8	\$72.10	\$94.20	\$81.86
011 Administrative services managers	112	191	A	39.7	\$41.78	\$54.83	\$49.52
0111 Financial managers	61	74	A	39.0	\$44.99	\$55.01	\$50.85
0112 Human resources managers	35	40	A	39.9	\$41.70	\$52.91	\$47.60
0113 Purchasing managers	20	22	B	39.7	\$45.29	\$57.84	\$53.10
0114 Other administrative services managers	35	55	B	40.4	\$36.45	\$54.97	\$47.84
021 Managers in engineering, architecture, science and information systems	41	115	B	38.5	\$53.56	\$82.62	\$66.76
0211 Engineering managers	26	88	B	38.2	\$53.55	\$85.60	\$67.88
0212 Architecture and science managers	10	11	C	39.7	\$45.04	\$57.04	\$53.52
0213 Computer and information systems managers	12	16	C	39.9	\$56.95	\$72.50	\$64.00
060 Corporate sales managers	11	23	C	39.1	\$63.36	\$89.39	\$75.51
0601 Corporate sales managers	11	23	C	39.1	\$63.36	\$89.39	\$75.51
062 Retail and wholesale trade managers	96	170	A	40.7	\$39.74	\$52.48	\$46.70
0621 Retail and wholesale trade managers	96	170	A	40.7	\$39.74	\$52.48	\$46.70

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071 Managers in construction and facility operation and maintenance	68	145	B	40.2	\$38.08	\$59.78	\$49.87
0711 Construction managers	24	52	C	40.2	\$25.21	\$44.69	\$37.69
0714 Facility operation and maintenance managers	44	92	A	40.2	\$45.43	\$67.70	\$56.14
073 Managers in transportation	10	14	C	39.1	\$51.26	\$73.00	\$63.90
0731 Managers in transportation	10	14	C	39.1	\$51.26	\$73.00	\$63.90
091 Managers in manufacturing and utilities	300	697	A	40.3	\$44.66	\$70.31	\$54.28
0911 Manufacturing managers	300	696	A	40.3	\$44.65	\$70.36	\$54.30
111 Auditors, accountants and investment professionals	82	138	A	37.5	\$33.38	\$47.37	\$40.11
1111 Financial auditors and accountants	82	137	A	37.5	\$33.36	\$47.32	\$40.05
112 Human resources and business service professionals	57	115	B	38.2	\$29.43	\$45.00	\$36.55
1121 Human resources professionals	23	43	B	38.6	\$35.27	\$49.08	\$41.15
1123 Professional occupations in advertising, marketing and public relations	38	67	B	37.8	\$25.76	\$41.97	\$33.38
121 Administrative services supervisors	66	157	A	40.0	\$34.26	\$46.15	\$40.34
1215 Supervisors, supply chain, tracking and scheduling co-ordination occupations	61	141	A	40.0	\$34.68	\$46.79	\$40.78
122 Administrative and regulatory occupations	197	536	A	38.5	\$24.12	\$48.28	\$34.90
1221 Administrative officers	137	405	B	38.6	\$23.14	\$51.61	\$35.71

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1222 Executive assistants	10	28	C	37.8	\$30.20	\$37.88	\$34.53
1225 Purchasing agents and officers	64	88	A	38.2	\$27.54	\$36.76	\$32.19
124 Office administrative assistants - general, legal and medical	133	239	A	36.9	\$20.81	\$32.11	\$26.10
1241 Administrative assistants	132	237	A	36.8	\$20.78	\$32.12	\$26.07
131 Finance, insurance and related business administrative occupations	57	81	A	34.6	\$25.22	\$34.72	\$30.44
1311 Accounting technicians and bookkeepers	57	81	A	34.6	\$25.22	\$34.72	\$30.44
141 General office workers	96	232	A	38.8	\$20.73	\$32.98	\$26.60
1411 General office support workers	51	165	A	39.2	\$20.34	\$34.45	\$26.67
1414 Receptionists	43	57	A	37.8	\$18.45	\$24.33	\$21.18
143 Financial, insurance and related administrative support workers	133	252	A	37.1	\$22.41	\$32.59	\$27.63
1431 Accounting and related clerks	125	223	A	36.9	\$21.81	\$32.77	\$27.33
1432 Payroll administrators	20	23	B	38.6	\$27.42	\$31.33	\$29.99
152 Supply chain logistics, tracking and scheduling co-ordination occupations	225	916	A	39.1	\$21.70	\$30.11	\$26.49
1521 Shippers and receivers	164	616	A	39.1	\$18.53	\$24.97	\$22.49
1522 Storekeepers and partspersons	32	68	A	38.7	\$24.55	\$34.33	\$29.28
1523 Production logistics co-ordinators	57	141	B	39.3	\$32.73	\$46.55	\$41.32

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1524 Purchasing and inventory control workers	38	72	A	39.0	\$25.66	\$38.19	\$31.42
Common Professional, Technical, Skilled, and Labour Occupations							
211 Physical science professionals	8	45	D	39.2	\$41.62	\$72.56	\$60.30
2112 Chemists	7	42	D	39.0	\$42.58	\$75.59	\$62.37
213 Civil, mechanical, electrical and chemical engineers	49	212	A	39.1	\$36.93	\$56.64	\$45.69
2131 Civil engineers	10	14	C	39.2	\$42.76	\$59.35	\$52.31
2132 Mechanical engineers	28	107	B	39.4	\$33.72	\$49.91	\$41.57
2133 Electrical and electronics engineers	18	55	C	39.7	\$38.11	\$53.80	\$45.15
214 Other engineers	52	190	B	39.2	\$36.75	\$59.16	\$45.45
2141 Industrial and manufacturing engineers	37	115	B	39.4	\$36.43	\$52.10	\$42.83
2145 Petroleum engineers	8	29	D	40.2	\$32.73	\$78.93	\$41.14
217 Computer and information systems professionals	25	77	B	39.6	\$33.01	\$46.73	\$38.30
2171 Information systems analysts and consultants	12	23	C	38.9	\$32.72	\$39.55	\$35.77
2174 Computer programmers and interactive media developers	8	21	D	40.6	\$35.19	\$46.89	\$40.63
221 Technical occupations in physical sciences	20	99	B	38.7	\$33.81	\$50.18	\$42.49
2211 Chemical technologists and technicians	19	85	C	38.6	\$34.49	\$51.36	\$43.58

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223 Technical occupations in civil, mechanical and industrial engineering	103	318	A	39.4	\$28.38	\$42.91	\$37.16
2231 Civil engineering technologists and technicians	8	18	D	38.7	\$37.86	\$60.01	\$50.41
2232 Mechanical engineering technologists and technicians	10	32	C	38.3	\$27.66	\$42.84	\$37.96
2233 Industrial engineering and manufacturing technologists and technicians	49	155	B	39.3	\$28.05	\$44.94	\$38.56
2234 Construction estimators	47	113	A	40.1	\$27.77	\$36.99	\$32.57
224 Technical occupations in electronics and electrical engineering	37	234	B	39.8	\$28.84	\$45.50	\$37.26
2241 Electrical and electronics engineering technologists and technicians	22	123	C	40.7	\$25.77	\$41.06	\$32.47
2243 Industrial instrument technicians and mechanics	17	92	C	38.3	\$36.03	\$51.83	\$44.64
225 Technical occupations in architecture, drafting, surveying, geomatics and meteorology	99	351	A	39.3	\$28.63	\$44.25	\$37.26
2252 Industrial designers	15	83	C	38.1	\$37.00	\$62.70	\$53.31
2253 Drafting technologists and technicians	86	265	A	39.7	\$25.59	\$37.80	\$31.45
226 Other technical inspectors and regulatory officers	61	132	A	38.9	\$31.08	\$43.57	\$38.09
2261 Non-destructive testers and inspection technicians	9	16	D	40.2	\$29.24	\$39.07	\$34.51
2263 Inspectors in public and environmental health and occupational health and safety	50	96	A	38.6	\$31.14	\$44.30	\$38.31
228 Technical occupations in computer and information systems	30	42	B	38.7	\$29.81	\$37.26	\$34.22

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2281 Computer network technicians	23	28	B	38.7	\$29.35	\$37.63	\$34.54
2282 User support technicians	9	11	D	38.4	\$29.78	\$35.83	\$32.79
322 Technical occupations in dental health care	13	204	C	39.3	\$17.42	\$41.96	\$24.85
3223 Dental technologists, technicians and laboratory assistants	12	195	B	39.4	\$17.24	\$41.47	\$24.38
416 Policy and program researchers, consultants and officers	28	74	B	38.5	\$45.35	\$70.48	\$59.38
4163 Business development officers and marketing researchers and consultants	20	34	B	39.3	\$40.86	\$61.79	\$52.98
524 Creative designers and craftspersons	42	121	A	37.7	\$18.60	\$29.52	\$24.00
5241 Graphic designers and illustrators	36	80	A	36.5	\$18.52	\$26.97	\$23.13
622 Technical sales specialists in wholesale trade and retail and wholesale buyers	96	310	A	39.7	\$30.31	\$47.41	\$39.29
6221 Technical sales specialists - wholesale trade	91	290	A	39.6	\$30.51	\$48.23	\$39.88
6222 Retail and wholesale buyers	9	20	D	39.8	\$28.05	\$37.67	\$32.27
633 Butchers and bakers	16	82	C	36.5	\$16.39	\$20.89	\$18.36
6332 Bakers	14	76	C	36.3	\$16.27	\$20.66	\$18.21
641 Sales and account representatives - wholesale trade (non-technical)	93	299	B	39.3	\$25.13	\$47.63	\$33.78
6411 Sales and account representatives - wholesale trade (non-technical)	93	299	B	39.3	\$25.13	\$47.63	\$33.78
642 Retail salespersons	37	132	B	36.0	\$22.68	\$34.02	\$27.31

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6421 Retail salespersons	37	132	B	36.0	\$22.68	\$34.02	\$27.31
655 Customer and information services representatives	53	141	A	39.5	\$22.43	\$32.18	\$27.58
6552 Other customer and information services representatives	52	130	A	39.0	\$22.08	\$32.46	\$27.59
671 Food counter attendants, kitchen helpers and related support occupations	13	72	C	37.4	\$15.76	\$22.46	\$18.01
6711 Food counter attendants, kitchen helpers and related support occupations	13	72	C	37.4	\$15.76	\$22.46	\$18.01
673 Cleaners	63	232	B	37.1	\$22.59	\$29.74	\$26.77
6731 Light duty cleaners	8	63	D	38.0	\$17.60	\$23.74	\$23.35
6732 Specialized cleaners	16	67	C	40.4	\$24.30	\$30.63	\$26.45
6733 Janitors, caretakers and building superintendents	43	102	B	35.4	\$23.76	\$31.58	\$28.17
720 Contractors and supervisors, industrial, electrical and construction trades and related workers	84	191	A	39.8	\$33.18	\$41.93	\$38.18
7201 Contractors and supervisors, machining, metal forming, shaping and erecting trades and related occupations	56	109	A	39.5	\$35.31	\$42.31	\$39.95
7204 Contractors and supervisors, carpentry trades	9	15	D	39.6	\$30.78	\$49.22	\$40.88
7205 Contractors and supervisors, other construction trades, installers, repairers and servicers	17	55	C	40.3	\$26.52	\$35.65	\$30.84
723 Machining, metal forming, shaping and erecting trades	250	2,235	A	39.6	\$27.32	\$38.23	\$32.37
7231 Machinists and machining and tooling inspectors	97	586	A	40.0	\$28.25	\$40.60	\$32.88

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7233 Sheet metal workers	24	174	B	40.0	\$19.32	\$33.31	\$27.36
7235 Structural metal and platework fabricators and fitters	25	191	A	36.1	\$23.77	\$37.98	\$31.63
7237 Welders and related machine operators	174	1,188	A	39.9	\$29.04	\$37.61	\$32.95
724 Electrical trades and electrical power line and telecommunications workers	40	187	A	40.0	\$36.60	\$41.57	\$38.60
7241 Electricians (except industrial and power system)	10	60	B	39.8	\$38.17	\$41.62	\$39.00
7242 Industrial electricians	30	127	A	40.1	\$35.98	\$41.54	\$38.45
725 Plumbers, pipefitters and gas fitters	20	82	B	37.8	\$37.64	\$41.93	\$38.48
7252 Steamfitters, pipefitters and sprinkler system installers	17	76	C	37.7	\$37.80	\$41.91	\$38.46
727 Carpenters and cabinetmakers	26	205	B	40.3	\$24.74	\$36.11	\$28.09
7272 Cabinetmakers	20	190	B	40.2	\$24.01	\$36.09	\$27.96
730 Contractors and supervisors, maintenance trades and heavy equipment and transport operators	41	111	B	40.4	\$42.74	\$53.87	\$47.01
7301 Contractors and supervisors, mechanic trades	24	48	B	40.6	\$38.81	\$53.75	\$44.74
7302 Contractors and supervisors, heavy equipment operator crews	17	59	C	40.5	\$49.53	\$56.79	\$51.49
731 Machinery and transportation equipment mechanics (except motor vehicles)	87	588	A	40.1	\$38.52	\$43.56	\$40.16
7311 Construction millwrights and industrial mechanics	74	481	A	40.2	\$39.57	\$43.56	\$40.60

MANUFACTURING INDUSTRY Selected Occupations (4-Digit NOC)	Employers Reporting (n)	# of Employees	Data Reliability Code	Avg. Hours Worked per Week	Avg. Starting Pay	Avg. Top Pay	Overall Average Pay for All Employees
7312 Heavy-duty equipment mechanics	19	103	C	39.7	\$33.66	\$43.44	\$37.93
732 Automotive service technicians	14	48	C	40.5	\$30.34	\$38.90	\$34.51
7321 Automotive service technicians, truck and bus mechanics and mechanical repairers	11	41	C	40.7	\$30.77	\$38.82	\$34.49
738 Printing press operators and other trades and related occupations, n.e.c.	26	137	B	38.5	\$21.37	\$36.36	\$28.30
7381 Printing press operators	24	129	B	38.3	\$21.11	\$36.51	\$28.21
744 Other installers, repairers and servicers	41	179	A	40.2	\$20.54	\$32.12	\$26.37
7441 Residential and commercial installers and servicers	37	156	A	40.2	\$20.73	\$32.69	\$26.90
745 Longshore workers and material handlers	92	679	A	40.0	\$20.41	\$27.38	\$24.09
7452 Material handlers	92	679	A	40.0	\$20.41	\$27.38	\$24.09
751 Motor vehicle and transit drivers	66	305	B	41.4	\$26.74	\$31.77	\$29.93
7511 Transport truck drivers	38	264	B	42.0	\$27.50	\$32.80	\$30.92
7514 Delivery and courier service drivers	29	40	B	36.8	\$20.78	\$23.69	\$22.30
752 Heavy equipment operators	18	226	C	41.0	\$26.82	\$35.99	\$30.90
7521 Heavy equipment operators (except crane)	18	226	C	41.0	\$26.82	\$35.99	\$30.90
761 Trades helpers and labourers	52	321	A	40.0	\$20.51	\$30.36	\$25.65
7611 Construction trades helpers and labourers	31	180	A	40.3	\$20.30	\$31.79	\$26.02

MANUFACTURING INDUSTRY Selected Occupations (4-Digit NOC)	Employers Reporting (n)	# of Employees	Data Reliability Code	Avg. Hours Worked per Week	Avg. Starting Pay	Avg. Top Pay	Overall Average Pay for All Employees
7612 Other trades helpers and labourers	21	141	B	39.7	\$20.77	\$28.61	\$25.20
921 Supervisors, processing and manufacturing occupations	64	407	A	39.8	\$35.69	\$50.32	\$42.07
9211 Supervisors, mineral and metal processing	17	100	C	40.1	\$34.77	\$58.77	\$43.88
9212 Supervisors, petroleum, gas and chemical processing and utilities	15	69	C	37.1	\$44.73	\$67.05	\$54.11
9213 Supervisors, food and beverage processing	22	181	B	40.5	\$29.38	\$37.82	\$33.70
9214 Supervisors, plastic and rubber products manufacturing	7	20	D	39.8	\$35.57	\$41.40	\$37.84
922 Supervisors, assembly and fabrication	54	158	A	40.1	\$27.94	\$35.82	\$32.16
9224 Supervisors, furniture and fixtures manufacturing	9	18	D	40.3	\$27.16	\$34.06	\$31.30
9226 Supervisors, other mechanical and metal products manufacturing	15	50	C	41.3	\$34.82	\$44.42	\$39.55
9227 Supervisors, other products manufacturing and assembly	20	60	B	39.7	\$23.89	\$28.73	\$26.24
923 Central control and process operators in processing and manufacturing	9	309	C	39.6	\$40.53	\$65.78	\$56.46
9232 Central control and process operators, petroleum, gas and chemical processing	8	308	C	39.6	\$40.54	\$65.80	\$56.49
924 Utilities equipment operators and controllers	13	72	C	40.2	\$34.53	\$40.94	\$39.45
9241 Power engineers and power systems operators	11	66	C	40.2	\$35.98	\$42.13	\$40.47
941 Machine operators and related workers in mineral and metal products processing and manufacturing	95	830	A	40.1	\$23.47	\$34.60	\$29.01

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9411 Machine operators, mineral and metal processing	11	78	C	39.9	\$32.02	\$34.61	\$33.27
9415 Inspectors and testers, mineral and metal processing	11	59	C	40.1	\$25.63	\$35.77	\$29.03
9416 Metalworking and forging machine operators	32	177	A	39.7	\$24.57	\$35.24	\$29.14
9417 Machining tool operators	37	202	B	37.7	\$21.64	\$33.03	\$27.26
9418 Other metal products machine operators	5	91	C	44.6	\$23.81	\$44.92	\$36.19
942 Machine operators and related workers in chemical, plastic and rubber processing	26	536	B	40.3	\$22.43	\$33.93	\$27.73
9421 Chemical plant machine operators	12	247	C	40.9	\$26.22	\$45.80	\$36.20
9422 Plastics processing machine operators	12	275	B	40.1	\$20.75	\$28.44	\$23.86
943 Machine operators and related workers in pulp and paper production and wood processing and manufacturing	20	776	B	40.6	\$27.90	\$39.73	\$33.36
9431 Sawmill machine operators	7	324	B	40.6	\$28.01	\$35.17	\$30.63
9437 Woodworking machine operators	9	102	B	40.0	\$15.91	\$19.89	\$17.91
944 Machine operators and related workers in textile, fabric, fur and leather products processing and manufacturing	22	102	B	37.0	\$16.15	\$21.91	\$18.76
9442 Weavers, knitters and other fabric making occupations	11	28	C	36.7	\$15.43	\$18.92	\$17.20
9446 Industrial sewing machine operators	11	52	C	36.3	\$16.19	\$23.35	\$19.13

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946 Machine operators and related workers in food, beverage and associated products processing	41	4,919	A	40.5	\$18.29	\$24.72	\$21.37
9461 Process control and machine operators, food and beverage processing	33	1,451	B	41.3	\$17.60	\$26.31	\$20.60
9462 Industrial butchers and meat cutters, poultry preparers and related workers	13	3,356	A	40.0	\$18.73	\$23.57	\$21.84
9465 Testers and graders, food and beverage processing	11	112	B	39.9	\$20.02	\$24.74	\$23.80
947 Printing equipment operators and related occupations	27	190	B	38.2	\$18.94	\$34.56	\$25.49
9471 Plateless printing equipment operators	15	67	C	38.2	\$17.82	\$33.95	\$23.63
9472 Camera, platemaking and other prepress occupations	13	42	B	38.9	\$20.53	\$34.07	\$27.73
9473 Binding and finishing machine operators	18	81	C	37.9	\$19.09	\$35.42	\$25.95
952 Mechanical, electrical and electronics assemblers	49	498	B	39.5	\$17.91	\$29.63	\$23.08
9523 Electronics assemblers, fabricators, inspectors and testers	12	137	C	39.9	\$16.90	\$27.73	\$21.56
9524 Assemblers and inspectors, electrical appliance, apparatus and equipment manufacturing	20	235	B	39.3	\$16.77	\$29.50	\$22.22
9526 Mechanical assemblers and inspectors	10	48	C	39.2	\$26.43	\$38.95	\$32.41
953 Other assembly and related occupations	109	1,616	A	39.6	\$18.27	\$27.45	\$22.24
9532 Furniture and fixture assemblers and inspectors	12	196	A	38.3	\$16.17	\$21.49	\$18.49
9533 Other wood products assemblers and inspectors	19	797	B	40.2	\$16.74	\$25.19	\$20.91

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9534 Furniture finishers and refinishers	8	75	B	40.0	\$16.06	\$28.77	\$21.47
9535 Plastic products assemblers, finishers and inspectors	11	57	C	39.6	\$23.18	\$27.97	\$26.40
9536 Industrial painters, coaters and metal finishing process operators	32	158	B	39.3	\$20.96	\$37.90	\$25.15
9537 Other products assemblers, finishers and inspectors	33	333	B	39.5	\$20.46	\$29.93	\$24.77
961 Labourers in processing, manufacturing and utilities	145	1,825	A	40.1	\$18.58	\$26.29	\$22.38
9612 Labourers in metal fabrication	64	381	B	38.8	\$19.31	\$32.60	\$26.45
9614 Labourers in wood, pulp and paper processing	7	244	C	42.8	\$20.56	\$30.02	\$25.28
9617 Labourers in food and beverage processing	27	591	B	39.8	\$18.12	\$21.23	\$19.94
9619 Other labourers in processing, manufacturing and utilities	38	462	B	39.8	\$17.07	\$23.98	\$19.97

“n” in the above table represents the number of employers who indicated at least one employee in an occupation. For example, 145 employers combined reported wages for 1,825 labourers in processing, manufacturing and utilities (NOC 961).

Averages are calculated using data weighted by establishment to account for survey non-response (stratified by region, industry group and employer size) and by number of employees reported.

“n/a” indicates that results have been suppressed due to missing data for some employers or due to calculation anomalies.

Data Reliability Codes are based on coefficient of variation as an indicator of general reliability: “A”: coefficient of variation of less than or equal to $\pm 6.00\%$, “B”: from $\pm 6.01\%$ to $\pm 15.00\%$, “C”: from $\pm 15.01\%$ to $\pm 33.00\%$, “D”: more than $\pm 33.01\%$.

Job vacancies and hiring difficulties – selected occupations

The following table illustrates the job vacancy survey results associated with some common occupations within the Manufacturing industry as cited by survey respondents and confirmed through review of the data.

MANUFACTURING INDUSTRY Selected Occupations (4-Digit NOC)	Employers Reporting (n)	% of Employers that Hired for this Occupation within the Last 2 Years	% of Employers Experiencing Hiring Difficulties (out of those hiring)	% of Employers with Vacancies of Greater than 4 Months	Job Vacancy Rate
Common Business, Managerial, Administrative, and Clerical Occupations					
001 Legislators and senior management	78-79	5%	44%	0%	n/a
0016 Senior managers - construction, transportation, production and utilities	76	4%	25%	0%	n/a
011 Administrative services managers	106-107	18%	28%	2%	1.4%
0111 Financial managers	57	26%	24%	2%	1.7%
0112 Human resources managers	31-32	11%	43%	4%	3.4%
0113 Purchasing managers	18	16%	n/a	0%	n/a
0114 Other administrative services managers	35	13%	0%	0%	n/a
021 Managers in engineering, architecture, science and information systems	38	9%	n/a	0%	n/a
0211 Engineering managers	23	9%	n/a	0%	n/a
0212 Architecture and science managers	10	0%	n/a	0%	n/a
0213 Computer and information systems managers	11	14%	n/a	0%	n/a

MANUFACTURING INDUSTRY Selected Occupations (4-Digit NOC)	Employers Reporting (n)	% of Employers that Hired for this Occupation within the Last 2 Years	% of Employers Experiencing Hiring Difficulties (out of those hiring)	% of Employers with Vacancies of Greater than 4 Months	Job Vacancy Rate
060 Corporate sales managers	11	7%	n/a	0%	n/a
0601 Corporate sales managers	11	7%	n/a	0%	n/a
062 Retail and wholesale trade managers	92-93	14%	38%	2%	1.1%
0621 Retail and wholesale trade managers	92-93	14%	38%	2%	1.1%
071 Managers in construction and facility operation and maintenance	60	17%	20%	2%	2.0%
0711 Construction managers	24	18%	n/a	8%	5.2%
0714 Facility operation and maintenance managers	37	16%	19%	0%	n/a
073 Managers in transportation	9	24%	n/a	0%	n/a
0731 Managers in transportation	9	24%	n/a	0%	n/a
091 Managers in manufacturing and utilities	287	8%	31%	2%	1.1%
0911 Manufacturing managers	287	8%	31%	2%	1.1%
111 Auditors, accountants and investment professionals	77-78	21%	0%	0%	n/a
1111 Financial auditors and accountants	77-78	21%	0%	0%	n/a

MANUFACTURING INDUSTRY Selected Occupations (4-Digit NOC)	Employers Reporting (n)	% of Employers that Hired for this Occupation within the Last 2 Years	% of Employers Experiencing Hiring Difficulties (out of those hiring)	% of Employers with Vacancies of Greater than 4 Months	Job Vacancy Rate
112 Human resources and business service professionals	54	15%	41%	0%	n/a
1121 Human resources professionals	20-21	11%	n/a	0%	n/a
1123 Professional occupations in advertising, marketing and public relations	37	16%	53%	0%	n/a
121 Administrative services supervisors	62	13%	16%	2%	1.3%
1215 Supervisors, supply chain, tracking and scheduling co-ordination occupations	57	14%	16%	2%	1.3%
122 Administrative and regulatory occupations	190-192	18%	18%	2%	1.2%
1221 Administrative officers	135-136	18%	24%	4%	1.5%
1222 Executive assistants	8	40%	n/a	0%	n/a
1225 Purchasing agents and officers	60	13%	13%	0%	n/a
124 Office administrative assistants - general, legal and medical	127-128	23%	5%	0%	n/a
1241 Administrative assistants	126-127	22%	5%	0%	n/a
131 Finance, insurance and related business administrative occupations	55-56	7%	n/a	0%	n/a

MANUFACTURING INDUSTRY Selected Occupations (4-Digit NOC)	Employers Reporting (n)	% of Employers that Hired for this Occupation within the Last 2 Years	% of Employers Experiencing Hiring Difficulties (out of those hiring)	% of Employers with Vacancies of Greater than 4 Months	Job Vacancy Rate
1311 Accounting technicians and bookkeepers	55-56	7%	n/a	0%	n/a
141 General office workers	89-92	32%	16%	3%	1.4%
1411 General office support workers	48	31%	18%	5%	1.2%
1414 Receptionists	38-41	34%	16%	3%	1.9%
143 Financial, insurance and related administrative support workers	124	22%	11%	0%	n/a
1431 Accounting and related clerks	116	24%	13%	0%	n/a
1432 Payroll administrators	18	19%	n/a	0%	n/a
152 Supply chain logistics, tracking and scheduling co-ordination occupations	213-215	29%	19%	2%	n/a
1521 Shippers and receivers	154-157	35%	23%	3%	n/a
1522 Storekeepers and partspersons	29	41%	0%	7%	2.9%
1523 Production logistics co-ordinators	53	18%	19%	0%	n/a
1524 Purchasing and inventory control workers	35	17%	20%	0%	n/a

MANUFACTURING INDUSTRY Selected Occupations (4-Digit NOC)	Employers Reporting (n)	% of Employers that Hired for this Occupation within the Last 2 Years	% of Employers Experiencing Hiring Difficulties (out of those hiring)	% of Employers with Vacancies of Greater than 4 Months	Job Vacancy Rate
Common Professional, Technical, Skilled, and Labour Occupations					
211 Physical science professionals	7-8	21%	n/a	0%	n/a
2112 Chemists	7	23%	n/a	0%	n/a
213 Civil, mechanical, electrical and chemical engineers	48	24%	3%	2%	n/a
2131 Civil engineers	9	14%	n/a	14%	n/a
2132 Mechanical engineers	28	30%	5%	0%	n/a
2133 Electrical and electronics engineers	18	21%	n/a	0%	n/a
214 Other engineers	46-47	20%	20%	4%	n/a
2141 Industrial and manufacturing engineers	32-33	15%	17%	3%	1.0%
2145 Petroleum engineers	7-8	26%	n/a	7%	1.6%
217 Computer and information systems professionals	23-24	36%	39%	4%	2.0%
2171 Information systems analysts and consultants	11-12	30%	n/a	0%	n/a

MANUFACTURING INDUSTRY Selected Occupations (4-Digit NOC)	Employers Reporting (n)	% of Employers that Hired for this Occupation within the Last 2 Years	% of Employers Experiencing Hiring Difficulties (out of those hiring)	% of Employers with Vacancies of Greater than 4 Months	Job Vacancy Rate
2174 Computer programmers and interactive media developers	7	42%	n/a	0%	n/a
221 Technical occupations in physical sciences	19	16%	0%	0%	n/a
2211 Chemical technologists and technicians	18	15%	n/a	0%	n/a
223 Technical occupations in civil, mechanical and industrial engineering	95-97	21%	36%	2%	2.6%
2231 Civil engineering technologists and technicians	8	11%	n/a	0%	n/a
2232 Mechanical engineering technologists and technicians	8-9	16%	n/a	0%	n/a
2233 Industrial engineering and manufacturing technologists and technicians	46	15%	35%	2%	3.8%
2234 Construction estimators	43-44	35%	44%	4%	1.8%
224 Technical occupations in electronics and electrical engineering	34-35	24%	17%	3%	1.9%
2241 Electrical and electronics engineering technologists and technicians	21-22	37%	5%	2%	n/a

MANUFACTURING INDUSTRY Selected Occupations (4-Digit NOC)	Employers Reporting (n)	% of Employers that Hired for this Occupation within the Last 2 Years	% of Employers Experiencing Hiring Difficulties (out of those hiring)	% of Employers with Vacancies of Greater than 4 Months	Job Vacancy Rate
2243 Industrial instrument technicians and mechanics	14-15	1%	n/a	0%	n/a
225 Technical occupations in architecture, drafting, surveying, geomatics and meteorology	92-94	41%	34%	4%	1.0%
2252 Industrial designers	14-15	41%	32%	4%	0.6%
2253 Drafting technologists and technicians	80-81	41%	35%	4%	1.1%
226 Other technical inspectors and regulatory officers	55-56	16%	8%	0%	n/a
2261 Non-destructive testers and inspection technicians	8	17%	n/a	0%	n/a
2263 Inspectors in public and environmental health and occupational health and safety	45	18%	10%	0%	n/a
228 Technical occupations in computer and information systems	29	15%	n/a	2%	1.4%
2281 Computer network technicians	22	18%	n/a	3%	2.2%
2282 User support technicians	9	0%	n/a	0%	n/a
322 Technical occupations in dental health care	13	41%	62%	10%	1.5%

MANUFACTURING INDUSTRY Selected Occupations (4-Digit NOC)	Employers Reporting (n)	% of Employers that Hired for this Occupation within the Last 2 Years	% of Employers Experiencing Hiring Difficulties (out of those hiring)	% of Employers with Vacancies of Greater than 4 Months	Job Vacancy Rate
3223 Dental technologists, technicians and laboratory assistants	12	36%	57%	12%	1.5%
416 Policy and program researchers, consultants and officers	25-26	10%	16%	2%	n/a
4163 Business development officers and marketing researchers and consultants	17-18	13%	n/a	0%	n/a
524 Creative designers and craftspersons	39-41	32%	36%	1%	n/a
5241 Graphic designers and illustrators	33-35	27%	42%	2%	n/a
622 Technical sales specialists in wholesale trade and retail and wholesale buyers	93-94	20%	7%	4%	1.9%
6221 Technical sales specialists - wholesale trade	89-90	21%	7%	5%	2.0%
6222 Retail and wholesale buyers	7	5%	n/a	0%	n/a
633 Butchers and bakers	15-16	35%	57%	0%	n/a
6332 Bakers	13-14	35%	59%	0%	n/a
641 Sales and account representatives - wholesale trade (non-technical)	89	34%	16%	2%	n/a

MANUFACTURING INDUSTRY Selected Occupations (4-Digit NOC)	Employers Reporting (n)	% of Employers that Hired for this Occupation within the Last 2 Years	% of Employers Experiencing Hiring Difficulties (out of those hiring)	% of Employers with Vacancies of Greater than 4 Months	Job Vacancy Rate
6411 Sales and account representatives - wholesale trade (non-technical)	89	34%	16%	2%	n/a
642 Retail salespersons	34-35	37%	16%	2%	n/a
6421 Retail salespersons	34-35	37%	16%	2%	n/a
655 Customer and information services representatives	50-51	22%	58%	6%	2.1%
6552 Other customer and information services representatives	49-50	22%	58%	6%	2.4%
671 Food counter attendants, kitchen helpers and related support occupations	12-13	28%	22%	0%	n/a
6711 Food counter attendants, kitchen helpers and related support occupations	12-13	28%	22%	0%	n/a
673 Cleaners	57-58	28%	12%	3%	1.7%
6731 Light duty cleaners	7	59%	n/a	0%	n/a
6732 Specialized cleaners	15	36%	27%	3%	1.1%
6733 Janitors, caretakers and building superintendents	38	21%	3%	4%	2.3%

MANUFACTURING INDUSTRY Selected Occupations (4-Digit NOC)	Employers Reporting (n)	% of Employers that Hired for this Occupation within the Last 2 Years	% of Employers Experiencing Hiring Difficulties (out of those hiring)	% of Employers with Vacancies of Greater than 4 Months	Job Vacancy Rate
720 Contractors and supervisors, industrial, electrical and construction trades and related workers	80	14%	10%	1%	n/a
7201 Contractors and supervisors, machining, metal forming, shaping and erecting trades and related occupations	54-55	5%	n/a	0%	n/a
7204 Contractors and supervisors, carpentry trades	8	9%	n/a	0%	n/a
7205 Contractors and supervisors, other construction trades, installers, repairers and servicers	16-17	50%	0%	7%	2.3%
723 Machining, metal forming, shaping and erecting trades	234-236	39%	30%	4%	1.2%
7231 Machinists and machining and tooling inspectors	88-90	30%	50%	5%	1.2%
7233 Sheet metal workers	21-22	68%	23%	3%	n/a
7235 Structural metal and platework fabricators and fitters	25	32%	14%	0%	0.0%
7237 Welders and related machine operators	161-165	41%	27%	4%	1.4%

MANUFACTURING INDUSTRY Selected Occupations (4-Digit NOC)	Employers Reporting (n)	% of Employers that Hired for this Occupation within the Last 2 Years	% of Employers Experiencing Hiring Difficulties (out of those hiring)	% of Employers with Vacancies of Greater than 4 Months	Job Vacancy Rate
724 Electrical trades and electrical power line and telecommunications workers	36	22%	12%	6%	n/a
7241 Electricians (except industrial and power system)	9	13%	n/a	0%	0.0%
7242 Industrial electricians	27	26%	11%	9%	1.1%
725 Plumbers, pipefitters and gas fitters	14-15	46%	50%	0%	n/a
7252 Steamfitters, pipefitters and sprinkler system installers	12-13	46%	54%	0%	n/a
727 Carpenters and cabinetmakers	23-24	73%	78%	20%	5.9%
7272 Cabinetmakers	18-19	84%	78%	22%	6.0%
730 Contractors and supervisors, maintenance trades and heavy equipment and transport operators	39	13%	24%	2%	1.0%
7301 Contractors and supervisors, mechanic trades	22	10%	n/a	0%	n/a
7302 Contractors and supervisors, heavy equipment operator crews	17	25%	n/a	7%	2.3%
731 Machinery and transportation equipment mechanics (except motor vehicles)	82	40%	51%	10%	4.0%

MANUFACTURING INDUSTRY Selected Occupations (4-Digit NOC)	Employers Reporting (n)	% of Employers that Hired for this Occupation within the Last 2 Years	% of Employers Experiencing Hiring Difficulties (out of those hiring)	% of Employers with Vacancies of Greater than 4 Months	Job Vacancy Rate
7311 Construction millwrights and industrial mechanics	69	38%	48%	10%	4.1%
7312 Heavy-duty equipment mechanics	18	50%	65%	8%	3.3%
732 Automotive service technicians	11	31%	n/a	0%	n/a
7321 Automotive service technicians, truck and bus mechanics and mechanical repairers	9	32%	n/a	0%	n/a
738 Printing press operators and other trades and related occupations, n.e.c.	24-25	30%	42%	4%	1.4%
7381 Printing press operators	23-24	29%	44%	4%	1.4%
744 Other installers, repairers and servicers	37-38	41%	56%	0%	n/a
7441 Residential and commercial installers and servicers	33-34	43%	56%	0%	n/a
745 Longshore workers and material handlers	85-87	45%	43%	8%	2.8%
7452 Material handlers	85-87	45%	43%	8%	2.8%
751 Motor vehicle and transit drivers	60-61	27%	48%	2%	n/a
7511 Transport truck drivers	34-35	37%	55%	2%	n/a

MANUFACTURING INDUSTRY Selected Occupations (4-Digit NOC)	Employers Reporting (n)	% of Employers that Hired for this Occupation within the Last 2 Years	% of Employers Experiencing Hiring Difficulties (out of those hiring)	% of Employers with Vacancies of Greater than 4 Months	Job Vacancy Rate
7514 Delivery and courier service drivers	28	12%	n/a	0%	n/a
752 Heavy equipment operators	16-18	30%	45%	10%	1.9%
7521 Heavy equipment operators (except crane)	16-18	30%	45%	10%	1.9%
761 Trades helpers and labourers	47-49	49%	8%	10%	4.0%
7611 Construction trades helpers and labourers	28-30	55%	13%	18%	6.6%
7612 Other trades helpers and labourers	19	41%	0%	0%	0.0%
921 Supervisors, processing and manufacturing occupations	56-57	14%	11%	1%	n/a
9211 Supervisors, mineral and metal processing	14-15	23%	n/a	0%	n/a
9212 Supervisors, petroleum, gas and chemical processing and utilities	15	13%	n/a	0%	n/a
9213 Supervisors, food and beverage processing	19	12%	n/a	1%	n/a
9214 Supervisors, plastic and rubber products manufacturing	6	6%	n/a	0%	n/a

MANUFACTURING INDUSTRY Selected Occupations (4-Digit NOC)	Employers Reporting (n)	% of Employers that Hired for this Occupation within the Last 2 Years	% of Employers Experiencing Hiring Difficulties (out of those hiring)	% of Employers with Vacancies of Greater than 4 Months	Job Vacancy Rate
922 Supervisors, assembly and fabrication	52-53	17%	48%	3%	1.2%
9224 Supervisors, furniture and fixtures manufacturing	9	0%	n/a	0%	n/a
9226 Supervisors, other mechanical and metal products manufacturing	15	32%	n/a	11%	2.7%
9227 Supervisors, other products manufacturing and assembly	19	14%	n/a	0%	n/a
923 Central control and process operators in processing and manufacturing	8	33%	35%	8%	n/a
9232 Central control and process operators, petroleum, gas and chemical processing	7	35%	35%	8%	n/a
924 Utilities equipment operators and controllers	11	22%	n/a	7%	1.8%
9241 Power engineers and power systems operators	10	27%	n/a	9%	2.2%
941 Machine operators and related workers in mineral and metal products processing and manufacturing	89	28%	28%	5%	1.0%
9411 Machine operators, mineral and metal processing	11	25%	n/a	7%	1.6%

MANUFACTURING INDUSTRY Selected Occupations (4-Digit NOC)	Employers Reporting (n)	% of Employers that Hired for this Occupation within the Last 2 Years	% of Employers Experiencing Hiring Difficulties (out of those hiring)	% of Employers with Vacancies of Greater than 4 Months	Job Vacancy Rate
9415 Inspectors and testers, mineral and metal processing	9-11	32%	n/a	8%	5.8%
9416 Metalworking and forging machine operators	32	16%	36%	2%	n/a
9417 Machining tool operators	36-37	36%	29%	0%	0.0%
9418 Other metal products machine operators	n/a	n/a	n/a	n/a	n/a
942 Machine operators and related workers in chemical, plastic and rubber processing	24-26	45%	51%	7%	0.8%
9421 Chemical plant machine operators	11-12	52%	31%	0%	0.0%
9422 Plastics processing machine operators	11-12	39%	n/a	13%	1.2%
943 Machine operators and related workers in pulp and paper production and wood processing and manufacturing	18	53%	3%	4%	0.3%
9431 Sawmill machine operators	6	27%	n/a	0%	0.0%
9437 Woodworking machine operators	8	44%	n/a	10%	2.4%
944 Machine operators and related workers in textile, fabric, fur and leather products processing and manufacturing	21	35%	68%	0%	n/a

MANUFACTURING INDUSTRY Selected Occupations (4-Digit NOC)	Employers Reporting (n)	% of Employers that Hired for this Occupation within the Last 2 Years	% of Employers Experiencing Hiring Difficulties (out of those hiring)	% of Employers with Vacancies of Greater than 4 Months	Job Vacancy Rate
9442 Weavers, knitters and other fabric making occupations	11	23%	n/a	0%	n/a
9446 Industrial sewing machine operators	11	44%	n/a	0%	n/a
946 Machine operators and related workers in food, beverage and associated products processing	38	33%	32%	8%	3.8%
9461 Process control and machine operators, food and beverage processing	30-31	29%	33%	10%	3.6%
9462 Industrial butchers and meat cutters, poultry preparers and related workers	11-12	58%	40%	9%	4.0%
9465 Testers and graders, food and beverage processing	9	30%	n/a	0%	n/a
947 Printing equipment operators and related occupations	26-27	22%	22%	0%	n/a
9471 Plateless printing equipment operators	14	27%	n/a	0%	n/a
9472 Camera, platemaking and other prepress occupations	13	20%	n/a	0%	0.0%
9473 Binding and finishing machine operators	16-17	19%	n/a	0%	n/a

MANUFACTURING INDUSTRY Selected Occupations (4-Digit NOC)	Employers Reporting (n)	% of Employers that Hired for this Occupation within the Last 2 Years	% of Employers Experiencing Hiring Difficulties (out of those hiring)	% of Employers with Vacancies of Greater than 4 Months	Job Vacancy Rate
952 Mechanical, electrical and electronics assemblers	48	37%	19%	1%	n/a
9523 Electronics assemblers, fabricators, inspectors and testers	12	21%	n/a	0%	n/a
9524 Assemblers and inspectors, electrical appliance, apparatus and equipment manufacturing	19	48%	21%	0%	0.0%
9526 Mechanical assemblers and inspectors	10	32%	n/a	0%	n/a
953 Other assembly and related occupations	100	58%	45%	7%	2.2%
9532 Furniture and fixture assemblers and inspectors	12	81%	22%	22%	5.2%
9533 Other wood products assemblers and inspectors	16-18	73%	58%	2%	1.9%
9534 Furniture finishers and refinishers	7	73%	n/a	0%	0.0%
9535 Plastic products assemblers, finishers and inspectors	10	63%	43%	18%	3.2%
9536 Industrial painters, coaters and metal finishing process operators	29	40%	54%	2%	n/a

MANUFACTURING INDUSTRY Selected Occupations (4-Digit NOC)	Employers Reporting (n)	% of Employers that Hired for this Occupation within the Last 2 Years	% of Employers Experiencing Hiring Difficulties (out of those hiring)	% of Employers with Vacancies of Greater than 4 Months	Job Vacancy Rate
9537 Other products assemblers, finishers and inspectors	30-31	45%	12%	6%	1.2%
961 Labourers in processing, manufacturing and utilities	134-135	56%	16%	4%	2.4%
9612 Labourers in metal fabrication	59-60	47%	22%	4%	0.5%
9614 Labourers in wood, pulp and paper processing	6	83%	0%	0%	n/a
9617 Labourers in food and beverage processing	25	54%	7%	0%	n/a
9619 Other labourers in processing, manufacturing and utilities	33	65%	26%	13%	7.0%

“n” in the above table represents the range of the number of employers who indicated at least one employee in an occupation and responded to individual questions about hiring difficulties and vacancies (not all employers responded to all questions).

“n/a” indicates that results have been suppressed due to missing data for some employers.

Statistics on hiring activity, hiring difficulties, and employers reporting vacancies were calculated based on *the number of employers responding* for each question, weighted by establishment for survey non-response (stratified by region, industry group and employer size).

Job Vacancy Rate for vacancies that had been unfilled for 4 months or more calculated as: $\text{Sum of Unfilled Vacancies} / (\text{Sum of Current Employees} + \text{Sum of Unfilled Vacancies})$, with data weighted by establishment for survey non-response (stratified by industry group and employer size).

Industry Definition as per North American Industry Classification System (NAICS)

Manufacturing sector (NAICS 31-33)

This sector comprises of establishments primarily engaged in the physical or chemical transformation of materials or substances into new products. These products may be finished, in the sense that they are ready to be used or consumed, or semi-finished, in the sense of becoming a raw material for an establishment to use in further manufacturing. Related activities, such as the assembly of the component parts of manufactured goods; the blending of materials; and the finishing of manufactured products by dyeing, heat-treating, plating and similar operations are also treated as manufacturing activities. Manufacturing establishments are known by a variety of trade designations, such as plants, factories or mills.

Manufacturing establishments may own the materials which they transform or they may transform materials owned by other establishments. Manufacturing may take place in factories or in workers' homes, using either machinery or hand tools.

- Certain activities involving the transformation of goods are classified in other sectors. Some examples are post-harvest activities of agricultural establishments, such as crop drying; logging; the beneficiating of mineral ores; the production of structures by construction establishments; and various activities conducted by retailers, such as meat cutting and the assembly of products such as bicycles and computers.

Research conducted for the Alberta Government by R.A. Malatest & Associates Ltd.