

Occupation Overview

21 Occupations in the Valley Sierra Consortia Region

MJC Manufacturing Technology - Interdisciplinary

435 College Avenue
Modesto, California 95350
209.575.6550

Parameters

Occupations

21 items selected. See Appendix A for details.

Regions

Code	Description
6001	Alameda County, CA
6009	Calaveras County, CA
6043	Mariposa County, CA
6047	Merced County, CA
6077	San Joaquin County, CA
6099	Stanislaus County, CA
6109	Tuolumne County, CA

Timeframe

2014 - 2021

Datarun

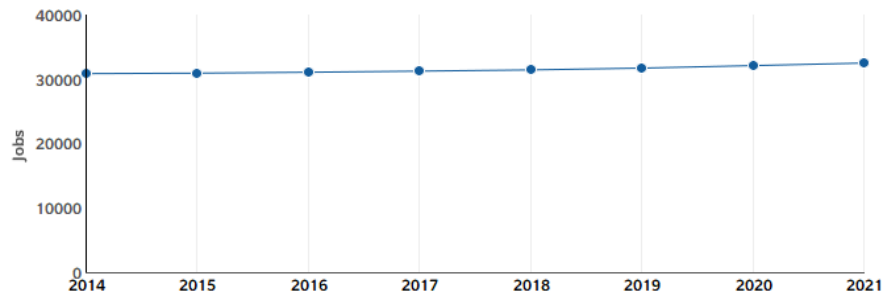
2014.2 – QCEW Employees and Extended Proprietors

Occupation Headline

30,936 Jobs (2014) 8% below National average	5.3% % Change (2014-2021) Nation: 5.1%	\$19.18/hr Median Earnings Nation: \$17.62/hr
---	---	--

Growth

30,936 2014 Jobs	32,575 2021 Jobs	1,638 Change (2014-2021)	5.3% % Change (2014-2021)
----------------------------	----------------------------	------------------------------------	-------------------------------------

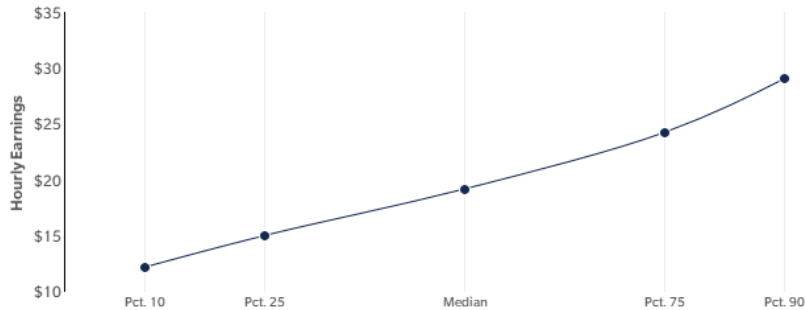


Occupation	2014 Jobs	2021 Jobs	Change	% Change
Helpers--Production Workers (51-9198)	4,393	4,547	154	4%
Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic (51-4031)	1,447	1,372	-75	-5%
Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic (51-4191)	61	64	3	5%
Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic (51-4032)	91	83	-8	-9%
Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic (51-4033)	491	462	-29	-6%
Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic (51-4034)	187	178	-9	-5%
Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic (51-4193)	276	273	-3	-1%
Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic	86	81	-5	-6%

Occupation	2014 Jobs	2021 Jobs	Change	% Change
(51-4035)				
Food and Tobacco Roasting, Baking, and Drying Machine Operators and Tenders (51-3091)	325	334	9	3%
Food Cooking Machine Operators and Tenders (51-3093)	601	605	4	1%
Computer-Controlled Machine Tool Operators, Metal and Plastic (51-4011)	687	751	64	9%
Helpers--Installation, Maintenance, and Repair Workers (49-9098)	1,308	1,420	112	9%
Food Processing Workers, All Other (51-3099)	498	539	41	8%
Industrial Machinery Mechanics (49-9041)	2,812	3,150	338	12%
Installation, Maintenance, and Repair Workers, All Other (49-9099)	1,730	1,816	86	5%
First-Line Supervisors of Production and Operating Workers (51-1011)	4,667	4,780	113	2%
Maintenance Workers, Machinery (49-9043)	837	898	61	7%
Maintenance and Repair Workers, General (49-9071)	10,025	10,811	786	8%
Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic (51-4021)	258	254	-4	-2%
Forging Machine Setters, Operators, and Tenders, Metal and Plastic (51-4022)	103	99	-4	-4%
Rolling Machine Setters, Operators, and Tenders, Metal and Plastic (51-4023)	54	57	3	6%

Percentile Earnings

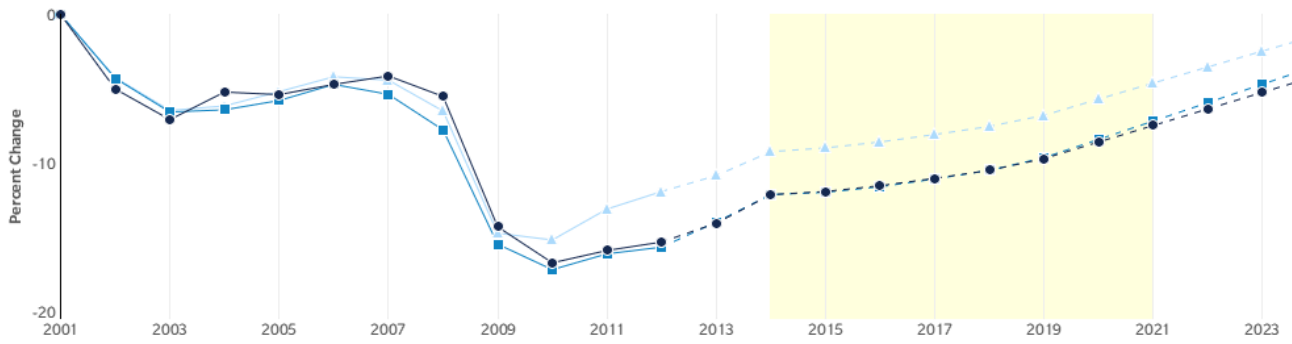
\$15.00/hr 25th Percentile Earnings	\$19.18/hr Median Earnings	\$24.26/hr 75th Percentile Earnings
---	--------------------------------------	---



Occupation	25th Percentile Earnings	Median Earnings	75th Percentile Earnings
Helpers--Production Workers (51-9198)	\$9.74	\$12.43	\$15.83
Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic (51-4031)	\$12.88	\$16.29	\$20.28
Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic (51-4191)	\$13.46	\$16.34	\$19.04
Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic (51-4032)	\$13.49	\$16.00	\$18.60
Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic (51-4033)	\$11.32	\$15.20	\$19.48
Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic (51-4034)	\$15.99	\$21.04	\$25.19
Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic (51-4193)	\$11.40	\$15.66	\$20.51
Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic (51-4035)	\$12.13	\$16.29	\$19.92
Food and Tobacco Roasting, Baking, and Drying Machine Operators and Tenders (51-3091)	\$10.89	\$14.19	\$17.57

Occupation	25th Percentile Earnings	Median Earnings	75th Percentile Earnings
Food Cooking Machine Operators and Tenders (51-3093)	\$12.88	\$16.58	\$19.60
Computer-Controlled Machine Tool Operators, Metal and Plastic (51-4011)	\$15.45	\$19.07	\$25.37
Helpers--Installation, Maintenance, and Repair Workers (49-9098)	\$9.37	\$11.05	\$14.08
Food Processing Workers, All Other (51-3099)	\$9.93	\$10.95	\$14.45
Industrial Machinery Mechanics (49-9041)	\$20.63	\$25.73	\$29.79
Installation, Maintenance, and Repair Workers, All Other (49-9099)	\$14.03	\$17.29	\$22.56
First-Line Supervisors of Production and Operating Workers (51-1011)	\$21.33	\$27.47	\$35.30
Maintenance Workers, Machinery (49-9043)	\$16.79	\$23.10	\$28.02
Maintenance and Repair Workers, General (49-9071)	\$14.77	\$19.19	\$24.78
Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic (51-4021)	\$11.32	\$12.44	\$15.97
Forging Machine Setters, Operators, and Tenders, Metal and Plastic (51-4022)	\$14.47	\$18.22	\$22.35
Rolling Machine Setters, Operators, and Tenders, Metal and Plastic (51-4023)	\$12.79	\$15.39	\$19.01

Regional Trends



	Region	2014 Jobs	2021 Jobs	% Change
●	Region	30,936	32,575	5.3%
■	State	364,904	385,438	5.6%
▲	Nation	3,918,513	4,117,793	5.1%

Occupation Gender Breakdown



	Gender	2014 Jobs	2014 Percent
•	Male	25,937	83.8%
•	Female	4,999	16.2%

Occupation Age Breakdown



	Age Group	2014 Jobs	2014 Percent
●	14-18	352	1.1%
●	19-24	2,339	7.6%
●	25-34	5,676	18.3%
●	35-44	6,981	22.6%
●	45-54	8,849	28.6%
●	55-64	5,409	17.5%
●	65+	1,330	4.3%

Occupational Programs

7 Programs (2013)	97 Completions (2013)	1,313 Openings (2013)
-----------------------------	---------------------------------	---------------------------------

Program	Completions (2013)
Machine Tool Technology/Machinist	50
Industrial Mechanics and Maintenance Technology	23
Electrical/Electronics Equipment Installation and Repair, General	21
Sheet Metal Technology/Sheetworking	3
Machine Shop Technology/Assistant	0

Industries Employing these Occupations

Industry	Occupation Group Jobs in Industry (2014)	% of Occupation Group in Industry (2014)	% of Total Jobs in Industry (2014)
Local Government, Excluding Education and Hospitals	1,461	4.7%	2.5%
Temporary Help Services	1,292	4.2%	6.9%
Fruit and Vegetable Canning	796	2.6%	19.7%
Machine Shops	658	2.1%	22.4%
Poultry Processing	592	1.9%	13.9%

Appendix A - Occupations

Code	Description
49-9041	Industrial Machinery Mechanics
49-9043	Maintenance Workers, Machinery
49-9071	Maintenance and Repair Workers, General
49-9098	Helpers--Installation, Maintenance, and Repair Workers
49-9099	Installation, Maintenance, and Repair Workers, All Other
51-1011	First-Line Supervisors of Production and Operating Workers
51-3091	Food and Tobacco Roasting, Baking, and Drying Machine Operators and Tenders
51-3093	Food Cooking Machine Operators and Tenders
51-3099	Food Processing Workers, All Other
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic
51-4021	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic
51-4022	Forging Machine Setters, Operators, and Tenders, Metal and Plastic
51-4023	Rolling Machine Setters, Operators, and Tenders, Metal and Plastic
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic
51-4032	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic
51-4033	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic
51-4034	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic
51-4035	Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic
51-4191	Heat Treating Equipment Setters, Operators, and Tenders, Metal and Plastic
51-4193	Plating and Coating Machine Setters, Operators, and Tenders, Metal and Plastic
51-9198	Helpers--Production Workers

Appendix B - Data Sources and Calculations

Occupation Data

EMSI occupation employment data are based on final EMSI industry data and final EMSI staffing patterns. Wage estimates are based on Occupational Employment Statistics (QCEW and Non-QCEW Employees classes of worker) and the American Community Survey (Self-Employed and Extended Proprietors). Occupational wage estimates also affected by county-level EMSI earnings by industry.

State Data Sources

This report uses state data from the following agencies: California Labor Market Information Department

Institution Data

The institution data in this report is taken directly from the national IPEDS database published by the U.S. Department of Education's National Center for Education Statistics.

Completers Data

The completers data in this report is taken directly from the national IPEDS database published by the U.S. Department of Education's National Center for Education Statistics.

Staffing Patterns Data

The staffing pattern data in this report are compiled from several sources using a specialized process. For QCEW and Non-QCEW Employees classes of worker, sources include Occupational Employment Statistics, the National Industry-Occupation Employment Matrix, and the American Community Survey. For the Self-Employed and Extended Proprietors classes of worker, the primary source is the American Community Survey, with a small amount of information from Occupational Employment Statistics.

Industry Data

EMSI industry data have various sources depending on the class of worker. (1) For QCEW Employees, EMSI primarily uses the QCEW (Quarterly Census of Employment and Wages), with supplemental estimates from County Business Patterns and Current Employment Statistics. (2) Non-QCEW employees data are based on a number of sources including QCEW, Current Employment Statistics, County Business Patterns, BEA State and Local Personal Income reports, the National Industry-Occupation Employment Matrix (NIOEM), the American Community Survey, and Railroad Retirement Board statistics. (3) Self-Employed and Extended Proprietor classes of worker data are primarily based on the American Community Survey, Nonemployer Statistics, and BEA State and Local Personal Income Reports. Projections for QCEW and Non-QCEW Employees are informed by NIOEM and long-term industry projections published by individual states.