Mechanical Drafters
in San Diego-Chula Vista-Carlsbad, CA

Mechanical Drafters (SOC 17-3013):
Prepare detailed working diagrams of machinery and mechanical devices, including dimensions, fastening methods, and other engineering information.

Sample of Reported Job Titles:
Mechanical Designer
Design Drafter
Drafting Technician
Drafter
Tool Design Drafter
Piping Designer
Mechanical Drafter
Designer
Project Designer
Product Designer

Related O*NET Occupation:
Mechanical Drafters (17-3013.00)

Contents

What is Emsi Data?

Emsi data is a hybrid dataset derived from official government sources such as the US Census Bureau, Bureau of Economic Analysis, and Bureau of Labor Statistics. Leveraging the unique strengths of each source, our data modeling team creates an authoritative dataset that captures more than 99% of all workers in the United States. This core offering is then enriched with data from online social profiles, resumés, and job postings to give you a complete view of the workforce.

Emsi data is frequently cited in major publications such as *The Atlantic*, *Forbes*, *Harvard Business Review*, *The New York Times*, *The Wall Street Journal*, and *USA Today*.

Report Parameters

1 Occupation

17-3013	Mechanical Drafters

1 MSA

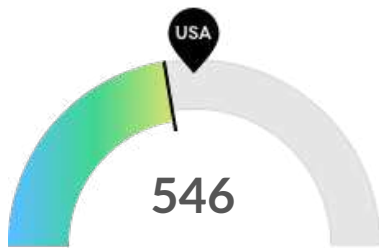|	
41740	San Diego-Chula Vista-Carlsbad, CA

Class of Worker

QCEW Employees, Non-QCEW Employees, and Self-Employed

The information in this report pertains to the chosen occupation and geographical area.
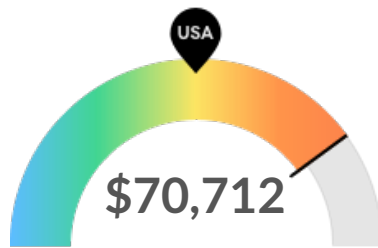
Executive Summary

## Aggressive Job Posting Demand Over a Thin Supply of Regional Jobs

546

Jobs (2018)

San Diego-Chula Vista-Carlsbad, CA is not a hotspot for this kind of job. The national average for an area this size is 637* employees, while there are 546 here.

$70,712

Compensation

Earnings are high in San Diego-Chula Vista-Carlsbad, CA. The national median salary for Mechanical Drafters is $55,668, compared to $70,712 here.

13
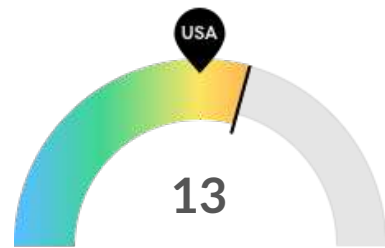
Job Posting Demand

Job posting activity is high in San Diego-Chula Vista-Carlsbad, CA. The national average for an area this size is 10* job postings/mo, while there are 13 here.

*National average values are derived by taking the national value for Mechanical Drafters and scaling it down to account for the difference in overall workforce size between the nation and San Diego-Chula Vista-Carlsbad, CA. In other words, the values represent the national average adjusted for region size.

Jobs

Regional Employment Is Lower Than the National Average

An average area of this size typically has 637* jobs, while there are 546 here. This lower than average supply of jobs may make it more difficult for workers in this field to find employment in your area.
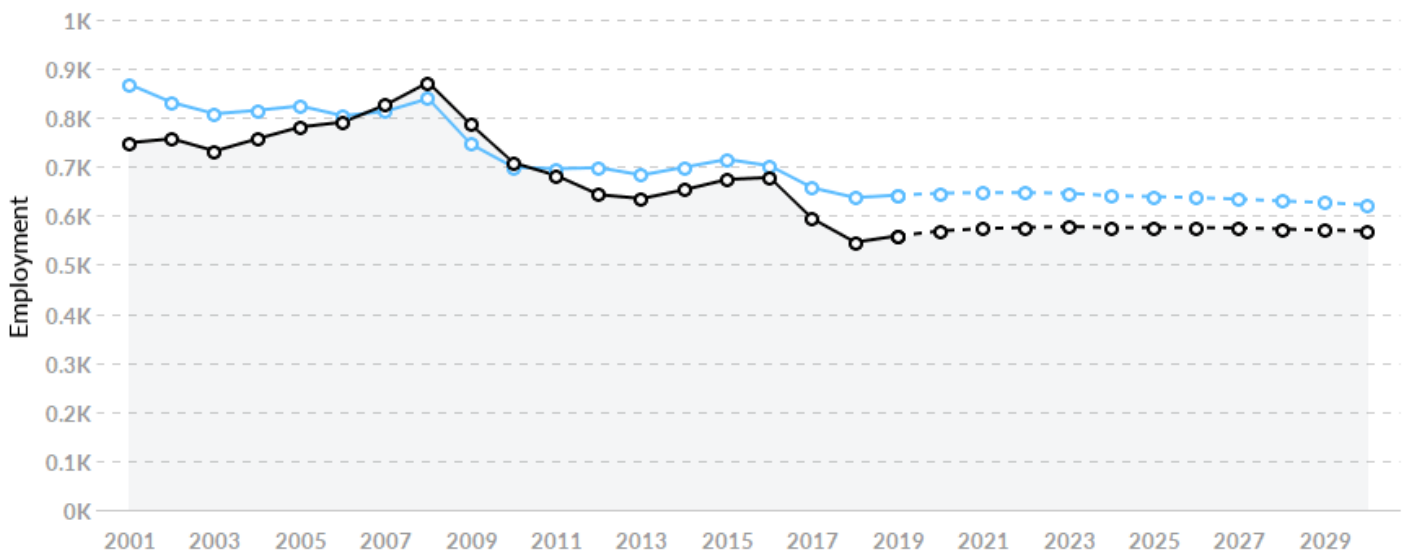
	Region	2018 Jobs	2028 Jobs	Change	% Change
●	San Diego-Chula Vista-Carlsbad, CA	546	573	27	5.0%
●	National Average	637	630	-6	-1.0%

*National average values are derived by taking the national value for Mechanical Drafters and scaling it down to account for the difference in overall workforce size between the nation and San Diego-Chula Vista-Carlsbad, CA. In other words, the values represent the national average adjusted for region size.

Regional Breakdown

County	2018 Jobs
San Diego County, CA	546

## Most Jobs are Found in the Architectural, Engineering, and Related Services Industry Sector

	Industry	% of Occupation in Industry (2018)
🔵	Architectural, Engineering, and Related Services	32.0%
🔵	Ship and Boat Building	9.6%
🔵	Aerospace Product and Parts Manufacturing	6.6%
🟣	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	5.8%
🟠	Scientific Research and Development Services	4.5%
🟡	Employment Services	4.2%
🟢	Other	37.4%

Compensation

Regional Compensation Is 27% Higher Than National Compensation

For Mechanical Drafters, the 2018 median wage in San Diego-Chula Vista-Carlsbad, CA is $70,712, while the national median wage is $55,668.
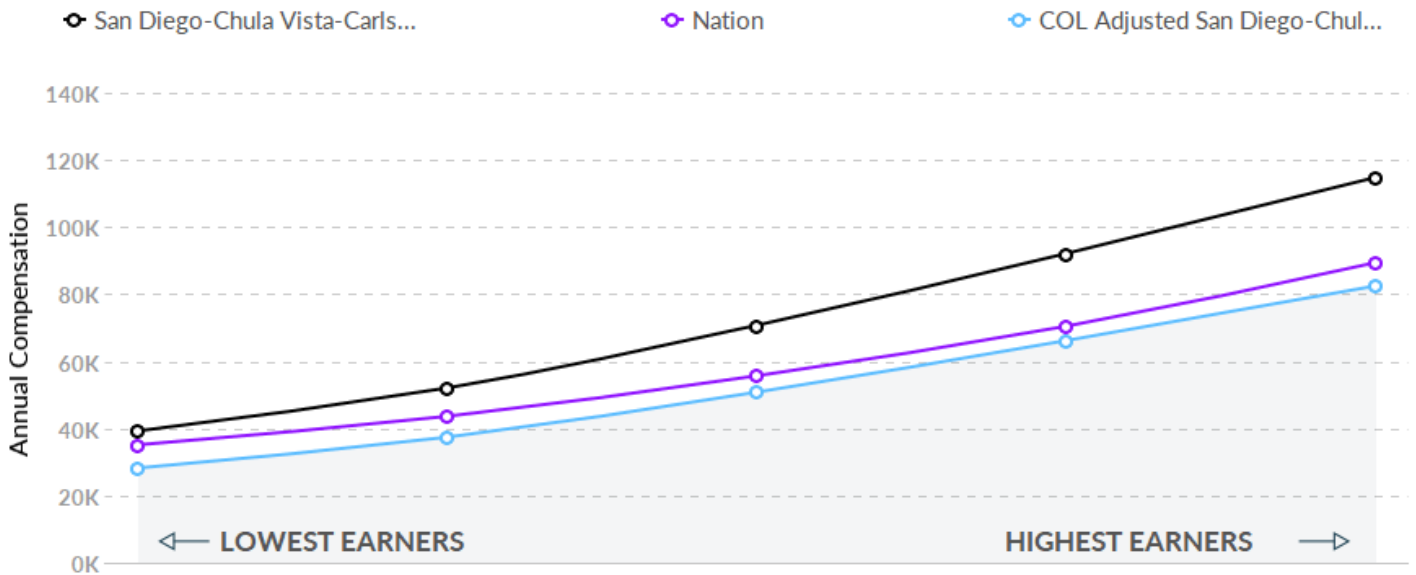
Job Posting Activity

363 Unique Job Postings	**142 Employers Competing**	**41 Day Median Duration**
The number of unique postings for this job from Jan 2018 to May 2020.	All employers in the region who posted for this job from Jan 2018 to May 2020.	Posting duration is 8 days longer than what's typical in the region.

● Monthly Unique Postings   ● Estimated Hires Per Month*
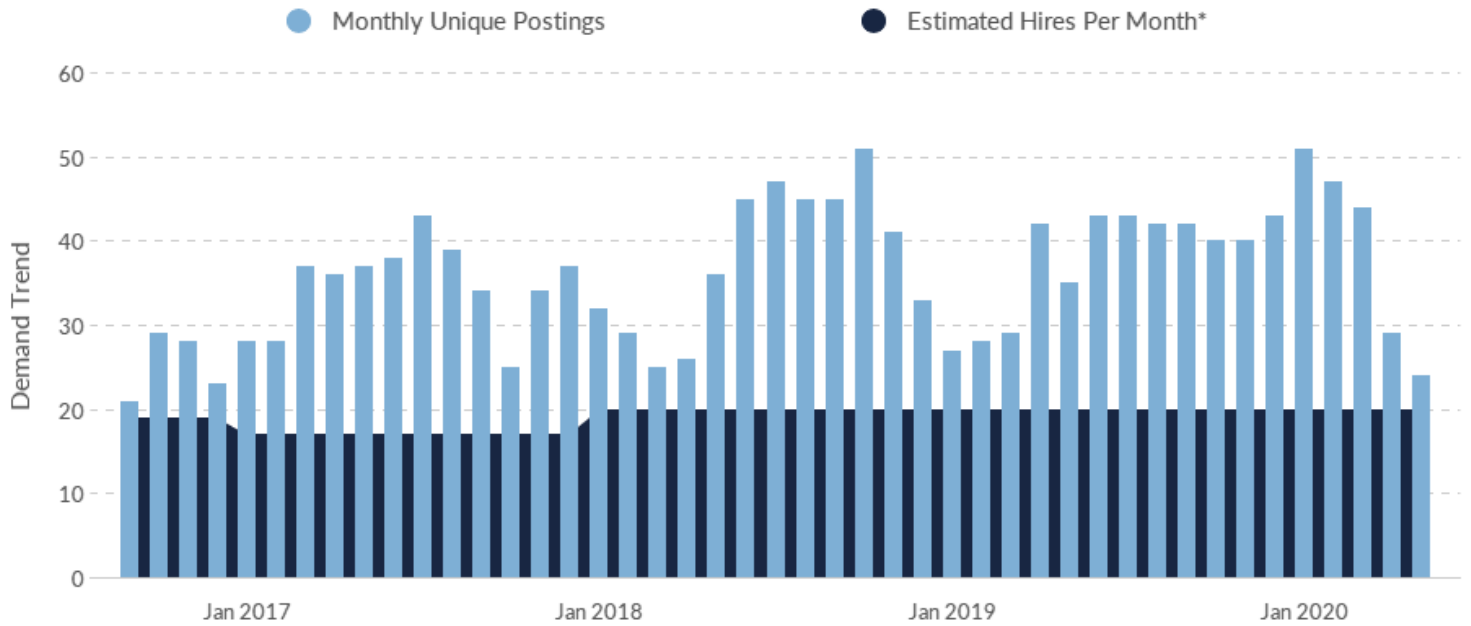
Occupation	Avg Monthly Postings (Jan 2018 - May 2020)	Avg Monthly Hires (Jan 2018 - May 2020)
Mechanical Drafters	38	20

*A hire is reported by the Quarterly Workforce Indicators when an individual's Social Security Number appears on a company's payroll and was not there the quarter before. Emsi hires are calculated using a combination of Emsi jobs data, information on separation rates from the Bureau of Labor Statistics (BLS), and industry-based hires data from the Census Bureau.

Top Companies	Unique Postings		Top Job Titles	Unique Postings	
Aerotek, Inc.	19	▬	Drafters	130	▬▬
Indus Corporation	19	▬	Design Engineers (Architecture ...	80	▬
Volt Information Sciences Inc	11	▬	Designer Drafters	27	▪
General Atomics	9	▬	CAD Technicians	24	▪
Pro Engineering Consulting	9	▬	Computer Aided Design (CAD) D...	19	▪
Device Research Group, Inc	7	▬	Draftspersons (Architecture and...	13	▪
Gulfstream Strategic Placement...	7	▬	Automotive Detailers	8	▪
Lincoln Electric Holdings, Inc.	7	▬	Piping Designers (Construction a...	5	❘
Randstad N.V.	7	▬	Structural Engineers	5	❘
Semper Solaris	7	▬	Designers	4	❘

Top Hard Skills

● Frequency in Job Postings   ● Frequency in Profiles
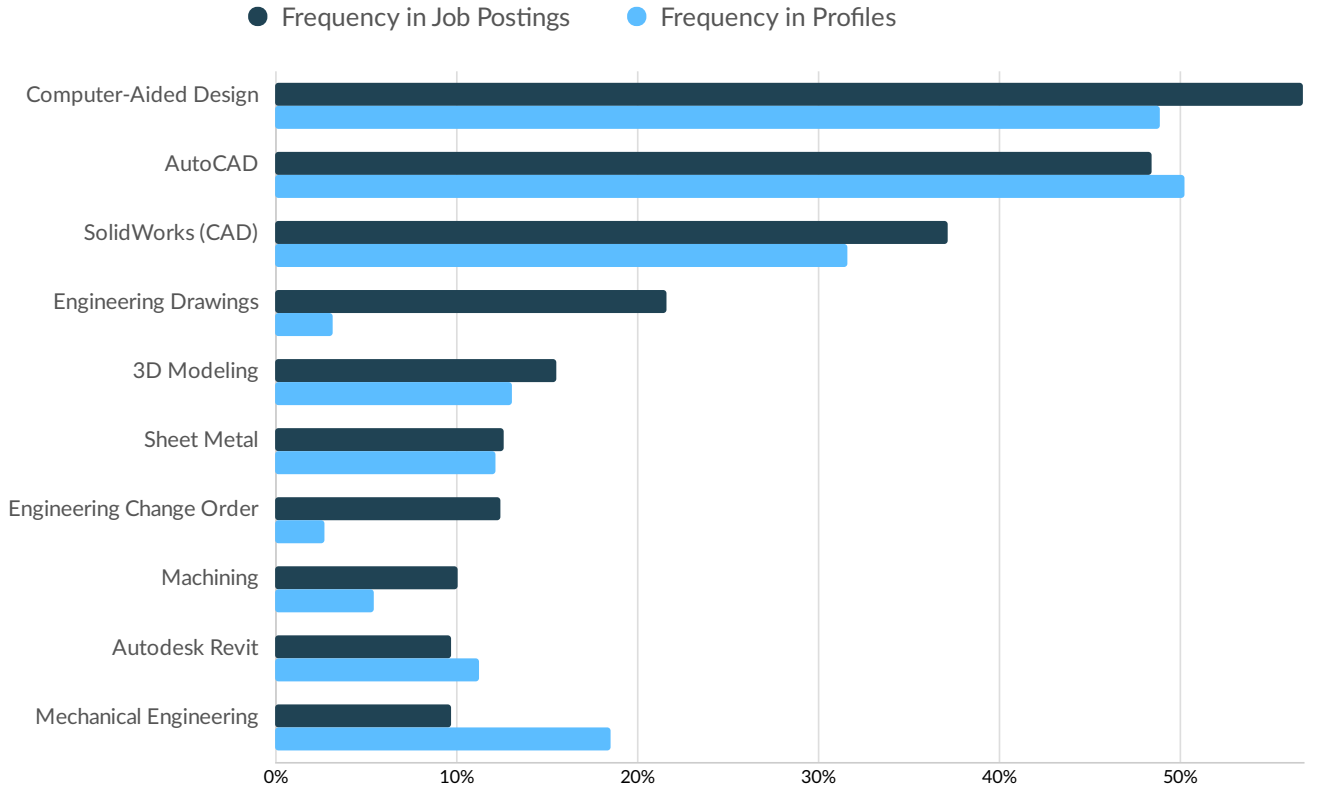
Skills	Postings	% of Total Postings	Profiles	% of Total Profiles
Computer-Aided Design	292	57%	108	49%
AutoCAD	249	48%	111	50%
SolidWorks (CAD)	191	37%	70	32%
Engineering Drawings	111	22%	7	3%
3D Modeling	80	16%	29	13%
Sheet Metal	65	13%	27	12%
Engineering Change Order	64	12%	6	3%
Machining	52	10%	12	5%
Autodesk Revit	50	10%	25	11%
Mechanical Engineering	50	10%	41	19%

Top Common Skills

● Frequency in Job Postings   ● Frequency in Profiles
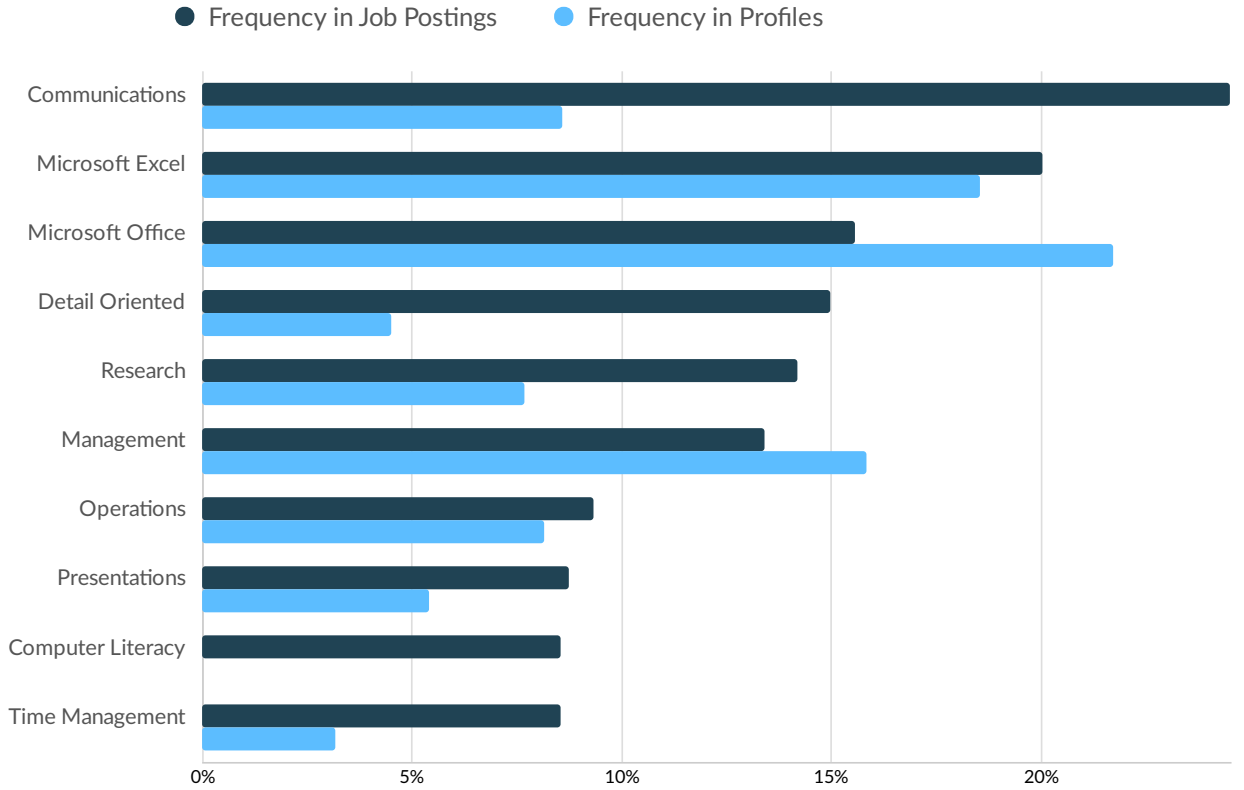
Skills	Postings	% of Total Postings	Profiles	% of Total Profiles
Communications	126	25%	19	9%
Microsoft Excel	103	20%	41	19%
Microsoft Office	80	16%	48	22%
Detail Oriented	77	15%	10	5%
Research	73	14%	17	8%
Management	69	13%	35	16%
Operations	48	9%	18	8%
Presentations	45	9%	12	5%
Computer Literacy	44	9%	0	0%
Time Management	44	9%	7	3%

Demographics

Retirement Risk Is About Average, While Overall Diversity Is High
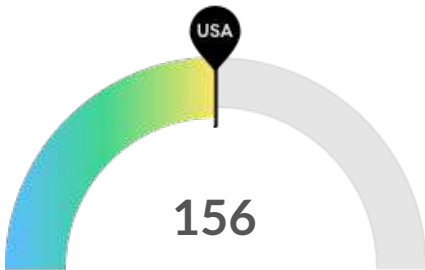
156
Retiring Soon

Retirement risk is about average in San Diego-Chula Vista-Carlsbad, CA. The national average for an area this size is 156* employees 55 or older, while there are 156 here.

235
Racial Diversity

Racial diversity is high in San Diego-Chula Vista-Carlsbad, CA. The national average for an area this size is 116* racially diverse employees, while there are 235 here.

106
Gender Diversity

Gender diversity is about average in San Diego-Chula Vista-Carlsbad, CA. The national average for an area this size is 98* female employees, while there are 106 here.
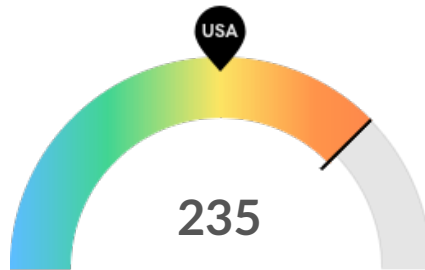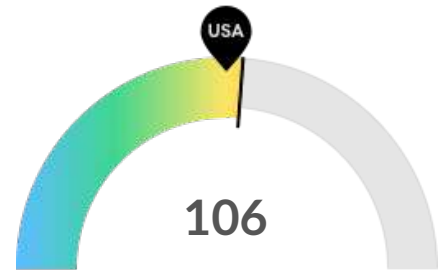
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Occupation Age Breakdown

	% of Jobs	Jobs
14-18	0.2%	1
19-24	6.3%	35
25-34	23.1%	129
35-44	20.9%	117
45-54	21.6%	121
55-64	19.9%	112
65+	7.9%	44
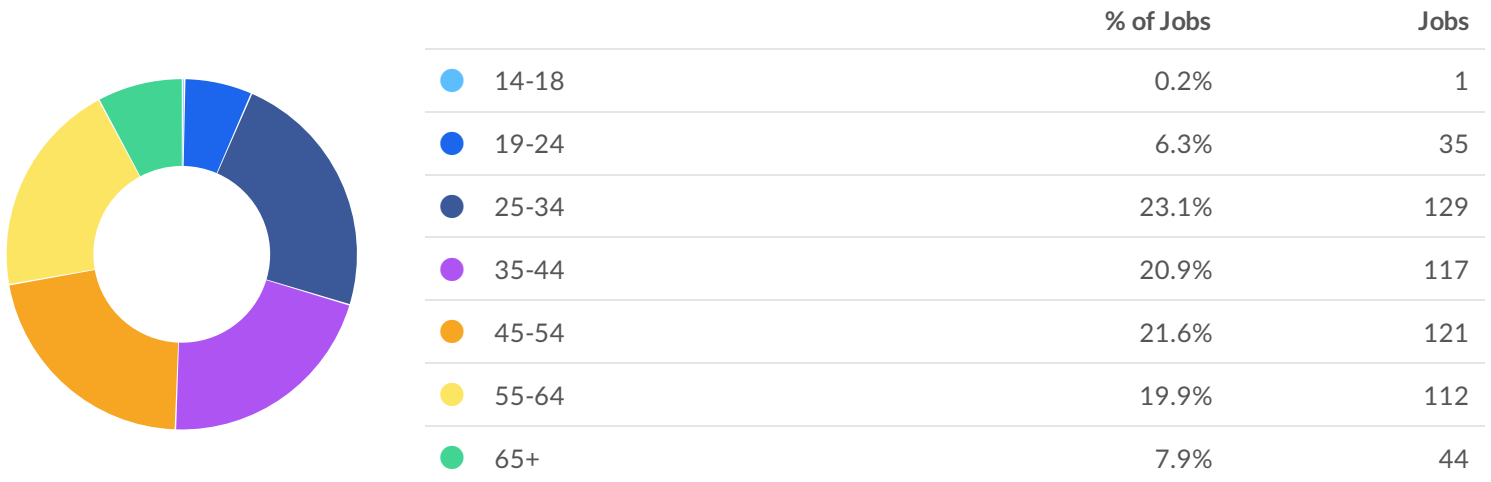
Occupation Race/Ethnicity Breakdown
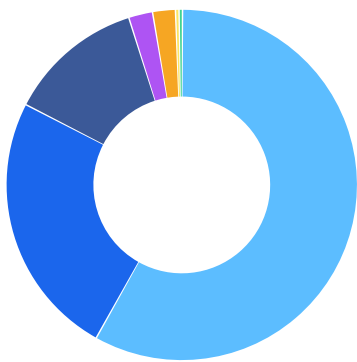
		% of Jobs	Jobs
●	White	58.0%	325
●	Hispanic or Latino	24.5%	137
●	Asian	12.5%	70
●	Black or African American	2.2%	12
●	Two or More Races	2.1%	12
●	American Indian or Alaska Native	0.3%	2
●	Native Hawaiian or Other Pacific Islander	0.3%	2

Occupation Gender Breakdown
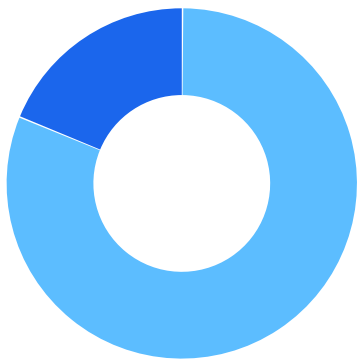
		% of Jobs	Jobs
●	Males	81.1%	454
●	Females	18.9%	106

National Educational Attainment
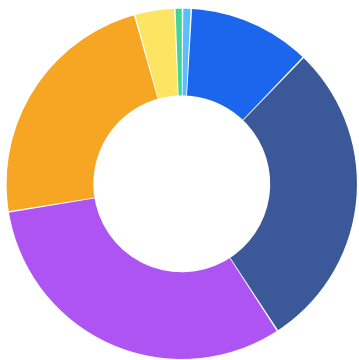
		% of Jobs
🔵	Less than high school diploma	0.8%
🔵	High school diploma or equivalent	11.3%
🔵	Some college, no degree	28.6%
🟣	Associate's degree	31.6%
🟠	Bachelor's degree	23.2%
🟡	Master's degree	3.7%
🟢	Doctoral or professional degree	0.7%

Occupational Programs

3 Programs

Of the programs that can train for this job, 3 have produced completions in the last 5 years.

75 Completions (2018)

The completions from all regional institutions for all degree types.

69 Openings (2018)

The average number of openings for an occupation in the region is 288.

CIP Code	Top Programs	Completions (2018)	
15.1301	Drafting and Design Technology/Technician, General	49	
15.1306	Mechanical Drafting and Mechanical Drafting CAD/CADD	26	

Top Schools	Completions (2018)	
MiraCosta College	33	
Palomar College	26	
Cuyamaca College	10	
San Diego City College	4	
Southwestern College	2	

Appendix A - Data Sources and Calculations

Location Quotient

Location quotient (LQ) is a way of quantifying how concentrated a particular industry, cluster, occupation, or demographic group is in a region as compared to the nation. It can reveal what makes a particular region unique in comparison to the national average.

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.

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.

Cost of Living Data

Emsi cost of living data is based on the Cost of Living Index published quarterly by the Council for Community and Economic Research (C2ER).

Emsi Job Postings

Job postings are collected from various sources and processed/enriched to provide information such as standardized company name, occupation, skills, and geography.

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.