

Electromechanical Equipment Assemblers Labor Market Analysis: San Diego County

January 2018

Summary

The following list summarizes findings from the labor market analysis below for *Electromechanical Equipment Assemblers*:

- Between 2016 and 2021, *Electromechanical Equipment Assemblers* are projected to increase by 32 jobs (or six percent) in San Diego County.
- Employers in San Diego County will need to hire 25 workers annually to fill new jobs and to backfill jobs due to attrition such as retirement or turnover. The most demand will be in the Central Region.
- Between 2010 and 2017, there was an average of five online job postings per year for *Electromechanical Equipment Assemblers* in San Diego County.
- *Electromechanical Equipment Assemblers* earn median hourly earnings of \$15.10, more than the self-sufficiency wage (\$13.09 per hour) for a single adult in San Diego County.
- According to the California Community Colleges Chancellor's Office Management Information System (MIS) Data Mart, no colleges supply the region with awards for this occupation. This may be due to the fact that this occupation's typical entry-level education is no formal educational credential. If an occupation does not require any formal training there may be no need for an institution to provide education or training to meet labor demand.
- Comparing the labor market demand against labor supply, there is a supply gap for this occupation in San Diego County, with 74 annual openings and zero awards. Comparatively, there are 734 annual openings in California and zero awards. The typical entry-level educational requirement for this occupation is a high school diploma or equivalent, therefore, local educational institutions may not need to develop training programs for this occupation.
- Between January 1, 2015 and December 31, 2017, the top five employers in San Diego County for this occupation were Elite Craftsman, Surge Force, Solar Turbines, Provide Commerce and International Marine and Industrial Appliances.
- The typical on-the-job training for this profession is moderate. The typical entry-level education is a high school diploma or equivalent.

Introduction

This report provides labor market information in San Diego County for the following occupational code in the Standard Occupational Classification (SOC)¹ system:

¹ The Standard Occupational Classification (SOC) system is used by federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating or disseminating data. bls.gov/soc.

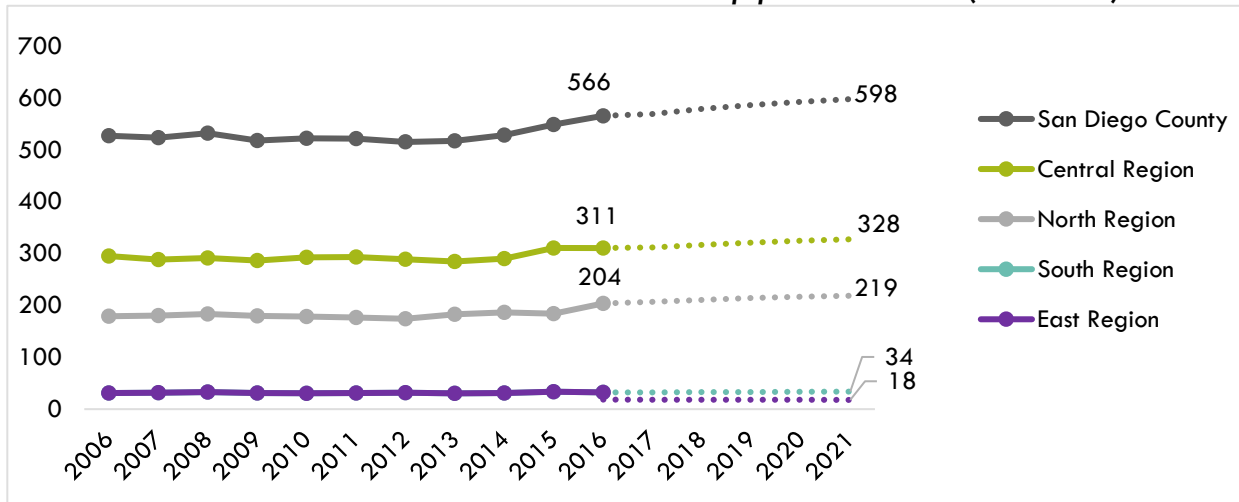
Electromechanical Equipment Assemblers (SOC 51-2023): Assemble or modify electromechanical equipment or devices, such as servomechanisms, gyros, dynamometers, magnetic drums, tape drives, brakes, control linkage, actuators and appliances. Sample reported job titles include:

- Electromechanical Equipment Assembler
- Electromechanical Assembler
- Assembler
- Wiring Technician
- Production Associate
- Mechanical Assembler
- Machine Assembler
- Electronics Assembler
- Electronic Technician
- Electronic Assembler

Projected Occupational Demand

Between 2016 and 2021, *Electromechanical Equipment Assemblers* are projected to increase by **32** jobs (or **six** percent) in San Diego County (Exhibit 1a and Exhibit 1b).²

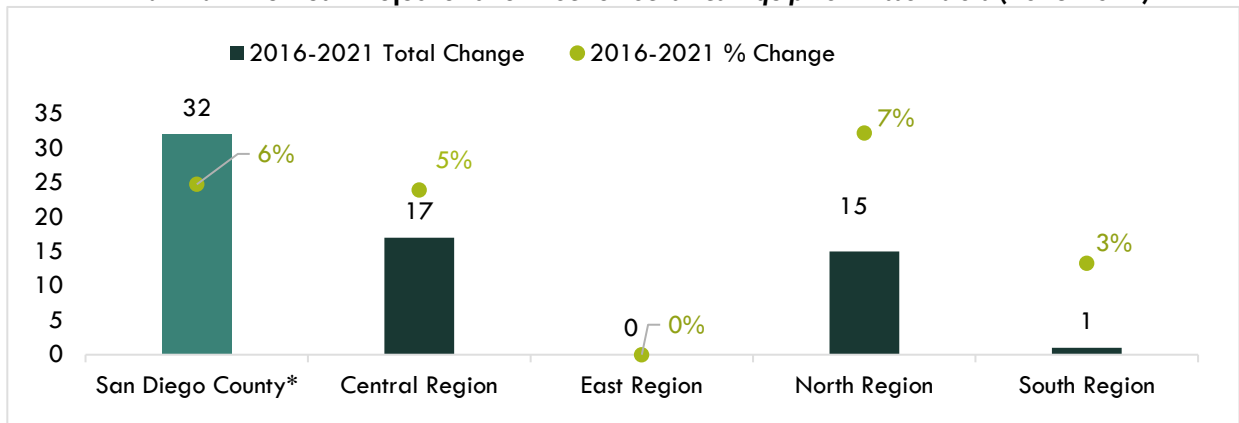
Exhibit 1a: Number of Jobs for *Electromechanical Equipment Assemblers* (2006-2021)³



² South, East, Central and North Regions' ZIP codes in this report are defined by the local Workforce Development Board, the San Diego Workforce Partnership.

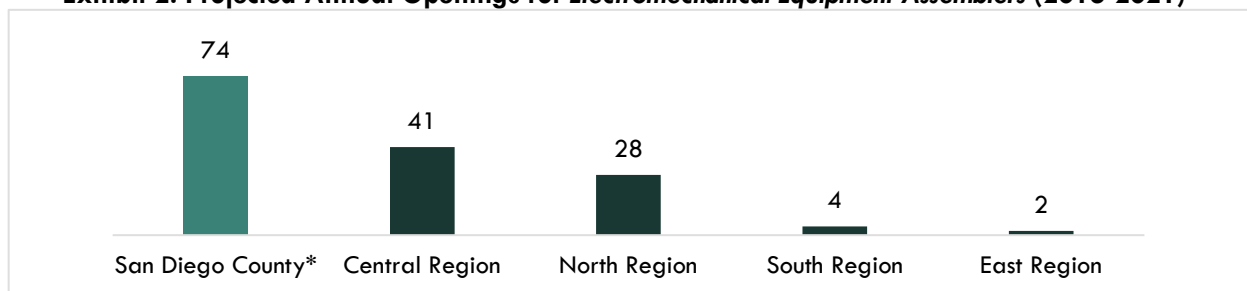
³ Economic Modeling Specialists, Int'l. (EMS). San Diego County (6073). 2017.03 Class of Worker. QCEW + Non-QCEW+ Self-Employed. 2006-2021.

Exhibit 1b: Five-Year Projections for *Electromechanical Equipment Assemblers* (2016-2021)⁴



Employers in San Diego County will need to hire **74** workers annually to fill new jobs and backfill jobs due to attrition such as retirement or turnover (Exhibit 2).

Exhibit 2: Projected Annual Openings for *Electromechanical Equipment Assemblers* (2016-2021)⁵



*Total annual openings for the subregions in San Diego County may not add up exactly due to rounding.

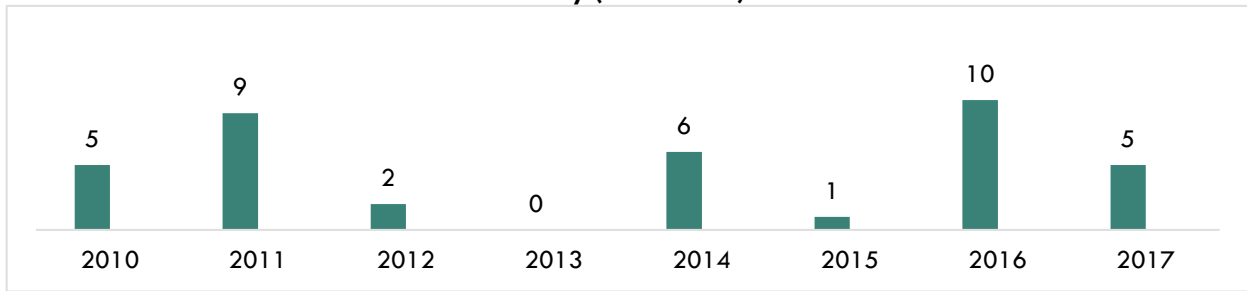
Online Job Postings

Between 2010 and 2017, there was an average of **five** online job postings per year for *Electromechanical Equipment Assemblers* in San Diego County (Exhibit 3).

⁴ EMSI. San Diego County (6073). 2017.04 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2016-2021.

⁵ EMSI. San Diego County (6073). 2017.04 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2016-2021.

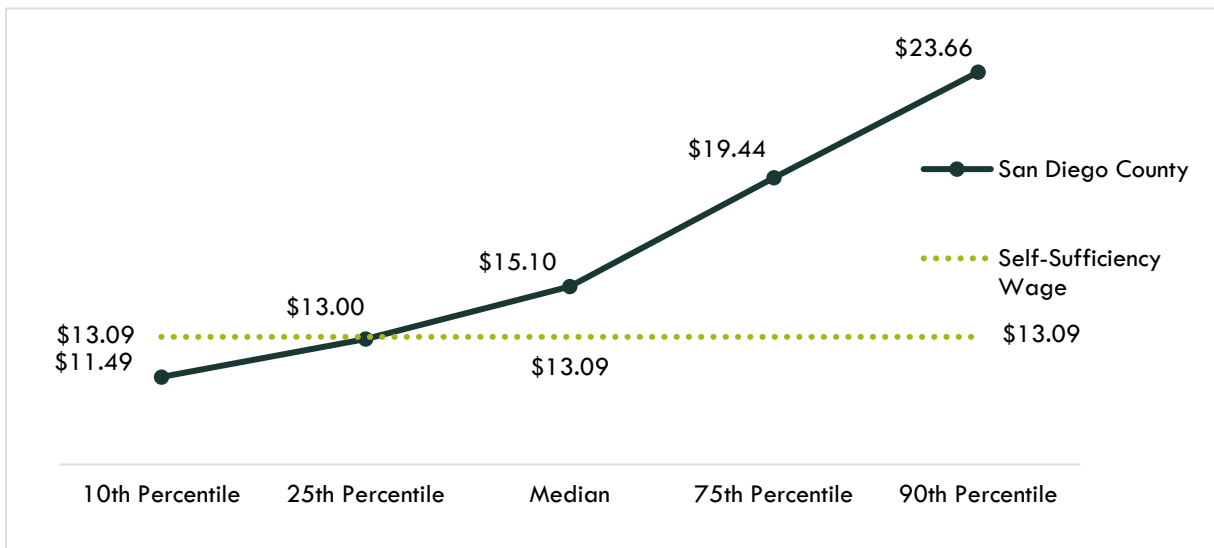
Exhibit 3: Number of Online Job Postings for Electromechanical Equipment Assemblers in San Diego County (2010-2017)⁶



Earnings

Electromechanical Equipment Assemblers earn median hourly earnings of **\$15.10**, more than the self-sufficiency wage (\$13.09 per hour)⁷ for a single adult in San Diego County (Exhibit 4).

Exhibit 4: Hourly Earnings for Electromechanical Equipment Assemblers in San Diego County⁸



Educational Supply

Educational supply for an occupation can be estimated by analyzing the number of related program completers/graduates/awards in San Diego County. To determine what programs are available, Exhibit 5 lists the Taxonomy of Programs (TOP) code(s) related to the SOC code analyzed.

⁶ Labor Insight Jobs. Burning Glass Technologies. San Diego, CA. Full years 2010, 2011, 2012, 2013, 2014, 2015, 2016, and 2017.

⁷ The self-sufficiency wage in San Diego for one adult is \$13.09 (insightccd.org/tools-metrics/self-sufficiency-standard-tool-for-california)

⁸ EMSI. San Diego County (6073). 2017.04 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2016-2021.

Exhibit 5: Related TOP Codes in San Diego County

SOC 51-2023: Electromechanical Equipment Assemblers

N/A

According to the California Community Colleges Chancellor's Office Management Information System (MIS) Data Mart, no colleges supply the region with awards for this occupation (Exhibit 6). This may be due to the fact that this occupation's typical entry-level education is no formal educational credential. If an occupation does not require any formal training there may be no need for an institution to provide education or training to meet labor demand.

Exhibit 6 shows the annual average regional community college awards (associate degrees and certificates) conferred during the three academic years between 2013 and 2016, as well as other awards granted outside the California Community Colleges from 2012 to 2015 with the relevant TOP code.

Please note: An award is not equivalent to a single person in search of a job opening because a student may earn more than one award such as an associate degree in addition to a certificate.

Exhibit 6: Number of Awards (Certificates and Degrees) Conferred by Postsecondary Institutions by Occupation (Program Year 2012-13 through PY2015-16 Average)

TOP06	TOP06 Title	3-Yr Annual Average Supply (PY13-14 to PY15-16)	3-Yr Annual Average CC Awards (PY13-14 to PY15-16)	Other Educational Institutions 3-Yr Annual Average Awards (PY12-13 to PY14-15)
N/A	N/A	0	0	0

*Total number of awards may not add up exactly due to rounding.

Demand vs. Supply

Comparing the labor demand (annual openings) with labor supply⁹ from the region's community colleges, there is a supply gap for this occupation in San Diego County, with 74 annual openings and zero awards. Comparatively, there are 734 annual openings in California and zero completions.¹⁰ The typical entry-level educational requirement for this occupation is a high school diploma or equivalent. Local educational institutions may not need to develop training programs for this occupation.

⁹ Labor supply can be found from two different sources: EMSI or the California Community Colleges Chancellor's Office MIS Data Mart. EMSI uses CIP codes while MIS uses TOP codes. Different coding systems result in differences in the supply numbers.

¹⁰ EMSI. San Diego County (6073). 2017.04 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2016-2021.

Exhibit 7: Labor Demand (Annual Openings) Compared to Labor Supply (Average Annual Awards)

Community Colleges and Other Postsecondary Educational Institutions	Demand (Annual Openings)	Supply (Total Annual Average Supply)	Supply Gap or OverSupply
San Diego County	74	0	74
California	734	0	734

Please note: This is a basic analysis of supply and demand of labor for these occupations. This data should be used to discuss the potential gaps or oversupply of workers for these occupations; however, it should not be the only basis for determining whether or not a program should be developed. Additionally, the data does not include workers who are currently in the labor force that could fill these positions or workers that are not captured by publicly available data.

Student Outcomes

Because there are no programs in the state that train workers for Electromechanical Equipment Assemblers, student outcome data is not available in the CTE LaunchBoard.¹¹

Top Employers and Work Locations

Between January 1, 2015 and December 31, 2017, the top five employers in San Diego County for this occupation were U.S .Navy, URS Corporation, STS Technical Services, Naval Air Systems Command and Elwood Professional (Exhibit 8).

Exhibit 8: Top Industries and Employers in San Diego County for Electromechanical Equipment Assemblers

Top Employers	Top Industries
<ul style="list-style-type: none"> • U.S. Navy • URS Corporation • STS Technical Services • Naval Air Systems Command • Elwood Professional 	<ul style="list-style-type: none"> • Automotive Parts, Accessories, and Tire Stores • National Security and International Affairs • Architectural, Engineering, and Related Services

¹¹ calpassplus.org/LaunchBoard/SWP.aspx

Skills, Education and Certifications

Exhibit 9 indicates the educational attainment for the occupation found currently in the national labor force. The typical on-the-job training for this occupation is **moderate-term on-the-job training**. The typical entry-level education is a **high school diploma or equivalent**.¹²

Exhibit 9: National Educational Attainment of *Electromechanical Equipment Assemblers*

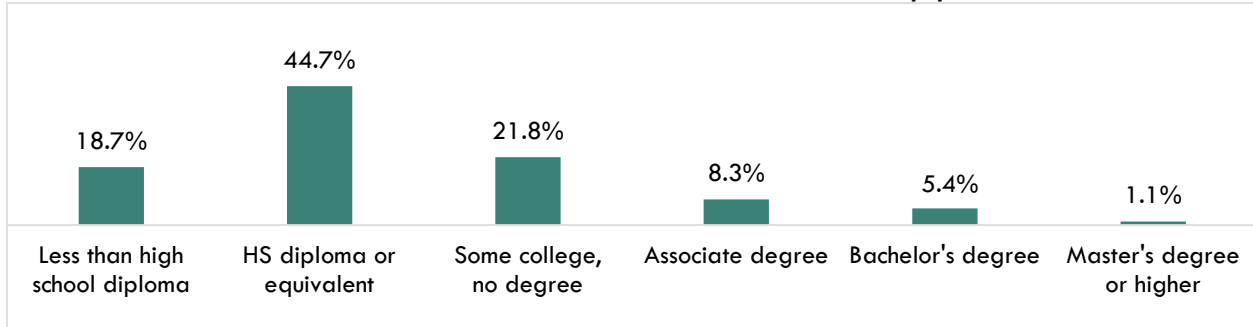


Exhibit 10 lists the top specialized, soft and software skills that appeared in online job postings between January 1, 2015 and December 31, 2017.

Exhibit 10: Top Skills for *Electromechanical Equipment Assemblers* in San Diego County¹³

Specialized Skills	Soft Skills	Software Skills
<ul style="list-style-type: none"> • Repair • Soldering • Inspection • Power Tools • AutoCAD 	<ul style="list-style-type: none"> • English • Physical Demand • Communication Skills • Computer Skills • Troubleshooting 	<ul style="list-style-type: none"> • Computer Aided Drafting/Design • AutoCAD • Windows NT • Microsoft Word • Microsoft Operating Systems

Tina Ngo Bartel, Director
Center of Excellence, San Diego-Imperial Region
tn gobartel@miracosta.edu



¹² EMSI. San Diego County (6073). 2017.04 Class of Worker. QCEW + Non-QCEW + Self-Employed. 2016-2021.

¹³ Labor Insight Jobs. Burning Glass Technologies. San Diego, CA. Full years 2015, 2016 and 2017.