



Advanced Manufacturing

LABOR MARKET ANALYSIS REPORT HIGHLIGHTS

San Diego County
October 2014

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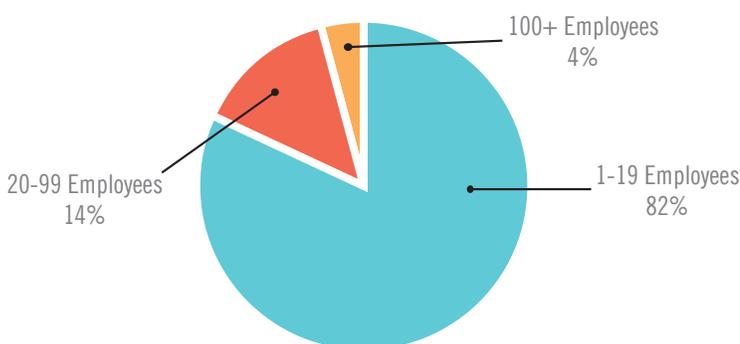
San Diego's Advanced Manufacturing careers are diverse and demand high-tech skills in computers, robotics and information technologies. This study serves to inform the workforce development system—educational training institutions, Workforce Investment Boards and community workforce development organizations—on how to best prepare the future workforce for this sector. The full report analyzes data on job growth, training gaps, hiring challenges and skills in demand from firms in the Advanced Manufacturing sector.

OVERVIEW OF ADVANCED MANUFACTURING IN SAN DIEGO COUNTY

The Advanced Manufacturing sector accounts for 10% of all establishments,¹ 15% of all paid employment and 22% of all annual payroll.

The Advanced Manufacturing sector is dominated by small- to medium-sized businesses with 82% of firms employing less than 20 employees.

SIZE OF ADVANCED MANUFACTURING ESTABLISHMENTS BY NUMBER OF EMPLOYEES

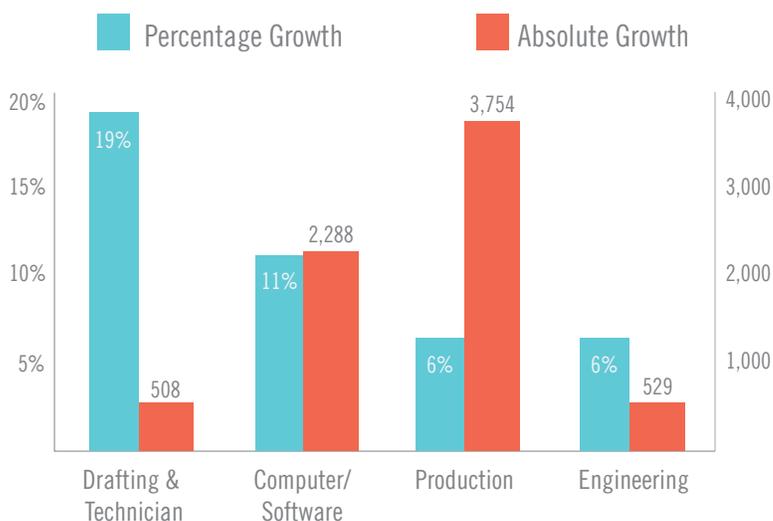


ADVANCED MANUFACTURING SECTOR PROJECTED EMPLOYMENT GROWTH



Production occupations are projected to have the greatest absolute growth in the region with more than 3,700 jobs between 2014 and 2018. Drafting and technician occupations are expected to grow at the fastest rate of 19% during this period.

PROJECTED EMPLOYMENT GROWTH BY OCCUPATIONAL CLUSTER 2014-2018



This study highlights four occupational clusters that are most commonly employed by Advanced Manufacturing firms: drafting and technician, computer/software, production and engineering. The top three professions with the most employment in each cluster are listed below:

Drafting and Technician

- Chemical technicians
- Engineering technicians, except drafters (all other)
- Environmental science and protection technicians, including health

Computer/Software

- Software developers, applications
- Software developers, systems software
- Computer user support specialists

Production

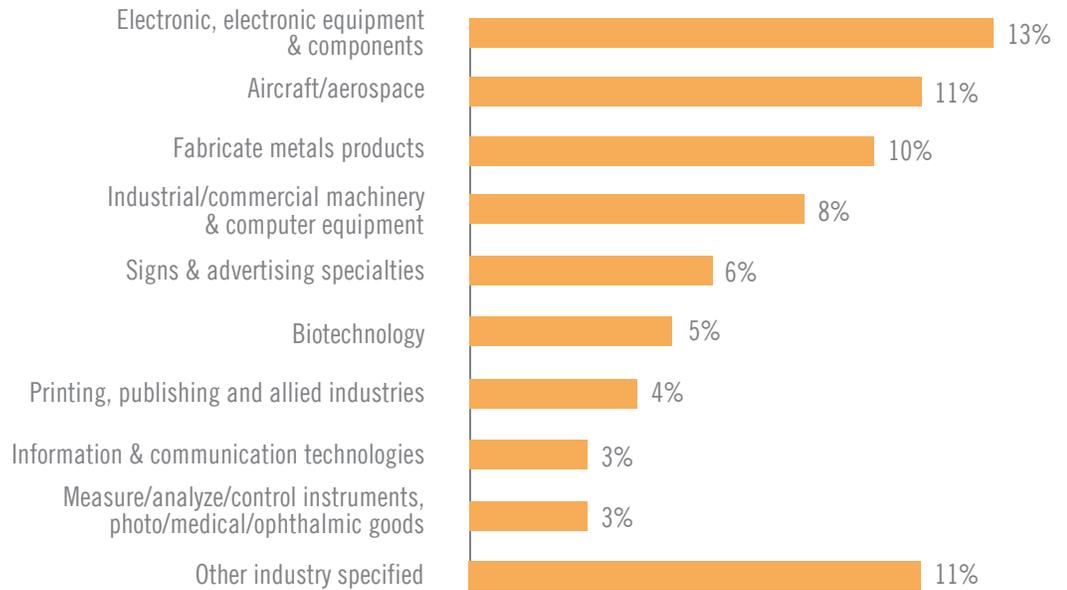
- Installation, maintenance and repair occupations
- Food processing workers
- Inspectors, testers, sorters, samplers and weighers

Engineering

- Computer hardware engineers
- Electrical engineers
- Mechanical engineers

1. An "establishment" is a single physical location of a business used for reporting purposes in government data sources. A single company may have multiple establishments.

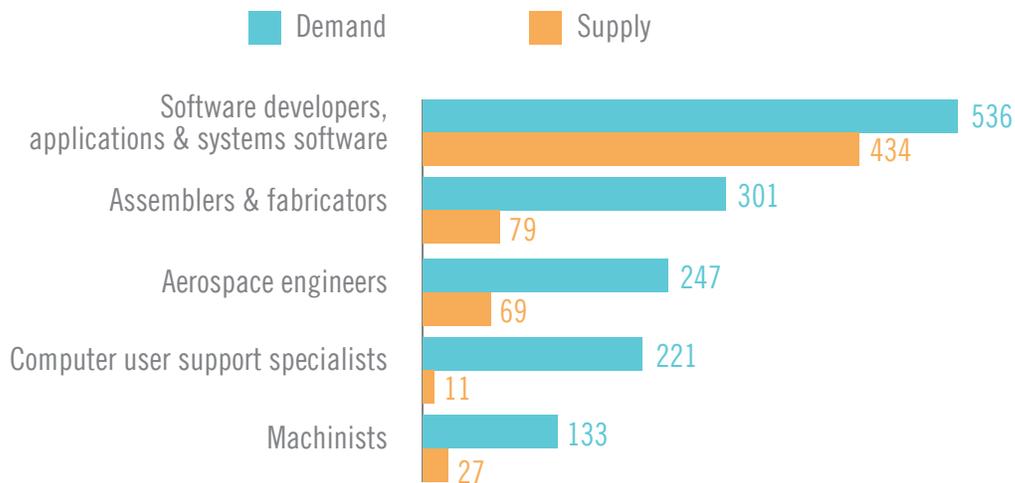
TOP INDUSTRY OR BUSINESS FUNCTION OF ADVANCED MANUFACTURING FIRMS PERCENT OF SURVEY RESPONDENTS



More than 250 employers in the Advanced Manufacturing sector in San Diego were surveyed and interviewed for this report. This sector includes diverse industries such as electronics, aerospace and biotechnology. No one industry dominated the Advanced Manufacturing sector. Eleven percent of firms specified other industries as their primary business function, which included medical equipment, dental restorations, custom foam inserts, breweries, radio frequency identification, musical instruments and more.

This study provides an analysis of jobs gaps within the Advanced Manufacturing sector. A gap is created when the number of trained workers produced by the region's educational institutions does not match the number of available job openings. Comparing employer demand with worker supply helps identify jobs gaps that can be addressed with workforce development.

TOP 5 OCCUPATIONS WITH SUPPLY GAPS



RECOMMENDATIONS FOR WORKFORCE DEVELOPMENT

- Shift the public image of traditional manufacturing to Advanced Manufacturing
- Develop an Advanced Manufacturing talent pipeline
- Increase employer knowledge about business assistance programs for workforce training
- Add an internship and/or work experience requirements to education and training programs
- Encourage critical thinking and real world application in education and training programs
- Standardize certifications and articulation agreements

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