

Sample Military Occupational Classifications

42730 - Machinist (Air Force)

44E - Machinist (Army)

2161 - Machinist (Marines)

4404 - Computer Numerically-controlled Machinist (Navy)

This packet is designed for men and women in Machinist positions leaving the military and entering into civilian occupations. It identifies and describes the current military occupation, and profiles five related civilian occupations that share many of the same skill requirements. These five related occupations are examples and individuals may have skills and interests that would qualify them for many other jobs.

These profiles can be used to:

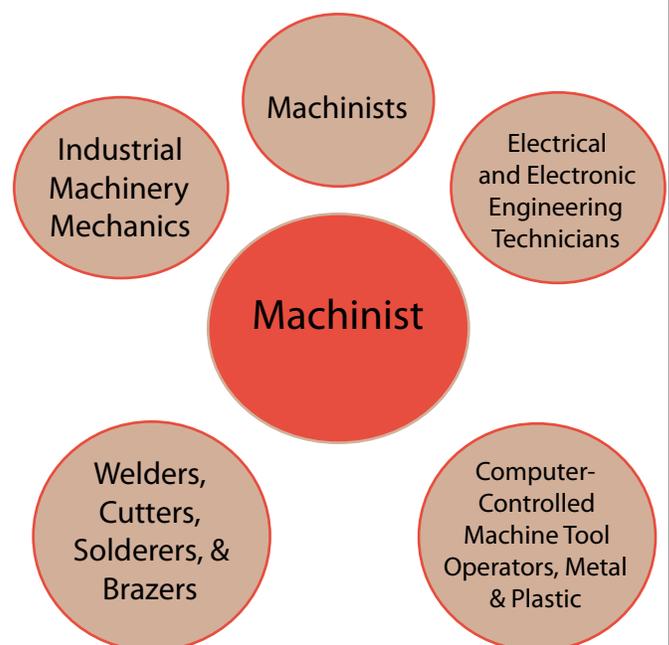
- Prepare for resume writing and job interviews.
- Help make training decisions.
- Explore new career options in occupations that require many of the same skills.

Each Occupation Profile contains the following information:

- Profile of current military occupation, with Top 5 important Duties and Top 3 pertinent Knowledges, Skills, Abilities, and Work Activities.
- Profiles of the most closely related civilian occupations identified, with Top 5 important Tasks; Top 3 pertinent Knowledges, Skills, Abilities, and Work Activities; Labor Market Information; Education and Training Requirements; and Job Listings in your area.

Each information packet is designed to answer questions like "how much can I expect to earn on this job?" and "what's the outlook for this type of work in the next ten years?"

Labor Market Information Division
Workforce Services Branch
Employment Development Department



Machinist, cont.

Description

Perform various duties related to fabrication, repair or modification of engineer, motor transport, weapons, and accessories. Understands the theory and application of Computer Numerically Controlled (CNC) lathes, milling machines and associated equipment utilizing Computer Aided Design (CAD), and Computer Aided Machining (CAM) software. Machinists work from sketches, diagrams, blueprints, written specifications, or oral instructions. Quality control and accuracy is met by the machinists' use of precision measuring devices including micrometers, vernier gauges, and various other gauges. Once the metals are fabricated then they are welded using all standard welding equipment. All shop equipment is maintained to ensure that serviceability is sustained. The machinist will coordinate with other repair shops, report work completion, and complete shop administrative functions.

Important Duties

- Select the appropriate tools, machines, and materials to be used in preparation of machinery work.
- Machine parts to specifications using machine tools such as lathes, milling machines, shapers, or grinders.
- Calculate dimensions and tolerances using knowledge of mathematics and instruments such as micrometers and vernier calipers.
- Determine the sequence of machine operations, and select the proper cutting tools needed to machine workpieces into the desired shapes.
- Analyze job orders, drawings, blueprints, specification, and design data in order to calculate dimensions, tool selection, machine speeds, and feed rates.

Important Knowledge, Skills, Abilities, and Work Activities

Knowledge	Skills
Mechanical	Operation Monitoring
Mathematics	Complex Problem Solving
Design	Quality Control Analysis
Abilities	Work Activities
Control Precision	Controlling Machines and Processes
Near Vision	Interacting With Computers
Problem Sensitivity	Getting Information

Source: Occupational Information Network ([O*NET](#))

Computer-Controlled Machine Tool Operators, Metal and Plastic

Description

Operate computer-controlled machines or robots to perform one or more machine functions on metal or plastic work pieces.

Sample Job Titles

Computer Numerical Control Operator (CNC Operator), Computer Numerical Control Machinist (CNC Machinist), Machine Operator, Computer Numerical Control Lathe Operator (CNC Lathe Operator), CNC Machine Operator

Important Tasks

- Measure dimensions of finished workpieces to ensure conformance to specifications, using precision measuring instruments, templates, and fixtures.
- Remove and replace dull cutting tools.
- Mount, install, align, and secure tools, attachments, fixtures, and workpieces on machines, using hand tools and precision measuring instruments.
- Listen to machines during operation in order to detect sounds such as those made by dull cutting tools or excessive vibration and adjust machines to correct problems.
- Adjust machine feed and speed, change cutting tools, or adjust machine controls when automatic programming is faulty or if machines malfunction.

Job Fit

The job of Computer-Controlled Machine Tool Operator, Metal and Plastic may appeal to those who enjoy work activities that include practical, hands-on problems and solutions. This occupation also may appeal to those who like following set procedures and routines.

Education and Training Requirements

Typical Education Level: High school diploma or the equivalent, less than one year of work experience, and moderate-term on-the-job training. This is an occupation in which workers can develop skills needed to attain competency after a period of between 1 and 12 months of combined on-the-job experience and informal training.

Certification: Link to America's Career InfoNet Certification Finder at www.careerinfonet.org and type in the keywords "machine tool operator" to find certification programs related to this occupation.

Computer-Controlled Machine Tool Operators, Metal and Plastic, cont.

2013 Median Wages

	Hourly	Annual
California	\$17.72	\$36,860
Los Angeles County	\$17.57	\$36,547
Ventura County	\$15.82	\$32,906

Source: Occupational Employment Statistics Survey 2013 1st Q

Projections of Employment - California Long-Term

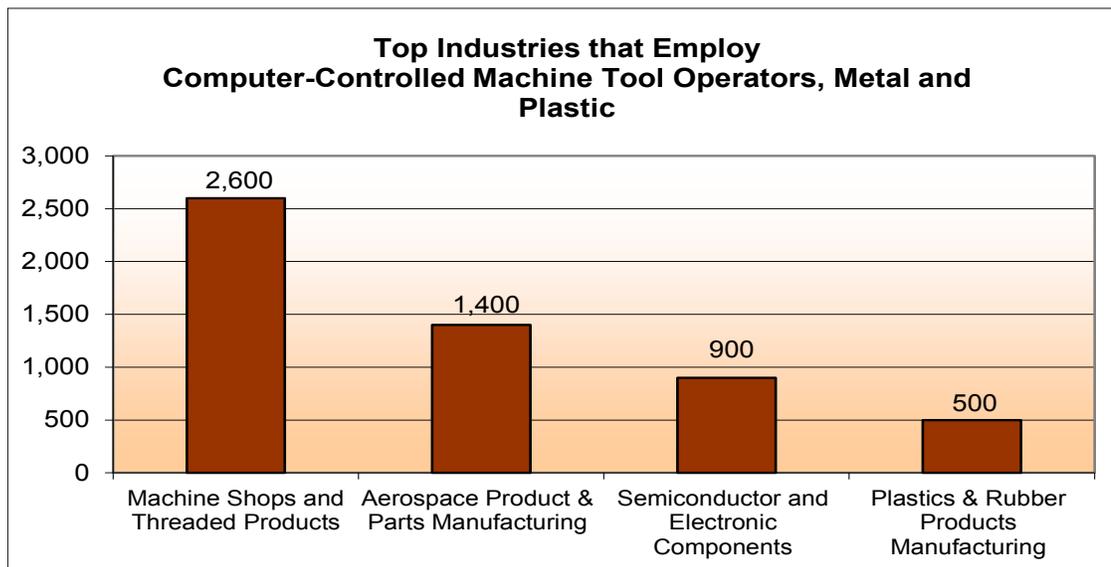
Est. # of Workers (2010-2020)		Numeric Change	Percent Change	Average Annual Job Openings
9,500	11,500	2,000	21.1	390

Projections of Employment - California Short-Term

Est. # of Workers (2012-2014)		Numeric Change	Percent Change	Average Annual Job Openings
9,900	10,200	300	3.0	340

Source: EDD/LMID Projections of Employment by Occupation

Top Industries that Employ this Occupation



Source: CA Staffing Patterns

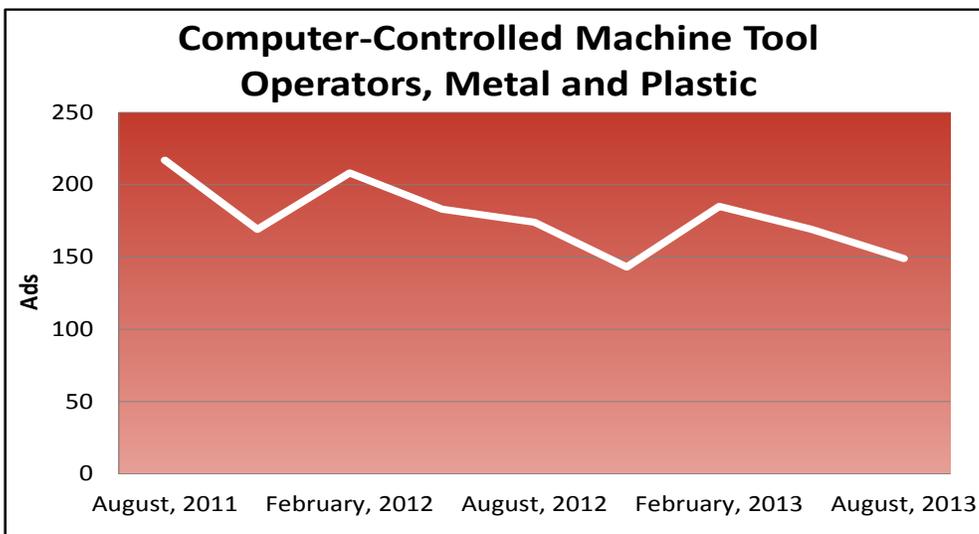
Computer-Controlled Machine Tool Operators, Metal and Plastic, cont.

Recent Job Openings for this Occupation

Month	Total Job Listings	Sample of Employers
July 2013	169	<ul style="list-style-type: none"> • Work 22 • Volt Information Sciences, Inc.
August 2013	152	<ul style="list-style-type: none"> • Work 22 • Lisi Aerospace
September 2013	150	<ul style="list-style-type: none"> • Alcoa Inc. • Work 22

Source: [The Conference Board Help Wanted Online™ \(HWOL\) data series - Hiring Demand Dashboard](#)

Regional 2-Year Online Job Ad Trend for this Occupation



Source: [The Conference Board Help Wanted Online™ \(HWOL\) data series - Hiring Demand Dashboard](#)

Regional Supply and Demand for this Occupation

Estimated Candidate Supply	6,400
Employers Hiring	34
# of Employers Who Have Hired in the Past Four Years	321
Average Posting Period	43 days

Source: [WANTED Analytics: Date accessed 9/30/13](#)

Computer-Controlled Machine Tool Operators, Metal and Plastic, cont.

Important Knowledge, Skills, Abilities, and Work Activities

Knowledge	Description
Mechanical	Knowledge of machines and tools, including their designs, uses, repair, and maintenance.
Mathematics	Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications.
Production and Processing	Knowledge of raw materials, production processes, quality control, costs, and other techniques for maximizing the effective manufacture and distribution of goods.
Skill	Description
Monitoring	Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action.
Operation Monitoring	Watching gauges, dials, or other indicators to make sure a machine is working properly.
Critical Thinking	Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
Ability	Description
Hearing Sensitivity	The ability to detect or tell the differences between sounds that vary in pitch and loudness.
Problem Sensitivity	The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.
Reaction Time	The ability to quickly respond (with the hand, finger, or foot) to a signal (sound, light, picture) when it appears.
Work Activity	Description
Controlling Machines and Processes	Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).
Inspecting Equipment, Structures, or Material	Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
Getting Information	Observing, receiving, and otherwise obtaining information from all relevant sources.

Source: Occupational Information Network ([O*NET](#))

Electrical and Electronic Engineering Technicians

Description

Apply electrical and electronic theory and related knowledge, usually under the direction of engineering staff, to design, build, repair, calibrate, and modify electrical components, circuitry, controls, and machinery for subsequent evaluation and use by engineering staff in making engineering design decisions.

Sample Job Titles

Test Technician, Technician, Refurbish Technician (Refurb Tech), Electrical Technician, Electronics Test Technician, Engineering Aide, Failure Analysis Technician

Important Tasks

- Set up and operate test equipment to evaluate performance of developmental parts, assemblies, or systems under simulated operating conditions, and record results.
- Assemble electrical and electronic systems and prototypes according to engineering data and knowledge of electrical principles, using hand tools and measuring instruments.
- Provide technical assistance and resolution when electrical or engineering problems are encountered before, during, and after construction.
- Read blueprints, wiring diagrams, schematic drawings, or engineering instructions for assembling electronics units, applying knowledge of electronic theory and components.
- Perform preventative maintenance or calibration of equipment or systems.

Job Fit

Electrical and Electronic Engineering Technician jobs will appeal to those with realistic interests who like practical, hands-on problems and solutions and paying close attention to detail. An interest in math and science is helpful. The ability to work independently and as a member of a team is important in this occupation.

Education and Training Requirements

Typical Education Level: Associate degree.

Certification: Link to America's Career InfoNet Certification Finder at www.careerinfonet.org and type in the keywords "electrical engineering technician" to find certification programs related to this occupation.

Electrical and Electronic Engineering Technicians, cont.

2013 Median Wages

	Hourly	Annual
California	\$29.52	\$61,391
Los Angeles County	\$30.31	\$63,040
Ventura County	\$35.00	\$72,811

Source: [Occupational Employment Statistics Survey 2013 1st Q](#)

Projections of Employment - California Long-Term

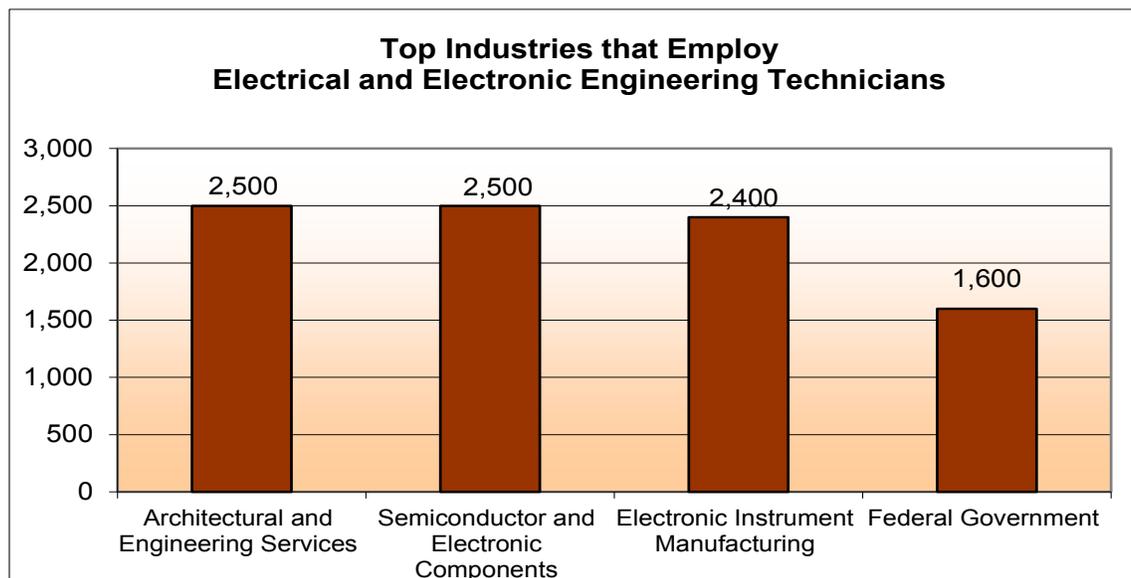
Est. # of Workers (2010-2020)		Numeric Change	Percent Change	Average Annual Job Openings
20,400	22,100	1,700	8.3	570

Projections of Employment - California Short-Term

Est. # of Workers (2012-2014)		Numeric Change	Percent Change	Average Annual Job Openings
20,600	20,900	300	1.5	560

Source: [EDD/LMID Projections of Employment by Occupation](#)

Top Industries that Employ this Occupation



Source: [CA Staffing Patterns](#)

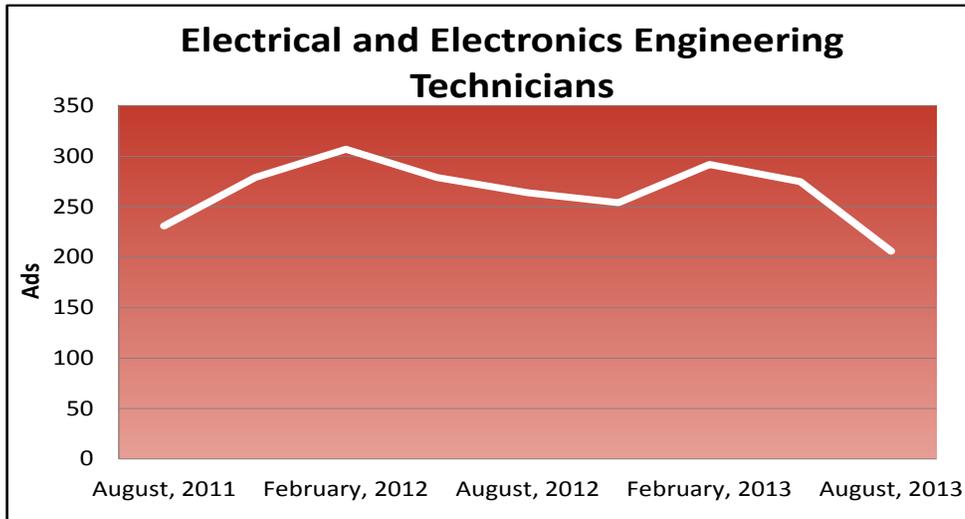
Electrical and Electronic Engineering Technicians, cont.

Recent Job Openings for this Occupation

Month	Total Job Listings	Sample of Employers
July 2013	225	<ul style="list-style-type: none"> L-3 Communications Northrop Grumman
August 2013	209	<ul style="list-style-type: none"> Teledyne Northrop Grumman
September 2013	172	<ul style="list-style-type: none"> Teledyne SIMCO Electronics

Source: The Conference Board Help Wanted Online™ (HWOL) data series - Hiring Demand Dashboard

Regional 2-Year Online Job Ad Trend for this Occupation



Source: The Conference Board Help Wanted Online™ (HWOL) data series - Hiring Demand Dashboard

Regional Supply and Demand for this Occupation

Estimated Candidate Supply	7,300
Employers Hiring	0
# of Employers Who Have Hired in the Past Four Years	1
Average Posting Period	46 days

Source: WANTED Analytics: Date accessed 10/8/13

Electrical and Electronic Engineering Technicians, cont.

Important Knowledge, Skills, Abilities, and Work Activities

Knowledge	Description
Engineering and Technology	Knowledge of the practical application of engineering science and technology. This includes applying principles, techniques, procedures, and equipment to the design and production of various goods and services.
Computers and Electronics	Knowledge of circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.
Mechanical	Knowledge of machines and tools, including their designs, uses, repair, and maintenance.
Skill	Description
Complex Problem Solving	Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.
Reading Comprehension	Understanding written sentences and paragraphs in work related documents.
Time Management	Managing one's own time and the time of others.
Ability	Description
Problem Sensitivity	The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.
Oral Comprehension	The ability to listen to and understand information and ideas presented through spoken words and sentences.
Oral Expression	The ability to communicate information and ideas in speaking so others will understand.
Work Activity	Description
Getting Information	Observing, receiving, and otherwise obtaining information from all relevant sources.
Repairing and Maintaining Electronic Equipment	Servicing, repairing, calibrating, regulating, fine-tuning, or testing machines, devices, and equipment that operate primarily on the basis of electrical or electronic (not mechanical) principles.
Making Decisions and Solving Problems	Analyzing information and evaluating results to choose the best solution and solve problems.

Source: Occupational Information Network ([O*NET](#))

Industrial Machinery Mechanics

Description

Repair, install, adjust, or maintain industrial production and processing machinery or refinery and pipeline distribution systems.

Sample Job Titles

Maintenance Mechanic, Maintenance Technician, Mechanic, Engineering Technician, Master Mechanic, Industrial Machinery Mechanic, Machine Adjuster, Overhauler

Important Tasks

- Disassemble machinery and equipment to remove parts and make repairs.
- Repair and replace broken or malfunctioning components of machinery and equipment.
- Repair and maintain the operating condition of industrial production and processing machinery and equipment.
- Examine parts for defects such as breakage and excessive wear.
- Reassemble equipment after completion of inspections, testing, or repairs.

Job Fit

The job of Industrial Machinery Mechanic may appeal to those who enjoy work activities that include practical, hands-on problems and solutions. This occupation also may appeal to those who like searching for facts and figuring out problems mentally.

Education and Training Requirements

Typical Education Level: High school diploma or the equivalent and short-term on-the-job training. This is an occupation in which workers can develop skills needed to attain competency after a period of less than one month of combined on-the-job experience and informal training.

Certification: Link to America's Career InfoNet Certification Finder at www.careerinfonet.org and type in the keywords "industrial mechanic" to find certification programs related to this occupation.

Industrial Machinery Mechanics, cont.

2013 Median Wages

	Hourly	Annual
California	\$26.55	\$55,223
Los Angeles County	\$27.00	\$56,152
Ventura County	\$23.06	\$47,973

Source: [Occupational Employment Statistics Survey 2013 1st Q](#)

Projections of Employment - California Long-Term

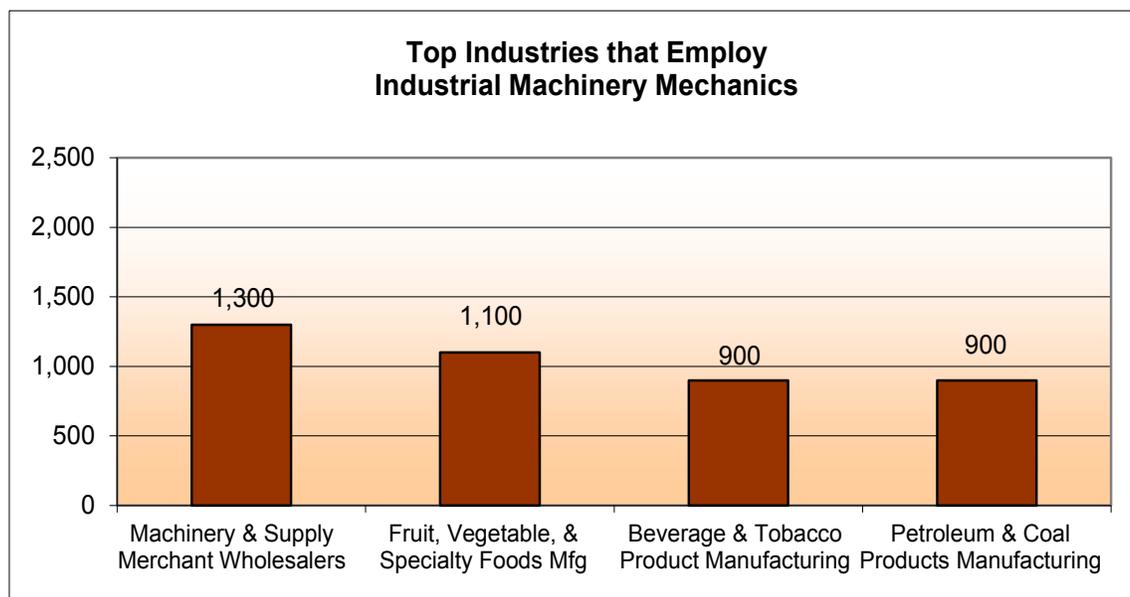
Est. # of Workers (2010-2020)		Numeric Change	Percent Change	Average Annual Job Openings
19,300	24,500	5,200	26.9	880

Projections of Employment - California Short-Term

Est. # of Workers (2012-2014)		Numeric Change	Percent Change	Average Annual Job Openings
20,600	21,100	500	2.4	650

Source: [EDD/LMID Projections of Employment by Occupation](#)

Top Industries that Employ this Occupation



Source: [CA Staffing Patterns](#)

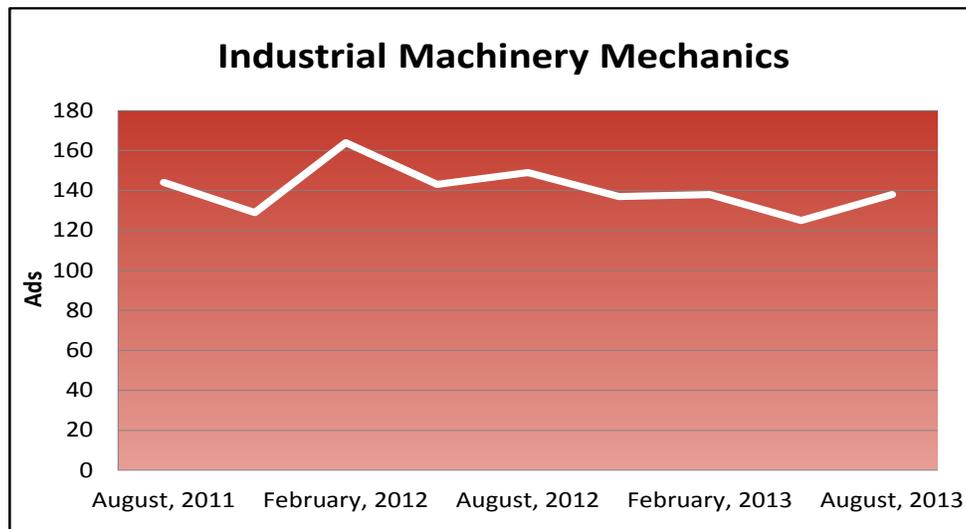
Industrial Machinery Mechanics, cont.

Recent Job Openings for this Occupation

Month	Total Job Listings	Sample of Employers
July 2013	136	<ul style="list-style-type: none"> • Aerotek • Alliant Techsystems
August 2013	148	<ul style="list-style-type: none"> • Aerotek • Owens Illinois
September 2013	153	<ul style="list-style-type: none"> • Aerotek • Adecco

Source: [The Conference Board Help Wanted Online™ \(HWOL\) data series - Hiring Demand Dashboard](#)

Regional 2-Year Online Job Ad Trend for this Occupation



Source: [The Conference Board Help Wanted Online™ \(HWOL\) data series - Hiring Demand Dashboard](#)

Regional Supply and Demand for this Occupation

Estimated Candidate Supply	8,100
Employers Hiring	41
# of Employers Who Have Hired in the Past Four Years	445
Average Posting Period	44 days

Source: [WANTED Analytics](#): Date accessed 9/30/13

Industrial Machinery Mechanics, cont.

Important Knowledge, Skills, Abilities, and Work Activities

Knowledge	Description
Mechanical	Knowledge of machines and tools, including their designs, uses, repair, and maintenance.
Mathematics	Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications.
Engineering and Technology	Knowledge of the practical application of engineering science and technology. This includes applying principles, techniques, procedures, and equipment to the design and production of various goods and services.
Skill	Description
Repairing	Repairing machines or systems using the needed tools.
Equipment Maintenance	Performing routine maintenance on equipment and determining when and what kind of maintenance is needed.
Operation Monitoring	Watching gauges, dials, or other indicators to make sure a machine is working properly.
Ability	Description
Reaction Time	The ability to quickly respond (with the hand, finger, or foot) to a signal (sound, light, picture) when it appears.
Control Precision	The ability to quickly and repeatedly adjust the controls of a machine or a vehicle to exact positions.
Manual Dexterity	The ability to quickly move your hand, your hand together with your arm, or your two hands to grasp, manipulate, or assemble objects.
Work Activity	Description
Repairing and Maintaining Mechanical Equipment	Servicing, repairing, adjusting, and testing machines, devices, moving parts, and equipment that operate primarily on the basis of mechanical (not electronic) principles.
Inspecting Equipment, Structures, or Material	Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
Handling and Moving Objects	Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.

Source: Occupational Information Network ([O*NET](#))

Machinists

Description

Set up and operate a variety of machine tools to produce precision parts and instruments. Includes precision instrument makers who fabricate, modify, or repair mechanical instruments. May also fabricate and modify parts to make or repair machine tools or maintain industrial machines, applying knowledge of mechanics, shop mathematics, metal properties, layout, and machining procedures.

Sample Job Titles

Tool Room Machinist, Machine Operator, Machine Repair Person, Machinist Tool and Die, Automation Technician, Gear Machinist, Maintenance Specialist, Set-Up Machinist, Utility Operator

Important Tasks

- Calculate dimensions and tolerances using knowledge of mathematics and instruments such as micrometers and vernier calipers.
- Align and secure holding fixtures, cutting tools, attachments, accessories, and materials onto machines.
- Select the appropriate tools, machines, and materials to be used in preparation of machinery work.
- Monitor the feed and speed of machines during the machining process.
- Machine parts to specifications using machine tools such as lathes, milling machines, shapers, or grinders.

Job Fit

The job of Machinist may appeal to those who enjoy working with their hands, operating machines to install or move things, performing duties that are clearly defined, and paying close attention to details. This occupation may also be a good fit for those who enjoy activities that include practical, hands-on problems and solutions.

Education and Training Requirements

Typical Education Level: High school diploma or the equivalent and long-term on-the-job training. This is an occupation in which workers can develop skills needed to attain competency after a period of 12 months or more of combined on-the-job experience and informal training.

Certification: Link to America's Career InfoNet Certification Finder at www.careerinfonet.org and type in the keywords "machinist" to find certification programs related to this occupation.

Machinists, cont.

2013 Median Wages

	Hourly	Annual
California	\$19.25	\$40,050
Los Angeles County	\$17.26	\$35,893
Ventura County	\$18.72	\$38,948

Source: [Occupational Employment Statistics Survey 2013 1st Q](#)

Projections of Employment - California Long-Term

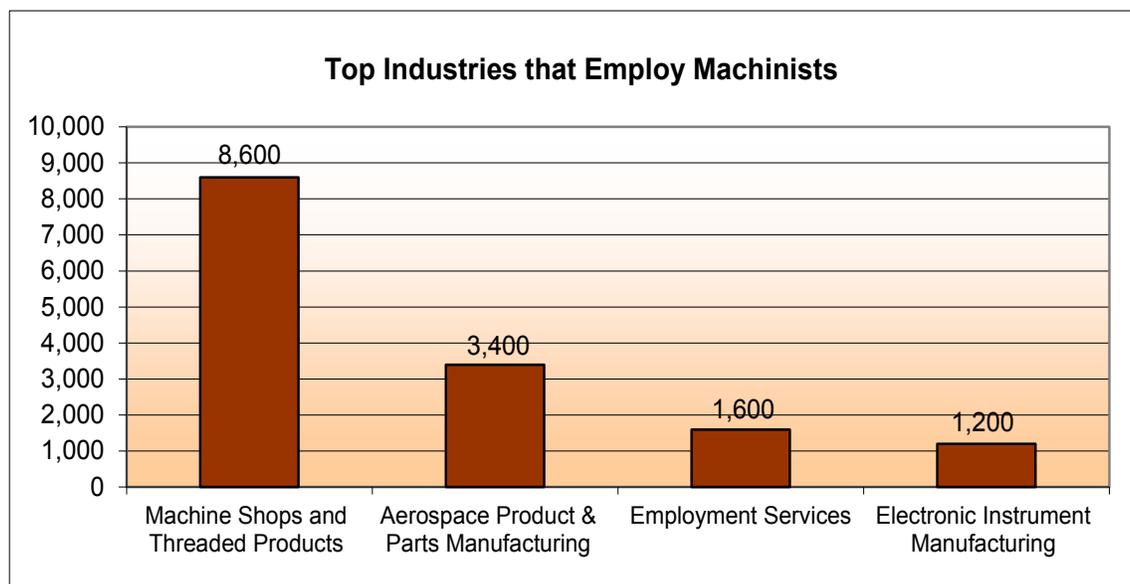
Est. # of Workers (2010-2020)		Numeric Change	Percent Change	Average Annual Job Openings
30,500	34,500	4,000	13.1	950

Projections of Employment - California Short-Term

Est. # of Workers (2012-2014)		Numeric Change	Percent Change	Average Annual Job Openings
32,400	33,700	1,300	4.0	1,230

Source: [EDD/LMID Projections of Employment by Occupation](#)

Top Industries that Employ this Occupation



Source: [CA Staffing Patterns](#)

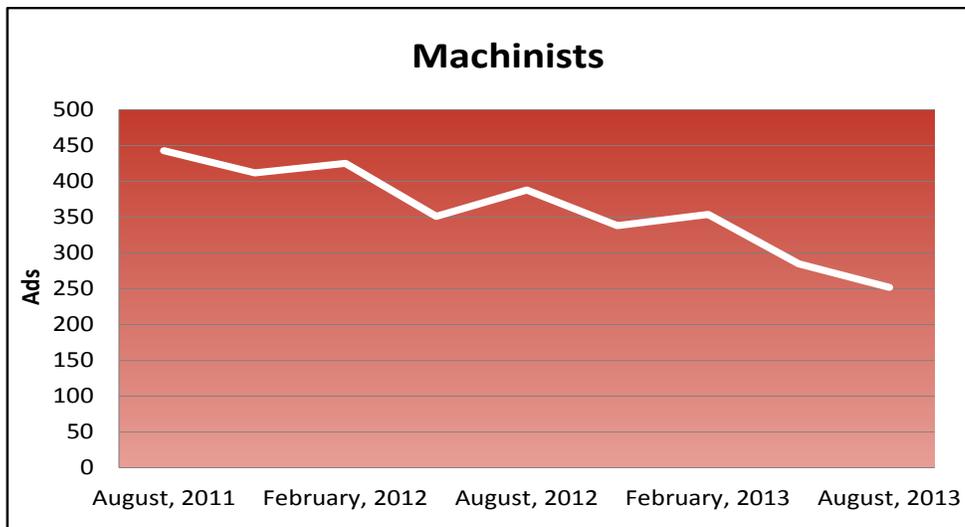
Machinists, cont.

Recent Job Openings for this Occupation

Month	Total Job Listings	Sample of Employers
July 2013	268	<ul style="list-style-type: none"> • Aerotek • Alcoa Inc.
August 2013	241	<ul style="list-style-type: none"> • Alcoa Inc. • Aerotek
September 2013	245	<ul style="list-style-type: none"> • Alcoa Inc. • Lisi Aerospace

Source: [The Conference Board Help Wanted Online™ \(HWOL\) data series - Hiring Demand Dashboard](#)

Regional 2-Year Online Job Ad Trend for this Occupation



Source: [The Conference Board Help Wanted Online™ \(HWOL\) data series - Hiring Demand Dashboard](#)

Regional Supply and Demand for this Occupation

Estimated Candidate Supply	17,000
Employers Hiring	66
# of Employers Who Have Hired in the Past Four Years	644
Average Posting Period	43 days

Source: [WANTED Analytics](#): Date accessed 9/30/13

Machinists, cont.

Important Knowledge, Skills, Abilities, and Work Activities

Knowledge	Description
Mechanical	Knowledge of machines and tools, including their designs, uses, repair, and maintenance.
Production and Processing	Knowledge of raw materials, production processes, quality control, costs, and other techniques for maximizing the effective manufacture and distribution of goods.
Mathematics	Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications.
Skill	Description
Operation Monitoring	Watching gauges, dials, or other indicators to make sure a machine is working properly.
Quality Control Analysis	Conducting tests and inspections of products, services, or processes to evaluate quality or performance.
Operation and Control	Controlling operations of equipment or systems.
Ability	Description
Control Precision	The ability to quickly and repeatedly adjust the controls of a machine or a vehicle to exact positions.
Problem Sensitivity	The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.
Finger Dexterity	The ability to make precisely coordinated movements of the fingers of one or both hands to grasp, manipulate, or assemble very small objects.
Work Activity	Description
Controlling Machines and Processes	Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).
Getting Information	Observing, receiving, and otherwise obtaining information from all relevant sources.
Making Decisions and Solving Problems	Analyzing information and evaluating results to choose the best solution and solve problems.

Source: Occupational Information Network ([O*NET](#))

Welders, Cutters, Solderers, and Brazers

Description

Use hand-welding, flame-cutting, hand soldering, or brazing equipment to weld or join metal components or to fill holes, indentations, or seams of fabricated metal products.

Sample Job Titles

Welder-Fitter, Fabricator, Maintenance Welder, Mig Welder, Sub Arc Operator, Electronic Assembler, Wirer, Assembly Line Brazier, Connector, Electronic Technician

Important Tasks

- Operate safety equipment and use safe work habits.
- Weld components in flat, vertical, or overhead positions.
- Melt and apply solder along adjoining edges of workpieces to solder joints, using soldering irons, gas torches, or electric-ultrasonic equipment.
- Ignite torches or start power supplies and strike arcs by touching electrodes to metals being welded, completing electrical circuits.
- Examine seams for defects, and rework defective joints or broken parts.

Job Fit

This occupation appeals to those who like practical, hands-on problems and solutions dealing with metals, tools, and machinery. The job of Welder satisfies those with realistic interests who enjoy building things.

Education and Training Requirements

Typical Education Level: High school diploma or the equivalent, less than one year of work experience, and moderate-term on-the-job training. This is an occupation in which workers can develop skills needed to attain competency after a period of between 1 and 12 months of combined on-the-job experience and informal training.

Certification: Link to America's Career InfoNet Certification Finder at www.careerinfonet.org and type in the keyword "welder" to find certification programs related to this occupation.

Welders, Cutters, Solderers, and Brazers, cont.

2013 Median Wages

	Hourly	Annual
California	\$18.42	\$38,322
Los Angeles County	\$16.29	\$33,878
Ventura County	\$16.15	\$33,583

Source: [Occupational Employment Statistics Survey 2013 1st Q](#)

Projections of Employment - California Long-Term

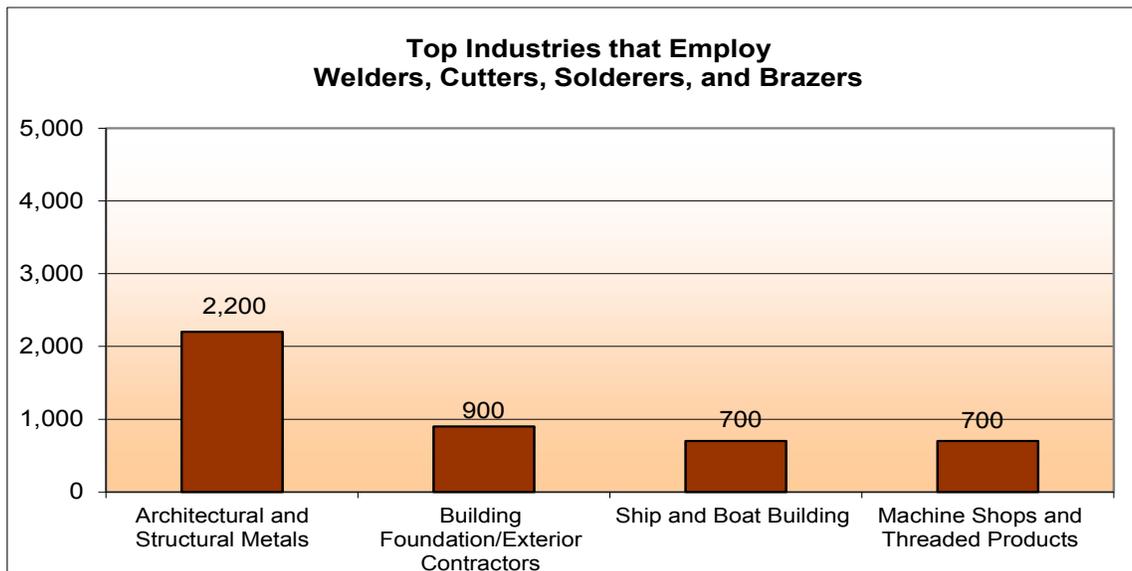
Est. # of Workers (2010-2020)		Numeric Change	Percent Change	Average Annual Job Openings
21,700	24,100	2,400	11.1	820

Projections of Employment - California Short-Term

Est. # of Workers (2012-2014)		Numeric Change	Percent Change	Average Annual Job Openings
22,900	23,700	800	3.5	1,030

Source: [EDD/LMID Projections of Employment by Occupation](#)

Top Industries that Employ this Occupation



Source: [CA Staffing Patterns](#)

Welders, Cutters, Solderers, and Brazers, cont.

Recent Job Openings for this Occupation

Month	Total Job Listings	Sample of Employers
July 2013	125	<ul style="list-style-type: none"> • Volt Information Sciences, Inc. • Aerotek
August 2013	126	<ul style="list-style-type: none"> • Aerotek • Honeywell
September 2013	114	<ul style="list-style-type: none"> • Aerotek • Honeywell

Source: [The Conference Board Help Wanted Online™ \(HWOL\) data series - Hiring Demand Dashboard](#)

Regional 2-Year Online Job Ad Trend for this Occupation



Source: [The Conference Board Help Wanted Online™ \(HWOL\) data series - Hiring Demand Dashboard](#)

Regional Supply and Demand for this Occupation

Estimated Candidate Supply	8,700
Employers Hiring	31
# of Employers Who Have Hired in the Past Four Years	315
Average Posting Period	40 days

Source: [WANTED Analytics: Date accessed 10/8/13](#)

Welders, Cutters, Solderers, and Brazers, cont.

Important Knowledge, Skills, Abilities, and Work Activities

Knowledge	Description
Mechanical	Knowledge of machines and tools, including their designs, uses, repair, and maintenance.
Mathematics	Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications.
Engineering and Technology	Knowledge of the practical application of engineering science and technology. This includes applying principles, techniques, procedures, and equipment to the design and production of various goods and services.
Skill	Description
Monitoring	Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action.
Critical Thinking	Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
Active Listening	Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.
Ability	Description
Near Vision	The ability to see details at close range (within a few feet of the observer).
Arm-Hand Steadiness	The ability to keep your hand and arm steady while moving your arm or while holding your arm and hand in one position.
Manual Dexterity	The ability to quickly move your hand, your hand together with your arm, or your two hands to grasp, manipulate, or assemble objects.
Work Activity	Description
Handling and Moving Objects	Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.
Inspecting Equipment, Structures, or Material	Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
Controlling Machines and Processes	Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).

Source: Occupational Information Network ([O*NET](#))

