



Training Proposal for:
California Manufacturers and Technology Association
Agreement Number: ET16-0378

Panel Meeting of: February 26, 2016

ETP Regional Office: Sacramento

Analyst: M. Mazzone

PROJECT PROFILE

Contract Attributes:	Retrainee Priority Rate SB <100 SET/Entrepreneurial Veteran	Industry Sector(s):	Manufacturing Technology/IT Aerospace and Defense Biotechnology/Life Sciences Priority Industry: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Counties Served:	Statewide	Repeat Contractor:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Union(s):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No International Union of Operating Engineers, Local Union No. 3		
Turnover Rate:	≤20%		
Managers/Supervisors: (% of total trainees)	≤20%		

FUNDING DETAIL

Program Costs	+	Support Costs	=	Total ETP Funding
\$1,120,956		\$78,856 8%		\$1,199,812

In-Kind Contribution:	50% of Total ETP Funding Required	\$1,500,000
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TRAINING PLAN TABLE

Job No.	Job Description	Type of Training	Estimated No. of Trainees	Range of Hours		Average Cost per Trainee	Post-Retention Wage
				Class / Lab	CBT		
1	Retrainee Priority Rate	Business Skills, Computer Skills, Cont. Impv., Hazardous Materials, Mgmt Skills, Mfg Skills, OSHA 10/30	566	8-200	0-200	\$1,289	\$15.60
				Weighted Avg: 67			
2	Retrainee Priority Rate SB<100	Business Skills, Computer Skills, Cont. Impv., Hazardous Materials, Mgmt Skills, Mfg Skills, OSHA 10/30	215	8-200	0-200	\$1,668	\$15.60
				Weighted Avg: 60			
3	Retrainee SB<100	Business Skills, Computer Skills, Cont. Impv., Hazardous Materials, Mgmt Skills, Mfg Skills, OSHA 10/30	100	8-200	0-200	\$752	\$15.60
				Weighted Avg: 32			
4	Entrepreneurial Priority Rate SB<100 SET	Business Skills, Computer Skills, Cont. Impv., Hazardous Materials, Mgmt Skills, Mfg Skills, OSHA 10/30	11	8-200	0-200	\$1,668	N/A
				Weighted Avg: 60			
5	Veteran	Business Skills, Computer Skills, Cont. Impv., Hazardous Materials, Mgmt Skills, Mfg Skills, OSHA 10/30	10	8-200	0-200	\$1,807	\$15.60
				Weighted Avg: 70			

Minimum Wage by County:

Job Numbers 1-3 and 5: \$17.02 per hour in Alameda, Contra Costa, Marin, San Francisco, San Mateo, and Santa Clara Counties; \$16.48 per hour in Los Angeles County; \$16.51 in Orange County; \$16.46 in San Diego County; \$16.10 in Sacramento County; and \$15.60 in all other counties.

Health Benefits: Yes No This is employer share of cost for healthcare premiums – medical, dental, vision.

Used to meet the Post-Retention Wage?: Yes No Maybe

Participating employers may use health benefits to meet the Post-Retention Wage.

Wage Range by Occupation		
Occupation Titles	Wage Range	Estimated # of Trainees
Administrative Support Staff 1		75
Administrative Support Staff 2		14
Customer Service Representative 1		50
Customer Service Representative 2		25
Sales Staff 1		45
Sales Staff 2		25
Production Staff 1		100
Production Staff 2		30
Technician 1		36
Technician 2		23
Maintenance 1		30
Maintenance 2		22
Manager 1		15
Manager 2		5
Supervisor 1		30
Supervisor 2		25
Engineer 1		100
Engineer 2		95
Engineer 3		50
Analyst		100
Owner		15

INTRODUCTION

California Manufacturers and Technology Association (CMTA) (www.cmta.net) is a trade association representing a large number of California’s manufacturing, processing, service, and technology-based companies. Headquartered in Sacramento, CMTA has worked closely with its member companies and ETP to implement successful work skills training programs for over 20 years. CMTA’s comprehensive advocacy and educational initiatives seek to foster a business environment that will lead to the retention and creation of high-wage, high-skill jobs that will enhance the overall prosperity of California.

CMTA's members range from traditional industries such as manufacturing, food processing, and oil, to high-tech and emerging industries such as biotechnology, aerospace, and software. This will be CMTA's fourteenth ETP-funded project.

Need for Training

CMTA continues to serve member companies which need to improve productivity and efficiencies to remain competitive. In doing so, CMTA has identified the critical needs of these California companies. CMTA relies on training research from the National Association of Manufacturing to ensure the training plans developed are in line with the type of training required on a national level. Many industries have a high rate of technological change, and skill gaps have become increasingly wide. Also, CMTA surveys members to discern local training requirements. Many participating employers have found it difficult to find qualified engineers, technicians, machine operators, and maintenance workers. ETP funded training will allow employers to bridge the skill gap of incumbent staff.

Another major focus of CMTA's training is the growing California craft brewers, fermented cider, and craft distillery industries. Within these industries there are many new start-ups and companies which are undergoing significant growth. Promoting entrepreneurial training for these start-up companies is a current focus of CMTA. Entrepreneurial training will provide valuable strategies, tools, and tips for small business owners. To reach the start-up companies and larger breweries/distilleries, CMTA presented at the California Craft Brewers Association in November 2015 and has built relationships with many of these companies with the idea of promoting continual success. In response to the need for training of the craft breweries, CMTA built a relationship with the University of California Davis to provide specialized brewing training to participating employers.

Lastly, California companies must be able to compete with foreign and domestic competitors. To do so, employers must strive to develop new products and services, increase productivity and quality, and improve customer satisfaction. ETP-funded training is critical to help close the skill gaps and respond to unique employer challenges and growth opportunities.

Veterans Program

The Panel has established a higher reimbursement rate and other incentives for training California veterans.

CMTA conservatively plans to have 10 Veterans (Job Number 5) participate in training, who have served on active full-time duty in the Armed Forces. Veteran trainees in Job Number 5 will receive a higher reimbursement rate of \$22 per hour.

PROJECT DETAILS

Training Plan

The proposed training will mainly target manufacturers; however, companies from the aerospace, defense, and technology industries may also participate. CMTA serves companies statewide, but the core employers are located primarily in the Los Angeles and Bay areas.

Business Skills (10%): Training will be delivered to all occupations to communicate more effectively, have a better understanding of their industry, and will improve business functions. Trainees will receive job specific training in skills such as communication skills, customer

service skills, financial analysis, product knowledge, sales strategies, business writing, and project management.

Computer Skills (15%): Training will be delivered to all occupations. Engineers, Production Staff, Analysts, Managers, Supervisors, and Owners will receive training to become more efficient in their company's enterprise resource planning software and database management. Engineers will also receive training in CAD/CAM software. Administrative Support Staff will receive training in accounting software and will also receive training with Sales Staff and Customer Service Staff in intermediate and advanced Microsoft Office.

Management Skills (10%): Training will be provided to Supervisors, Managers and Owners. Training topics will include: leadership skills, managing change, motivation and teamwork skills, coaching and mentoring skills, and supervisory skills.

Manufacturing Skills (28%): Training will be provided to Production Staff, Technicians, Maintenance, and job specific Managers and Supervisors. Staff will learn proper operating and maintenance techniques for equipment. In addition to equipment operations, training will include topics such as blueprint reading, brewing basics, intensive brewing, science for practical brewing, hydraulics training, wiring, electronics training, and welding fundamentals.

Continuous Improvement (30%): Training will be provided to all participating employers and to all occupations to help reduce waste, increase efficiencies, and improve quality. Training will include ISO training, lean manufacturing, kaizen methodology, Six-Sigma, team problem solving, and analyzing jobs for efficiency.

Hazardous Materials (5%) – Training will be delivered to all manufacturing occupations to provide staff with the skills necessary to ensure a safe work environment while working with dangerous materials. Topics will include: ammonia training; hazardous materials handling, storage, transport, and disposal; and hazardous materials clean-up.

Certified Safety Training (2%)

OSHA 10/30 training is a series of courses “bundled” by industry sector and occupation. The coursework must be approved by, and the instructors must be certified by Cal-OSHA. Training hours may be delivered in a classroom setting or via CBT. When delivery is by CBT all training hours must be delivered in a classroom over a finite number of times, and the vendor must have a certified instructor present to confirm attendance. To ensure that each trainee receives certification, ETP will only consider payment earned upon completion of the full 10-hour or 30-hour course. OSHA 10/30 is not included in the 10% limitation on safety training, or in the 50% limitation on CBT.

Computer-Based Training

Normally, CBT hours are capped at 50% of total training hours per-trainee. However, under this proposal, CMTA is requesting up to 100% of CBT for some trainees. (See Exhibit B).

CMTA is promoting the use of Tooling U online training (<http://www.toolingu.com/>). Small businesses who find it difficult to stop production to train may take advantage of Tooling U. This will allow for full production to continue as trainees can be individually taken off of their job to participate in CBT. An estimated 10 participating employers will train 100 trainees (Production Staff, Technicians, and Maintenance workers) utilizing only the CBT delivery method. For the trainees who will receive only CBT, they will average between 40-60 hours of training.

Special Employment Training/Entrepreneurial

Trainees in Job Number 4 are funded under Special Employment Training (SET). In this job number, the participating employers will not be required to demonstrate out-of-state competition and are not subject to a post-retention wage requirement as all trainees will be considered entrepreneurs.

Commitment to Training

Large employers have well-established training programs that include courses such as employee onboarding, orientation, mission statements, ethics, and ergonomics. Other smaller employers are only able to provide government-mandated training such as safety, compliance, and sexual harassment prevention. Training for these companies is generally provided on an as needed basis and can often be delayed. ETP funding will expand industry specific training to upgrade employee skill sets for both large and small businesses.

Safety training is, and will continue to be, provided in accordance with all pertinent requirements under state and federal law.

➤ Training Infrastructure

Training will be delivered primarily at the participating employer's worksites, with occasional center-based classes for employers with similar training needs. CMTA has partnered with several training vendors to deliver training in Business Skills, Computer Skills, Continuous Improvement, and Manufacturing Skills. Participating employers will also provide qualified trainers who will train their own employees.

CMTA has three full-time staff members assigned to conduct employer marketing and recruitment, training need assessments, skill gap analysis, trainer recommendations and selection, class scheduling, and compliance with all ETP documentation and tracking activities.

Impact/Outcome

CMTA training will focus on Lean Manufacturing, new technology, process improvement, effective communication, and certification training to standardize job skills and competencies. CMTA has partnered with the National Association of Manufacturers to implement a skills certification system, whose goal is to standardize competencies and basic skills. Training will provide employers with skilled workers for new production and growth opportunities.

Trainees may earn a National Institute for Metalworking Skills (NIMS) certification. The certification sets skill standards for the industry, certifies individual skills against the standards, and accredits training programs that meet NIMS quality requirements. In addition, Engineers may receive a Microsoft Certified Systems Engineer certification and Production Staff may become an American Welding Society Certified Welder through training.

Marketing and Support Costs

CMTA markets to an extensive database of current and potential members. Marketing activities are done through newsletters, workforce development partnerships (such as the Bay Area Manufacturing Renaissance Council), trade shows, telemarketing, direct mailing, and in-person visits.

CMTA is requesting 8% support costs for the cost associated with employer recruitment; employer worksite visits to determine training needs; curricula design and scheduling of training; and assisting employers with training plan implementation. Staff recommends the 8% support costs.

Curriculum Development

CMTA meets with frontline workers, managers, and training staff to understand current business needs and challenges. Employers and trainees complete needs assessments and work with CMTA staff to create a customized curriculum to improve production capacity and operational efficiency. CMTA also conducts course evaluations and surveys with trainees and employers to gauge the results of the programs.

CMTA relies on research data from the National Association of Manufacturing (NAM) to ensure the curriculum provides the types of training required on a national level. The NAM-endorsed certification system combines traditional education with industry-based requirements. CMTA also surveys its membership to discern local training requirements.

RECOMMENDATION

Staff recommends approval of this proposal.

ACTIVE PROJECTS

The following table summarizes performance by CMTA under an active ETP Agreement:

Agreement No.	Approved Amount	Term	No. Trainees (Estimated)	No. Completed Training	No. Retained
ET15-0353	\$649,755	02/02/15 – 02/01/17	486	670	406

Based on ETP Systems, 30,686 reimbursable hours have been tracked and \$0 is earned (0% of approved amount). The Contractor projects final earnings of 100% based on training currently completed by participating employers.

PRIOR PROJECTS

The following table summarizes performance by CMTA under ETP Agreements that have been completed within the last five years:

Agreement No.	Location (City)	Term	Approved Amount	Payment Earned \$ %
ET14-0144	Sacramento	09/03/13 – 09/02/15	\$1,245,642	1,245,642 (100%)
ET12-0294	Sacramento	02/06/12 – 02/05/14	\$749,199	\$749,199 (100%)
ET11-0219	Sacramento	04/04/11 – 04/03/13	\$399,285	\$399,285 (100%)

DEVELOPMENT SERVICES

N/A

ADMINISTRATIVE SERVICES

N/A

TRAINING VENDORS

Custom Corporate Communications in Redondo Beach has been retained to provide Continuous Improvement, Communications Skills, and Computer Skills training for an approximate fee of \$600,000.

Get Kaizened in San Ramon has been retained to provide Lean Manufacturing and Six Sigma training for an approximate fee of \$100,000.

The University of California Davis Extension in Davis has been retained to provide Brewing Science and Brewing Engineering training for an approximate fee of \$50,000.

Other trainers will be identified for ETP record-keeping purposes, as they are retained.

Exhibit B: Menu Curriculum

Class/Lab/E-Learning

8-200

Trainees may receive any of the following:

BUSINESS SKILLS

- + Business Communication Skills
- + Business Fundamentals
- + Communication Skills
- + Cost Control
- + Customer Service Skills
- + Financial Analysis
- + International Shipping
- + Negotiating Skills
- + Planning and Organization Skills
- + Presentation Skills
- + Product Knowledge
- + Project Management
- + Relationship Building through Sales and Service
- + Sales Strategies
- + Marketing Skills
- + Supply Chain Management
- + Business Writing

COMPUTER SKILLS

- + Intermediate and Advanced Microsoft Office
- + Enterprise Resource Planning Software
- + Database Management Training
- + Accounting Software
- + Custom Programming
- + CAD/CAM
- + Computer Skills for Equipment Maintenance

CONTINUOUS IMPROVEMENT

- + Benchmarking
- + Building Successful Teams
- + Interpreting and Analyzing Data
- + ISO Training
- + Leadership Skills for Front-Line Workers
- + Lean Manufacturing
- + Kaizen Methodology
- + Performance Management
- + Problem Solving and Decision Making
- + Root Cause Analysis
- + Six-Sigma
- + Standard Work (Lean Process)
- + Statistical Process Control

- ✚ Team Problem Solving
- ✚ Train-the-Trainer
- ✚ Analyzing Jobs for Efficiency
- ✚ Time Management Skills

HAZARDOUS MATERIALS

- ✚ Hazardous Materials Handling, Storage, Transport and Disposal
- ✚ Hazardous Materials Clean-up
- ✚ Ammonia Training

MANAGEMENT SKILLS

- ✚ Leadership Skills
- ✚ Managing Change
- ✚ Motivation and Teamwork Skills
- ✚ Coaching and Mentoring Skills
- ✚ Supervisory Skills

MANUFACTURING SKILLS

- ✚ American Welding Society Certified Welder
- ✚ Assembly Procedures
- ✚ Blueprint Reading
- ✚ Brewing Basics
- ✚ Certified Manufacturing Engineer
- ✚ Certified Manufacturing Technologist
- ✚ Certified Quality Engineer
- ✚ CNC Operator Certificate
- ✚ Cross-Training in Equipment/Production
- ✚ Electronics Training
- ✚ Equipment Maintenance
- ✚ Equipment Operations
- ✚ Forklift Training
- ✚ Good Manufacturing Practices (GMP)
- ✚ Hydraulics Training
- ✚ Industrial/Shop Math
- ✚ Introduction to Practical Brewing
- ✚ Intensive Brewing
- ✚ Job Instruction
- ✚ National Institute for Metalworking Skills (NIMS) Certification Training
- ✚ Welding Fundamentals
- ✚ Wiring
- ✚ Motor Controls
- ✚ Production Operation
- ✚ Programmable Logic Controllers (PLC)
- ✚ Pneumatics
- ✚ Science for Practical Brewing
- ✚ Warehouse Operations and Distribution
- ✚ Machine/Equipment Safety

OSHA 10/30 (Certified OSHA Instructor Required)

- ✚ OSHA 10 Certified Training (requires completion of 10 hours)
- ✚ OSHA 30 Certified Training (requires completion of 30 hours)

Safety Training cannot exceed 10% of total training hours per-trainee (This cap does not apply to OSHA 10/30).

CBT Hours

0-100

BUSINESS SKILLS

- ✚ Quality and Customer Service 175 (1.5 hours)
- ✚ Essentials of Communication 120 (1.5 hours)
- ✚ Basics of Manufacturing Costs 140 (1.5 hours)
- ✚ Intro to Managerial Accounting 145 (1.5 hours)
- ✚ Conflict Resolution Principles 150 (1.5 hours)
- ✚ Conflict Resolution for Different Groups 155 (1.5 hours)
- ✚ Franklin Covey: Business Acumen (1 hour)
- ✚ Franklin Covey: Communication Skills (1 hour)

COMPUTER SKILLS

- ✚ CAD/CAM Overview 160 (1.5 hours)
- ✚ Parts Software 150 (1.5 hours)
- ✚ Creating a Turning Program 280 (1.5 hours)
- ✚ Turning Calculations 285 (1.5 hours)
- ✚ Creating a Milling Program 290 (1.5 hours)
- ✚ Milling Calculations 295 (1.5 hours)
- ✚ Canned Cycles 310 (1.5 hours)
- ✚ Creating an EIA/ISO Program for the Mazak Mill 286 (1.5 hours)
- ✚ Creating an EIA/ISO Program for the Mazak Lathe 287 (1.5 hours)
- ✚ Creating a Mazatrol Program for the Mill 288 (1.5 hours)
- ✚ Creating a Mazatrol Program for the Lathe 289 (1.5 hours)
- ✚ Mazak Mill: Program Execution 290 (1.5 hours)
- ✚ Mazak Lathe: Program Execution 295 (1.5 hours)
- ✚ Mazak Mill: Program Storage 310 (1.5 hours)
- ✚ Mazak Lathe: Program Storage 315 (1.5 hours)
- ✚ Mazak Mill: First Parts Run 320 (1.5 hours)
- ✚ Mazak Lathe: First Parts Run 325 (1.5 hours)
- ✚ Inspecting with CMM's 220 (1.5 hours)
- ✚ Basic Programming 250 Intro to PLC's 200 (1.5 hours)
- ✚ Networking for PLCs 270 Intro to PLC's 200 (1.5 hours)
- ✚ Hand-held Programmers of PLC's 280 (1.5 hours)
- ✚ PLC Diagrams and Programs 300 (1.5 hours)
- ✚ Overview of PLC Registers 305 (1.5 hours)

- ✚ PLC Program Control Instructions 310 (1.5 hours)
- ✚ Data Manipulation 360 (1.5 hours)
- ✚ Haas Mill: Program Execution 280 (1.5 hours)
- ✚ Haas Lathe: Program Execution 285 (1.5 hours)
- ✚ Haas Mill: Program Storage 310 (1.5 hours)
- ✚ Haas Lathe: Program Storage 315 (1.5 hours)
- ✚ Haas Mill: First Part Runs 320 (1.5 hours)
- ✚ Haas Lathe: First Part Runs 325 (1.5 hours)

CONTINUOUS IMPROVEMENT

- ✚ Essentials of Leadership 110 (1.5 hours)
- ✚ Personal Effectiveness 190 (1.5 hours)

MANAGEMENT SKILLS (Supervisors and Managers Only)

- ✚ Managing Performance: Best Practices 130 (1.5 hours)
- ✚ Team Leadership 160 (1.5 hours)
- ✚ Managing a Diverse Workplace 210 (1.5 hours)
- ✚ Manufacturing Management 180 (1.5 hours)
- ✚ Managing Practices for Total Quality 320 (1.5 hours)
- ✚ Franklin Covey: Conflict Management (1 hour)
- ✚ Franklin Covey: Managing Change (1 hour)

MANUFACTURING SKILLS

- ✚ Basics of the CNC Machining Center 130 (1.5 hours)
- ✚ Basics of the CNC Swiss-Type Lathe 135 (1.5 hours)
- ✚ CNC Coordinates 140 (1.5 hours)
- ✚ CNC Manual Operations 200 (1.5 hours)
- ✚ CNC Offsets 210 (1.5 hours)
- ✚ CNC Specs for the Mill 220 (1.5 hours)
- ✚ CNC Specs for the Lathe 225 (1.5 hours)
- ✚ Mazak Mill: Control Panel Overview 250 (1.5 hours)
- ✚ Mazak Lathe: Control Panel Overview 255 (1.5 hours)
- ✚ Mazak Mill: Safety for the Mill 260 (1.5 hours)
- ✚ Mazak Lathe: Safety for the Lathe 265 (1.5 hours)
- ✚ Mazak Mill: Locating Program Zero 270 (1.5 hours)
- ✚ Mazak Lathe: Locating Program Zero 275 (1.5 hours)
- ✚ Mazak Mill: Entering Offsets 280 (1.5 hours)
- ✚ Mazak Lathe: Entering Offsets 285 (1.5 hours)
- ✚ Basic Measurements 110 (1.5 hours)
- ✚ Linear Instruments Characteristics 115 (1.5 hours)
- ✚ Basics of the CMM 120 (1.5 hours)
- ✚ Basics of the Optical Comparator 130 (1.5 hours)
- ✚ Surface Measurement 140 (1.5 hours)
- ✚ Overview of Threads 150 (1.5 hours)
- ✚ Intro to Geometric Dimensioning and Tolerancing (GD&T) 200 (1994) (1.5 hours)
- ✚ Intro to GD&T 205 (2009) (1.5 hours)
- ✚ Calibration Fundamentals 210 (1.5 hours)
- ✚ Inspecting with Optical Comparators 230 (1.5 hours)

- ✚ Hole Inspection 240 (1.5 hours)
- ✚ Thread Inspection 250 (1.5 hours)
- ✚ Hardness Testing 260 (1.5 hours)
- ✚ Measuring System Analysis 300 (1.5 hours)
- ✚ Interpreting GD&T 310 (1994) (1.5 hours)
- ✚ Interpreting GD&T 315 (2009) (1.5 hours)
- ✚ Basics of the Manual Mill 110 (1.5 hours)
- ✚ Basics of the Engine Lathe 115 (1.5 hours)
- ✚ Overview of the Manual Mill Setup 200 (1.5 hours)
- ✚ Overview of the Engine Lathe Setup 205 (1.5 hours)
- ✚ Benchwork and Layout Operations 210 (1.5 hours)
- ✚ Manual Mill Operations 220 (1.5 hours)
- ✚ Engine Lathe Operations (1.5 hours)
- ✚ Hole making on the Mill 230 (1.5 hours)
- ✚ Threading on the Engine Lathe 235 (1.5 hours)
- ✚ Taper Turning on the Engine Lathe 240 (1.5 hours)
- ✚ Metal Removal Process 110 (1.5 hours)
- ✚ Safety for Metal Cutting 115 (1.5 hours)
- ✚ What is Cutting? 120 (1.5 hours)
- ✚ Machines for Metal Cutting 130 (1.5 hours)
- ✚ Cutting Processes 140 (1.5 hours)
- ✚ Sawing Fundamentals 155 (1.5 hours)
- ✚ Intro to Screw Machining 160 (1.5 hours)
- ✚ Cutting Variables 200 (1.5 hours)
- ✚ Cutting Fluids 210 (1.5 hours)
- ✚ Band Saw Blade Selection 215 (1.5 hours)
- ✚ Cutting Tool Materials 220 (1.5 hours)
- ✚ Carbide Grade Selection 230 (1.5 hours)
- ✚ Tool Geometry 240 (1.5 hours)
- ✚ Milling Geometry 245 (1.5 hours)
- ✚ Drill Geometry 247 (1.5 hours)
- ✚ ANSI Insert Selection 250 (1.5 hours)
- ✚ Tool handlers for Turning 260 (1.5 hours)
- ✚ Speed and Feed Selection 300 (1.5 hours)
- ✚ Optimizing Insert Life 305 (1.5 hours)
- ✚ High-Speed Machining 310 (1.5 hours)
- ✚ Hard Turning 315 (1.5 hours)
- ✚ Machining Titanium Alloys 325 (1.5 hours)
- ✚ Intro to EDM 100 (1.5 hours)
- ✚ Intro to PLC's 200 (1.5 hours)
- ✚ Hardware for PLC's 210 (1.5 hours)
- ✚ Basics of Ladder Logic 220 (1.5 hours)
- ✚ Numbering Systems and Codes 230 (1.5 hours)
- ✚ PLC Inputs and Outputs 240 (1.5 hours)
- ✚ PLC Timers and Counters 260 Intro to PLC's 200 (1.5 hours)
- ✚ Math for PLC's 320 (1.5 hours)
- ✚ Sequencer Instructions for PLC's 330 (1.5 hours)
- ✚ PLC Installation Practices 340 (1.5 hours)
- ✚ PID for PLC's 350 (1.5 hours)
- ✚ Shift Registers 370 (1.5 hours)
- ✚ Quality Overview 100 (1.5 hours)
- ✚ ISO 9000 Overview 110 (1.5 hours)

- ✚ Approaches to Maintenance 120 (1.5 hours)
- ✚ Lean Manufacturing Overview 130 (1.5 hours)
- ✚ Intro to Supply Chain Management 140 (1.5 hours)
- ✚ Total Productive Maintenance Overview 150 (1.5 hours)
- ✚ 5S Overview 155 (1.5 hours)
- ✚ Cell Design and Pull Systems 160 (1.5 hours)
- ✚ Intro to Six-Sigma 170 (1.5 hours)
- ✚ Troubleshooting: Identifying Problems 180 (1.5 hours)
- ✚ Troubleshooting: Understanding Cause and Effects 182 (1.5 hours)
- ✚ Troubleshooting: Taking Corrective Actions 184 (1.5 hours)
- ✚ Conducting an Internal Audit 200 (1.5 hours)
- ✚ SPC Overview 210 (1.5 hours)
- ✚ TS 16949:2009 Overview 220 (1.5 hours)
- ✚ Metrics for Lean 230 (1.5 hours)
- ✚ Process Flow Charting 240 (1.5 hours)
- ✚ Strategies for Setup Reduction 250 (1.5 hours)
- ✚ Approaches to Quality Management 255 (1.5 hours)
- ✚ Conducting Kaizen Events 260 (1.5 hours)
- ✚ Value Stream Mapping: The Present State 300 (1.5 hours)
- ✚ Value Stream Mapping: The Future State 305 (1.5 hours)
- ✚ Six-Sigma Goals and Tools 310 (1.5 hours)
- ✚ Product Design and Development 134 (1.5 hours)
- ✚ Product Design and Development 135 (1.5 hours)
- ✚ Production System Design and Development 136 (1.5 hours)
- ✚ Equipment/Tool Design and Development 137 (1.5 hours)
- ✚ Intro to Machine Rigging 110 (1.5 hours)
- ✚ Rigging Equipment 120 (1.5 hours)
- ✚ Lifting and Moving Equipment 130 (1.5 hours)
- ✚ Rigging Inspection and Safety 210 (1.5 hours)
- ✚ Rigging Mechanics 220 (1.5 hours)
- ✚ Blood borne Pathogens 115 (1.5 hours)
- ✚ Personal Protective Equipment 120 (1.5 hours)
- ✚ Lockout/Tag Out Procedures 130 (1.5 hours)
- ✚ Safety for Lifting Devices 135 (1.5 hours)
- ✚ Machine Guarding 140 (1.5 hours)
- ✚ Hand and Power Tool Safety 145 (1.5 hours)
- ✚ Metalworking Fluid Safety 165 (1.5 hours)
- ✚ Noise Reduction and Hearing Conservation 170 (1.5 hours)
- ✚ Walking and Working Surfaces 180 (1.5 hours)
- ✚ Confined Spaces 190 (1.5 hours)
- ✚ Respiratory Safety 195 (1.5 hours)
- ✚ Powered Industrial Truck Safety 210 (1.5 hours)
- ✚ Math: Fundamentals 100 (1.5 hours)
- ✚ Math: Fractions and Decimals 105 (1.5 hours)
- ✚ Math: Units of Measurement 115 (1.5 hours)
- ✚ Basics of Tolerance 120 (1.5 hours)
- ✚ Blueprint Reading 130 (1.5 hours)
- ✚ Geometry: Lines and Angles 155 (1.5 hours)
- ✚ Geometry: Triangles 165 (1.5 hours)
- ✚ Shop Geometry Overview 170 (1.5 hours)
- ✚ Shop Algebra Overview 200 (1.5 hours)

- + Trig: Pythagorean Theorem 205 (1.5 hours)
- + Shop Trig Overview 210 (1.5 hours)
- + Trig: Sine, Cosine and Tangent 215 (1.5 hours)
- + Statistics 220 (1.5 hours)
- + Trig: Sine Bar Applications 225 (1.5 hours)
- + Interpreting Blueprints 230 (1.5 hours)
- + Concepts of Calculus 310 (1.5 hours)
- + Applied Engineering Sciences 110 (1.5 hours)
- + Manufacturing Process Applications: Part I 124 (1.5 hours)
- + Manufacturing Process Applications: Part II 125 (1.5 hours)
- + Intro to Workholding 104 (1.5 hours)
- + Supporting and Locating Principals 106 (1.5 hours)
- + Locating Devices 107 (1.5 hours)
- + Clamping Basics 108 (1.5 hours)
- + Chucks, Collets, and Vises 110 (1.5 hours)
- + Fixture Body Construction 200 (1.5 hours)
- + Drill Bushing Selection 230 (1.5 hours)
- + Fixture Design Basics 210 (1.5 hours)
- + Haas Mill: Control Panel Overview 250 (1.5 hours)
- + Haas Lathe: Control Panel Overview 255 (1.5 hours)
- + Haas Mill: Entering Offsets 260 (1.5 hours)
- + Haas Lathe: Entering Offsets 265 (1.5 hours)
- + Haas Mill: Locating Program Zero 270 (1.5 hours)
- + Haas Lathe: Locating Program Zero 275 (1.5 hours)

HAZARDOUS MATERIALS

- + Flammable/Combustible Liquids 155 (1.5 hours)
- + SDS and Hazardous Communications 160 (1.5 hours)

Note: Reimbursement for retraining is capped at 200 total training hours per trainee, regardless of the method of delivery. CBT is capped at 100% of total training hours per trainee.

Participating Employers in Retrainee Multiple Employer Contracts

Contractor's Name: California Manufacturers and Technology CCG No.: ET16-0378
Association

Reference No: 16-0189

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PRINT OR TYPE IN ALPHABETICAL ORDER

Company: ALOM

Address: 48105 Warm Springs Blvd.

City, State, Zip: Fremont, CA 94539-7498

Collective Bargaining Agreement(s): None

Estimated # of employees to be retrained under this Agreement: 55

Total # of full-time company employees worldwide: 76

Total # of full-time company employees in California: 76

Company: Andpak Zipchem

Address: 400 Jarvis Drive

City, State, Zip: Morgan Hill, CA 95037

Collective Bargaining Agreement(s): None

Estimated # of employees to be retrained under this Agreement: 40

Total # of full-time company employees worldwide: 133

Total # of full-time company employees in California: 133

Company: Artistree 269-7474-1

Address: 2720 S. Pellissier Place

City, State, Zip: City of Industry, CA 90601

Collective Bargaining Agreement(s): None

Estimated # of employees to be retrained under this Agreement: 25

Total # of full-time company employees CA & worldwide: 720

Total # of full-time company employees in California: 720

Company: Arvan

Address: 14083 S. Normandie Ave.

City, State, Zip: Gardena, CA 90249

Collective Bargaining Agreement(s): None

Estimated # of employees to be retrained under this Agreement: 40

Total # of full-time company employees CA & worldwide: 55

Total # of full-time company employees in California: 55

Participating Employers in Retrainee Multiple Employer Contracts

Contractor's Name: California Manufacturers and Technology CCG No.: ET16-0378
Association

Reference No: 16-0189

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Company: Axiom Technology Inc

Address: 18138 Rowland St.

City, State, Zip: City of Industry, CA 91748

Collective Bargaining Agreement(s): None

Estimated # of employees to be retrained under this Agreement: 40

Total # of full-time company employees worldwide: 89

Total # of full-time company employees in California: 55

Company: Bear Flag Republic

Address: 110 Sandholm Ln, Suite 10

City, State, Zip: Cloverdale, CA 95425

Collective Bargaining Agreement(s): None

Estimated # of employees to be retrained under this Agreement: 25

Total # of full-time company employees worldwide: 150

Total # of full-time company employees in California: 150

Company: Graphic Research

Address: 9334 Mason Ave

City, State, Zip: Chatsworth, CA 91311

Collective Bargaining Agreement(s): None

Estimated # of employees to be retrained under this Agreement: 20

Total # of full-time company employees worldwide: 45

Total # of full-time company employees in California: 45

Company: Hen House Brewing

Address: 133 Copeland St

City, State, Zip: Petaluma, CA 94952

Collective Bargaining Agreement(s): None

Estimated # of employees to be retrained under this Agreement: 10

Total # of full-time company employees worldwide: 25

Total # of full-time company employees in California: 25

Participating Employers in Retrainee Multiple Employer Contracts

Contractor's Name: California Manufacturers and Technology CCG No.: ET16-0378
Association

Reference No: 16-0189

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Company: Industrial Electric Manufacturing

Address: 48205 Warm Springs Blvd.

City, State, Zip: Fremont, CA 94539

Collective Bargaining Agreement(s): None

Estimated # of employees to be retrained under this Agreement: 40

Total # of full-time company employees worldwide: 181

Total # of full-time company employees in California: 181

Company: Integra Biotechnical

Address: 2731 Loker Ave West

City, State, Zip: Carlsbad, CA 92010

Collective Bargaining Agreement(s): None

Estimated # of employees to be retrained under this Agreement: 40

Total # of full-time company employees worldwide: 99

Total # of full-time company employees in California: 99

Company: Knee Deep Brewing Company

Address: 13395 New Airport Rd., Ste H

City, State, Zip: Auburn, CA 95602

Collective Bargaining Agreement(s): None

Estimated # of employees to be retrained under this Agreement: 15

Total # of full-time company employees worldwide: 20

Total # of full-time company employees in California: 20

Company: Kokusai Soko America

Address: 1521 Francisco St, Unit A

City, State, Zip: Torrance, CA

Collective Bargaining Agreement(s): None

Estimated # of employees to be retrained under this Agreement: 10

Total # of full-time company employees worldwide: 23

Total # of full-time company employees in California: 23

Participating Employers in Retrainee Multiple Employer Contracts

Contractor's Name: California Manufacturers and Technology CCG No.: ET16-0378
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Company: LED Tronics

Address: 23105 Kashiwa Court

City, State, Zip: Torrance, CA 90505

Collective Bargaining Agreement(s): None

Estimated # of employees to be retrained under this Agreement: 50

Total # of full-time company employees worldwide: 109

Total # of full-time company employees in California: 109

Company: NC Dynamics, Inc.

Address: 3401 E 69th St.

City, State, Zip: Long Beach, CA 90805

Collective Bargaining Agreement(s): None

Estimated # of employees to be retrained under this Agreement: 40

Total # of full-time company employees worldwide: 150

Total # of full-time company employees in California: 150

Company: Newegg Inc.

Address: 9997 Rose Hills Road

City, State, Zip: Whittier, CA 90601

Collective Bargaining Agreement(s): None

Estimated # of employees to be retrained under this Agreement: 100

Total # of full-time company employees worldwide: 3007

Total # of full-time company employees in California: 1142

Company: Novasyste

Address: 3207 Grey Hawk Court, Ste 100

City, State, Zip: Carlsbad, CA 92010

Collective Bargaining Agreement(s): None

Estimated # of employees to be retrained under this Agreement: 20

Total # of full-time company employees worldwide: 25

Total # of full-time company employees in California: 25

Participating Employers in Retrainee Multiple Employer Contracts

Contractor's Name: California Manufacturers and Technology CCG No.: ET16-0378
Association

Reference No: 16-0189

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Company: Peterson Power

Address: 2828 Teagarton

City, State, Zip: San Leandro, CA 94577

Collective Bargaining Agreement(s): Yes

Estimated # of employees to be retrained under this Agreement: 100

Total # of full-time company employees worldwide: 500

Total # of full-time company employees in California: 500

Company: Price Products

Address: 106 State Place

City, State, Zip: Escondido, CA 92029

Collective Bargaining Agreement(s): None

Estimated # of employees to be retrained under this Agreement: 20

Total # of full-time company employees worldwide: 35

Total # of full-time company employees in California: 35

Company: Shasta EMS

Address: 525 East Brokaw

City, State, Zip: San Jose, CA 95112

Collective Bargaining Agreement(s): None

Estimated # of employees to be retrained under this Agreement: 22

Total # of full-time company employees worldwide: 22

Total # of full-time company employees in California: 22

Company: Sipac

Address: 1850 Russell AVE

City, State, Zip: Santa Clara, CA 95054

Collective Bargaining Agreement(s): None

Estimated # of employees to be retrained under this Agreement: 20

Total # of full-time company employees worldwide: 20

Total # of full-time company employees in California: 20

Participating Employers in Retrainee Multiple Employer Contracts

Contractor's Name: California Manufacturers and Technology CCG No.: ET16-0378
Association

Reference No: 16-0189

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Company: Sonoma Cider

Address: 133 Copeland St

City, State, Zip: Petaluma, CA 94952

Collective Bargaining Agreement(s): None

Estimated # of employees to be retrained under this Agreement: 28

Total # of full-time company employees worldwide: 40

Total # of full-time company employees in California: 40

Company: Venture Manufacturing

Address: 1051 S East Street

City, State, Zip: Anaheim, CA 92805

Collective Bargaining Agreement(s): None

Estimated # of employees to be retrained under this Agreement: 80

Total # of full-time company employees worldwide: 13,000

Total # of full-time company employees in California: 300

Company: VSMPO - TYRUS

Address: 2850 E Cedar Street

City, State, Zip: Ontario, CA 91761

Collective Bargaining Agreement(s): None

Estimated # of employees to be retrained under this Agreement: 20

Total # of full-time company employees worldwide: 32

Total # of full-time company employees in California: 32



OPERATING ENGINEERS LOCAL UNION No. 3

1620 SOUTH LOOP ROAD, ALAMEDA, CA 94502 • (510) 748-7400 • FAX (510) 748-7412

Jurisdiction: Northern California, Northern Nevada, Utah, Hawaii, and the Mid-Pacific Islands

Business Manager Russell E. Burns

September 29, 2015

Mr. Stewart Knox
Executive Director
Employment Training Panel
1100 J St., 4th Floor
Sacramento, CA 95814

Dear Mr. Knox:

I am writing on behalf of the Operating Engineers Local Union No. 3. We support the proposed training funded in part by the Employment Training Panel. This training will be covered under the California Manufacturers & Technology Association's Multiple Employer Training Contract. The proposed training will assist our union members in developing new skills.

Sincerely,

Russell E. Burns
Business Manager
IUOE General Vice President

REB:smd/law
Opeiu-3-afl-cio