



**Training Proposal for:
Benchmark Electronics, Inc.
Agreement Number: ET15-0193**

Panel Meeting of: June 27, 2014

ETP Regional Office: Sacramento

Analyst: L. Lai

PROJECT PROFILE

Contract Attributes:	Retrainee Priority Rate	Industry Sector(s):	Manufacturing Priority Industry: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Counties Served:	Alameda and Contra Costa	Repeat Contractor:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Union(s):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Number of Employees in:	CA: 219	U.S.:3,123	Worldwide: 10,630
<u>Turnover Rate:</u>	12%		
<u>Managers/Supervisors:</u> (% of total trainees)	10%		

FUNDING DETAIL

Program Costs	-	(Substantial Contribution)	(High Earner Reduction)	=	Total ETP Funding
\$197,100		\$0	\$0		\$197,100

In-Kind Contribution:	100% of Total ETP Funding Required	\$346,300
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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	Advanced Tech, Computer Skills, Continuous Impr, HazMat, Mgmt Skills, Mfg Skills, PL-Mfg Skills	219	8-200	0-44	\$900	\$16.25
				Weighted Avg: 50			

Minimum Wage by County: \$16.25 for Alameda and Contra Costa 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

Up to \$1.59 per hour may be used to meet the Post-Retention Wage.

Wage Range by Occupation

Occupation Titles	Wage Range	Estimated # of Trainees
Production Staff		73
Office Support/Customer Service		4
CNC Programmer		7
Machinist		71
Buyer		5
Engineer		24
Supervisor		6
Manager		16
Welder		7
Planner/Scheduler		6

INTRODUCTION

Benchmark Electronics, Inc. (Benchmark) provides integrated electronics manufacturing, design and engineering services worldwide. At its ISO-certified facilities Benchmark creates and produces advanced electronics-based products. The Company also provides product development to regional printed circuit board builders (including system level assembly and sourcing) in the United States, Mexico, Europe and Asia. Its client base includes the Semiconductor, Medical and Aerospace business sectors.

The acquisition of several companies over the past few years has created a gap in employee skillsets, especially the technical expertise within workgroups. To address the skills gap and improve efficiency, the Company created a comprehensive competency program to ensure everyone within the organization receives training required to achieve baseline competency. Furthermore, the Company has begun a Continuous Improvement initiative to facilitate Lean

manufacturing and has invested in new equipment of over \$1 million at both facilities to meet its goal of increasing productivity by 30% in the next few years.

PROJECT DETAILS

Training Plan

Computer Skills (20%): Training will be provided to Office Support/Customer Service, Buyers, Planners/Schedulers, Managers, Supervisors, and Engineers. Office Support/Customer Service will learn to use features in office applications to track, collect, process, and generate data and reports. Buyers, Planners/Schedulers, Managers, Supervisors, and Engineers will receive training in software applications such as Baan, Catsweb, and Enterprise Asset Management to efficiently manage work processes, inventory, shipping/receiving, and production.

Continuous Improvement (15%): Training will be provided to all occupations. Training is intended to improve processes, eliminate defects, and increase efficiency and productivity.

Hazardous Materials (2%): Training will be offered to Production Staff, Supervisors, and Managers to teach them safe handling of hazardous materials which will increase safety.

Management Skills (2%): Training will be offered to Supervisors and Managers who often have technical skills but lack management or supervisory skills. This training will improve their leadership and management capabilities.

Manufacturing Skills (55%): Training will be provided to Production Staff, CNC Programmers, Machinists, Engineers, Welders, Supervisors, and Managers. Training will include, but is not limited to, blue print reading, clean room procedures, coordinate measuring machines, inspection testing and techniques, lathes and mills operation and programming, and welding. Training will help employees acquire the skills necessary to perform job tasks efficiently.

Advanced Technology (AT) (3%) - Training will be offered to Engineers, Supervisors, Managers, CNC Programmers, and Machinists. Trainees must learn to utilize complex and sophisticated software and programming technology in Master CAM, Solidworks Modeling and CNC. The trainer-to-trainee ratio will not exceed 1:10 to allow for in-depth coverage and personal attention from the instructor.

Benchmark Electronics is requesting an average of 24 hours of AT training. AT will be reimbursed at \$26 per training hour for priority industries to cover the high costs of skilled trainers and sophisticated machines and programming software.

Productive Laboratory

Productive Laboratory (PL) trainees may produce goods for profit as part of the training in the courses identified under the Curriculum. The instructor must be solely dedicated to training delivery during all hours of training.

Benchmark has determined that PL training is an effective training methodology to ensure successful skills development. The trainer-to-trainee ratio will not exceed 1:3. PL trainers will be subject matter experts who possess the requisite technical knowledge and skills to serve as instructors.

Benchmark estimates that 98 Production Staff, Machinists and Welders will receive PL training in Manufacturing Skills on multiple pieces of equipment, programming software, and manufacturing related tasks specific to individual job functions and responsibilities. The training

involves trainer demonstration and trainee performance of the various tasks on mills, lathes, welding equipment, cranes, forklifts, and coordinate measuring machines on the shop floor. Once a trainee completes training in a piece of machinery or equipment, the trainer will certify the trainee's competency and ability to work independently. Productivity levels will be lower during training sessions to allow trainees to achieve optimal competency on processes and procedures.

Computer-Based Training (CBT)

Some Business Skills training will be delivered via CBT and hours will be capped at 44 hour per-trainee. Trainees will receive CBT in conjunction with classroom and/or PL training.

Commitment to Training

Benchmark has an annual training budget of \$196,404 for the two facilities. Training provided includes compliance, new hire orientation, safety orientation, some skills and quality training.

Benchmark represents that ETP funds will not displace the existing financial commitment to training. Safety training is, and will continue to be, provided in accordance with all pertinent requirements under state and federal law.

➤ Training Infrastructure

The Company will have 15 people dedicated to administering this project. The team will be responsible for scheduling training, enrolling trainees, and tracking training hours. The Company also has three people including an HR Generalist, General Manager, and Director of Human Resources who are available to meet with ETP staff.

RECOMMENDATION

Staff recommends approval of this proposal.

DEVELOPMENT SERVICES

N/A

ADMINISTRATIVE SERVICES

N/A

TRAINING VENDORS

To Be Determined

Exhibit B: Menu Curriculum**Class/Lab Hours**

8-200

Trainees may receive any of the following:

COMPUTER SKILLS

- Baan
- Catsweb
- Computer Navigation
- Copy Exact
- Enterprise Asset Management
- Extended Process Control
- Minitab
- MS Office – Intermediate/Advanced
- Purchasing Approval Workflow System
- Rapid Response
- Visual FAI

CONTINUOUS IMPROVEMENT

- 7 Basic Quality Tools
- AS9100
- Corrective Action Process
- Developing Performance Parameters
- Green Belt Training
- Incoming Inspection
- Internal Audit
- ISO 9001
- ISO 13485
- Lean Training
- Poke Yoke Techniques
- Problem Solving
- Quality Manual Supplement
- Quality Qualification and Certification
- Quality Standards
- Supplier Audit
- Theory and Implementation of Lean Tools

HAZARDOUS MATERIALS

- Hazard/Non-Hazard Waste Handling
- Hazardous and Universal Waste Management
- Gas Bottle Handling
- IPA Disposal

MANAGEMENT SKILLS (For Managers and Supervisors only)

- Management training

MANUFACTURING SKILLS

- Axis Rotary Fixture Design
- Blood Borne Pathogens
- Blue Print Reading
- Clean Room Detrash Process

- Clean Room Procedure
- CNC Lathe
- CNC Mill
- Control of Nonconforming Material
- Coolant Changeouts
- Coordinate Measuring Machines
- Corrective and Preventive Action
- Cosmetic Standards
- Crane/Hoist Usage
- Cutting Tools
- Document Control Procedure
- Engineering Change Order
- Engineering Databases
- Engineering Deviation/Red Line Process
- Export Procedures
- First Article Process
- Geometric Dimensional and Tolerancing
- Global Harmonized System/Safety Data Sheets
- Hydraulic Preventative Maintenance
- In-Process Inspection
- Inspection Techniques
- Inspection Testing
- Leak Check
- Lifting Techniques
- Lockout/Tag Out
- Lubricating Oils Handling
- Machines Safeguarding
- Material Shipping and Packaging
- Mills Operation and Programming
- Packaging / Crating
- Personal Protective Equipment
- PH Testing
- Product Transfer Management
- Receiving, General Storage and Dispatch
- Rinse Water Evaporation
- Scrap Handling
- Technical Assembly
- Tooling and Fixturing Design
- Tooling, Fixture and Template Control
- Welding
- Workmanship Standards

AT Hours

0-24

ADVANCED TECHNOLOGY

- Coordinate Measuring Machine Programming
- Master CAM
- Solidworks Modeling and CNC Programs

Productive Lab

0-50

MANUFACTURING SKILLS

- CNC Lathe
- CNC Mill
- Control of Nonconforming Material
- Coolant Changeouts
- Coordinate Measuring Machines
- Corrective and Preventive Action
- Crane/Hoist Usage
- Document Control Procedure
- Engineering Change Order
- Engineering Databases
- Engineering Deviation/Red Line Process
- Geometric Dimensional and Tolerancing
- Hydraulic Preventative Maintenance
- In-Process Inspection
- Inspection Techniques
- Inspection Testing
- Leak Check
- Lifting Techniques
- Machines Safeguarding
- Mills Operation and Programming
- Packaging / Crating
- PH Testing
- Technical Assembly
- Tooling, Fixture and Template Control
- Welding

CBT Hours

0-44

BUSINESS SKILLS

- Communication Skills – 8 hours
- Time Management Skills – 8 hours
- Problem Solving Techniques – 5 hours
- Project Management – 14 hours
- Leadership – 9 hours

Note: Reimbursement for retraining is capped at 200 total hours per trainee, regardless of method of delivery. CBT is capped at 50% of total training hours, per-trainee.