



**Retrainee – Job Creation  
Training Proposal for:  
Wellex Corporation  
ET15-0198**

**Panel Meeting of:** July 25, 2014

**ETP Regional Office:** San Francisco Bay Area

**Analyst:** A. Nastari

**CONTRACTOR**

- Type of Industry: Manufacturing  
Priority Industry:  Yes  No
- Number of Full-Time Employees  
California: 150  
Worldwide: 300  
Number to be trained: 115  
Owner  Yes  No  
Mgr/Supr 10  
Frontline 105
- Out-of-State Competition: NAICS Code Eligible
- Special Employment Training:  Yes  No
- High Unemployment Area:  Yes  No
- Turnover Rate: 4%
- Repeat Contractor:  Yes  No
- Substantial Contribution:  Yes  No

**FUNDING**

- Requested Amount: \$98,760
- In-Kind Contribution: \$102,800



Wellex is increasing its marketing and sales of PCB Assemblies in all of these industries. Product life cycles are shorter in four of them: Medical, Automotive, Industrial/Solar, and Defense. This requires the OEMs to redesign and update components at a faster pace.

Defense is a new OEM client base for Wellex. In order to expand into the industry, Wellex must establish and implement an internal compliance process that meets International Traffic Arms Regulations (ITAR). These US government regulations control the export and import of defense related articles. Without the established processes, Wellex will not be able to manufacture products for Defense-related manufacturers. Wellex needs to train its engineering and quality assurance team members as they will create the manufacturing standards for the production team. Once implemented, Wellex will need to train its workforce on the new regulations.

To remain competitive in their Automotive industry segment, Wellex must meet ISO 14001 Environmental standards certification. This Certification provides assurance that any environmental impact is being measured and improved upon, as is required for many of its products sold in Europe. One of Wellex's automotive client requires that any employee who markets, sells, designs or produces its products must be certified in the ISO 14001 standards. The same certification is required to increase business in the Solar industry. Wellex must implement the standards and train workers from its sales, customer service, production, engineering and shipping departments, in order to pass audits and acquire the certification. Additional training in ISO 9001:2015 will allow the Company to maintain its ISO certification.

Wellex's business expansion requires it to provide more advanced design services and increase sourcing and assembly capabilities of PCB and related components. Wellex invested in new Surface Mount and Wave Soldering Equipment that will be installed in June and will be used across all product lines. Training is required for Operators, Engineers and Quality Technicians.

Wellex uses an advanced "in process and final inspection technology" called Automatic Optical Inspection or AOI, used on wave soldering and through-pin assembly processes. The parts are too small for visual inspection and the boards are too complex to find defects without sophisticated testing devices. Therefore, Wellex has determined that it needs to update the skills of its Quality Technicians and Production leads in the use of AOI equipment and processes.

Wellex must update its ERP system to meet its business enterprise as a contract manufacturer. To meet customers' demands the ERP must be updated to include scheduling, inventory control, purchasing and delivery platforms.

### **Expansion and Job Creation**

Wellex's goal for 2014-2016 is to increase its marketing, sales and PCB production in the Medical, Automotive, Industrial/Solar Defense (ITAR), Networks and Security industries. In order to address these expansion goals, Wellex anticipates increased business which will require hiring 30 new workers. Of the 30 workers, 25 will be in the occupations of Production Workers or Quality Technicians. The remaining five will be Office Personnel to handle the increases in orders and administrative functions.

Wellex bases its expansion plans on the following: in 2013 it hired 35 employees, and in the 2014 YTD it added seven employees. Wellex also hired a new sales manager who will start at the end of July 2014, whose purpose is to expand the company's presence with the intent to support its growth plan. It is anticipated that with the ITAR certification, the company will increase sales revenue in 2015 by 5%. The following is a breakdown of its ongoing growth by industry in the period between 2013 and 2016:

	<u>2013/14</u>	<u>2015/16</u>
➤ <u>Security</u>	20%	5%
➤ <u>Networks</u>	15%	5%
➤ <u>Industrial/Solar</u>	30%	35%
➤ <u>Defense (ITAR)</u>	0%	5%
➤ <u>Automotive</u>	5%	10%
➤ <u>Medical</u>	30%	40%

**Training Plan**

Classroom/laboratory training across the Company’s various departments will be provided in Business, Continuous Improvement, Computer, and Manufacturing skills. Both incumbent and newly hired workers will participate in training delivered by in-house trainers and vendors. Participating occupations will consist of Engineers, IT Staff, Managers, Office Personnel, Production Staff, Quality Technicians, Sales Staff and Supervisors.

**Business Skills (10%)** - Training in Business Planning, Customer Service, Communication, Negotiation and Sales training will be provide to Office Personnel, Sales, Managers and Supervisors who interface with customers and suppliers.

**Continuous Improvement (30%)** – Training will be offered to all occupations in updated ISO 9001:2015 standards which includes Risk Mitigation, Failure Mode and Effects Analysis (FMEA) both for design and process requirements and ISO 14001 (Environmental Standards) as required by European customers.

Additional training will be provided to Engineers, Production Staff, Quality Technicians, Managers, and Supervisors in Lean Manufacturing to reduce costs, improve quality and reduce errors and lead time. Training in Root Cause Corrective Action, and Six Sigma (used to reduce process variations) will help improve overall cost structure. Wellex will also include 5S skills in workplace organization. Office Personnel will be provided training in Lean Office skills to improve accuracies in order taking, while reducing errors. Supervisors and Managers will receive training in Interpersonal Skills, Leadership and Teambuilding in order to lead teams through the Company’s expansion goals.

**Computer Skills (10%)** – Training in Wellex’s updated ERP system will be provided to IT Staff, Office Personnel, Sales, Quality Technicians, Managers and Supervisors.

**Manufacturing Skills (40%)** – Training will be provided to Production Associates, Quality Technicians, Supervisors and Managers in assembly operations, IPC 610 training, PCBA techniques, Quality Control, Quality at the Source, Surface Mount Technology, Touch up and Rework standards. Training and cross training in new equipment operation and testing processes are required by new product design and assembly.

**Hazardous Materials (10%)** – Training in HACCP, required for handling and processing of chemicals primarily used in the wave soldering processes and manufacturing of PCB products, is required by Production Staff, Supervisors and Technicians who work the wave soldering line.

**RECOMMENDATION**

Staff recommends approval of this proposal.

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

8 – 200

Trainees may receive any of the following:

**BUSINESS SKILLS**

- Business Plans
- Customer Service
- Communication Skills
- Developing Sales Strategies
- Developing Marketing Strategies
- Finance for Medium-Sized Manufacturers
- Interpersonal Skills
- Conflict Resolution
- Effective Team Building
- Effective Report Writing
- Inventory Control
- Listening Skills
- Negotiating Skills
- New Product Introduction
- Presentations
- Strategic Planning
- Strength, Weakness, Opportunities and Threats (SWOT) Analysis

**COMPUTER SKILLS**

- Accounting Systems
- Computer Networking/Support Systems
- Communications Systems
- Database Management
- ERP Training
- IT Programming/Manufacturing Equipment Support
- Spreadsheets/Advanced Excel and Access Training
- Website Development and Maintenance

**CONTINUOUS IMPROVEMENT**

- 5S: Sort, Set, Shine, Standardize, Sustain
- ISO Audit Principles
- Basic Quality Tools
- Continuous Improvement Skills/Lean Manufacturing
- Creative Problem Solving Skills
- Cycle-Time Reduction Techniques
- Interpreting & Analyzing Data
- ISO 9001/13485/14001

- Leadership Skills for Frontline Workers
- Management Training
- Maintenance (TQM)
- Process Control/Process Improvement
- Process/Product Handling
- Production Scheduling
- Production Operations/Workflow
- Project Management
- Standard Operating Procedures

### **HAZARDOUS MATERIALS**

- Hazardous Analysis Critical Control Points (HACCP)

### **MANUFACTURING SKILLS**

- Automatic Optical Inspection (AOI) Programming
- Assembly Operations
- Blueprint Reading
- Clean and Green Technology
- Chemical Usage and Handling
- Electro Static Discharge (ESD)
- Electronic Assembly Workmanship
- Facilities Management
- Forklift Safety/Operations (Delivered in a Non-Productive Environment)
- IPC 610 Acceptability of Electronic Assemblies Certification Training
- Printed Circuit Board Assembling (PCBA) Techniques
- Quality Control and Final Quality Assurance
- Set up Reduction
- Shipping/Receiving
- Soldering Skills
- Special Machines/Inspections
- Statistics Skills for Operations
- Surface Mount Technology (SMT) Operation
- Surface Mount Technology (SMT) Programming
- Testing Techniques
- Touch-Up and Rework Training (Surface Mount/Wave Soldering etc)
- Warehousing Operations/Distribution
- Wave Soldering Machine Training

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