



**Training Proposal for:
Source One Cable Technology, Inc.**

Small Business ≤ \$50,000

ET16-0121

Approval Date: July 21, 2015

ETP Regional Office: San Francisco Bay Area

Analyst: R. Jackson

CONTRACTOR

- Type of Industry: Manufacturing
Engineering
Priority Industry: Yes No
- Number of Full-Time Employees
California: 73
Worldwide: 74
Number to be trained: 54
Owner Yes No
- Out-of-State Competition: NAICS Code Eligible
- Special Employment Training (SET): Yes No
- High Unemployment Area (HUA): Yes No
- Turnover Rate: 15%
- Repeat Contractor: Yes No

FUNDING

- Requested Amount: \$49,140
- In-Kind Contribution: \$44,337

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 SB <100 Priority Rate	Business Skills, Computer Skills, Continuous Improvement, Management Skills, Manufacturing Skills, OSHA 10/30, Literacy Skills	54	8-60	0	\$910	\$16.44
				Weighted Avg: 35			

- Reimbursement Rate: Job #1: \$26 SB Priority
- County(ies): Santa Clara
- Occupations to be Trained: Production Staff, Administrative Staff, Management Staff, Engineers, Office Staff
- Union Representation: Yes
 No
- Health Benefits: Job #1: \$2.43 per hour

SUBCONTRACTORS

- Development Services: Manex Consulting in San Ramon assisted with development of this project for a flat fee of \$4,750 under an existing ETP Marketing Agreement.
- Administrative Services: None
- Training Vendors: To Be Determined

OVERVIEW

Source One Cable Technology, Inc. (SOCT) is a small business headquartered in San Jose, California with production facilities in US and Mexico. SOCT was started in 1991 and is now ISO certified and FDA registered. The Company specializes in custom development and production of electronic/mechanical cables and assemblies. SOCT serves broad industries worldwide including: medical, entertainment, transportation, and aerospace. Some of their better known customers include: Johnson & Johnson, Medtronic, Abbott, and the U.S. Government.

Following changes in leadership in 2014, the Company moved to its present location in San Jose from Los Gatos. SOCT has 74 full-time employees, 54 of which have been identified as needing skill upgrades in order to meet new contract demands and quality improvement/performance goals. The Company conducted a comprehensive training needs assessment which consisted of customer feedback and internal performance appraisals, in order to set

specific training goals. These are: improved on-time delivery rates, increased sales, increased efficiency, waste reduction, and targeted cross-training needs. To this end, SOCT has implemented a companywide training initiative called Source One Fundamentals.

The proposed training plan aims to increase product delivery speed by an estimated 20% and reduce costs by an estimated 30%. Overall, the proposed training reinforces the Company's aim to accelerate speed and precision in the delivery of customize prototype products with greater efficiencies and reductions in waste. The proposed training will reinforce improvements in customer service. Additionally, planned technology upgrades include a roll-out of a new Enterprise Resource Planning (ERP) system which requires companywide training.

SOCT's in-house engineering and design capability offers a competitive edge for business growth and sets the Company apart from other cable manufacturers. However, the cable assemblies arena is becoming much more competitive in price and increasing customer demands. SOCT is growing its business by fulfilling contracts requiring more integrated and value-added assemblies that include sheet metal enclosures, computer controlled actuators, motors, electronic circuitry and devices that provide a higher level of product integration. The Source One Fundamentals training plan is designed to support this expanding area of the business.

SOCT's customers have high quality manufacturing standards such as ISO 13485, ISO 9001:2015, 21CFR820 and demand the same approach from their suppliers to ensure that the products are produced to exacting quality and performance standards. This means SOCT must maintain the same ISO certifications and meet the same regulatory requirements.

Training Plan

Training will be delivered by a combination of in-house subject matter experts and vendors (to be determined) based in California. OSHA training will be presented by an OSHA certified trainer.

Continuous Improvement: Training will be offered to all occupations as needed in an effort to develop efficiency (cost and lead time reduction). Lean Manufacturing (Kaizen and 5S) will help to reduce costs, improve quality, accuracy, reduce errors and speed delivery. An update to ISO 9001:2015 includes Risk Mitigation which will require more focus on Failure Mode and Effects Analysis both for design and process requirements. Formal Quality System training in Root Cause Corrective Action, and Six Sigma all assist with improving efficiency and saving costs.

Management Skills: Will be offered to Supervisors and Managers only. Topics include: supervisory skills, strategic management, project and timeline management, project planning, team building and leadership. The supervisors and managers at SOCT do not have prior experience managing people. Therefore, the training being offered is critical in furthering the Company's goals of upgrading the skills of the workforce so that each employee demonstrates improved competencies. Enhanced supervision is aligned with the Company's aim to improve quality, reduce waste, improve delivery time, and ultimately grow the business.

Manufacturing Skills: Training will be offered to Production Staff, Supervisors and Managers. Advanced Manufacturing Techniques fall into two categories: product fulfillment and product protection. Product fulfillment involves skills such as crimping, soldering, injection molding, insert molding, transfer molding, measurement and testing. Product protection involves skills such as cleaning, packaging and Electro Static Discharge measures. To perform these tasks production associates must be trained in equipment operation and the underlying principles. To improve quality, training in assembly operations improvements, IPC/JST training, Quality Control, Quality at the Source, Electronic Testing and troubleshooting are being delivered. IPC

610 training is also required along with topics which help the Company meet customer expectations related to required certifications which the Company maintains.

OSHA 10/30: Training will be offered to Production Staff to improve safety and reduce waste. This training is a series of courses bundled by industry sector and occupation. It consists of 10 hours of classroom training for production workers and 30 hours for frontline supervisors. This coursework is geared to manufacturing. Completion of the training results in a certificate that expands employment opportunities. The coursework must be approved by Cal-OSHA, and the instructors are Cal-OSHA certified.

Business Skills: Training will be offered to Production Staff, Office Staff and Administrative Staff. Skills to strengthen strategic planning and penetrate new markets are needed to implement business changes that will support more rapid, but reliable growth. Due to ISO certification requirements and strategic goals established by the Company, staff needs training to better understand and execute contract reviews, supplier management, customer service, document and inventory controls. This training will enable the organization to manufacture and better service new clients, while managing the performance of expanded growth initiatives.

Computer Skills: Training will be offered companywide. As a contract manufacturer, a firm grasp of scheduling, inventory control, purchasing and on-time delivery are among key customer satisfaction requirements in addition to keeping costs low and quality high. The training will include the roll-out of a new ERP System, changes to existing proprietary software systems and server/hardware upgrades. Training on new computer software such as CAD/CAM will generate improved electronic design skills and broaden business development opportunities. Transparency and accuracy in the control of work orders, personnel records, and meeting various stakeholder reporting requirements will provide greater financial and other operational inputs for more informed decision making. Training will be delivered to IT team leaders in a train-the-trainer program. From there the training will be extended to all departments. Updates to HR, accounting, document control processes and other key system upgrades will create a more compatible, faster, and more reliable environment supportive of SOCT's business development goals.

Literacy Skills: Training will be offered to Production Staff and Office Staff; non-native English speakers with job requirements where basic vocational English language or math skills are required and currently assessed as needing improvement. Literacy skills training is limited to no more than 45% of total training hours, per trainee.

Impact/Outcome

SOCT is ISO 9001 certified, but will update to 9001:2015 standard and also include IPC 610 to remain competitive based on customer demands. The proposed training is anticipated to help the Company attract new business and develop new products and services by establishing a high-performance workplace where front line workers and teams are increasingly able to determine and affect the success of the Company. SOCT plans to measure improvements in efficiency and track progress towards reaching a self-imposed 10% annual revenue increase goal correlated directly with the training plan and changes being made at the Company under new leadership. The Company hopes to obtain demonstrated increases in the skill sets within SOCT's workforce and reduce any lost production time through targeted cross training in order to reduce losses, prevent waste, increase production and boost sales, while delivering quality products in record time. The workforce itself will benefit by having upgraded skills which could give them upward mobility in addition to greater job security.

Temporary to Permanent Hiring

The trainees in Job Number 1 come under Panel guidelines for “temporary to permanent” employment. SOCT has retained an estimated seven employees through a temporary agency, with the intention of hiring them into full-time, permanent positions after training.

These trainees must be determined eligible to participate in ETP-funded training before the start of training, while on payroll with the temporary agency. However, the retention and post-retention wage requirements cannot be satisfied until after they have been hired by SOCT. Until then, SOCT will not receive progress payments for any that is not full-time permanent.

RECOMMENDATION

Staff recommends approval of this proposal.

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

8-60 Trainees may receive any of the following:

BUSINESS SKILLS

- Budget Analysis
- Business Plans
- Business Process Reengineering
- Business Strategies
- Computer/Internet Applications in Business
- CRM
- Customer Service
- Developing Sales Strategies
- Developing Marketing Strategies
- Financial Literacy
- Inventory Control
- Listening Skills
- Materials Management
- Marketing for Small/Medium Sized Manufacturers:
 - Evaluating Marketing Effectiveness
 - Marketing Concepts
 - Marketing Techniques
 - Practical Marketing Applications
- Negotiating Skills
- New Product Introduction
- Project Management Techniques
- Relationship Building for Small/Medium Sized Manufacturer
- Business Administration for Small/Medium Sized Mfg.
- Selling/Serving the Customer
- Strategic Planning
- SWOT (Strengths, Weaknesses, Opportunities, Threats) Analysis
- Sustainability
- Effective and Technical Writing

COMPUTER SKILLS

- Accounting Systems
- Basic Operations
- CAD
- CNC
- Computer-based/Web-based Training Systems
- Communications Systems
- Database Management
- Desktop Publishing
- Digital Entertainment Systems
- Disaster Recovery
- ERP/MRP
- Graphics

- Internet / Internet Security
- Microsoft Server Maintenance & Administration
- Networking
- Payroll Systems
- Presentation
- Programming
- Publishing
- Recovery
- Spreadsheets
- System Diagraming
- Technical Writing
- Telecommuting
- Website Development and Maintenance including HTML
- Word Processing

CONTINUOUS IMPROVEMENT

- Assessment Principles
- Audit Principles
- Basic Quality Tools
- Benchmarking Principles
- Building Teams
- Business Improvement Principles
- Communication Skills
- Continuous Improvement Skills
- Creative Problem Solving Skills
- Cycle-time Reduction Techniques
- Cycle-time Management Techniques
- Decision Making Skills
- Defining Problems
- Design for Manufacturing and Assembly (DFMA)
- Design of Experiments
- Design for Assembly (DFA)
- Developing Action Plans
- Developing Solutions
- Effective Meetings
- Effective Teams
- Implementation Skills
- Interpreting & Analyzing Data
- ISO 9001, 13485 etc
 - Quality Auditor Training
- Injection Molding Training and Process Optimization
- Just-in-Time Production (JIT):
 - Cycle-time Reduction
 - Cycle-time Management
 - Developing JIT
 - Evaluating JIT
 - Implementing JIT
 - Organizing for JIT
 - JIT Principles

- o JIT Production
- Lean Manufacturing
- Leadership Skills
- Manufacturing Excellence
- Monitoring The Process
- Presentations
- Process Control Principles
- Process Capabilities
- Process Improvement
- Process/Product Handling
- Production Scheduling
- Production Operations/Workflow
- Root Cause Analysis
- Self-directed Work Teams
- Situation/Problem Analysis
- Statistical Process Control (SPC):
 - o Data Collection
 - o Design for Manufacturing and Assembly
 - o Design of Experiments
 - o Developing SPC
 - o Documenting Processes
 - o Evaluating SPC
 - o Failure Mode Effects Analysis
 - o Five S Principles
 - o Graphing
 - o Implementing SPC
 - o Kaizen Principles
 - o Kanban Principles
 - o Key Process Indicators
 - o Lean Manufacturing Principles
 - o Organizing for SPC
 - o Root Cause Analysis
 - o SPC Concepts, Theory & Application
 - o SPC Tools
 - o Statistical Process Control (SPC)
 - o Six Sigma
 - o Statistical Techniques
 - o Taguchi Methods
 - o Variation/Process Control
 - o Validation
- System Analysis
- System Strategies
- Taguchi Methods
- Team Building/Problem Solving:
 - o Building Teams
 - o Communication
 - o Creative/Innovative Thinking
 - o Decision Making
 - o Developing Action Plans
 - o Developing Solutions

- o Effective Teams
- o High Performance Work Teams
- o Leadership
- o Problem Solving
- o Self-directed Work Teams
- o Situation/Problem Solving
- o Team concepts
- o Team Building/Problem Solving
- o Teamwork in an Empowered Workforce
- Total Quality Management (TQM):
 - o Audit Planning
 - o Basic Quality Tools
 - o Benchmarking
 - o Business Process Improvement Change Process
 - o Continuous Improvement
 - o Creative Problem Solving/Innovation
 - o Creative/Innovative Thinking
 - o Developing TQM
 - o Evaluating TQM
 - o Implementing TQM
 - o Organizing for TQM
 - o Quality Concepts
 - o TQM Strategies
- Train the Trainer
- Value Stream Mapping
- Variation/Process Control

MANAGEMENT SKILLS (Managers or Supervisors Only)

- Appraisal Skills
- Coaching/Feedback
- Communication Skills
- Conflict Management
- Decision Making/Problem Solving
- Developing Teams
- Effective Meetings
- Effective Writing
- Facilitation Skills
- Finance for Small/Medium Sized Manufacturers
- Good Manufacturing Practices (21CFR820)
- Leadership/ Management Development
- Management Skills
- Management Styles
- Managing Change
- Managing Customer Service (Internal & External)
- Managing Innovation
- Manufacturing Cells
- Marketing for Small/Medium Sized Manufacturers
- Performance Management
- Project Management

- Strategic Planning
- Supervisory Skills
- Negotiations
- Leadership
- Effective Communication
- Decision Making
- Teambuilding
- Administration
- Coaching Procedures.

MANUFACTURING SKILLS

- Assembly Operations
- Automated Equipment
- Bio-science Manufacturing
- Blueprint Reading
- Computer Aided Design (CAD)
- Computer Aided Engineering (CAE)
- Computer Aided Manufacturing (CAM)
- Computer Numeric Control (CNC)
- Cellular Manufacturing
- Chemistry
- Computer Electronics
- Cycle Time Reduction
- Cutting
- Electro Static Discharge
- Electronics
- Electronic Assembly Workmanship
- Equipment Operations
- Equipment/Preventive Maintenance
- Facilities Management
- Forklift
- Five S Principles
- Good Manufacturing Practices (GMP)
- Handling Changes
- Injection Molding
- Inventory Control
- International Standards Organization (ISO) Certification
- ISO Documentation Principles
- Kaizen Principles
- Kanban Principles
- Layout
- Lean Manufacturing Principles
- Machining
- Maintenance Mechanic Overview Level 1
- Maintenance Mechanic Overview Level 2
- Machine Tool Technology
- Introduction to Hand Tools
- Manufacturing Processes
- Master Production Scheduling (MPS Planning)

- Meeting Customer Expectations (Internal/External)
- Metrology/Geometric Dimensioning & Tolerances
- Manufacturing Resource Planning (MRP)
- Optimal Operating. Methods
- Pneumatics/Hydraulics
- Presses
- Production Planning
- Production Techniques
- Programmable Logic Controllers (PLC)
- Quality
- Re-engineering Concepts
- Root Cause Analysis
- Set up Reduction
- Shipping/Receiving
- Shop skills -- Drawing, Measurement and Instrumentation
- Soldering Skills
- Special Machines/Inspections
- Statistics Skills for Operations
- Technical Training
- Total Productive Manufacturing
- Total Quality Management
- Training Within Industry (TWI)
- Understanding Product Specs/Drawings
- Value Stream Mapping
- Warehousing Operations/Distribution
- Welding
- Workflow
- World Class Manufacturing Principles
- Analysis Critical Control Points

OSHA

- OSHA 10
- OSHA 30

LITERACY SKILLS

- Vocational English Second Language
- Basic Writing Skills
- Completing Job-related Forms
- Computer Skills
- Reading Comprehension
- Basic Math

Literacy Training cannot exceed 45% of total training hours per-trainee
Safety Training cannot exceed 10% of total training hours per-trainee (This cap does not apply to Hazmat, OSHA 10/30 or HAZWOPER)

Note: Reimbursement for retraining is capped at 60 total training hours per trainee, regardless of the method of delivery.