



**Training Proposal for:
T/Q Systems Inc.**

Small Business ≤ \$50,000

ET15-0302

Approval Date: October 14, 2014

ETP Regional Office: San Diego

Analyst: R. Swier

CONTRACTOR

- Type of Industry: Manufacturing
 - Number of Full-Time Employees
 - California: 39
 - Worldwide: 39
 - Number to be trained: 32
 - Out-of-State Competition: Competitors Outside CA
 - Special Employment Training (SET): Yes No
 - High Unemployment Area (HUA): Yes No
 - Turnover Rate: 3%
 - Repeat Contractor: Yes No
- Priority Industry: Yes No
- Owner Yes No

FUNDING

- Requested Amount: \$49,920
- In-Kind Contribution: \$50,022

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	Computer Skills, Cont. Improv., Mfg. Skills, HazMat	32	8-60	0	\$1,560	\$15.98
				Weighted Avg: 60			

- Reimbursement Rate: Job #1: \$26 SB Priority
- County(ies): Orange
- Occupations to be Trained: Production Staff, Quality Staff, Engineering/Planning Staff, Manager/Supervisor, Owner
- Union Representation: Yes
 No
- Health Benefits: Job #1: \$0.99 per hour

SUBCONTRACTORS

- Development Services: N/A
- Administrative Services: N/A
- Training Vendors: To Be Determined

OVERVIEW

T/Q Systems Inc. (T/Q), founded in 1988, provides high quality machined parts for the aerospace industry. Located in Lake Forest, the Company specializes in CNC "chip making" capabilities, high production, prototype, milling and turning. They also specialize in close tolerance, hard to manufacture, complex multi surface, multi-axis and electrical discharge machining using exotic metals.

T/Q is a major supplier of parts for Boeing Aerospace, Lockheed Martin Aerospace, Honeywell Aerospace, GKN Aerospace, SpaceX, Nasa and Moog Aerospace. The products produced by T/Q require on-going training to keep employees current on new designs, contractual regulations, new state-of-the-art equipment, and manufacturing processes.

T/Q is eligible for priority retraining under the Out-of-State Competition Provisions for industrially-classified manufacturers retraining current employees.

This is the fourth project between T/Q and ETP. The prior Agreement focused on manufacturing skills training, as T/Q moved to new 50,000 square foot building which became

operational in May 2012. In this proposed Agreement T/Q has added high speed CNC machines that require training on equipment operation and new equipment technology. The training will help T/Q meet their plans to expand and increase annual sales by 20%.

Training Plan

This training differs from that offered in the previous Agreement due to the new equipment, increasing complexity of the parts being produced, additional quality requirements and mandates. Training will benefit T/Q's increased demand for shorter lead times, increased production and lower cost. T/Q requests ETP funds to train 32 incumbent workers in a classroom setting in the following:

Computer Skills – This training will be offered to all occupations. Trainees will learn how to utilize various software solutions to assess current conditions, set objectives, identify trends, and communicate information and data in a high flow environment. Trainees will also learn to use software systems such as intermediate/advanced Microsoft Office, Real Trac, DISCUS and Quick Books to track costs, plan production and service, and connect regularly with customers.

Manufacturing Skills – This training will be offered to all occupations. Trainees will learn how to utilize the complex new technologies of 5 Axis machining, Insert Loading, Part Loading, Best Shop Practices, Offsets, Material handling, Variation Reduction and Configuration Management.

Continuous Improvement Skills – This training will be offered to all occupations. The purpose of this training is to improve quality, cycle time, increase production and cost efficiency through Lean methodologies, process improvements, new technologies, and new equipment. This training will teach workers Blue Print Reading, Geometric Dimensional Tolerance, Shop Math, Mistake Proofing, Critical Thinking, Team Building, Preventive Maintenance, Statistics Process Control and Document and Data Controls.

Hazardous Materials – This training will be offered to Production/Manufacturing Staff. Training includes proper hazardous material handling and waste management as required for these occupations.

RECOMMENDATION

Staff recommends approval of this proposal.

PRIOR PROJECTS

The following table summarizes performance by T/Q under ETP Agreementst that were completed within the last five years:

Agreement No.	Location (City)	Term	Approved Amount	Payment Earned \$ %
ET12-0432	Lake Forrest	06/26/12- 06/25/14	\$98,020	\$98,020 (100%)
ET11-0238	Lake Forrest	04/25/11- 04/24/12	\$49,400	\$49,400 (100%)
ET09-0392	Lake Forrest	12/15/08- 12/14/10	\$62,400	\$62,400 (100%)

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

8-60 Trainees may receive any of the following:

COMPUTER SKILLS

Intermediate & Advanced MS Office
Real Trac
Quick Books
DISCUS

CONTINUOUS IMPROVEMENT

Statistics Process Control (SPC)
AS9100C
LEAN Manufacturing
Process Improvements
Process Mapping
Team Building
Document & Data Controls (DDC)
Blue Print Reading

MANUFACTURING SKILLS

Advanced Product Quality Planning (APQA)
Process Control Planning & Execution (PCPX)
Manufacturing Planning and Control (MPC)
Equipment Operations & Maintenance
Inventory Management Systems
Tool Management Systems
Good Manufacturing Practice (GMP)
Inventory Control
Product Development & Creation
Shop Math
Offsets
Material Handling
Variation Reduction
Configuration Management
Geometric Dimensional Tolerance

HAZARDOUS MATERIALS

Hazardous Material Handling
Hazardous Waste Management

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