Transduction

ISO 9001:2015

QUALITY CONTROL MANUAL

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Revision Index

Revision	Issue	Section	Description	Date	Approved By:
1.0	1		First Release	10/01/2015	Stan Tyminski
2.0	1	3.2 and 3.5	Mistype, spelling errors and reference documentation	08/30/2016	Stan Tyminski
3.0	1	All 3.5.4	Revise to ISO 9001:2015 Standard Calibration compliance	06/18/2018	Stan Tyminski
3.1	1	3.5.5 and 3.5.22	Add CFSI section	10/25/2018	Stan Tyminski
3.2	1	3.5.11	Add control of limited shelf-life items	02/02/2021	Stan Tyminski
3.3	1	3.5.4	Change M&TE	10/28/2021	Stan Tyminski

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Quality Policy

The ultimate objective of the quality policy at Transduction is to produce high-quality products, provide for effective quality assurance during all phases of manufacturing, improvement of customer satisfaction level, improvement of employee knowledge and skills and to ensure that specific quality requirements of the customer contracts are satisfied.

The quality policy is implemented in detail through procedures affecting the Metal Engineering, Computer Engineering, and Quality Control Departments.

This Quality Control Manual is designed for compliance with ISO 9001:2015, and quality policy will be reviewed yearly.

According to main quality policies, the organization reviews *"Quality Objectives"* (QF-08) at the beginning of each year.

Distribution

This Quality Control Manual is distributed electronically to the following management personnel:

- Quality Control Manager & CEO
- Purchasing and Expediting Department
- Metal Engineering Department
- Computer Engineering Department
- Marketing and Administration Department
- Accounting

All documents and records are controlled in accordance with related procedure, PRM01 and form QF-04.

Transduction Inc.
Bldg. 23
Mississauga, Ontario
L4W 5A1

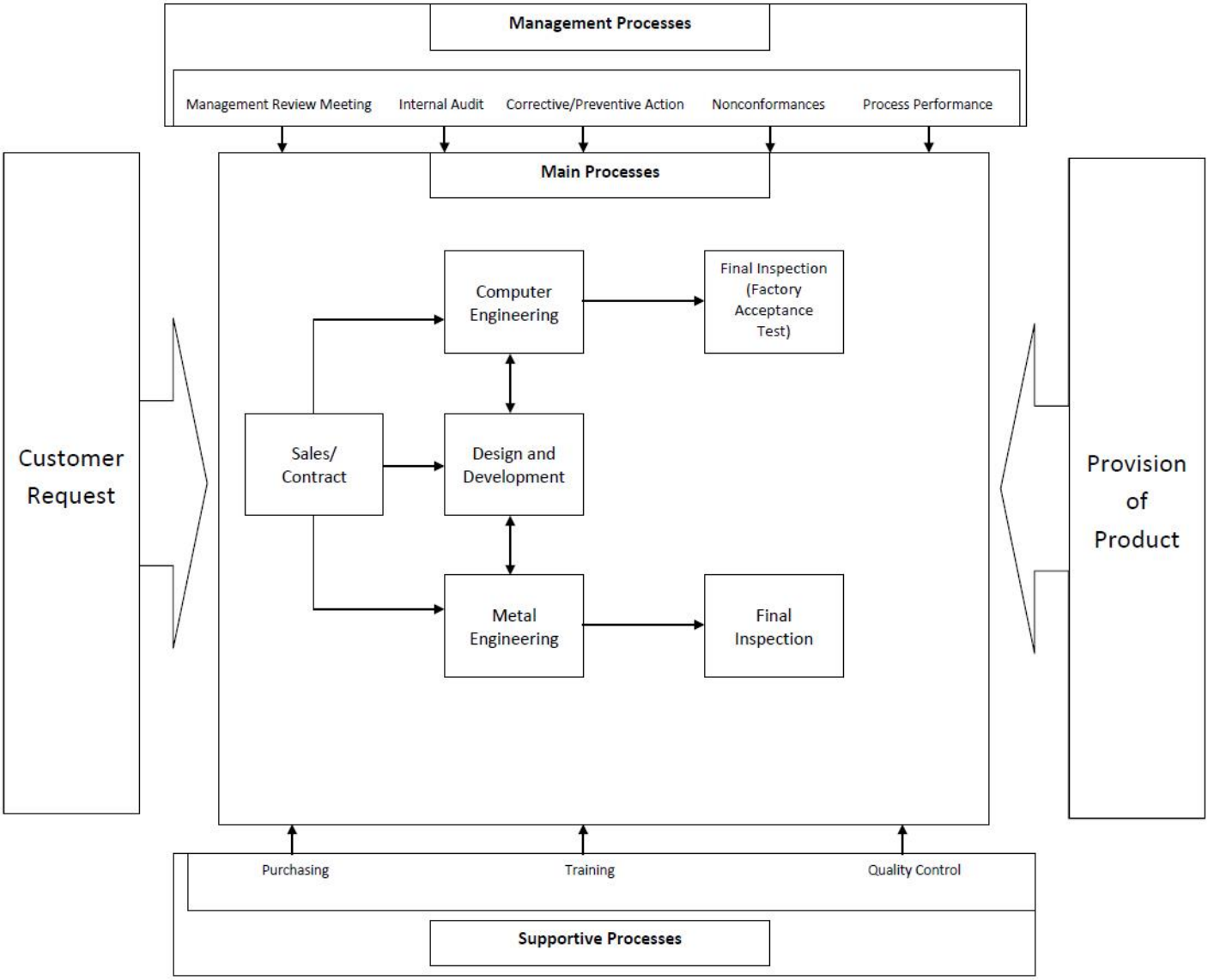
Quality Control Manual
Certification

I hereby certify that this Quality Control Manual accurately describes the system used by Transduction to meet the requirements of Quality Management System according to ISO 9001:2015

Quality Control Manager

Scope of Operation: Design, development and production of industrial computers and monitors.

Process Map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1.0 SCOPE

1.1 General

1.1.1

Transduction Inc. Quality Control Program and Quality Control Manual is based on the ISO 9001:2015. Transduction Inc. is responsible for maintaining this program which is aimed primarily at controlling inspection and test verifications which;

a. Assure that Transduction products and services conform to specified requirements and;

b. Readily detect and control the disposition of nonconformance.

The Quality Control Program will be implemented and maintained at the two locations, head office and manufacturing plant, located in Mississauga, Ontario.

Head Office	**Metal Engineering**
5155 Spectrum Way, Bldg. 23	5155 Spectrum Way, Bldg. 20
Mississauga, ON L4W 5A1	Mississauga, ON L4W 5A1

1.1.2

Transduction Inc. Quality Control Program identifies special controls, measuring and testing equipment, and skill requirements for assuring product and service quality.

1.1.3

This Manual describes and outlines all the program elements as listed in the ISO 9001:2015.

1.1.4

Transduction products are manufactured to a semi-finished inventory level and finished after receipt of a customer contract to the specified requirements included in the contract. All products shipped are supported by objective evidence that they are compliant with the contract specifications and terms and conditions.

1.1.5

a. Transduction manufacturing system and Quality Control Program is supported by a system of networked computers. The application programs, databases, and personnel that use the computer system are also controlled as outlined in this manual.

b. Transduction QA procedures rely on the modern technology of the CAD-CAM robots that have adequate precision to eliminate individual testing of metal parts. Acceptance of the metal parts is done at the assembly level in the Computer Engineering Department to verify that they fit standard computer related parts.

c. Factory Acceptance Test is the cornerstone of the QA program as there are no tests on the level of incoming inspection unless specifically requested by the QA manager. Sophisticated diagnostic software is used during 24-48 hours of Factory Acceptance Test (FAT). In case of failure, the defective part is replaced and the FAT test is restarted again. This procedure eliminates "infant mortality" of the electronic parts and reduces warranty claims to an acceptable level.

1.2 Customer Responsibility

a. Customers are responsible for the generation of the specifications.

b. The customers should review Transduction quotations to make sure that they reflect desired specifications and proposed design of the monitors and computers.

1.3 Transduction Responsibility

Transduction acknowledges its responsibilities to:

a. Satisfy requirements specified in a contract;

b. Maintain the Transduction Quality Control Program;

c. Conduct yearly evaluation and if needed, update the Quality Control Manual including documented system function descriptions and inspection and test reports when needed to improve the effectiveness of the program or reflect current practices;

d. Provide customer access to Transduction facilities for the purpose of quality surveillance and audit; identify for the customer before the award of the contract which products will be supplied from inventory, and demonstrate that the Quality Control Program was implemented for the products at the time they were produced.

1.4 Regulatory Authority Requirements

Transduction meets the requirements of all Federal, Provincial, Territorial, and Municipal Acts, Regulations, Bylaws, and their Federal Codes that apply to Transduction products and services.

In addition, customers can request additional standards related to EMI/RFI, Seismic, Nuclear Radiation, and Environmental specifications.

1.5 Electrical Safety

Each Transduction product that includes power supply will be individually tested for acceptable leakage current with an HI-POT tester at 2.12kV DC to comply with CSA Mode Code SPE-1000.

2.0 DEFINITIONS

The following definitions apply in this Standard:

Batch (volume or lot) means an identifiable collection of products, or quantity of material, of a single type, grade, class, size, or composition produced in the same facility under essentially the same conditions and at essentially the same time.

Calibration means comparing two instruments, measuring devices, or standard, one of which is of known accuracy. It is done to detect, correlate, report, or eliminate by adjustment any variation in accuracy of the instrument or measuring device of unknown accuracy.

Characteristic means any distinct property or attribute of a product, process, or service that can be described and measured to determine conformance and nonconformance to specified requirements.
Contract means the written covenant and other documents agreed to and legally binding between the customer and supplier which specify requirements and conditions that must be met to successfully complete the work.

Customer means the party or his representative issuing a contract for procuring products or services.

Customer representative means the person appointed by the customer to survey and verify the quality of the supplier's work.

Description means a document stating the purpose and scope of an activity and who is responsible for what, and outlining what has to be done to complete it.

Design input means requirements and information specified by customers, regulatory authorities, and one design group or discipline for another and needed as a reference base for design work.

Design output means requirements and information needed to procure or produce products or provide services.

Design review means the formal, independent examination of a design to confirm its adequacy.

Disposition means an action to determine how a nonconformance is to be resolved.

Evaluation means an appraisal to determine whether or not production processes and quality assurance programs are capable of producing a quality product or providing a quality service and generating evidence that supports decisions of acceptability.

Inspection means the examination, measurement, and testing of the characteristics of products or services to determine acceptability and record inspection data.

Inspection and test point means a location or stage in the production cycle where inspection and testing are performed by personnel whose responsibility is to determine the acceptability of products or services and to record inspection and test data.

Monitor process methods means to carry out independent, periodic verification of processes to confirm that all the parameters of those processes are maintained within the specifications defined by the process procedures.

Nonconformance means a deficiency in characteristic, documentation, or procedure which renders the quality of a product or service unacceptable or indeterminate or not according to specified requirements. Examples of nonconformance are: physical defects, test failures, inadequate documentation, and deviations from prescribed processing or from any other part of the program.

Positive recall means a method whereby a product can be released so that further work can proceed, provided that the product is identified as being subject to recall and can be removed, repaired, or reworked at a later stage if found unacceptable.

Procedure means a document that specified, as applicable, the purpose and scope of an activity; what shall be done and by whom; when, where, and how it shall be done; what materials, parts, equipment, and documentation shall be used; and how it shall be controlled.

Production means all activities involved in the fabrication, assembly, construction, and erection of products to specified requirements.

Quality means the totality of features and characteristics of products or services that bear on their ability to meet specified requirements.

Quality assurance means all those planned and systematic actions needed to provide adequate confidence that products or services will satisfy specified requirements.

Quality audit means a documented activity aimed at verifying by independent examination and evaluation that the applicable elements of the quality assurance program have been established, documented and implemented effectively in accordance with specified requirements.

Regulatory authority means the Federal, Provincial, Territorial, or Municipal agency having the lawful right and power to interpret the law and exercise authority.

Repair means processing nonconforming products so that they can function reliably and safely although the products still do not conform to the originally specified requirement.

Rework means reprocessing products to conform to the originally specified requirement.

Scrap A disposition which may be imposed for a nonconforming product when it can be established that the product cannot be reworked, repaired or used for its intended function.

Special production process means a production process where conformance is assured by using evidence generated during the process. A production process is a special process when subsequent inspections required to establish conformance are either impossible or undesirable.

Special inspection processes means an inspection requiring either specialized inspector skills or inspection techniques, or both.

Specified requirements mean requirements prescribed by the customer in the contract and complementary requirements prescribed by the supplier that is not directly prescribed by the customer.

Subcontract means a contract between a supplier and sub-supplier.

Supplier means the party responsible for the performance of the work specified in the contract.

Surveillance means the continuing evaluation, analysis, and verification of a supplier’s records, methods, procedures, products, and services, to assure that requirements are met.

Use-as-is a disposition which may be imposed for a nonconforming product, when it can be established that the discrepancy will result in no adverse conditions and that the product under consideration will continue to meet all functional requirements including performance, maintainability fit and safety.

Verification means independently reviewing, inspecting, examining, measuring, testing, checking, witnessing, monitoring, or otherwise establishing and documenting that products, processes, services, and documents conform to specified requirements.

Work means any activity performed to provide products and services.

3.0 QUALITY ASSURANCE PROGRAM REQUIREMENTS

3.1 General

Transduction is a manufacturer and distributor of industrial computers, custom chassis, monitors, display systems and I/O components. Transduction has planned, established, implemented and will maintain a Quality Control Program in accordance with the ISO 9001:2015 standard.

3.2 Management Responsibilities

3.2.1 Management Policies and Organization

a. The objective of Transduction management is to provide the highest level of quality industrial computers, monitors, custom metal fabrication and processes which conform to contractual customer requirements.

   It is the policy of Transduction to establish and maintain an effective and efficient Quality Control Program in conjunction with other management functions. Determination of work conformance to contract requirements is made on the basis of objective evidence of quality and quantity.

b. The responsibilities and authority for the quality of those managing and performing the work, and of those verifying conformance to quality requirements and their relationships are shown in *Figure 1* and *"Organizational Chart" (TOC-001).*

Management	Responsibilities
CEO	- Oversees each management group below.
Quality Control Manager	- Ensures conformance to all quality control program documents, final identification and traceability requirements - Consult with engineering on pertinent technical subjects
Marketing & Administration	- Provide assistance to CEO - Design and implement marketing programs - Prepare quotations for approval - Quality Control representative appointed by the QC Manager to act as a contact for quality matters.
Accounting Bookkeeper	- Operate daily finances - Create and maintain financial statement and reports - Handle A/R and A/P accounts
Tenders & Contracts (Sales)	- Receive and approve contracts - Prepare and issue quotation - Sales order planning - Detect and resolve differences in contract and tender - Provide technical sales support
Purchasing & Expediting	- Shipping/receiving - Export documentation - Purchase orders - Order processing - Work status and production planning and scheduling - Vendor inspection and qualification

Computer Engineering	- Oversees engineering all aspects of computer system production and future products - Research and Development (R&D) of hardware and software. Interface with QC Manager as technical advisor - Measuring and test equipment - Disposition of non-contractual and contractual non-conformances
Metal Engineering	- Oversee engineering all aspects of custom chassis and metal components. - Research and Development (R&D) - Vendor and inspection and qualification - Special Processes management - Maintain backed up records of all drawings - Maintain log of calibration and maintenance of equipment
Shipping & Receiving	- Packing and shipping - Receive all incoming shipments
Production 1	- Reporting directly to Computer Engineering - Hardware assembly - Issue software testing and configuration form
Production 2	- Reporting directly to Metal Engineering

Figure 1 – Organizational Chart Management Responsibilities

c. See the position interrelationships on the *"Organizational Chart" (TOC-001).*

3.2.2 Management Review

Transduction management reviews the Quality Control Program at least once a year. The purpose of the review is to ensure the effectiveness and continuing suitability and adequacy of the quality system to meet the requirements of the ISO 9001:2015 standard and quality policy and objectives. This review includes assessing opportunities for improvement and the need for changes to the Quality Control Program. Top management is responsible for scheduling and conducting reviews. Records of the review will be maintained.

The input to management review shall include any information on the following:

- Results of audits
- Customer feedback
- Process performance and product conformity
- Status of preventative and corrective actions
- Follow-up actions from previous management review
- Changes that could affect the quality management system
- Recommendations for improvement

The output from the management review will be recorded on a form of the agenda and a list of actions items. The output shall include any decisions and actions related to:

- Any improvement needed to maintain and improve the effectiveness of the Quality Control Program and its processes
- Improvement of product related to customer requirements
- Resource needs

REFERENCES
Management Review (PRM02)
Measurement & Improvement (PRM11)
Management Review Meeting Agenda (QF-07)

3.2.3 Management Representative

a. The Quality Control Manager will perform and verify at the organizational level such that the quality control requirements are not subordinated to procurement, production or delivery.

b. The Quality Control Manager carries the authority to resolve quality matters pertinent to product and quality programs as established by drawing specifications, customer requirements, and Quality Control policies and procedures. The Quality Control Manager may delegate his responsibility through management and reports to the CEO. The responsibilities of the Quality Control Manager are:
    i. Implement Transduction policy on quality.
    ii. Set quality objectives.
    iii. Review organizational relationship as they affect the quality and develop proposals for improvement.
    iv. Determine and report the principal causes of quality losses.
    v. Monitor Transduction Quality Control Program to determine where improvements are needed and take necessary corrective action.

c. When required by contract, the customer will be advised of the name of the Quality Control Manager in writing.

3.2.4 Organizational Authority

a. All Production Staff (1 & 2) under Computer Engineering and Metal Engineering are responsible for and authorized to identify and record nonconformance to contractual requirements, and required to notify the Quality Control Manager for disposition instructions.

b. The Quality Control Manager exercises the authority to initiate and recommend disposition of nonconforming parts and parts for rework.

c. The Quality Control Manager gives the final verification of correction of nonconforming products.

d. The Quality Control Manager can prevent further processing, delivery or installation of nonconformance products.

3.2.5 Independent Inspection, Witnessing and Monitoring

The Computer Engineering Manager designates a representative in the Production Staff 1 Department for quality purposes. The representative is qualified to survey the inspection data, physical integrity, and all contract/purchase order criteria to satisfy customer requirements prior to packaging and shipping. The data is recorded on a *"Factory Acceptance Test" (CDS-001)* and is signed and dated. The Computer Engineering Manager will verify each factory acceptance form.

Passmark BurnIn Test Software is used by the representative to support production configuration data collection, analysis, and acceptance. The BurnIn Test produces a *"BurnIn Test Summary" (BTS-001) of* all the major sub-systems of a computer simultaneously tested for endurance, reliability, and stability for 24 – 48 hours depending on customer requirement. Passmark MonitorTest Software will be used when applicable to customer contractual requirements. The MonitorTest produces a *"MonitorTest Test Screen" (MTS-001)* with generated test patterns on the screen at a variety of different resolutions and color depths to test for optimum visual performance.

When a contract requires "source inspection", a representative from the Transduction Manufacturing Engineering Department is assigned to assist the customer's representative in all quality testing.

3.2.6 Indoctrination and Training

a. Copy of approved Quality Control Manual is maintained and provided to each level of management *Ref.: "Organizational Chart" (TOC-001).*
b. Management is trained and qualified to ensure that they are aware of the responsibilities and are capable of performing to the quality control standards. This shall be evidenced by a *"Training Records" (QF-09)* maintained by the Quality Control Manager. Training and re-qualification will be done when quality procedures change or when applicable.

REFERENCES
Organizatonal Chart (TOC-001)
Resources Procedure (PRM03)
Training Records (QF-09)

3.3 Quality Control Manual

a. Transduction Inc. has prepared the Quality Control Manual in compliance with the ISO 9001:2015 Standard. This manual has been approved by Transduction Management and signed by senior management officers.

b. All Quality Control Program Descriptions will be implemented according to the Quality Control Manual.

c. The following will be included in the Quality Control Manual.
    i. **Program Application:** See Ref.: 3.2.1(a), (b) and (c)
    ii. **Management Responsibilities and Organization:** See *"Organizational Chart" (TOC-001)*. Transduction Inc. has no divisions.
    iii. **Descriptions:** The Quality Control Program Documents are considered essential by Transduction for facilitating verification by the customer of the work performed; therefore, Quality Control Program Descriptions are included as part of the Quality Control Manual. All of the descriptions stated in section 3.4 have been included. Each Quality Control Program Description documents the purpose, scope, who is responsible for what and an outline of what will be done. Forms used are included.
    iv. **Manual Review:** The Transduction Inc. Quality Control Manager and Marketing and Administration will periodically review (a minimum of once a year), and determine if updates are warranted to reflect current quality verification practices. Changes to the manual will be implemented to comply with ISO 9001:2015 standards. Control of revisions and copies issued will be kept in the *"Revision Index" (Ref.: Page 3)* of this manual.

3.4 Quality Control Program Descriptions

PURPOSE

To establish document procedure for the following system functions and any other such functions that apply to contracts:

Tender and Contract	3.5.1
Design	3.5.2
Documentation	3.5.3
Measuring and Testing Equipment	3.5.4
Procurement	3.5.5
Inspection and Test Plan(s)	3.5.6
Incoming Inspection	3.5.7
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Final Inspection	3.5.9
Inspection Status	3.5.10
Identification and Traceability	3.5.11
Customer Property	3.5.12
Production and Quality Control	3.5.13
Special Process	3.5.14
Packaging and Shipping	3.5.15
Quality Records	3.5.16
Nonconformance	3.5.17
Corrective Action and Preventative Action	3.5.18
Statistical Techniques	3.5.19
External Quality Audit	3.5.20
Risk & Opportunities Management	3.5.21
Counterfeit Fraudulent and Suspect Items (CFSI)	3.5.22

3.5 Quality Control Program Elements

3.5.1 Tender and Contract

PURPOSE
This procedure describes the requirements for accepting and processing tenders and contracts.

SCOPE
This procedure applies to all customer tenders and contracts received by Transduction.

RESPONSIBILITIES
The Tenders & Contracts Department (Sales) is responsible for:

- Receive tender from customer
- Acknowledge receipt
- Review and determine if the tender complies with Transduction production capabilities
- Prepare and issue quotation
- Approve quotation if issued by Marketing and Administration
- Receive contract from a customer with reference to the quotation
- Review the contract before acceptance to detect and resolve differences from the tender
- Approve contract for processing

PROCEDURES
This procedure describes the quality management system used within Transduction to control the processing of customer tenders and contracts.

a. The Tenders and Contracts Department (Sales) receives tender from a customer for review to ensure that:
    i. The customer procurement document agrees with the offered quotation (if applicable); and,
    ii. Transduction can meet the customer's technical requirements

b. If the tender is approved by Transduction, a formal *"Quotation" (QUF-001)* is issued to the customer.

c. An official contract (purchase order) is needed for the tender and quotation to be deemed acceptable.

d. Transduction authorized personnel (Tenders and Contracts Department) are responsible to review and accept customer's contract term and conditions.

e. If Transduction is unable to meet the terms and conditions, authorized personnel shall contact the customer to notify them of the circumstances and attempt to resolve concerns. If a resolution cannot be achieved the customer contract will not be processed and, if applicable, the customer's equipment returned.

f. If the customer requirements are deemed acceptable, the Tenders and Contracts Department will forward all pertinent documentation in reference to the contract to the Purchasing and Expediting and Manufacturing Departments respectively. The Purchasing and Expediting Department will record customer contract details in the *"Customer Purchase Order Form" (QF-14).*

DOCUMENTS
Tender
Contract
Quotation (QUF-001)
Customer Purchase Order Form (QF-14)
Customer Requirement Procedure (PRM04)
Production and Service Operation Procedure (PRM05)

3.5.2 Design

a. In response to Customer specifications Transduction responds with detailed quotation, which when approved by the Customer, it becomes work order. This way Customer is responsible for the design and Transduction is responsible for implementation of this design to ISO 9001:2015 QA standard.

In addition, all designs will conform to the following standards:

Canadian Electrical Code for assembly and CSA code SPE 1000 for electrical safety.

When possible design will be based on the critical parts selected and approved by Transduction QA Manager.

3.5.3 Documentation

a. Each design file will contain records of the parts used, including Factory Acceptance Test, invoice, shipping record, etc. that will be kept for minimum 10 years.

PURPOSE
To describe the process for managing and controlling all work and quality related documentation.

SCOPE

This procedure describes that all essential documentation affecting quality are:

- Reviewed, adequate and released by authorized personnel.
- Available at all levels of inspection and test points where applicable.
- Ensure documentation changes and obsolete issues are promptly resolved.
- Prepare and submit requests for changes to customer documents when required.

RESPONSIBILITIES

The Transduction Quality Control Manager is responsible for the adequacy of all essential documentation affecting quality. The Computer Engineering and Metal Engineering Department is responsible for its technical content. The Marketing and Administration Department is responsible for maintaining the system for creating and controlling the documentation, with the approval of the Quality Control Manager for any changes. Documentation will include but will not be limited to:

i. This manual;
ii. Quality Control Program descriptions included in this manual;
iii. Engineering specifications, drawings, procedures, and work instructions;
iv. Procurement documentation required by section 3.5.5
v. Inspection and Test Plan(s) required by section 3.5.6;
vi. Special process procedures and documentation required by section 3.5.14
vii. Nonconformance required by section 3.5.17
viii. Corrective action required by section 3.5.18
ix. Audit documentation required by section 3.5.21.

PROCEDURE

a. The Marketing and Administration Department will oversee that any incomplete, ambiguous, or conflicting documentation is resolved and approved by the Quality Control Manager. All personnel having access to Transduction's documentation have the authority to report documentation discrepancies to the Quality Control Manager.

b. Hard copies of current documentation will be maintained as the primary source using a *"Document Register" (PRM13)* filing system in the Marketing and Administration Department to ensure that only current documentation is used by work and inspection station personnel.

c. All revision levels of documentation are maintained "electronically" on a computer network as the secondary source.

d. Changes to documentation will be initiated in writing using a *"Document Change Request" (QF-4)*. A hard copy of each change will be kept on file.

e. The Document Change Notice will indicate all information to be updated with and purged of any nonconforming documentation.

f. When required as a result of a Quality Control or engineering observation, a written request for changes and/or clarification to customer documentation will be submitted to the customer for acceptance of requested changes and/or clarification. The request and related responses will be maintained on file in the Marketing and Administration and Purchasing and Expediting Department.

REFERENCES
Document Register (PRM13)
Document Change Request (QF-04)
Design and Development Procedure (PRM12)
Design and Development Plan (QF-02)
Design and Development Change (QF-03)

3.5.4 Measuring and Testing Equipment

PURPOSE
To define requirements for control and calibration of all measuring and testing equipment used in activities affecting quality are accurate and conform to calibration standards and specifications.

SCOPE
This procedure applies to all measuring and testing equipment used at Transduction:

1. CRITERION Dielectric Strength Tester, Model: DV-25V-10 (***(exception CRITERION Dielectric Strength Tester, Model: DV-25V-10 is used daily on all computer systems with a power supply) (see section 3.5.4 (e) and (k))***
2. HART SCIENTIFIC Temperature Thermocouple Calibrator, Model: HDRC 9100 **(exception to be calibrated on as needed basis)**
3. SIMPSON Leakage Current Tester, Model: 228
4. FLUKE 73III Multimeter
5. FLUKE 23 Multimeter ***(INDICATION USE ONLY) (see section 3.5.4 (e) and (k))***
6. MITUTOYO 24 Inch Digital Caliper Model: 500-506-50 ***(INDICATION USE ONLY) (see section 3.5.4 (e) and (k))***
7. MITUTOYO 12 Inch Digital Caliper Model: 500-193 ***(INDICATION USE ONLY) (see section 3.5.4 (e) and (k))***
8. 10 Inch Metal Block ***(used for confirming Digital Caliper gauge reading)***

RESPONSIBILITIES

- The Quality Control Manager is responsible for the implementation of this procedure.
- Computer Engineering and Metal Engineering Department review and establish that the measuring and testing equipment is readily available and calibrated for use on Transduction products.
- The Computer Engineering and Metal Engineering Departments ensure that all scheduled and newly purchased measuring and testing equipment is sent to a Calibration Laboratory for calibration, program enrolment or both.
- The Calibration Laboratory performs the calibration of all the measuring and testing equipment used.
- The Calibration Laboratory informs Transduction of nonconforming measuring and testing equipment and directs the disposal of rejected equipment if needed.
- The Computer Engineering and Metal Engineering Departments and Production Staff verify proper calibration of equipment prior to use and/or return from the Calibration Laboratory.

PROCEDURES

a. A measuring and testing equipment program will be implemented, maintained and approved by the Computer Engineering and Metal Engineering Departments and Quality Control Manager. Personnel will use only equipment traceable to the Institute for National Measurement Standards, National Research Council of Canada for in process inspection and final test. The measuring and testing equipment will periodically be calibrated and/or certified which contributes to the overall product quality and production yield. All calibration records and logs are maintained to provide adequate control over equipment in the calibration program.

b. The Computer Engineering and Metal Engineering Departments review and establish that the measuring and testing equipment is available for existing and future Transduction products and services. Manuals of purchased equipment contain instructions for use of the equipment in meeting technical requirements.

c. A Calibration Laboratory that is ISO 9001:2015 compliant and is National Research Council of Canada (NRC) traceable certifies all scheduled and newly acquired measuring and testing equipment. Labels are attached to the equipment for purposes of maintenance of periodic calibration dates.

d. The Computer Engineering and Metal Engineering Departments has established that calibration intervals will be determined by the Calibration Laboratory or if there is a significant change in measurement capability. This is subject to change per request by other agencies representing Transduction customers.

9. All measuring and testing equipment ***(exception MITUTOYO 24 & 12 Inch Digital Calipers as they are a continuity tester) (*****exception CRITERION Dielectric Strength Tester, Model: DV-25V-10 is used daily on all computer systems with a power supply) (exception HART SCIENTIFIC Temperature Thermocouple Calibrator, Model: HDRC 9100 to be calibrated on as needed basis)**

e. for specifications and personnel use are recorded on the *"Calibration and Log"* forms;

   i. *MTECDML-001*
   ii. *MTESLCML-001*

   Any unsatisfactory performance by any of the measuring and testing equipment ***(FLUKE 23 Multimeter)*** is sent to a Calibration Laboratory certified with a purchase order containing equipment information for repair and calibration.

   Production Staff 2 with the approval of the Metal Engineering Department will test the Digital Calipers before every use using a 10-inch Metal Block to verify proper operation.

   If it is determined by Production Staff 1 that there is unsatisfactory performance or suspicious results from FLUKE 23 Multimeters, FLUKE Multimeter, Model: 73III will be used to verify suspicious results.

f. Calibration Laboratory is located in a dedicated environmentally controlled area that is accredited with the National Research Council of Canada (NRC). Adequate precautions concerning sufficient warm-up, temperature and humidity stabilization shall be taken at all times.

g. Calibrations of all measuring and testing equipment are ISO 9001:2015 compliant and are National Research Council of Canada (NRC) traceable with a *"Certificate of Calibration Conformance"*.

h. *"Labels" (LAB-001)* are attached to the case of the measuring and testing equipment indicating its calibration status and next due date. The label includes a reference to the certificate of calibration conformance.

i. A seal *(Ref.: section 3.5.4 (h))* is affixed to all measuring and testing equipment at the time of calibration to deter tampering. Equipment is not to be used with a damaged seal as it may be damaged or inaccurate. Production Staff are to notify the Computer Engineering and Metal Engineering Departments of any seal that is damaged respectively.

j. The Purchasing and Expediting Department maintains a history of equipment calibration. All measuring and testing equipment will have a written certificate of calibration that includes pre and post calibration results.

k. Measuring and testing equipment is located in the Computer Engineering and Metal Engineering Departments office ***(except for FLUKE 23 Multimeters and MITUTOYO 24 & 12 Inch Digital Calipers as these are INDICATION USE ONLY used as continuity testers)*** and is used by laboratory and inspection personnel only. Any use of the equipment is recorded on pertinent *"Calibration and Log"* forms.

l. Measuring and testing equipment that is not completely functional is identified and placed in the Quality Control hold area in the "Stock Room Cage". The Quality Control Manager will create a *"Nonconformance Report" (TNCR-001)* with issue of Return Material Authorization number from the "*Return Material Authorization (RMA) Log" (RMAL-001).* Purchasing and Expediting Department will be notified and a purchase order will be created so that the Shipping Department can ship the equipment to a certified Calibration and Repair Laboratory. If the equipment cannot be calibrated, adjusted within acceptable tolerances, has become obsolete, or requires excessive repair it will be taken out of service immediately with the approval from the Quality Control Manager.

m. When a possibility exists where a faulty measuring and testing equipment has compromised data, a meeting is assembled and appropriate action is taken. This meeting consists of the Quality Control Manager, Computer Engineering and Metal Engineering Department. Affected customers will be notified for any potential impacts from faulty measuring and test equipment issues.

REFERENCES

Calibration and Log Forms (Ref.: MTECDML-001 and *MTESLCML-001*)
Certificate of Calibration Conformance
Label (LAB-001)
Measuring and Monitoring Equipment Procedure (PRM07)
Calibration Equipment List (QF-01)
Nonconformance Report (TNCR-001)
Return Material Authorization (RMA) Log (RMAL-001)

3.5.5 Procurement

PURPOSE

To establish and maintain a system for the procurement (purchasing) of parts and material which will be incorporated into Transduction products.

SCOPE

This procedure applies to all procurement (purchasing) activities at Transduction.

RESPONSIBILITIES

The Computer Engineering Department and Metal Engineering Department are responsible for:

- Initiate purchase requisitions

The Purchasing and Expediting Department is responsible for:

- Procurement of parts and material which conform to technical specifications and purchase requisitions
- Maintain suppliers list
- Preparation and issue of purchase orders
- Supplier corrective action

The Quality Control Manager is responsible for:

- Supplier quality system audit
- Supplier source inspection (if required by Quality Control Program)
- Review purchase order for:
    i. Specification of acceptance criteria
    ii. Selection of Quality Control Program requirements for subcontracted (purchased) parts and material
    iii. Certification of materials and parts

PROCEDURE

Each new material or part that the Computer Engineering and Metal Engineering Departments request and approve for procurement is assigned a unique part number. A *"Transduction Purchase Request" (TPR-001)* will be drawn up. At this time a *"Purchase Order" (PUO-001)* is created by the Purchasing and Expediting Department that includes the unique part number (if applicable), approved supplier name, manufacturer catalog number, and any other specifications and quality control instructions as described in section 3.5.5 (b). This will ensure accurate procurement. The purchase order is maintained "electronically" with a hard copy backup.

A date, purchase order number, quantity and any other details are recorded on the purchase order for each transaction. Each purchase order is recorded in the *"Purchase Order Log" (POL-001).* Purchase Order numbers begin with an abbreviation of the Department who issued the requisition and/or the process requirement;

- Manufacturing **(M)**
- Metal Shop **(MS)**
- Shipping/Receiving **(SHP)**
- Service **(S)**
- Marketing and Administration **(OFF)**

Each purchase order is technically reviewed for accuracy and then submitted to supplier. It is then filed and maintained by the Transduction Purchasing and Expediting Department. A copy of the Purchase Order is provided to the Department which issued the requisition. All purchase orders over $10,000 must be approved by the CEO. If during the technical review a nonconformance is found, the purchase order will be clearly marked ***"Cancelled"*** and a new purchase order number will be issued. Outstanding purchase orders will be put into suspense in the Purchasing and Expediting Department until parts are received and/or service performed in full. Incoming inspection will be done in accordance with section 3.5.7 of this manual.

All procurements (purchase orders) are subject to the following:

a. Selection

When the contract does not specify Quality Control Program standards for critical products and services, the Computer Engineering, Metal Engineering and Purchasing and Expediting Departments are responsible for selecting which suppliers are approved to procure parts and material.

The selection of approved suppliers is based on their ability to meet the technical requirements. Critical parts and/or services will be procured from suppliers from the *"Approved Supplier List" (ASL-001).* The selection process and type of quality control used to assess suppliers is also dependent on the type of part/material, past performance financial stability and Quality Control Program (Ref.: section 3.5.21.2).

Critical parts/service is defined as: Sheet Metal, Power Supply, Motherboard, Single Board Computer (SBC), Memory, Hard Drive, Flash Drive (SSD) and LCD Panel.

The parts used in the manufacturing of Transduction products are complex electronic components provided by suppliers with extensive technical catalog information. Purchasing and Expediting Department uses this catalog information in developing an *"Inventory List" (INL-001).* The Inventory List is the reference for parts used in manufacturing Transduction products. The list includes references to the supplier, part number, quantity and cost. Surveillance of this type of supplier is limited to Transduction Incoming Inspection (section 3.5.7), In Process Inspection (section 3.5.8) and Final Inspection (section 3.5.9) unless past performance suggests additional quality controls.

If a supplier provides parts and material to Transduction engineering design specifications or customer specifications requiring a Quality Control Program then:

i. Transduction Quality Control Manager will select and justify applicable ISO 9001:2015 or other Quality Control Program Standards to be used.
ii. The Quality Control Manager will evaluate supplier/manufacturer ability to meet specified standard requirements before work begins by:

1. Reviewing the supplier Quality Control Manual and implementation of the Quality Control Program. Note – Evidence of registration by a recognized authority may be used in lieu of this review.

2. Verifying that the facility, resources and related plans are sufficient for meeting customer requirements.

b. Purchase Order Requirements

When required, the following will be included in the purchase order:

i. Supplier name and part number. Also included will be any specifications, drawings and verification requirements not covered by the manufacturer's published product description and data sheets. These documents are controlled in accordance with section 3.5.3(d) of this manual;
ii. the title, number, and issue of the Quality Control Program standard to be applied to the parts and material;
iii. requirements for approval or qualification of parts or material, procedures, processes, equipment, and personnel;
iv. requirements for the submittal for acceptance of the disposition of non-conforming parts and material;
v. identification requirements for the parts and material;
vi. requirements for preservation, packaging, and shipping;
vii. the right of Transduction or its customer to –
    1. Review the supplier documentation required by the applicable Quality Control Program standard.

    2. Have access to the supplier facility or working area so that Transduction and Transduction's customer can audit, survey, and verify that the supplier is conforming to specified requirements.

viii. points in supplier Inspection and Test Plan(s) where Transduction or Transduction's customer can verify conformance to contract requirements;
ix. references as required by the contract;
x. requirements for submission, retention and disposition of documentation and quality records;
xi. information and instructions required when the products or services are shipped directly to a consignee other than Transduction; and
xii. traceability requirements in accordance with section 3.5.11 of this manual.
xiii. purchase orders must state requested price and delivery time.

c. Review

All purchase orders and associated reference data shall be available for review by Transduction customer representative.

d. Surveillance of Supplier

i. Review supplier Inspection and Test Plan(s) to ensure specified requirements will be met.
ii. Evaluate all subcontracted parts and material to determine the amount of inspection, surveillance, and audit needed at the supplier facility.
iii. Carry out this inspection, surveillance, and external audit (Ref.: section 3.5.21.2).
iv. Evaluate the disposition of all reported nonconforming parts and material.

e. Amendments to Purchase Orders

All purchase order amendments will be made by the Purchasing and Expediting Department. Amendments are referenced back to the original purchase order number. Any technical specification change or if the part/material is obsolete the discrepancy is reported to the Quality Control Manager for approval to have purchase order amended.

f. Counterfeit, Fraudulent and Suspect Items

In order to minimize the risk of counterfeit and fraudulent items, various practices are employed;

i. Use commercially manufactured parts or components *(Ref.: section 3.5.5 (a))*.
ii. Purchase critical parts and other components directly from the manufacturer and/or authorized distributor *(Ref.: section 3.5.5 (a))*.
iii. Maintain meticulous records of supplier orders and customer configurations for at least 10 years.

REFERENCES

Purchase Order (PUO-001)
Inventory List (INL-001)
Transduction Purchase Request (TPR-001)
Purchase Order Log (POL-001)
Approved Supplier List (ASL-001)
Procurement Procedure (PRM06)

3.5.6 Inspection and Test Plan(s)

PURPOSE
To establish and maintain a system outlining how customer test and inspection requirements will be fulfilled.

SCOPE
This procedure applies only if requested by the customer to meet Quality Control requirements.

RESPONSIBILITIES
- The Computer Engineering Department, Metal Engineering Department and Quality Control Manager plan the inspection and test activities for contracts containing specific inspection and testing requirements.
- The Marketing and Administration Department will prepare custom inspection and testing documentation when contracts contain requirements to meet specific quality standards. Computer Engineering and Metal Engineering Departments will verify each document and receive approval from the Quality Control Manager.

PROCEDURE
The Inspection and Test Plan will be prepared in reference to customer Quality Control Standards after the award of the contract and must be approved before work starts.

REFERENCES
Factory Acceptance Test (CDS-001)

3.5.7 Incoming Inspection

PURPOSE
To establish and maintain a system to monitor the quality level for parts and material received to ensure compliance with purchasing documents, specifications and drawings.

SCOPE
This procedure applies to all parts and material purchased by Transduction.

RESPONSIBILITIES
- The Shipping and Receiving Department performs visual inspection to verify receipt of parts.
- The Computer Engineering Department performs functionality test on critical parts.

- The Purchasing and Expediting Department performs a secondary visual inspection of all parts in accordance with a purchase order.
- The Accounting Bookkeeper to issue payment to the supplier if the invoice is approved by the Purchasing and Expediting Department.
- The Purchasing and Expediting Department to dispose of parts nonconforming to purchase order.

PROCEDURE

a. The receipt of parts and material at Transduction is through Shipping and Receiving Department. The Shipping and Receiving Department notifies the Purchasing and Expediting Department of receiving parts. These procedures are under the knowledge of the Quality Control Manager. The Shipping and Receiving Department shall count the quantity and compare the part number information with the information from copy of the supplier packing slip. The incoming parts are checked for quantity and identity only. Following receipt, the Shipping and Receiving Department will submit all documentation received with shipment to Purchasing and Expediting Department for secondary visual inspection in accordance with the purchase order. The supplier invoice will be checked for conformance with the *"Purchase Order" (PUO-001).* The Purchasing and Expediting Department will initial invoice and/or packing slip before giving to the Accounting

   Bookkeeper for payment. Any discrepancies will be dealt with accordingly by the Accounting Bookkeeper and the Purchasing and Expediting Department. Nonconforming parts will be segregated in quarantine area in "Stock Room Cage" until disposition is determined by the Purchasing and Expediting Department and Quality Control Manager. Incoming parts are held in bond in the receiving area until an inspection as described above has been completed, and applicable material certifications have been received. Accepted parts will be transferred to the controlled "Stock Room Cage" where all Transduction inventory is located.

b. Any defective parts that may be provided by the supplier are identified by functional tests at the time of in-process inspection and/or engineering tests (BurnIn Test and/or Monitor Test if applicable) of the complete computer system at the time of final inspection. When purchased parts require specifications, the Quality Control Manager verifies that the specifications furnished with the parts are adequate. All documentation provided by the supplier showing evidence that the specified requirements were met is attached to the purchase order copy.

c. Incoming parts are held in a bonded area in the Shipping and Receiving Department until the proper inspection has been completed and applicable part specifications have been received (Ref.: section.:3.5.7 (a) and (b)).

d. If parts received do not conform to the information given on the *"Purchase Order" (PUO-001),* the parts are retained in "Stock Room Cage" for temporary storage and the Quality

Control Manager is notified. The Quality Control Manager will create a *"Nonconformance Report" (TNCR-001)* that references a Return Material Authorization number from the "*Return Material Authorization (RMA) Log" (RMAL-001).* The QC Manager will coordinate with Purchasing and Expediting and Computer Engineering Departments for disposition instructions.

Disposition of the parts will be recorded on the original purchase order in Purchasing and Expediting Department.

REFERENCES

Purchase Order (PUO-001)
Supplier Packing Slip
Supplier Invoice
Nonconformance Report (TNCR-001)
Return Material Authorization Log (RMAL-001)

3.5.8 In-Process Inspection

PURPOSE

Establish and maintain a system for the in-process inspection of parts to ensure compliance with customer contract and supporting documentation.

SCOPE

This procedure applies to all in-process products manufactured by Transduction and includes supplier source inspection (if applicable).

RESPONSIBILITIES

- Production Staff 1 and Production Staff 2 will conduct third visual inspection of all parts before assembly.
- Production Staff 1 will perform a functional test to confirm operation of parts.
- The Metal Engineering Department to perform metal fabrication and assembly in accordance to the manufacturing process and referenced detailed drawings.
- The Metal Engineering Department to monitor special process methods.

PROCEDURE

a. Parts that have passed incoming inspection are transferred to the Computer Engineering Department for assembly as per customer contract requirements. A visual inspection is conducted and a functional test is performed using applicable measuring and testing equipment to confirm operation.

The Metal Engineering Department will perform metal fabrication and assembly in accordance to the customer contract and manufacturing process required by the Computer Engineering Department. Referenced detailed *"Drawings"* are created and used in the metal fabrication. Each drawing will include:

i. Unique part number with revision level
ii. Layout
iii. Measurements
iv. Parts used for assembly

Completed metal fabrication and assemblies are visually inspected for cosmetic appearance, correct gauge and conformity to drawing. Any discrepancies will be cause for rework. If spares have been manufactured then the nonconforming part will be scrapped.

The purpose of the parts made by the Metal Engineering Department is to fit industry standard computer components, which is verified during the assembly process in the Computer Engineering Department.

b. The monitoring of special processes will be detailed in the procedure specifying who will perform the monitoring of the process, and the frequency and method of monitoring (Ref.: section 3.5.14).

c. When the in-process inspection is required for material that requires specifications, inspection or test reports; the Quality Control Manager or designated representative will verify that they are complete. If specifications are required and not furnished, the Quality Control Manager or designated representative will hold the material in bond in the

Shipping and Receiving Department until the specification requirement is satisfied. Only at the time of receipt of the acceptable specification, is the material released from the in-process inspection.

d. In-process inspection is performed by Production Staff 1 and Production Staff 2 under the supervision and management of the Computer Engineering and Metal Engineering Departments. Any nonconformance identified in section 3.5.8 (a), will be removed from assembly. The Manufacturing Engineering Department will notify the Quality Control Manager and a *"Nonconformance Report" (TNCR-001)* will be created with a Return Material Authorization number issued from the "*Return Material Authorization (RMA) Log" (RMAL-001).* The Quality Control Manager and Computer Engineering Department will review and provide disposition instructions. If nonconformance occurs in Metal Engineering Department for "raw material", the department will scrap all "raw material" that does not conform. Materials that are manufactured using special processes and are identified as nonconforming are initiated for rework.

After in-process inspection and test work is satisfied to engineering criteria, the parts proceed to the next production process of assembly and final testing. Parts from the Metal Engineering Department are transferred to the Computer Engineering Department for additional components to be added to complete assembly.

REFERENCES

Nonconformance Report (TNCR-001)
Drawing
Return Material Authorization (RMA) Log (RMAL-001)

3.5.9 Final Inspection

PURPOSE

Establish and maintain a system for final inspection of parts to ensure compliance with customer contract, documents and specifications.

SCOPE

This procedure applies to the final inspection of parts at Transduction in accordance with ISO 9001:2015 Quality Control Program.

RESPONSIBILITIES

- The Quality Control Manager designates the Computer Engineering Department to prepare and accept inspection and test records.
- The Computer Engineering Department designated representative is responsible for identification of part or parts to customer contract number, drawing(s) and serial number.
- The Computer Engineering Department will ensure products have been inspected at all points; from incoming inspection to final inspection.
- The Computer Engineering Department will ensure operations, inspections and tests have been properly completed, dated and signed by the designated representative from Production Staff 1.
- The Computer Engineering Department will advise the Quality Control Manager and Purchasing and Expediting Department that the inspection and final test records are complete and ready to be shipped to the customer.

PROCEDURE

a. Final inspection will inspect, identify and verify that all parts individually and as an assembly meet all of the contractual requirements of the customer with all necessary inspection and test records dated and signed;
    i. “Factory Acceptance Test” (CDS-001)

ii. *"BurnIn Test Summary" (BTS-001)*
iii. *"MonitorTest Test Screen" (MTS-001) (If applicable)*
iv. Customer Contract
v. *"Quotation" (QUF-001)*

b. The Quality Control Manager or designated representative will be responsible for:
   i. assuring all records are established and complete for all contractual requirements and;
   ii. verifying that the products have been inspected at all points and accepted.

c. If during the final inspection process a product is found not nonconforming during the inspection process a *"Color Tag" (COT-001)* is put on the part with a written description. A *"Nonconformance Report" (TNCR-001)* will be created with Return Material Authorization number from the *"Return Material Authorization (RMA) Log" (RMAL-001).* The Quality Control Manager will be advised of the issue. At that time, the Quality Control Manager and Computer Engineering Department will review and provide disposition instructions as required.

d. Pertinent inspection and test reports will be submitted to the customer at the time of contract completion. A *"Certificate of Conformance" (TCC-001),* if required by customer contract, will be issued and submitted by the Purchasing and Expediting Department with the approval of the CEO.

e. Only those items which fully meet the contractual requirements shall be submitted to the applicable customers and the designated representative of the Quality Control Manager.

   If contractual requirement concessions are required for the nonconforming items, the Quality Control Manager or designated representative must present these concessions in writing prior to offering the non-contractual items for inspection.

REFERENCES

Inspection and Test Records
- Factory Acceptance Test (CDS-001)
- BurnIn Test Summary (BTS-001)
- MonitorTest Test Screen (MTS-001) (If applicable)

Nonconformance Report (TNCR-001)
Color Tag (COT-001)
Quotation (QUF-001)
Contract
Certificate of Conformance (TCC-001)

3.5.10 Inspection Status

PURPOSE

Describe a method to ensure that the required inspection and tests are performed, indicating the inspection status of materials and process by means of documentation and tags throughout manufacturing.

SCOPE

This procedure applies to all manufactured products at Transduction in accordance with ISO 9001:2015 Quality Control Program.

RESPONSIBILITIES

- The Quality Control Manager is responsible through his delegate(s) to ensure inspection and tests are performed in accordance to this procedure and other procedures referenced in this Quality Control Manual.
- The Computer Engineering Department and Metal Engineering Department is responsible for ensuring that all materials and parts are tagged and labeled as required. They are authorized to remove any inspection status.

PROCEDURE

a. The Quality Control Manager or designated representative will ensure that the required inspections, tests, and requirements set forth in the Quality Control Manual are performed and known throughout production.

b. The inspection status of Transduction products use a *"Color Tag" (COT-001)*, and the *"Factory Acceptance Test" (CDS-001)* and *"BurnIn Test Summary (BTS-001) and/or MonitorTest Test Screen" (MTS-001)* to indicate final acceptance.

   When in-process testing begins the designated representative(s) will perform a visual inspection of all parts and material referencing customer contract and/or quotation. During testing any nonconformance, rework required and corrective action, date, and inspection sign off will be recorded.

   Any parts that are found to be in nonconformance with the customer criteria will be given a Return Material Authorization number and a Nonconformance Report will be created and approved by the Quality Control Manager. The nonconforming parts will be put in quarantine in the "Stock Room Cage" by the Purchasing and Expediting Department until further review has been done. Only after the Quality Control Manager and Computer Engineering Department have met and there is appropriate sign-off, will the assembly be returned to the final test. These reports will be kept by the Marketing and Administration Department in a *"Nonconformance Report Log" (NCRL-001)* for permanent record. If the part pertains to a customer purchase order, a copy will also be maintained with the customer order file if applicable.

c. The supplier and inspector identity are noted on the *"Nonconformance Report" (TNCR-001).*

d. The Quality Control Manager or designated representative has the authority to apply and remove tags relating to inspection status. After final Quality Control acceptance, these inspection and test reports will become a permanent record and stored in the original customer order file.

REFERENCES

Inspection and Test Records
- Factory Acceptance Test (CDS-001)
- BurnIn Test Summary (BTS-001)
- MonitorTest Test Screen (MTS-001) (If applicable)

Contract
Quotation (QUF-001)
Nonconformance Report (TNCR-001)
Nonconformance Report Log (NCRL-001)

3.5.11 Identification and Traceability

PURPOSE

Ensure identification and traceability of all Transduction parts and material through the production process.

SCOPE

This procedure applies to all parts and manufactured products at Transduction in accordance with the Quality Control Manual.

RESPONSIBILITIES
- The Computer Engineering Department will record serial number identification of all major parts in assembly.
- The Metal Engineering Department assigns unique part numbers to all parts manufactured "in-house".

PROCEDURE

a. All procured parts and material are traceable to a purchase order that contains the supplier, manufacturer catalog part number, unique part number (if applicable), description and quantity.

Parts manufactured by the Metal Engineering Department are all given a unique part number that are referenced with *"Drawing"* that include:

i. Unique part number with revision level
ii. Layout
iii. Measurements
iv. Parts used for assembly

The drawings are held electronically with a hard copy backup.

Standardized Transduction products manufactured by the Computer Engineering Department are all given a unique part number for internal and customer reference.

In the Computer Engineering Department, the serial number identification is taken from all the major parts of an assembly by Production Staff 1. This includes but is not limited to: the single board computer/motherboard, backplane, power supply, hard drive/solid state drive and operating software. This identification and traceability are maintained throughout the manufacturing, test and inspection process. This information is recorded on the *"Factory Acceptance Test" (CDS-001)* and is maintained electronically and a hard copy with each pertinent customer order file.

In the case where a product is bought as "whole system," an internal serial number is assigned by the Computer Engineering Department. The *"Serial Number" (SEN-001)* is permanently identified to the assembly by an anodized aluminum tag. Parts within the assembly will be controlled by the serial number.

b. When stipulated in a contract to Transduction, any specific part in addition to the above will be assigned a unique identification number. This will distinguish it from any other parts which are otherwise identical or produced in separated batches. The unique traceability identification shall be recorded on all processes, inspection and test records.

c. When limited shelf-life items are initially received from a supplier, the Shipping & Receiving Department will ensure that item is identified with an expiration date. When the manufacture's label or other written means on the item's packaging (i.e. box, container, etc.) contains the expiration date, no additional marking is required on the item.

d. Limited shelf-life items that are expired will be removed from use and placed in the QC "bond" area in the "Stock Room Cage" that is segregated for nonconforming products.

e. If a limited shelf-life item is used on a particular customer contract, the item will be identified with the expiry date on the *"Factory Acceptance Test" (CDS-001).*

REFERENCES
Drawing
Serial Number (SEN-001)
Factory Acceptance Test (CDS-001)

3.5.12 Customer Property

Customer property is traceable to a unique Return Material Authorization number from the *"Return Material Authorization (RMA) Log" (RMAL-001).* We will exercise care with the customer property while it is under Transduction control or being used by Transduction.

3.5.13 Production and Quality Control

See Production and Service Operations: PRM05

Also, 3.5.6, 3.5.7, 3.5.8, 3.5.9 and 3.5.9

3.5.14 Special Processes

SCOPE
Special Processes as referenced in this procedure means any manufacturing processes used to transform, join, finish or coat materials and parts.

Below is a list of special processes carried out by outside contractors:
- Anodizing – MIL-A-8625
- Zinc Plating (Clear/Black/Yellow) – ASTM B633
- Chemical Conversion (Alodine) – MIL-C-5541
- Powder and Liquid Paint
- Screen Printing (Silk-Screening)

DEFINITION
Special Processes are those processes where the results cannot be directly examined to establish full conformance.

RESPONSIBILITIES
- The Metal Engineering Department is responsible for the specification of special process, parameters and acceptance criteria.

- The Metal Engineering Department will control and conduct random source inspections of special process contractor to ensure compliance to procedures and qualification of personnel.
- The contractor is to perform special process procedures according to Transduction specifications, standards and codes.

PROCEDURE

Special Process will be performed by qualified personnel using qualified procedures, documentation and equipment according to specific criteria.

Records will be maintained by the contractor for the qualified personnel, procedures, and documentation according to applicable standards and codes. The records are available to Transduction upon request.

Qualification for personnel, procedures, documentation and equipment will be defined for special processes not covered by existing codes, standards or where the product quality exceeds the requirements of established codes or standards.

Evidence will be generated during the process to indicate the control of the process has been achieved according to specifications standards and codes.

3.5.15 Packaging and Shipping

PURPOSE

To define the requirements for proper packaging and shipping of products to prevent damage and deterioration.

SCOPE

This procedure applies to all finished products from the Shipping and Receiving Department to the destination.

RESPONSIBILITIES

- The Computer Engineering and Metal Engineering Departments are responsible for preparing finished product for shipment.
- The Purchasing and Expediting Department will arrange shipping details and provide the following documents to the Shipping and Receiving Department:
    i. Packing Slip (PAS-001)
    ii. Factory Acceptance Test (CDS-001)
    iii. Shipping Label (SHL-001)
    iv. Waybill
    v. Export Documents (if applicable)
    vi. Advise of Shipment Notice

- The Shipping and Receiving Department will conduct final visual inspection of shipment before packaging.
- The Shipping and Receiving Department will load products ready for shipment according to the method of shipment:
    i. Truck
    ii. Air
    iii. Rail
    iv. Sea

PROCEDURE

The Shipping and Receiving Department will have the entire product contents, drawings, instructions if required, shipping labels, waybill, packing slip, export documents (if applicable), and all final test and inspection records included with the shipment.

The Shipping and Receiving Department will inspect all final cleaning, preservation, packaging and marking and verify shipping instructions to ensure that specific requirements are met.

The Quality Control Manager or designated representative has the responsibility of final inspection to ensure that specific requirements are met.

Any and all defects, discrepancies or missing documentation shall be resolved before products can proceed further in the shipping process.

After inspection and review, the shipping document is signed and the material is protected with die-cut foam inserts and boxed for shipment.

The packaged goods are then inspected and if accepted they are released for shipment.

REFERENCES
Factory Acceptance Test (CDS-001)
Packing Slip (PAS-001)
Shipping Label (SHL-001)
Waybill
Export Documents

3.5.16 Quality Records

PURPOSE
To establish and maintain a system to generate and retain records, which adequately support and substantiate inspection, tests and processes performed, to provide evidence of the quality of the part and testify directly or indirectly that it's compliant with jurisdictional/contractual requirements.

SCOPE
This procedure applies to all reports, forms and records as described within the ISO 9001:2015 Quality Program and detailed system function procedures.

RESPONSIBILITIES
- The Quality Control Manager is responsible with the support of the Marketing and Administration Department for the design and the maintenance of the quality records system.
- The Metal Engineering, Computer Engineering and Purchasing and Expediting Departments are responsible for implementing and filing quality records as they are generated.

PROCEDURE
a. The maintenance of the quality records system is the responsibility of the Quality Control Manager. He will be supported by Transduction organization to meet all of the requirements for objective evidence in the performance of contractual and non-contractual requirements. Included in the scope of these files are engineering drawings, purchase orders, acceptable vendor lists, receiving records, test equipment records and

"Document Register" (PRM13) cataloging all standardized forms. All of these are retained in a hard copy and electronic backup on a computer network.
Objective evidence will be maintained that;

i. the Quality Control Program meets the requirements of the ISO 9001:2015 standard;
ii. the product or service and documentation meet specified requirements;
iii. personnel, procedures, documentation, and equipment for special processes are qualified, as required by section 3.5.14.3 (c);
iv. selection and surveillance, and audit of sub-suppliers are met as required by section 3.5.5 (a), (b) and (d)

b. The Quality Control Manual review records that identify all revisions required by section 3.3 (c) (iv) and will be maintained in the files as stated above in (a).

c. Maintained in the quality records the following documents have records of verification and product or service inspections and tests;

- "*Factory Acceptance Test" (CDS-001)*
- *"BurnIn Test Summary" (BTS-001)*
- *"MonitorTest Test Screen" (MTS-001)*
- *"Service Report" (TSR-001)*
- *"Nonconformance Report" (TNCR-001)*

The above forms (See (a) and (c)) identify either;

i. reference document number and revision or the part number of the product or service;
ii. applicable requirements for quality verification;
iii. specific inspections performed and result obtained. The basis for acceptance will be included if measurements are not required;
iv. nonconformance reports (section 3.5.17 (h)) and rework results;
v. date of the inspection or test;
vi. identify the inspector conducting the tests or;
vii. identify the data recorder being used.

d. Upon request, the Quality Control Manager will make the quality records available to the customer representative for analysis and review.

e. All quality records will be identified by the customer contract number (purchase order) and indexed and filed for ease of retrieval. This contract number will be identified through the Transduction computer network either by customer name, customer purchase order number or Transduction serial number.

f. The quality records will be maintained for ten years or for the time stated in a customer contract. They will be maintained in a suitable environment to minimize deterioration or damage and to prevent loss.

REFERENCES
Factory Acceptance Test (CDS-001)
BurnIn Test Summary (BTS-001)
MonitorTest Test Screen (MTS-001)
Service Report (TSR-001)
Nonconformance Report (TNCR-001)
Document Register (PRM13)

3.5.17 Nonconformance

PURPOSE
To establish the requirements for the control of nonconforming products within the Quality Control Program.

SCOPE
This procedure applies to nonconforming products supplied to and manufactured by Transduction.

RESPONSIBILITIES

- The Metal Engineering Department is responsible for the following:
    - Review and confirm all Production Staff 2 raised nonconforming issues.
    - Review and define disposition for all nonconforming items and special process items from suppliers.
- The Computer Engineering Department is responsible for the following:
    - Review and confirm all Production Staff 1 raised nonconforming issues.
    - Assign Return Material Authorization number to products that do not conform to drawing(s) or applicable specifications.
    - Add or remove color tag when nonconformance is discovered, accepted or corrected.
    - Review all nonconforming items supplied to Transduction and define their disposition with the approval of the Quality Control Manager.

- The Quality Control Manager has the following responsibilities:
    - Ensure that the disposition will meet code and customer requirements
    - When necessary, request customer inspection representative to signify their approval of proposed disposition.
    - Ensure the approved disposition are carried out and re-inspected and tested as required.
    - Issue Return Material Authorization number for all nonconforming products.

PROCEDURE

The Transduction Quality Control Manager is responsible for the disposition of all nonconforming items including those of suppliers to Transduction. Final acceptance of nonconforming items that violate contractual requirements is the prerogative of the customer. Approval for the acceptance must be established in writing prior to submittal of the material.

a. Products during the inspection process that do not conform to Transduction engineering documentation, inspection, testing and customer criteria will be identified by a colored tag with a written description. A Return Material Authorization number will be issued from the "*Return Material Authorization (RMA) Log" (RMAL-001)* and a *"Nonconformance Report" (TNCR-001)* will be created. The nonconforming items will be held in a segregated area pending corrective action and/or disposition instructions. All disposition actions will be recorded and signed off by the designated representative (Ref.: 3.5.7 (d), 3.5.8 (d) and 3.5.9 (b)).

   Quality Control issues that are established as nonconformance are:
   1. Appearance defect
   2. Properties of material
   3. Dimensional
   4. Operational defect

b. The Quality Control Manager designates the Computer Engineering and Metal Engineering Department have the responsibility and authority of those assigned to the disposition of nonconforming products.

   All personnel of Transduction involved in the manufacturing and production of equipment is obligated to report nonconformance.

c. Any nonconformance identified during the production process or if customer equipment is returned for service and cannot be repaired will be recorded on a nonconformance report and given a Return Material Authorization number from the Return Material Authorization (RMA) Log. A *"Nonconformance Log" (NCRL-001)* is maintained by the Marketing and Administration Department with a record of all Nonconformance Reports.

d. A QC "bond" area in the "Stock Room Cage" will be appointed for segregating nonconforming products to prevent unauthorized use, shipment or mixing with conforming products. Where physical segregation is not practical tagging may be used (Ref.: 3.5.10 (b)).

e. The disposition of a nonconforming product is the responsibility of the Computer Engineering and Metal Engineering Departments with the approval of the Quality Control Manager.

f. The Quality Control Manager or designated representative will implement the accepted disposition.

g. Rework or repaired parts will be re-entered into the production process to a point that will ensure adequate re-inspection. The parts will be accompanied by the applicable customer contract, manufacturing drawings and Nonconformance Report and thereby maintain the integrity of the materials and records.

h. All nonconforming items will be recorded on the Nonconformance Report and submitted to the Quality Control Manager for processing. The recorded nonconformance will be maintained as a permanent record in the Nonconformance Report log and electronically for backup.

   All recorded Nonconformance Reports will address:
   1. action to take to correct and/or disposition the nonconformance and;
   2. corrective action to take to prevent or minimize the recurrence of the nonconformance

REFERENCES
Nonconformance Report (TNCR-001)
Nonconformance Log (NCRL-001)
Return Material Authorization (RMA) Log (RMAL-001)
Color Tag (COT-001)
Measurement & Improvement (PRM11)
Control of Nonconformance Procedure (PRM09)

3.5.18 Corrective Action and Preventative Action

PURPOSE
To establish a system that defines how the corrective and preventative action is taken to address internal and external (customer concerns) concerns.

SCOPE
This procedure applies to concerns that are raised from customer complaints or internally identified issues in the Transduction Quality Control Program that does not relate to section 3.5.17 Nonconformance.

RESPONSIBILITIES

All levels of the organization are responsible for reporting situations or issues that are perceived to require corrective action. Management is responsible for overseeing the investigation, resolution and follow up for all corrective actions pertaining to their respective areas.

PROCEDURE – CORRECTIVE ACTION

Anyone can raise a corrective action highlighting an issue or where there is room for improvement. The details are brought to the attention of the Quality Control Manager.

Customer Complaint or Internally Identified Problem

When a customer complaint or internally identified problem is discovered, it is communicated by the person receiving the complaint to the Quality Control Manager. The Quality Control Manager will log the complaint in the "*Corrective Action Log" (QF-15)*.

An initial investigation is conducted to learn more about the nature of the problem.

If an initial investigation indicates a need for further action, a Transduction representative is assigned to investigate the problem and identify the root cause.

The issue is documented on a *"Corrective Action Report" (QF-13)*.

When appropriate, containment action is taken by notifying other departments so that the problem does not continue.

The assigned Transduction representative will oversee the investigation and report findings.

Upon agreement of the root cause and responsibility for the problem, appropriate action is taken.

The completed report is forwarded to the Quality Control Manager for approval. The Quality Control Manager's signature on the report indicates agreement with the action taken, both corrective and preventive, are considered effective.

The Corrective Action Report is given to the Quality System Management Representative. The closing date is noted, the report is filed in the CAR folder.

The process for handling customer complaints is raised by issuing a *"Corrective Action Report" (QF-13).* Once recorded on the "Corrective Action Report Log" (QF-15), the CAR is forwarded to the Quality Manager to follow up on the complaint and to ensure the appropriate corrective action and preventive action is taken to close off the complaint.

External Audit

A corrective action will be raised unless an external corrective action report is issued by the external assessor/auditor.

PROCEDURE – PREVENTATIVE ACTION

Upon completion of corrective actions, efforts are made to identify areas or processes where the same or similar problem might occur. Preventive action is taken in situations where the same or similar problem might occur (e.g. related processed or departments). Preventive action is also considered when previously implemented corrective actions have been ineffective and problems repeat themselves.

Opportunities are identified where the solution applied to a particular problem could be extended to other processes and areas as appropriate to prevent the same or similar problem.

To support preventive action, data from *"Customer Feedback" (QF-10)* are tracked and reported at least once a year. Negative customer feedback is recorded on a *"Customer Complaint Form" (QF-12)*. The total number of complaints and problem registrations are recorded on the *"Customer Complaint Registrar" (QF-11).*

This data is used to identify trends in recurring or chronic problems that may require further action.

When preventive actions are identified, they are assigned to the appropriate personnel for implementation. Preventive actions are documented on a *"Corrective Action Report" (QF-13).*

Information relative to corrective and preventive actions including process changes are reviewed by management during the management review meeting.

REFERENCES

Corrective Action Report (QF-13)
Corrective Action Log (QF-15)
Customer Feedback (QF-10)
Customer Complaint Form (QF-12)
Customer Complaint Registrar (QF-11)
Control of Corrective and Preventive Action Procedure (PRM10)
Measurement & Improvement (PRM11)

3.5.19 Statistical Techniques

Transduction Quality Control Program requires that all products be tested to meet 100% of the defined characteristics and specifications during Factory Acceptance Tests unless otherwise

specified by contract or by written authorization from the customer. Statistical techniques are not used by Transduction in any inspection and testing.

Since the number of failures is very low it is sufficient to track RMA records of the failed products and components.

3.5.20 Quality Audits

3.5.20.1 Internal Audits

See Internal Audit Procedure (PRM08), Measurement and Improvement (PRM11), forms QF-05 and QF-06.

3.5.20.2 External Audits

PURPOSE
To establish a system that evaluates, controls and determines acceptance criteria for suppliers.

SCOPE
This procedure applies to all current and potential suppliers of Transduction.

RESPONSIBILITIES
- The Quality Control Manager along with the Purchasing and Expediting Department are responsible for conducting external quality audits.

PROCEDURE
Only suppliers that are approved in accordance to Transduction Quality Control Program will be used. Transduction will evaluate and determine acceptability based on the following:
1. Quality Control Program
2. Performance and;
3. Financial stability

The Quality Control Manager assisted by the Purchasing and Expediting Department will conduct an external quality audit on each supplier before consideration as a supplier to Transduction. The type of external quality audit conducted will depend on the economic feasibility of the audit. The Quality Control Manager will determine the most appropriate audit to implement.

Transduction uses the following external audits for suppliers:
1. *"Supplier Quality System Audit" (SQSA-001)*
2. Third-party evaluation (used for suppliers in Taiwan)
3. Source inspection

Suppliers who do not have a specified Quality Control Program but are proven suppliers of a quality product based on long-term performance are designated as one from whom, specified parts may be purchased subject to acceptance inspection by Quality Control Manager.

External audits are conducted as follows:

1. When there has been a period of more than 12 months since the last shipment from the supplier and the part to be ordered requires ISO 9001:2015 Quality Control Program.
2. When the Quality Control Manager has recommended removing the supplier because of unsatisfactory quality performance.
3. Parts and material have been received within the past 12 months, but no audit has been conducted for more than 2 years.
4. Approving new supplier.

Approval of Quality Control Program does not absolve suppliers from responsibility for non-conformities discovered after receipt by Transduction. The responsibility shall be made clear with each supplier audited by the Quality Control Manager.

Source inspection is performed by Transduction Quality Control at the supplier premises whenever;

1. Critical product characteristics cannot be checked after the purchased part has left the supplier
2. Significant costs and delays can be reduced by such practices and;
3. Required by customer contract

Arrangements for source inspection are made by the Purchasing and Expediting Department at the request of Quality Control Manager.

REFERENCES
Supplier Quality System Audit (SQSA-001)

3.5.20.3

PURPOSE
To establish a system that evaluates, controls and determines acceptance criteria for suppliers.

SCOPE
This procedure applies to all current and potential suppliers of Transduction.

RESPONSIBILITIES
- The Quality Control Manager along with the Purchasing and Expediting Department are responsible for conducting external quality audits.

PROCEDURE
Only suppliers that are approved in accordance to Transduction Quality Control Program will be used. Transduction will evaluate and determine acceptability based on the following:

4. Quality Control Program
5. Performance and;
6. Financial stability

The Quality Control Manager assisted by the Purchasing and Expediting Department will conduct an external quality audit on each supplier before consideration as a supplier to Transduction. The type of external quality audit conducted will depend on the economic feasibility of the audit. The Quality Control Manager will determine the most appropriate audit to implement.

Transduction uses the following external audits for suppliers:

4. *"Supplier Quality System Audit" (SQSA-001)*
5. Third-party evaluation (used for suppliers in Taiwan)
6. Source inspection

A supplier who does not have a specified Quality Control Program but is proven suppliers of a quality product based on long-term performance are designated as one from whom, specified parts may be purchased subject to acceptance inspection by Quality Control Manager.

External audits are conducted as follows:

5. When there has been a period of more than 12 months since the last shipment from the supplier and the part to be ordered requires ISO 9001:2015 Quality Control Program.
6. When the Quality Control Manager has recommended removing the supplier because of unsatisfactory quality performance.

7. Parts and material have been received within the past 12 months, but no audit has been conducted for more than 2 years.
8. Approving new supplier.

Approval of Quality Control Program does not absolve suppliers from responsibility for non-conformities discovered after receipt by Transduction. The responsibility shall be made clear with each supplier audited by the Quality Control Manager.

Source inspection is performed by Transduction Quality Control at the supplier premises whenever;

4. Critical product characteristics cannot be checked after the purchased part has left the supplier
5. Significant costs and delays can be reduced by such practices and;
6. Required by customer contract

Arrangements for source inspection are made by the Purchasing and Expediting Department at the request of Quality Control Manager

REFERENCES
Supplier Quality System Audit (SQSA-001)

3.5.21 Risk & Opportunities Management

PURPOSE
To assess threats related to the organization interested parties and the quality management system. Prioritize risks that may arise and manage them efficiently and effectively.

SCOPE
This procedure describes the identification, assessment, and management of risks (threats) and pertains to all risks Transduction may face.

RESPONSIBILITIES

- The Quality Control Manager is responsible for overseeing the risk assessment and management processes.
- The Quality Control Manager along with all employees will identify potential nonconformities, ensuring the appropriate preventive action is taken and that it yields the desired results.

PROCEDURE
Transduction considers and manages risks and opportunities differently.

Risks are managed with a focus on decreasing their likelihood and minimizing their impact if they should occur.

Opportunities are managed to increase their likelihood, and to maximize their benefits if they should occur.

MANAGEMENT OF RISK

Risks are identified by any employee at any time.

Risks will be identified and evaluated when quality performance data indicates that there are trends of decreasing quality capability and/or effectiveness of the quality management system. In particular:

1. Product and service nonconformities
2. QMS Process nonconformities
3. Supplier quality performance records
4. On time delivery performance
5. Return Material Authorization (RMA) repairs
6. Customer feedback and complaints
7. Quality management system audit records

Requests for initiating a risk assessment are submitted to the Quality Control Manager. Only the Quality Control Manager has the authority to initiate or approve the initiation of risk assessment. This is to prioritize and direct the necessary resources where it is most urgent.

The methods for risk assessments vary but should always include a means of identifying the risk under examination, and a description of the result of the risk assessment.

A "Risk Assessment Worksheet" (RAW-001) will be used to perform a detailed risk analysis. Each risk assessment will be tracked using the *"Risk Assessment Log" (RAL-001).*

MANAGEMENT OF OPPORTUNITIES

Transduction actively seeks out opportunities which could enhance its financial viability and market position. For example:

- obtaining new contracts
- obtaining access to new markets
- identification of new industries which may be served by Transduction
- development of new offerings that are within the scope of capabilities of Transduction
- streamlining existing processes to improve efficiency and reduce costs

Discussing and analyzing opportunities shall be done by top management at least once a year. If made part of the management review activities, these shall be recorded in the management review records.

REFERENCES

Risk Assessment Worksheet (RAW-001)
Risk Assessment Log (RAL-001)

3.5.22 Counterfeit, Fraudulent and Suspect Items (CFSI)

PURPOSE

To establish a process to reduce the risk of purchasing and receiving counterfeit and fraudulent parts.

SCOPE

This procedure describes the identification, assessment, and management of reporting incidences of CFSI.

RESPONSIBILITIES

- The Quality Control Manager is responsible for overseeing the CFSI processes.
- The Purchasing & Expediting, Computer Engineering and Metal Fabrication Department will identify potential CFSI, ensuring the appropriate action is taken.

In order to substantially reduce the risk of receiving counterfeit parts, Transduction will always, when possible, purchase directly from the OEM and/or authorized OEM distributor.

Considerations for performing inspections to detect CFI's include the following:

- Individuals who perform and individuals who plan source and incoming inspection of items should consult available OE when determining inspection criteria.

- In cases in which an item is known to have been counterfeited in the past, the OEM should be consulted for advice and guidance on inspecting the item.

- Use digital photographs of authentic items that can be associated with stock codes from manufacturers so that the photographs can be compared to incoming items during receiving activities.

- When appropriate, verify the authenticity of certification or test results provided by entities other than the supplier by contacting the entity that provided the certification or test result, i.e. ISO 9001 QA certification.

- Involve and consult other personnel who are knowledgeable of the product when suspicious issues are observed.

Incoming, In-Process and Final Inspection

When appropriate, the Computer Engineering Department technicians can participate in inspections of complex equipment conducted as part of the acceptance process during receiving activities prior to placing the part into inventory.

The Shipping and Receiving Department will perform visual receipt inspection of supplied parts. They will verify that shipment information, i.e. part number, serial number, applicable revision matches the shipment paperwork and parts received.

The Purchasing and Expediting Department will identify any discrepancies noted between new parts and parts already in stock during processes such as put-away and inventory count, i.e. markings and labels.

The Computer Engineering and Metal Fabrication Departments will identify any discrepancies between the parts being installed and design documents. They will use the corrective action process (ref. 3.5.17 and 3.5.18) to identify any installed part they have reason to believe may be suspect.

If there are still doubts of the part being counterfeit, the Purchasing and Expediting Department will communicate those concerns with the manufacturer.

Control of Counterfeit and Fraudulent Items

The following important elements are included in the generic process for controlling suspected CFIs:

- Quarantine and clearly identify items as suspect.
- Gather information necessary to document the incident.
- Use the corrective action system to document, track, and disposition the incident.
- Make appropriate notifications (for example, OEM, OCM, or OES).
- Carefully consider when determining if the supplier should be notified.
- Carefully consider when determining if the item should be returned to the supplier.
- Notify law enforcement agencies when appropriate.
- Physically disposition the suspect items.

Process for Reporting and Controlling Suspect CFI

If a part is suspected of being counterfeit or fraudulent, it will be physically separated from useable inventory and clearly identified with a tag as unusable. Where applicable, we will retain shipping containers and packaging and keep them with the suspect item.

Information about the suspect part will be reviewed to determine the authenticity of the part. The following information will be gathered:

- Part number
- Serial number
- Lot or batch number, if applicable
- Model number
- Revision number, if applicable
- Supplier of CFSI
- Description of issue
- Manufacturer of genuine part
- Manufacturer technical documents and pictures of genuine part
- What prompted the identification of CFSI
- Contact person

If incident is confirmed that part is CFSI, it will be documented as a nonconformance in the corrective action system (ref. 3.5.17 and 3.5.18) in which the incident information can be accessed for use in preventing and resolving additional incidents of its kind.

If the information indicates that the part is no longer suspect, the part will be returned to useable inventory. Otherwise, incident information will be entered and documented into the corrective action process.

Any CFI's will be quarantined upon discovery to end their use. The parts will need to be physically dispositioned. Different actions may be appropriate for different types of parts and suppliers. Depending on the situation and information obtained from the OEM and supplier, one of the following dispositions will be used:

- Destroy the parts so that they are permanently removed from the supply chain and cannot be resold.

- Return the items to the OEM or supplier for further investigation, and work closely with them to prevent recurrence.
- Report suspected wrongdoing to law enforcement authorities.
- Turn the items over to appropriate law enforcement authorities.

In other cases, it may be prudent to notify the OEM and not notify the supplier.

3.6 Resources

See related procedure PRM03.