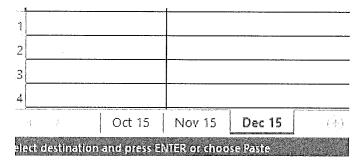
- 1) Brenda stated that they do not have access to ECIS.
  - i) A suggestion would be to give them access to ECIS or give them their own version.
- 2) Brenda does CRA/RMA out an Excel Spreadsheet. She showed me the spreadsheets that she has within Excel and how the CRA/RMA is worked.
  - i) A suggestion would be to give her access to the process that we have. It could be the exact same thing, just add another line where Brenda or Scott would put that it is for Cedar Rapids or Des Moines. They would each get their separate reports. Anything that is not filled out for CR or DM in that line, will not go through. It would have to have one or the other.
  - ii) Brenda is currently using an Excel Spreadsheet. She has multiple years on one sheet. She could instead have a workbook by year, then sheets by month in that year. Brenda would still be able to have the IQF Data graph that shows how many entries in a person's name under a tab at the end. It could also be broken down in the graph by month and year.
    - (1) I do have to say, that I also like the idea of the spreadsheet when it comes to employees and then looking at the employee training log. I would suggest that at some point these two programs (Excel and Access) work together to bring the information from one to the other.
    - (2) Also to do the same separation between non-employee issues and employee issues. You can have separate files for employee's vs non-employee issues.



- 3) When the 5 whys are asked for a corrective action, they are put on the back of the paperwork.
  - (1) A suggestion is that they are scanned in under the person's personal file.
- 4) Bob Carl was put on a CA in July for work quality that is below standards. In September it was signed off. Since September it has continued and they continue to trend his work quality.
- 5) When Purchasing or Ordering, there is no way to go back and just simply change a mistake. They have to do a manual override.
  - (1) A suggestion is to be able to give them this option. If it is something that does not need to be saved for a CAR/RMA, then let the order continue after it is able to be fixed.
- 6) In the work instructions there is a log to fill out depending on the part. There is also a picture of the part or orientation. The work instructions are detailed down to the picture.
- 7) When out in the warehouse, there are no signs for protective gear and areas. There is also no tape on the floor.

- i) This will all be done soon, as they just moved into the building the end of November beginning of December.
- 8) The rejected material is put into a red bin and a Rejected Raw Material label filled out.
  - i) There was part # 101387/501505; the knock outs were in the wrong places. It came shipped that way.
    - (1) A suggestion is that they have access to print out this label. At this time, the Cedar Rapids office prints out a few hundred at a time and mails them to the Des Moines office
- 9) I talked to Rhonda a QA for parts before they go out. She was reviewing part 200394. She had her work instructions out.
  - a) She printed the audit sheet for this part. Each part has their own.
  - b) She pulled up the drawing to figure out components tolerances of  $\frac{1}{2}$ ".
  - c) She looked at the "details" which explains what the assembler reads when building.
  - d) Then she measures to make sure they meet Matrix which is 3" breakout and 50" conduit.
- 10) I also viewed Amber picking.
  - a) She was working on Work Order # 23294-1. Parent part 200357.
  - b) She picked the part with the part number, description, and locator.
  - c) She then verifies the dates to make sure she is picking the earliest date.
  - d) Then she verified the count # needed per the work order. She also wrote the number on the left hand side of the box/label that she was putting the parts back into.
  - e) The purchase order is then written down as the items are being picked on the work order.
    - (1) I would suggest that she use the counting scale with some items. It will help with time and accuracy. The time it takes to count out 200 pieces of a part compared to doing the count scale is anywhere between 5-10 minutes in some cases.

ISO9001:2008 Standard

# QM 8.1 – Planning for Monitoring and Measurement

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Quality Manual

8 – Measurement, Analysis, and Improvement

Section 8.1

Section Revision: B

Revision Date: 2/3/2014

8.1 - General / Planning for Monitoring and Measurement

Approved By: Todd Gifford

Date: 7/12/2010

GENERAL POLICY MANAGEMENT

Measurement and monitoring activities required to assure conformity to product requirements, ensure conformity to the quality management system, and to continually improve the effectiveness of the quality management system are planned and defined. When applicable, statistical techniques are used for analyzing measurement data in addition to exception reporting and other types of reporting.

### **PROCEDURAL POLICIES**

1. Planning

1.1 Measurement and monitoring activities to assure conformity of the Quality Management System are defined in this manual in Section 8.2, Measurement and Monitoring, and in several operational procedures referenced at the end of this section.

- 1.2 The effectiveness of the quality system is monitored by internal audits and by measuring quality performance and customer satisfaction. Results of these activities are reported to the top management and are used to identify opportunities for improvement. Activities related to internal audits and to measuring customer satisfaction and quality performance are further defined in this manual in Sections 8.2.
- 2. Statistical techniques | 12/2/1/5

Dee Electronics identifies the need for statistical techniques necessary for establishing, controlling and verifying process capability and product characteristics. Dee Electronics establishes and maintains documented procedures to implement and control the application of identified statistical techniques.

- 1. Dee Electronics gathers the following data from Corrective Action, Preventative Action, and Measurement Systems Analysis (MSA):
  - 1. Internal and external audit results.
  - 2, Customer Feedback.
  - 3. Team member Feedback.
  - 4. Corrective and preventive actions.
- bruby Brender 5. Quality performance of subcontractors.
  - 6. Surveys.
  - 7. Supplier Quality/Performance Measurement Reports provided by Customers.
  - 8. Dee Performance Reporting on key customer satisfaction metrics as developed internally based on our data.
  - 9. Customer Sales Growth/Decline Reporting
  - 10. Statistical studies (e.g. Gage R&R) are conducted where feasible to analyze the variation present in the results of each active category of measuring and test equipment.
  - 2. Data is compiled and analyzed for trends that might merit preventive action. Analysis includes, but is not limited to: Analysis of Root Cause Category Statistics and Trends, Customer Complaint Corrective Actions, Statistical analysis of Supplier Corrective Actions and causes, and Employee and Supplier complaints.
- 3. The President, CEO/Treasurer, Vice President of Sales and Vice President of Operations 4. Abalyses are presented in Management Review Meetings where the usefulness of the data and the appropriateness of the methods used are evaluated.

  ASSOCIATED TO Operation of Operation of Contract of Contract

12/21/2015

# QF-81-01-01 Measurement Systems Analysis Log

QOP-82-01 Operational Procedure: Customer Satisfaction

QOP-82-02 Operational Procedure: Internal Audi

QOP-82-04 Operational Procedure: In-process Inspections

QOP-82-05 Operational Procedure: Final Inspection

QOP-74-03 Operational Procedure: Verification of Purchased Product

ISO9001:2008 Standard

## QM 8.2 – Monitoring and Measurement

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Quality Manual

8 - Measurement, Analysis, and Improvement

Section 8.2

Section Revision: A

Revision Date: 2/28/2003

8.2 - Monitoring and Measurement

Approved By: Todd Gifford

Date: 2/28/2003

GENERAL POLICY / 12 14 15 15

Customer satisfaction is the principal objective of the quality system, and the level of customer satisfaction is the most important measure of the effectiveness of the system. Customer satisfaction is measured by collecting and analyzing direct customer feedback, and by measuring secondary indicators of customer satisfaction. Customer satisfaction data is used by the top management to identify opportunities and priorities for improvement.

All activities and areas relevant to the quality system are audited at least once a year. Audits are scheduled on the basis of the status and importance of the activity. Internal auditors are independent of those having direct responsibility for the audited activity. Identified nonconforming conditions are brought to the attention of the responsible managers and corrective actions are implemented in response to audit findings.

Quality system processes are monitored to ensure that they achieve planned results.

Relevant product characteristics are measured through inspections and product verification activities, as specified in control plans. Evidence of product conformity is recorded. Products

are released for delivery only after all specified activities have been satisfactorily completed and verified.

# PROCEDURAL POLICIES 1215

1. CUSTOMER SATISFACTION

1/1 General

1.1.1 Marketing is responsible for developing suitable indicators of customer satisfaction, and for defining methods for collecting and analyzing the pertinent information.

1.1.2 Information and data pertaining to customer satisfaction and perception are collected from several sources. Specifically, these are:

Customer Surveys,

Customer Feedback, compliments, and developmental suggestions,

Dee Team Member Feedback,

Customers' Dee Electronics Performance Reports,

Product returns and rejections,

New Key Customer Growth, and

Existing Customer Sales Growth and Market share.

1.1.3 Operational Procedure QOP-82-01, Customer Satisfaction, defines the system for collecting and analyzing the pertinent information and data, and for reporting results to the top management.

1.2 Customer feedback

1.2.1 Customer complaints, spontaneous expressions of satisfaction, and other unsolicited customer feedback are collected and processed by the sales department and management.

These activities are defined in Operational Procedure QOP-72-02, Customer Feedback and Complaints. The resulting data is periodically analyzed by the Vice President, Sales and President, and is presented and discussed at management review meetings.

1/2.2 Executive Management interacts with customers periodically to understand how we are performing and assess customer's satisfaction and concerns. Conclusions of interaction are documented in Electronic Call Report Forms, and presented and discussed at management review meetings.

1.3 Performance Reports, Recognition/Awards

1,3.1 Dee Electronics encourages its customers to rate its performance and present periodic performance reports to Dee Electronics. If customer does not have a performance reporting system, Dee Electronics usually offers to produce its own self performance report and provide this to the customer. Dee Electronics reviews periodic performance reports carefully, and considers this information as an important input in determining customer satisfaction. Dee Electronics seeks to participate in customer's vendor/supplier recognition programs. These recognitions and ratings are considered as an important input into determining customer satisfaction.

1.4 Product returns and rejections

Information about the rate of product returns and rejections is extracted from database records. Results and trends are reported and analyzed at management review meetings.

1.5 New Key Customer Growth

1.5.1 Sales records are periodically analyzed to identify new key focus customers and track their purchase growth. Statistics on new key customer growth are presented and discussed at management reviews.

Existing Customer Market share

1.6.1 Vice President, Sales and the President are responsible for analyzing trending of market share at existing customers. This data is periodically analyzed and presented at management review meetings.

2. INTERNAL AUDIT

2.1 Planning and scheduling

21.1 The President establishes an internal audit plan and schedule in accordance with Procedure QOP-82-02, Internal Quality Audits. Every activity and area is audited at least once a year. Selected activities are audited more frequently, depending on their importance and quality performance history.

2.2 Audit team and preparation for audit  $\nu$ 

2.2.1 Only personnel independent of the audited activities are assigned to conduct internal audits. Normally, Quality Assurance coordinator leads the audit team except when QA activities are being audited. Audits of QA activities are conducted by other trained Internal Quality Auditors from other departments.

2.2 Auditors prepare for audits by reviewing applicable standards and procedures, analyzing quality records, and establishing questionnaires and checklists. Selection of auditors and preparation for the audit are explained in Procedure QOP-82-02, Internal Quality Audits.

2.3 Conducting the audit

2.2.1 Conducting the audit, auditors seek objective evidence indicating whether the audited activities comply with the requirements of the documented quality system and ISO 9001, and whether the quality system is effective. The evidence is collected by observing activities, interviewing personnel, and examining records.

213.2 Nonconforming conditions are documented on the Internal Audit checklist, and then audit nonconformities are recorded in the Internal Audit/Management Corrective and Preventive Action Form QF-82-02-01. This form is described in Procedure QOP-82-02.

3.3 Audits are conducted in a way that minimizes disruption of the audited activities.

4 Corrective action and follow up

**2.4.1** When nonconforming conditions are identified, the Corrective Action process is followed, developing a Corrective Action solution(s). Implementation and effectiveness of the action are verified by the Corrective Action process. The Internal Audit/Management Corrective and Preventive Action Form QF-82-02-01 is used for monitoring and recording the implementation of the corrective actions.

2.5 Audit Records / Reporting

2.5.1 Records of the audits are maintained per 4.2.4. When the auditing cycle is completed, all nonconformity/corrective action reports established during the cycle are compiled and analyzed, and key results/findings are presented and reviewed at the management review meeting. Top Management or the appropriate department manager will ensure that any necessary corrections and corrective actions are taken without delay to eliminate detected nonconformities and their causes.

3. MONITORING OF QUALITY SYSTEM PROCESSES



13.1 Process monitoring

Quality system processes are monitored by variety of approaches and techniques, as appropriate for a particular process and its importance. These include:

Conducting internal audits of the quality system;

Monitoring trends in corrective and preventive action requests;

Analyzing product conformity and other quality performance data and trends;

Measuring and monitoring customer satisfaction;

Listening to Feedback from organization Team Members.

3.2 Response actions

1.1 When a quality system process does not conform with requirements, the President may request the person responsible for the process to implement a corrective action, in accordance with Operational Procedure QOP-85-02, Corrective and Preventive Action.

MONITORING AND MEASUREMENT OF PRODUCT

¥. Product verification

1.1 Inspection and testing program for a product is defined by customer orders, purchasing documents/orders, inspection and testing procedures, and so forth. Documents defining the inspection and testing program for products are collectively referred to as control plans. Section 7.1 of this manual defines the process for establishing control plans.

4.1.2 **Verification of purchased product**: All purchased products are subjected to a visual inspection by the receiving clerk, and then some designated products are subjected to a more detailed additional inspection. Operational Procedure QOP-74-03, Verification of Purchased Product, sets forward detailed rules for performing receiving and additional quality control inspections. Urgent release is not done.

1.3 **In-process inspections:** In-process inspections may be in the form of product verification by bar code scanning equipment, or human visual review documented electronically. Each subsequent process verifies that the previous process was completed correctly. The focus is on defect prevention rather than detection. In-process inspection activities are regulated by Operational Procedure QOP-82-04, In-process Inspections.

41.4 Final inspection: Customer orders are subjected to the final authorization inspection. The shipping department reviews the order against all customer special handling requirements. Only customer orders that pass the final inspection can be shipped. Procedure QOP-82-05, Final Inspection, regulates these activities.

12 Inspection, test and monitoring records

**4.2.1** Results of inspections are recorded and evidence of conformity with the acceptance criteria is maintained. Instructions for establishing records for specific types of inspections are defined in Operational Procedures QOP-74-03, QOP-82-04, and QOP-82-05. Filing and maintenance of inspection records are regulated by Operational Procedure QOP-42-03, Control of Quality Records.

4.3 Product release

4.5.1 Products are released for delivery only after all specified activities have been satisfactorily completed and conformity of the product has been verified. Only personnel performing final authorization inspections have the authority to release products. The identity of the person authorizing product release is recorded in the Shipping Final Authorization process. Operational Procedure QOP-82-05, Final Inspection, defines specific methods for product release.

### **ASSOCIATED DOCUMENTS**

QF-82-02-01 Form [Cedar Rapids Location]: Internal Audit/Management Corrective and

Preventive Action Form

OP-82-01 Operational Procedure: Customer Satisfaction

QOP-82-02 Operational Procedure: Internal Quality Audits

00-82-04 Operational Procedure: In-process Inspections

QP-82-05 Operational Procedure: Final Inspection

 $\phi$ 9-74-03 Operational Procedure: Verification of Purchased Product

ISO9001:2008 Standard

# QOP-82-01 - Customer Satisfaction

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QMS Operational Procedure

QOP-82-01

Section 8.2

Section Revision: A

Revision Date: 7/12/2010

**Customer Satisfaction** 

Approved By: Todd Gifford

Date: 7/12/2010

I PURPOSE

The purpose of this procedure is to provide for a system and instructions, and to assign responsibilities for determining and reporting customer satisfaction.

II APPLICATION 13/11/15

This procedure applies to products, delivery, servicing, and other activities bearing on customer satisfaction. This procedure directly concerns Sales, Marketing, and Customer Service.

**III PROCEDURE** 

1. Sources of information

1.1 Information and data on customer satisfaction are acquired form customer feedback and by analyzing customer behavior, to include:

Customer Feedback, compliments, and developmental suggestions,

Dee Team Member Feedback, - Brenda stated that if an employee has feedback that they just come out and say it. There is no 'feedback' anator employees. Customers' Dee Electronics Performance Reports,

Product returns and rejections,

New Key Customer Growth, and

Existing Customer Sales Growth and Market share.

Customer Surveys.

- 1.2 The general scope, methods, and program for collecting customer satisfaction data and information are defined in this procedure. However, the program may be periodically adjusted.
- 2. Customer feedback and complaints
- 2.1 Customer complaints, spontaneous expressions of satisfaction, and other unsolicited customer feedback are collected and processed by Customer Service/Inside Salespeople, Field Salespeople, and Sales Management. These activities are defined in Operational Procedure QOP-72-02, Customer Feedback and Complaints.

This would be done on the CR side, by a CAR.

2.2 The resulting data is periodically compiled and analyzed by the President, and is presented and discussed at management review meetings.

- 3. Customer Performance Reports, Recognition/Awards
- 3.1 Dee Electronics encourages customers to rate its performance, and seeks to participate in customer's award and recognition programs. As such recognitions and ratings are a direct expression of customer satisfaction or dissatisfaction, they are considered as one of the most important inputs into determining customer satisfaction. Dee Electronics can also

produce delivery performance data by customer, in absence of the customer providing it to Dee. This is used if customer does not provide Dee with performance data.

Awards and recognitions, as well as failures to achieve them, are used in determining customer satisfaction. Executive Management analyses which aspects of products and/or services are most responsible for achievement of the recognition, and determines how this should be used in determining overall customer satisfaction for these aspects. The results are presented at management reviews. Customer ratings are analyzed and used in the same way as other customer feedback, in accordance with Clause 2 of this procedure and Operational Procedure QOP-72-02, Customer Feedback and Complaints.

A. Product returns and rejections Kilycted Raw Material labels are put on product.

4.7 Customer Service/Inside Sales handles product return authorization requests. The reason for each return request or claim is recorded in our CAR/RMA (Corrective Action/Return Material Authorization) Form.

4/2 Product return CAR/RMA records are periodically compiled and analyzed at the management review meetings.

5. New Key Customer Growth  $\gamma$ 

Sales records are periodically analyzed to identify trending of new key customers. The trending of these new customers sales is one of the most important indicators of new key customer satisfaction.

5<sub>12</sub> Statistics on new key customers trends are presented and discussed at management reviews.

7. Existing Customer Market share

Sales Management is responsible for collecting and analyzing data regarding existing customer market share. This data is periodically analyzed and presented at management review meetings.

8. Customer Surveys

8.1 Surveys, when and where appropriate at the discretion of the President, are selectively done to gain additional feedback from clients. These can range from 1 question to ten questions typically.

- 9. Analysis and presentation of results
- 9.1 Sales Management assembles, and analyses all customer satisfaction data collected form various sources and pertaining to different aspects of company's products and services, and presents this information at Management Review meetings.

Brendadoes-this Wher CAR IRAM Prouss.

9.2/ Executive Managers participating in the meeting discuss the reasons for successes or failures in reaching customer satisfaction objectives, and provide input for setting new objectives for the coming year.

### ASSO/IATED DOCUMENTS

QOP-56-01 Operational Procedure: Management Review

P-72-02 Operational Procedure: Customer Feedback and Complaints

ISO9001:2008 Standard

## QOP-82-02 - Internal Audits

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QMS Operational Procedure

QOP-82-02

Section 8.2

Section Revision: C

Revision Date: 5/20/2014

**Internal Quality Audits** 

Approved By: Todd Gifford

Date: 7/12/2010

I PURPOSE

The purpose of this procedure is to provide for a system and instructions, and to assign responsibilities for conducting internal quality audits.

II APPLICATION

This procedure applies to all activities comprising the quality system. This procedure directly concerns Quality Assurance and the executive management, and is indirectly relevant to all departments.

III PROCEDURE

1. Internal quality audit plan \

1.1 The President is responsible for planning and scheduling internal quality audits. Each section is audited at least once a year. In addition to the annually scheduled audits, certain

sections may be selected for more frequent auditing, depending on their status, importance, and past compliance history.

The President schedules dates and assigns audit teams for all auditable sections.

1.3 The **internal audit plan** is synchronized with management reviews of the quality system (refer to Procedure QOP-56-01, Management Review), so that results of an auditing cycle are available for the management review meeting.

2. Audit team

Personnel assigned to carry out internal audits are independent of those having direct responsibility for the audited activity. If there is no conflict of interest, it is usually Quality Assurance that conducts the audits. Activities that are the responsibility of Quality Assurance are usually audited by trained IQA individuals from other departments.

2.2 Internal auditors are trained by **in-house IQA-certified Trainers or professional IQA Trainers**. Quality Assurance maintains a copy of the ISO9001:2008 standard on the company Intranet. **IQA Training, whether done in-house or by professionals,** is recorded in the Training Records.

3. Preparing for audit v

Auditors prepare for an audit by familiarizing themselves with the ISO 9001 standard, refreshing their knowledge of the quality manual and relevant operational procedures, reviewing corrective actions files, and reviewing the IQA checklist.

• Conducting and reporting the audit

While conducting the audit, auditors seek objective evidence demonstrating whether the audited activities conform with the requirements of the documented quality system, and whether the system is effectively implemented and maintained. When a nonconformity is noted, it is brought to the attention of, and discussed with, the President. Before the end of an audit each noted nonconformity is documented using the Internal Audit/Management Corrective Action and Preventive Action Form QF-82-02-01. Auditors fill out only part of the form, describing the noted nonconformity. The form is then handed over to the President who uses the rest of the from to propose a corrective action and follow through to close out the corrective action.

5. Corrective action and follow up \

5.1 Once a nonconformity is identified and documented, further processing of the nonconformity report is similar to the corrective action requests (Procedure QOP-85-02, Corrective and Preventive Action). Upon receiving the report, the President and appropriate managers investigate the cause of the problem noted as a nonconformity, proposes a corrective action to be taken, and indicates the date by which the corrective action will be fully implemented.

When there is objective evidence that the corrective action is implemented and effective, the nonconformity report is closed out. If more work is needed to fully implement the action, a new follow-up date is set.

6. Documentation and record \

Internal audits and implementation of resulting corrective actions are documented using Internal Audit Checklist Form QF-82-02-02 for documenting the Audits, and the Internal Audit/Management Corrective and Preventive Action Form QF-82-02-01 for documenting findings that require Corrective Action.

The Internal Audit Checklist Form QF-82-02-02 contains the results and documentation of the Audit. The Internal Audit/Management Corrective and Preventive Action Form QF-82-02-01 contains a description of any nonconforming condition found during the Audit, the proposal for a corrective action, and corrective action implementation information.

At the end of an auditing cycle, all nonconformity reports established during the cycle are compiled and analyzed, and are presented at the management review meeting.

### **ASSOCIATED DOCUMENTS**

√F-82-02-02 Quality Form: Internal Quality Audit Checklist Form and Archived IQA Records

Af-82-02-01 Quality Form [Cedar Rapids Location]: Internal Audit/Management Correctiveand Preventive Action Form

F-82-02-03 Quality Form: Internal Audit Plan

perational Procedure QOP-85-02: Corrective and Preventive Actions

ISO9001:2008 Standard

# QOP-82-04 – In-Process Inspections

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QMS Operational Procedure

QOP-82-04

Section 8.2

Section Revision: A

Revision Date: 7/12/2010

**In-Process Inspections** 

Approved By: Todd Gifford

Date: 7/12/2010

I PURPOSE

The purpose of this procedure is to provide for a system and instructions, and to assign responsibilities for performing and recording in-process inspections.

II APPLICATION

This procedure applies to products throughout the order fulfillment cycle. This procedure concerns Picking and Quality Assurance.

III PROCEDURE

1. Scope and responsibilities

In-process inspections include operator self-inspections throughout the production process. Also, additional in process verifications are performed as required by the Work Instructions.

- 2. First-Time-Buy Part and Production Assembly inspection
- 2.1 When buying a part for the first time, Quality Assurance performs a second visual inspection in addition to the verification of purchased parts process.

2/2 First-time-buy part additional inspections are called out on the 2 x 1 Incoming Bar-code label that Receiving puts on every product that is received.

First-time-buy parts are subjected to the additional inspection by Receiving, and may include QA and Product Management When the result of the inspection is satisfactory, the inspector signs off the inspection record in the system (QF-74-03-02 Additional Inspection database form). The sign-off constitutes the record of the additional inspection, identifies the inspector, identifies the inspection status of the product, and authorizes the part to move to the next process.

Quality Assurance and/or Operations may subject First-Time-Builds to additional inspection. If conforming, sign off is documented in the audit database. The sign-off documents the record of additional inspection, identifies the inspector, and the inspection status, and releases the product to the next process.

3. Picking Process

Amburus Wolf 2
Personnel picking parts verify each item picked.

 Personnel picking parts verify each item associated to the work instructions is correct as picked.

• Personnel also visually inspect parts as they are picked as appropriate and feasible.

A. All in-process inspections required during the assembly process are noted in the assembly work instructions. Appropriate records of assembly in-process inspections are kept.

instructions. Appropriate records of assembly in-process inspections are kept.

Appropriate records of assembly in-process inspections are kept.

Appropriate records of assembly in-process inspections are kept.

5. Quality Check Process

As product is moved throughout the production process any in-process quality inspection is verified as required by the work instructions. Any required in-process check is then documented / recorded and stored per production order. Randy Rhonda do the QA process in the large transfer of the production order.

o. Qual
As product
as require
and stored

Quality Audit is a Final Inspection process that is performed based upon the documented requirements in the Work Instructions.

6. Release of product \

Completed product is routed to the Quality Assurance queuing area where the Quality Assurance inspector verifies the product is conforming to the work instructions and requirements. If conforming, the product is released to ship and documented electronically.

7. Nonconforming product

If a product is found to be non-conforming, Quality Assurance is notified and moves the product to a HOLD area.

### **ASSOCIATED DOCUMENTS**

QF-82-04-01 Quality Form (DBA Form # WO-D): Picking Form

QF-82-04-03 Quality Form: Instruction/Inspection Log Form

🞶-82-05-02 Quality Form: Quality Assurance Audit Form

OP-82-05 Operational Procedure: Final Inspection

OP-74-03 Operational Procedure: Verification of Purchased product

OP-83-01 Operational Procedure: Control of Nonconforming Product

ISO9001:2008 Standard

# QOP-82-05 - Final Inspection

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QMS Operational Procedure

QOP-82-05

Section 8.2

Section Revision: A

Revision Date: 7/12/2010

**Final Inspection** 

Approved By: Todd Gifford

Date: 7/12/2010

I PURPOSE

The purpose of this procedure is to provide for a system and instructions, and to assign responsibilities for performing the final inspection.

II APPLICATION

This procedure applies to all products being shipped to customers. This procedure concerns Shipping and Quality Assurance departments.

III PROCEDURE

1. General

All finished products/orders are subjected to final authorization before they released to ship. Quality Assurance and/or Management is responsible for the final inspection and authorization.

It is the policy of Dee Electronics to concentrate resources and attention to defect prevention rather than defect detection. The verification effort is therefore focused on process control and in-process inspections. The purpose of final inspection is to all work instruction requirements have been met.

2. Scope

At a minimum the scope of final authorization inspection comprises of reviewing the final product to the work instructions and meets any customer special requirements.

3. Carrying out the inspection

Access to the work instructions are provided to appropriate personnel

Products that pass all in-process and final inspections per the work instructions are identified as approved and moved to a shipping staging area.

4. Nonconforming product

When a nonconforming product is identified by Quality Assurance or Management the nonconformity is first determined if it can be resolved. If it cannot be resolved the product is moved to the HOLD area for corrective action.

5. Release of product

Only Quality Assurance Inspector or Management has the authority to release finished product for shipment.

6. Inspection record

Final inspection documentation is stored in an electronic database (QF-82-05-02). The inspection documentation includes the production order number, the inspector name, the date inspected, and the quantity inspected.

ASSOCIATED DOCUMENTS

QF-82-05-02 Quality Form: Quality Assurance Audit Form

QOP-82-04 Operational Procedure: In-process Inspections

QOP-74-03 Operational Procedure: Verification of Purchased Product

QOP-83-01 Operational Procedure: Control of Nonconforming Product

ISO9001:2008 Standard

# QM 8.3 – Control of Nonconforming Product

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Quality Manual

8 - Measurement, Analysis, and Improvement

Section 8.3

Section Revision: A

Revision Date: 7/12/2010

8.3 - Control of Nonconforming Product

Approved By: Todd Gifford

Date: 7/12/2010

GENERAL POLICY

Nonconforming product is identified, documented, evaluated, and prevented from being used or shipped. Appropriate actions are taken when product nonconformity is identified after delivery. When appropriate, corrective and preventive actions are implemented to prevent recurrence of identified nonconformities.

The quality system described in this section of the Quality Manual conforms to the requirements of the ISO 9001:2008 standard: Element 8.3 – Control of Nonconforming Product.

1. RESPONSIBILITY AND AUTHORITY (R&A)

The R&A for carrying out quality system activities related to this element have been assigned to the President. All associates have the responsibility to carry out their work assignments in accordance with the quality policy and quality system documentation. The

associates have been granted appropriate authority to complete the activities assigned in order to meet specified requirements.

# 2. CONTROL OF NONCONFORMING PRODUCT

Dee Electronics has established and maintains documented procedures to ensure that nonconforming product is prevented from unintended use or installation. This control provides for identification, documentation, evaluation, segregation, disposition of nonconforming product, and notification to the functions concerned.

Review and Disposition of Nonconforming Product – Dee Electronics has defined the responsibility for review and authority for the disposition of nonconforming product. Nonconforming product is reviewed in accordance with documented procedures. Where applicable, it may be reworked to meet the specified requirements, accepted without repair by concession, rejected/returned, or scrapped. Dee Electronics does not do Repair. When nonconforming product is corrected, it is subject to re-verification to demonstrate conformity to the requirements. Records of the nonconformities and actions taken, including concessions obtained, are maintained per 4.2.4.

Where required by contract, the proposed use of product which does not conform to specified requirements is reported for concession to the customer or customer's representative. The description of the nonconformity that has been accepted is recorded to denote the actual condition. Reworked product is reinspected in accordance with documented procedures.

#### 3. PRODUCT RETURNS \

When product nonconformity is detected by the customer after delivery or use has started, the customer is instructed to return the product, and a Return Authorization/Corrective Action (RMA/CAR) is issued by Inside Sales (Customer Service).

342 When product nonconformity is detected internally after delivery or use has started, customers are informed and instructed what to do with the product via RMA/CAR.

ASSOCIATED DOCUMENTS

OP-83-01 Operational Procedure: Control of Nonconforming Product

⟨✓P-74-03 Operational Procedure: Verification of Purchased Product

P-82-04 Operational Procedure: In-process Inspections

QOP-82-05 Operational Procedure: Final Inspection

ISO9001:2008 Standard

# QOP-83-01 – Control of Nonconforming Product

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QMS Operational Procedure

QOP-83-01

Section 8.3

Section Revision: A

Revision Date: 7/12/2010

**Control of Nonconforming Product** 

Approved By: Todd Gifford

Date: 7/12/2010

I PURPOSE

The intent of this procedure is to describe the process at Dee Electronics for the Control of Nonconforming Product (Section 8.3 of ISO 9001:2008).

The overall Responsibility and Authority for activities related to this element of the standard have been assigned to the President. Team members are charged with the responsibility to implement the procedure as written, and have been granted appropriate freedom and authority to do so.

II APPLICATION

This procedure pertains to actions taken when product fails to pass any inspection and/or test.

### III PROCEDURE

- . Upon receipt, if products are nonconforming (damaged, part number wrong, count wrong, etc.), Purchasing, Quality Assurance Coordinator, and Sales, when appropriate, are notified. The Quality Control Coordinator or Receiving Personnel records the nonconformance if nonconformance is traceable to supplier error. Product is labeled with Non-Conforming label and then moved to a HOLD AREA.
- If product is found to be nonconforming after being received, it is labeled with Non-Conforming label, and then moved to a HOLD AREA to await disposition. Corrective Action Report (CAR)/RMA document identification is noted on labeling when the document record has been created.
- 3. The Quality Control Coordinator determines the disposition of nonconforming product (disposition may also be delegated to the Warehouse Supervisor).
- 4/ Disposition alternatives include:
  - 1. Shipping to customer after receiving customer concession,
  - 2. Returning to supplier,
  - 3. Stocking in inventory for future sale,
  - 4. Scrapping
- When customers accept the order by concession without repair, Sales records the acceptance on the original order in the ECIS database. Details of the concession include identification of the customer representative, the date of the concession and a description of the order as accepted. The record of concession without repair is a retained quality record. See Procedure QOP-42-03, Control of Quality Records, for retention details.
- Returned goods are given an RMA # approval by Quality Control Coordinator or Purchasing and recorded in the ECIS database. Quality Control Coordinator dispositions customer-returned goods as stated above in paragraph 4.
- 7/ Product nonconformances are investigated for root causes, analyzed for trends, and /discussed in Management Review.
- Nonconforming orders (e.g., improper scanning, inappropriate product numbers, or inaccurate counts) are refilled, recounted, and rescanned by warehouse personnel.
- 9/ PRODUCT RETURNS: If a product nonconformity is detected by the customer after delivery or use has started, the customer is instructed to return the product, and a Return Authorization/Corrective Action (RMA/CAR) is issued by Inside Sales (Customer / Service), approved by Quality Control Coordinator.
- 10. When product nonconformity is detected internally after delivery or use has started, customers are informed and instructed what to do with the product via RMA/CAR.

### **ASSOCIATED DOCUMENTS**

F-85-02-01 Quality Form: Corrective Action Report CAR/RMA Form

QÓP-74-03 Operational Procedure: Verification of Purchased Product

OP-82-04 Operational Procedure: In-process Inspections

QOP-82-05 Operational Procedure: Final Inspection

QOP-85-02 Operational Procedure: Corrective and Preventive Action

ISO9001:2008 Standard

# QM 8.4 – Analysis of Data

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Quality Manual

8 - Measurement, Analysis, and Improvement

Section 8.4

Section Revision: A

Revision Date: 7/12/2010

8.4 - Analysis of Data

Approved By: Todd Gifford

Date: 7/12/2010

**GENERAL POLICY** 

Dee Electronics collects, compiles and analyzes information and data required for evaluating the suitability and effectiveness of the quality system and for identifying opportunities for continual improvement.

### PROCEDURAL POLICIES

1. General

is all kept in Brenda is all kept in Brenda files. She is she personal computer files. She is she only one who cess 1.1 Data and information recorded in quality records are compiled and analyzed periodically to determine trends in the performance and effectiveness of the quality system and to identify opportunities for improvement.

The President is responsible for coordinating these activities, and for reporting conclusions and trends to the executive management team. This is usually done within the framework of management reviews of the quality system, in accordance with Operational Procedure QOP-56-01, Management Review.

2. Scope

Following categories of information and data are recorded, compiled and analyzed:

2.1 Conformity to product and customer requirements:

On-time delivery performance - recorded in delivery performance reports

2.2 Suppliers:

Supplier quality performance – recorded in subcontractor/vendor quality performance files (Procedure QOP-74-01)

2.3 Customers:

Customer satisfaction levels – recorded in Management Review minutes (Procedure QOP-82-01) and evaluated for trends by executive management.

Customer complaints – recorded in Internal Audit/Management Corrective and Preventive Action Form (Form QF-82-02-01) and evaluated for trends by executive management.

2.4 Quality System: /

Effectiveness of training – recorded in training evaluation reports (Procedure QOP-2-01) and evaluated for trends by executive management.

Effectiveness of quality system – recorded in internal audit reports (Procedure QOP-82-02) and evaluated for trends by executive management.

### **ASSOCIATED DOCUMENTS**

pOP-56-01 Operational Procedure: Management Review

P-85-01 Operational Procedure: Continual Improvement

ISO9001:2008 Standard

# QM 8.5 - Improvement

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Quality Manual 8 – Measurement, Analysis, and Improvement

Section 8.5

Section Revision: A

Revision Date: 7/12/2010

8.5 - Improvement

Approved By: Todd Gifford

Date: 7/12/2010

GENERAL POLICY

Dee Electronics deploys a continual improvement philosophy throughout the entire organization. The improvement effort is driven by goals defined in the quality policy and quality objectives. Improvement opportunities are identified by analyzing quality performance data and information. Improvement projects are defined and implemented 4hrough the system of corrective and preventive actions and management review actions.

Causes of identified nonconformities are investigated and, where appropriate, corrective actions are implemented to ensure that nonconformities do not recur. Preventive actions are implemented to eliminate the causes of potential nonconformities. Corrective and preventive actions taken are recorded and are followed up to ensure that they have been properly implemented and that they are effective.

100 12/2/15 PROCEDURAL POLICIES

1. CONTINUAL IMPROVEMENT

1.10 pportunities for improvement

1.1.1 Opportunities and priorities for improvement are identified by comparing present quality performance to objectives defined in the quality policy and quality objectives.

1.12 Quality performance is determined by analyzing information about customer satisfaction, records of product and process nonconformity, results of internal audits, and other data and information relevant to quality performance. Section 8.4, Analysis of Data, defines the scope and system for collecting and analyzing such information.

1.1.3 Quality performance is evaluated by management reviews of the quality system. Where quality performance falls short of a defined objective, the management review identifies specific improvement actions to reach the objective. When a quality objective is reached, the management review may set a new, higher objective in this area and specify new improvement actions for reaching it.

1.4.4 This process of facilitating continual improvement through the use of quality policy, objectives, and analysis of data, is defined in Operational Procedures QOP-85-01, Continual Improvement, and QOP-56-01, Management Review.

1.1.5 In addition to management reviews, departmental supervisors/managers identify improvement opportunities continually, based on daily feedback from their operations and other activities. Employees are also encouraged to come forward with ideas for improving products, processes, systems, productivity, and working environment. These improvement opportunities are evaluated and prioritized by the President and, where appropriate, are implemented through the system of corrective and preventive actions.

1/2 Implementation of improvement projects

1.7.1 Improvement projects are usually implemented through management review actions and through corrective and preventive actions. Where appropriate, improvement projects may be also initiated by management directives, such as policy statements, announcements, memoranda, and so forth.

CORRECTIVE AND PREVENTIVE ACTION

2/1 Preventive versus corrective action

2.1.1 Preventive actions are requested and implemented when there are trends of decreasing quality capability and/or effectiveness of the quality system that create a risk for a potential nonconformity. Corrective actions are used when an actual nonconformity is identified. In the more wife code.

This is not listed in the more training by that he was retrained. Only that he was retrained. Only that he was retrained. Only that he was retrained. This is need for corrective and preventive actions. However, once the need is identified, a common system is used to process both types of actions. Forms, logs and other documents and the CAR records for processing of corrective and preventive actions are the same.

2. Corrective actions

2. Corrective actions

2.1 The need for corrective action is determined on the basis of identified actual nonconformities. Corrective action requests are typically triggered by such events as a failed inspection, customer complaint and/or product return, nonconforming delivery from a supplier, or a quality system audit finding.

2/3 Preventive actions Thousagned off on 912815 - Since September, this has continued.

This issue not been addressed again since September acording to 2,3.1 The need for preventive action is determined on the basis of information and data available regarding capability and performance of processes, product nonconformity rates, post-order downwob. fulfillment experience feedback, customer complaints, quality system audit findings, and management review ideas. Such information and data are collected and analyzed to detect unfavorable trends that, if not checked, will increase the risk of nonconformities. The system for collecting and analyzing quality performance information and data is defined in Section 8.4 of this manual.

2.4 Processing of corrective and preventive actions

2.4.1 Preventive and corrective actions are initiated, processed and followed up using a CAR (Corrective Action Request)/RMA form (QF-85-02-01) or Internal Audit/Management Corrective/Preventive Action Form (QF-82-02-01). The forms document the unsatisfactory condition and the corrective or preventive action to be taken, and is used to record the verification and closure of the action. Open CARs are reviewed regularly to ensure that the actions are implemented and followed up in a timely manner. Procedure QOP-85-02, Corrective and Preventive Action, explains how to use the CAR system.

2/5 Continual improvement

2/5/1 Continual improvement actions are often defined as corrective and preventive actions. This is especially true for preventive actions. Operational Procedures QOP-85-01, Continual Improvement, and QOP-56-01, Management Review, explain how the corrective and preventive action system is used for facilitating continual improvement.

### 2.6 Effectiveness of Corrective Action and Preventative Action

This information is not available to management of available to management of available to do this with and DMI. 2.6.1 The effectiveness of Corrective Action and Preventative Action taken is reviewed and records of this are maintained in QF-85-02-01 and Management Review Meeting Minutes.

### **ASSOCIATED SECTIONS AND DOCUMENTS**

QE/85-02-01 Form: Corrective Action Report CAR/RMA Form

QP-82-02-01 Form [Cedar Rapids Location/Shared between CR and DM]: Internal Au Ht/Management Corrective/Preventive Action Form

Q 2-85-01 Operational Procedure: Continual Improvement

-85-02 Operational Procedure: Corrective and Preventive Action

-56-01 Operational Procedure: Management Review

ISO9001:2008 Standard

# QOP-85-01 – Continual Improvement

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QMS Operational Procedure

QOP-85-01

Section 8.5

Section Revision: A

Revision Date: 7/12/2010

**Continual Improvement** 

Approved By: Todd Gifford

Date: 7/12/2010

The purpose of this procedure is to provide for a system and instructions, and to assign responsibilities for facilitating continual improvement of the quality management system.

This procedure applies to all activities comprising the quality management system. This procedure concerns all departments.

III PROCEDURE

1. General

1/1 Dee Electronics deploys continual improvement philosophy throughout the entire organization. The quality system itself is designed to incorporate all elements necessary to identify opportunities for improvement and to implement improvement projects.

1.2 Everyone in the organization is encouraged to come forward with ideas for improving products, processes, systems, productivity, and working environment. Improvement suggestions are evaluated and prioritized by the executive management team.

2. Identification of improvement opportunities

2) Opportunities for improvement are identified form such sources as:

Data of process and product characteristics and their trends;

Records of product nonconformities;

Customer satisfaction, dissatisfaction and other customer feedback;

Market research and analysis of competitive services;

Feedback from employees, suppliers, manufacturer representatives and other interested parties; and

Internal and external audits of the quality system.

2/2 In addition to the above-listed systems for continual performance monitoring, special assessment projects may be initiated to identify opportunities for improvement in other areas. Examples are:

Non value-added use of floor space,

Waste of labor and materials,

Excessive cost of non-quality, and

Excessive handling and storage.

- Branda - Christ Tury 2.3 Opportunities for improvement of operations and systems are identified on two levels: continuously, by the management team and supervisors, based on daily feedback form operations and other activities; and periodically, by the management review, based on analysis of loner-term data and trends. Opportunities for improvement of services are identified mainly by Sales/Marketing Management.

7. Evaluation of improvement opportunities

 $3\sqrt{1}$  Those opportunities for improvement based on daily feedback from operations are evaluated by executive management and, when appropriate, are implemented through the system of corrective and preventive action. Typically, they would be triggered by such events as identification of a nonconforming process or product, customer complaint, internal audit finding, and other such specific events.

3/2 Opportunities of improvement based on longer-term data and trends are evaluated by the management review. They are prioritized with respect to their relevance for reaching the quality policy and quality objectives. When new important opportunities for improvement are not adequately supported by the current policy and objectives, the management review may change the policy and/or establish new quality objectives. This evaluation and prioritizing process is defined in Operational Procedure QOP-56-01, Management Review.

3/3 Opportunities for improvement of services are evaluated by the President and Vice Chings work was by President, Sales.

4. Implementation of improvement projects

4/1 Improvements required to address daily feedback from operations and other activities are usually implemented through corrective and preventive actions. Operational Procedure QOP-85-02, Corrective and Preventive Action, defines the process.

4. Longer-term improvement projects to fulfill the quality policy, attain quality objectives, or correct unfavorable trends are implemented through special management actions defined by the management review. These actions may be documented in management review minutes, or be issued as directives, memoranda, policy statements, etc. The corrective and preventive action system may also be used for this purpose.

4/3 Service improvement projects are usually implemented via projects guided by the President.

### **ASSOCIATED DOCUMENTS**

QF-85-01-01 Quality Form: Employee Idea, Feedback, Concern Form

QOP-56-01 Operational Procedure: Management Review

 $Q\cancel{\phi}$ P-85-02 Operational Procedure: Corrective and Preventive Action

Does nothave. Just comesous and Lays it. Would Suggest a

poxon area togo

Someone might have a quat buggestion, or even something highly important to inform mgt of but are not willing to say it Verbally. An anonymous area to relay these missages is always a good idea.

ISO9001:2008 Standard

# QOP-85-02 - Corrective and Preventive Action

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QMS Operational Procedure

QOP-85-02

Section 8.5

Section Revision: A

Revision Date: 7/12/2010

**Corrective and Preventive Action** 

Approved By: Todd Gifford

Date: 7/12/2010

PURPOSE

The intent of this procedure is to describe the process at Dee Electronics for Corrective and Preventive Action (Section 8.5.2 and 8.5.3 of ISO 9001:2008).

The overall Responsibility and Authority for activities relating to this element of the standard have been assigned to the President. Team Members are charged with the responsibility to implement the procedure as written, and have been granted appropriate freedom and authority to do so.

APPLICATION DE SONS

This process pertains to all aspects of the quality system at Dee Electronic; it is not restricted to product-related concerns or nonconformities. Process and system nonconformities are also provided for.

PROCEDURE

The Corrective Action database of ECIS is utilized by team members universally to collect information for improving the effectiveness of the Quality System, such as:

- 1. Customer concerns
- 2. Inspection and testing results and trends
- 3. Internal audit Nonconformances
- 4. External audit Nonconformances
- 5. Team member concerns

s I fithere is an issue it is brought to Brenda and she putsina CAR, that she also works.

> I his is done by an " door policy!"

Preventive Actions may be taken by management as a result of successful Corrective Action. When Corrective Action is applied to other Dee Electronics products, processes or locations, it is preventive action. Additional sources for Preventive Action include:

- 1. Team member concerns
- 2. Management Review ideas
- 3. Industry and non-industry Best Practices
- 4. Internal and external audit Observations

3. If there is observable evidence that the problem already exists (Corrective Action scalled for):

- 1. Team Members in the affected area devise a Corrective Action Plan.
- 2. Team Members are trained as appropriate.
- 3. Team Members implement Corrective Action Plan. Utilization of the following tools is conducted when determining root cause: 5 Why's and Cause/Effect (Fish Bone) Diagrams.
- 4. Quality Control Coordinator and President follow up and determine the effectiveness of the CA.
- 5. President revises documentation as necessary, maintains records and reports to management in Management Review.

4. If there is no observable problem but there is a potential that one may exist in the near future (Preventive Action called for):

- 1. President and affected Team Members brainstorm preventative solution(s),
- 2. President proposes Preventive Action in Management Review moves ahead with implementation as appropriate.
- 3. Quality practices, documented procedures, processes and forms are revised as needed.
- 4. President revises and reissues quality system documentation, as necessary.
- 5. Management provides necessary resources.
- 6. Team Members are trained as appropriate.
- 7. Team Members implement Preventive Action.
- 8. President determines effectiveness of Preventive Action and reports during Management Review or prior if appropriate.

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9. President maintains records of Preventive Action in Internal Audit/Management Corrective/Preventive Action Form QF-82-02-01.

5. Corrective and Preventive Actions are continuously assessed by:

- 1. Internal quality audits.
- 2. External quality audits.
- 3. Feedback from Team Members.
- 4. Feedback from Customers.

f. The President and MR maintain electronic records (ECIS) related to Corrective and Preventive Action. See QOP-42-03, Control of Records, for retention details.

Continual Improvement – Continual improvement actions are often defined as corrective and preventive actions. This is especially true for preventive actions. Operational Procedure QOP-85-01, Continual Improvement, and QOP-56-01, Management Review, explain how the corrective and preventive action system is used for facilitating continual improvement.

A. The effectiveness of Corrective Action and Preventative Action taken is reviewed by ongoing statistical analysis (prompting for review of effectiveness of Corrective Actions and Preventative Actions) as well as reviewed in Management Review Meetings by reviewing Corrective Action and Preventative Action trending. Records of these reviews are maintained in QF-85-02-01 and in the Management Review Meeting minutes.

ASSOCIATED DOCUMENTS

/ SU) 12/24/15

QF-56-01-01 Quality Form: Management Review Minutes

QF-85-01-01 Quality Form: Online Employee Feedback/Concern Form

QF-72-02-02 Quality Form: Online Customer Concern/Complaint/Feedback Form

QF-85-02-01 Quality Form: Corrective Action CAR/RMA Form

QF-82-02-01 Quality Form: Internal Audit/Management Corrective/Preventive Action Form

QOP-83-01 Operational Procedure: Control of Nonconforming Product

QOP-72-02 Operational Procedure: Customer Feedback and Complaints

QOP-85-01 Operational Procedure: Continual Improvement