Audit Summary Report

Intertek

Client ID#:	CMPY-029974
Client/Address:	Harrington Signal, Inc. 2519 4th Avenue Moline, Illinois 61265 United States
Audit Criteria:	ISO 9001:2008
Audit Activity:	Re-certification
Date(s) of Audit:	Moline, United States: 26-Apr-2017 to 27-Apr-2017
Auditor(s) (level):	Bill Peterson (Lead Auditor, Moline, United States)

Scope of Audit:

Site: Harrington Signal, Inc., Moline, Illinois, United States

ISO 9001:2008:

The manufacture of electromechanical and printed circuit board assemblies, machined and fabricated parts for contract manufacturing.

Exclusions from scope:

7.3

OVERALL RESULT: Action Required

The management system was found to be effectively implemented although minor nonconformities were cited.

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Executive Summary

Strengths	• Involved ownership • Long term employees • Strong management team
Weaknesses	• Poor document control: Some documentation could be better linked from Quality Manual to work instruction. • Poor document control: Some operator notes could be written as work instructions.
Opportunities	• Find more lead free jobs to keep capacity busy
Threats	None noted at this time

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Intertek Benchmark Maturity Model

The score descriptions are generic to all management systems and cannot be customized by the auditor, thus allowing for the consistency of interpretation and standardization of audit results worldwide. The scores provided to your organisation are for benchmarking purposes only and are based on the audit team's evaluation. Comments located in the score descriptions will appear only if the auditor has provided specific comments in the audit report.

Management

Mature

Consistent evidence of management commitment, customer and/or interested party satisfaction, knowledge/awareness of policy and objectives being demonstrated by the majority of staff. Responsibility and authority is evident and supported via data, trends and related KPI's. Management reviews are complete and demonstrate support by the majority of personnel. Records are complete and demonstrate positive trends in improvement and lessons learned.

Auditor Comments:
There is a strong management team that has created a QMS with a policy and objectives. The policy is posted and known. There is a bonus aid for meeting goals and employees are very aware of what the current numbers are and how to improve them.

Goal	Measure	Results
OTD	>96%	99.5%
Profit	>3%	5%
Quality (Sales credits)	<2%	<1%

Internal Audits

Mature

Internal audits are being performed at planned intervals and are based on status and importance of the Management System. Data is being collected analyzed and reviewed by senior management on a regular basis. There exists a link between the internal audit results and the overall health of the Management System. Audit teams are trained, impartial and objective in their approach. Audit reports are clear, concise and supported with applicable correction actions. Management is involved in the corrective action process ensuring timely implementation and overall effectiveness of resolution.

Auditor Comments:
Mature
Done per documented procedure. There is a schedule and performance is current. All of the identified processes were audited. There needs to be a better matching if the process names on the IOP to those listed on the schedule. All audits seem to use the same checklist. This will be changed in the 2015 revision. There also seems to be a lack of auditors as the previous audits are no longer here. Need to get and train more prior to the 2015 revision.

Corrective Action

Mature

The corrective/preventive action process has demonstrated to be effective in practice. Data from sources such as customer and/or interested party complaints, internal audits, warranty analysis, defects, internal metrics and supplier performance show stability over time as the system matures. The process includes a thorough review of the effectiveness of the actions taken. There is evidence of problem solving tools being used to support the process.

Auditor Comments:
Mature
Done per documented procedure. CARs are logged and analyzed. There were 42 in 2016 and 12 in the first quarter of 2017. It seems that the pace has picked up. Analysis shows that the biggest problem is defective parts but there is no analysis about what to do. Of the CARs themselves there is a team assigned and there is good analysis of the problem. Also a good number of these CARs are written where no problem can be found. Also, rarely is there ever more than 1 defect per order.

Continuous Improvement

Mature

Data streams are being used as sources to drive continual improvement over time. These may include management system policy, objectives, and audit results, analysis of data, CAPA and management reviews. There is some evidence of advanced techniques being used during the improvement cycle. Economic benefits have been realized.

Auditor Comments:
Mature
This was a huge discussion point in the MRM. Improved phone network and saved money. Implementing barcode system. Invest in new equipment as profits allow. Invest in employee training, especially soldering skills

Operational Control

Mature

Operational Controls are planned and developed. Planning of operational controls is consistent with all other Management processes. Objectives, process requirements, needs for appropriate additional documents and resources, verification and monitoring activities and records requirements have been determined, as appropriate. Processes and activities run consistently. Data is collected, and reviewed to verify the effectiveness of operational controls with evidence of significant improvement trends. Some evidence linking to some key business factors.

Auditor Comments:
Mature
The manufacturing process includes many operations such as: Kit, Prep, SMT, Prep2, stuff, wave, postw, inspection, and pack. These operations are controlled by a part specific build instruction and flow in a set pattern. Control is in the fact that they must be prepped prior to stuff or they must be stuffed prior to wave. In production the trays are identified by a tray ticket which records progress and quantity through the operation.

Resources

Mature

Resources required for the effective maintenance and improvement of the management system have been defined and deployed. Improvements have been noted in areas such as customer and/or interested party satisfaction, continual improvement, and process variation. Levels of competency have been defined and documented within the existing management system.

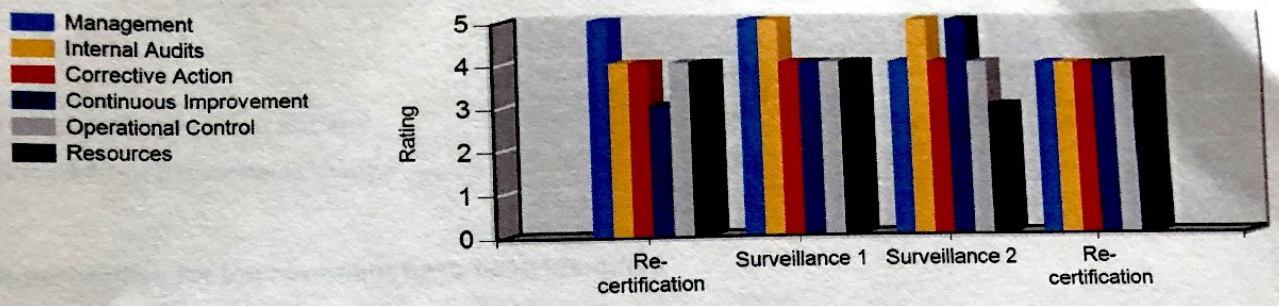
Auditor Comments:
Mature
6.1 Resources: There is sufficient personnel and equipment to get the jobs done. It would be helpful to have a few more internal auditors.

6.2 Training: Employees are given extensive training in the first 30 days. This includes safety, ISO, and job training. The training is well documented as to subject matter, trainer, and duration. It was seen that this training is given soon after hiring. Much of the training focuses on IPC Standards but there is also OJT for specific functions.

6.3 Infrastructure: Equipment was calibrated as needed. Calibration was done by an approved vendor and was current.

6.4 Environment: Building and grounds are well maintained. Working environment is quite good, clean, quiet, and well lit. ESD concerns are addressed through vests, mats, and some floor paint.

Intertek Benchmark Maturity Model



Rating: 5=Benchmark 4=Mature 3=Meets Intent 2=Beginning 1=Not Evident

Finding Summary

	Major	Minor
Issued during current activity	0	1
Closed from previous activities	0	1

Opportunities for improvement have been identified

No

Status of previous audit findings

Follow-up on findings issued at previous audit:

Corrective actions raised at the last audit have been closed. No further actions required.

Report on closure of previous findings

New procedures and forms have developed to ensure PM is completed. All PM was current.

Findings from the previous activity that could not be closed

No

Finding Detail

Finding #:	Audit Criteria:	Audit Criteria Ref#:	Corrective Action Plan Date:	Corrective Action Implementation Date:
2017 HSI NCR 1of1	ISO 9001:2008	4.2.3 g)	29-May-2017	30-Jun-2017
Issued by:	**Classification:**	**Document Ref#:**	**Action Required:**	
Bill Peterson	Minor		Submit Corrective Action Plan	

Finding:

The process of document control is not totally effective.

Requirement:

4.2.3 A documented procedure shall be established to define the controls needed g) to prevent the unintended use of obsolete documents, and to apply suitable identification to them if they are retained for any purpose.

Objective Evidence:

In three of the sections of the SMT PM binder PM procedure #FRM-610 Rev #2 was in place. This form as rev #3 was also in each section. There was no mark or stamp indicating that the rev #2 was obsolete. The master list indicates that the revision is #2 so either it wasn't updated or rev #3 is bogus.

Evidence Summary

The state of the management system is summarized below:

Conclusion of Client's Processes/Functional areas audited including KPI/Metrics

Quote – There are three reasons to quote a job, requote an old job, requote an old job with minor changes or quote a new job. Quoting itself is a rare occurrence but the quoting of a new job is a very rare event. There is a check sheet that details the inputs for a new quote and who should be included in the quote group. A CI discussed in MRM is to develop a business that will increase the number of quote wins. At that point it is an effective process.

Order entry – Received orders are reviewed by purchasing and manufacturing (as evidenced by initials) and then sent for order processing. At that point the information is keyed into the system, creating a job order, and a copy returned to manufacturing, purchasing, and acknowledged to the customer. Any problems/delays are communicated to the customer at that time. Even though there are no work instructions for this process it seems to be done effectively.

Purchasing – Done per documented procedure. Examine job que and purchase parts to arrive in time to make the job on time. Parts for many jobs can be purchased on 1 PO to reduce processing costs. Parts are purchased from approved vendors. There are few vendors and even though they are reviewed on a quarterly basis one is rarely dropped from the list. There is a work instruction to dictate the approval and re-evaluation.

Production scheduling – The scheduling department received the order, without a work instruction, and enters the job into the order Que. It is put in line to beat the "need by date". Problems at this point arise when parts cannot be obtained without expediting charges. Purchasing knows if a part is not in yet and will try to obtain them from other sources at a reasonable cost.

Receiving – This could be part of purchasing but was identified separately. When orders come in the parts are matched to the paperwork by part # and quantity. Purchasing is notified at this point if there is a problem. There is a quick check to see if any parts are needed to complete a kit in progress and the rest are labeled and put on the shelf using material transfer tags so all know the status of the parts.

Manufacturing – The manufacturing process includes many operations such as: Kit, Prep, SMT, Prep2, stuff, wave, postw, inspection, and pack. These operations are controlled by a part specific build instruction and flow in a set pattern. Control is in the fact that they must be prepped prior to stuff or they must be stuffed prior to wave. In production the trays are identified by a tray ticket which records progress and quantity through the operation. Over all this is an effective group of processes.

Inspection & test – Parts are visually inspected at the end of each process and any necessary repairs made if possible. After the wave operation the parts have an AOI inspection and again repaired if possible. (If not, parts go to the nonconforming area for MRBA disposition.) Some parts have a functional test which is per part procedure using a part specific fixture.

Shipping – Shipping manager checks que for orders and packs them (if not packed already by production) and ships them per customer instructions. Parts that are packed in the shipping area are usually sheet metal parts that are inspected for conformance if a status ticket is not included.

Conclusions regarding the audit of Mandatory Requirements

• Management Review: Management review meetings are held annually and attended by all of management. They ae conducted per a documented procedure. There is a problem that the requirements of the procedure do not match the directions of the Quality Manual on that topic. This will be corrected when the 2015 revision is implemented. The discussions were detailed and in depth. The requirements of ISO 9001:2008 were met.

• Internal audit: Done per documented procedure. There is a schedule and performance is current. All of the identified processes were audited. There needs to be a better matching if the process names on the IOP to those listed on the schedule. All audits seem to use the same checklist. This will be changed in the 2015 revision. There also seems to be a lack of auditors as the previous audits are no longer here. Need to get and train more prior to the 2015 revision.

• Review previous NC: New procedures and forms have developed to ensure PM is completed. All PM was current. The previous NC was effectively closed.

• CA&PA Customer complaint: Done per documented procedure. CARs are logged and analyzed. There were 42 in 2016 and 12 in the first quarter of 2017. It seems that the pace has picked up. Analysis shows that the biggest problem is defective parts but there is no analysis about what to do. Of the CARs themselves there is a team assigned and there is good analysis of the problem. Also a good number of these CARs are written where no problem can be found. Also, rarely is there ever more than 1 defect per order.

• CI: This was a huge discussion point in the MRM. Improved phone network and saved money. Implementing barcode system. Invest in new equipment as profits allow. Invest in employee training, especially soldering skills.

• Ops Control: Operations are controlled by a part specific build instruction and flow in a set pattern. Control is in the fact that they must be prepped prior to stuff or they must be stuffed prior to wave. In production the trays are identified by a tray ticket which records progress and quantity through the operation.

• Changes Review: No new equipment or processes. Will hire a new sales rep and upgrade to ISO 9001:2015.

• Site notes review (note changes in section 1-8): Site notes were reviewed and found to be correct.

• Legal & other requirements: OSHA, (no issues). IPC standards for soldering (training current). EPA (no issues).

• Use of Mark: The Intertek logo are properly displayed on the website. The cert is not displayed there. No other use of the fact that they are ISO certified is identified.

• Effectiveness of system to achieve goals: Goals were made at a high level most quarters in the previous year.

Review the results of previous audits and the performance of the management system over the certification if last surveillance of the cycle

Items from previous audits, such as goal definition, have been addressed and topics on CARs have not been repeated.

Communication / Changes during the audit (if applicable)

NA

Lead Auditor's Recommendation

Lead Auditor's Recommendation for ISO 9001:2008

The nonconformity(ies) identified do not jeopardize the certification of the management system. Continued certification is therefore recommended pending acceptance of the corrective action plans(s) for identified nonconformity(ies).

Other or Additional Lead Auditor Recommendation

na

Client Acknowledgement

Management Representative Name & Address:	Harrington Signal, Inc. Attn: J. Theesfeld 2519 4Th Ave Moline, IL 61265
Acknowledged By:	Jim Theesfeld

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Finding Detail

SECTION 1: BASIC DATA - AUDIT	
Client: **Harrington Signal, Inc.**	Client ID#: **CMPY – 022974**
Audit Criteria: **ISO 9001:2008**	Date(s) of audit: **4/26-27/2017**

SECTION 2: FINDING DATA

Finding # : 2016 HSI NCR 1of1

Finding classification
- ☐ Major Nonconformity
- ☒ Minor Nonconformity
- ☐ Opportunity for improvement
- ☐ Minor Area of concern for Stage II
- ☐ Major Area of concern for Stage II

Action required
- ☒ Submit corrective action plan by (date): 5/29/2017
- ☐ Submit corrective action by (date): 6/30/2017
- ☐ No response required
- ☐ No response required. Action to be taken prior to Stage II

Audit Criteria reference # : ISO 9001-2008

Management system documentation reference # : QMP-003 Sec. 5.5

Finding:
The process of document control is not totally effective.

Requirement:
4.2.3 A documented procedure shall be established to define the controls needed g) to prevent the unintended use of obsolete documents, and to apply suitable identification to them if they are retained for any purpose.

Objective Evidence: (Evidence recorded at, if multi site:)
In three of the sections of the SMT PM binder PM procedure #FRM-610 Rev #2 was in place. This form as rev #3 was also in each section. There was no mark or stamp indicating that the rev #2 was obsolete. The master list indicates that the revision is #2 so either it wasn't updated or rev #3 is bogus.

Issued by: Bill Peterson

SECTION 3: CORRECTIVE ACTION PLAN (To be completed by the client)

Root Cause (Required in all cases)
For this specific finding, procedures were not being properly followed concerning the handling of revised/obsolete documents.

Correction (if not required, please justify)
When FRM-610 Rev #3 was implemented, 5 copies were placed in the appropriate sections of the SMT Binder. Five copies of the obsolete document FRM-610 Rev #2 should have been removed. Only 2 were. The other 3 FRM-610 Rev #2 documents have since been removed. Also, the master list has been updated to show the current FRM-610 Rev #3 document.

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Finding Detail

Corrective action plan (Required in all cases)

A new quality procedure is being written for the ISO 9001:2015 revision. It will better document the controls and responsibilities for handling documented information required by Harrington Signal's quality management system. Training will be performed and documented to ensure proper implementation of the procedure.

Plan for verification of effectiveness (Required in all cases)

The proper completion of the new procedure and required training will be reviewed by the management staff after 30 days of implementation.

Target date for completion: 6-15-17	**Signature:**	**Date:** 5-9-17

SECTION 4: ACCEPTANCE OF CORRECTIVE ACTION PLAN (For Intertek's use only)

Major nonconformity: Acceptance of corrective action plan stated above.

Accepted by:	**Date:**

Minor nonconformity: Acceptance of corrective action plan stated above. Implementation to be verified during the next audit.

Accepted by:	**Date:**

SECTION 5: VERIFICATION OF IMPLEMENTATION (For Intertek's use only)

Implementation of the corrective action plan

Effectiveness of corrective action

Nonconformity closed: Corrective action(s) verified to be implemented.

Verified by:	**Date:**