MRC Supplier Assessment Checklist

General Information

Company Name **Emerson Process Management Valve Automation (Tianjin) Co., Ltd.**

Address **NO.15 Xing Wang Road, Wuqing Development Area**

City **Tianjin**

State / Country **China** **Postal Code** **301700**

Phone # **+86 22 8212 3300** **Fax #** **+86-22-59616396**

E-Mail Address **Florence.Yang@emerson.com**

Date of Assessment: **9/20-21/2011** **Auditor:** **Zongdi Zhu, Bob Smith**

Products Supplied:

History:

Ownership: ☐ Public ☐ Private ☐ Other

Union Affiliated? ☐ Yes ☐ No
If yes please give the union name.

Number of Employees at this site. **In Parent Company (if applicable)** **N/A**
Total

Engineering

Production

Quality Control

Quality Personnel: (Organizational Chart Attached ☒ Yes ☐ No)

Quality Management Representative
Name &Title
Reports to:

End user approval list attached (☒ Yes ☐ No).
ISO Registered (☒ Yes ☐ No), API (☐ Yes ☒ No), PED (☐ Yes ☒ No),
Canadian Registration Numbers (☐ Yes ☒ No), copy of Certificate(s) attached (☒ Yes ☐ No).
If not ISO, what quality standard(s) is the quality program designed to meet:

Nonconformances:

- **None**

Positives:

- **Emerson's philosophy for this plant is to outsource casting, machining &/or fabrication of components. The plant performs only welding of the spring cylinder heads, assembly, and test of the completed actuator.**
- **Quality system is extremely well documented.**
- **Manufacturing order is quite clear on all customer requirements, location of materials, order of production, testing requirements, and packaging.**
- **Do extensive data analysis to help improve their systems.**
- **Excellent audit preperation - all requested information was very quickly available.**
- **Plant housekeeping, layout, and use of Kanban system is quite good.**
- **Obvious re-investment in plant improvements.**

Concerns:

- **On time delivery performance for first two quarters of the year was considerably below expectations because business levels increased quickly. The housing supplier was not able to gear up quickly enough to meet demands (both in foundry & machining capacity). Also Wuqing Plant needed more assemblers to meet demand. Both issues have been resolved, and OTD is currently running at 90+ percent.**

Conclusions:

- **Very good plant and striving to get better.**

Company Overview	**In Place or Attached** **Y / N**	**N/A**
Does the manufacturer have in place a Sales, Distribution, and/or Technical Support organization to adequately serve MRC's market? • If yes, briefly describe the organization and describe how finished goods are supplied to MRC's market area. • For products that require technical support, briefly describe the technical sales and/or engineering organization, and provide a contact name/number within that organization. • Provide current copies of product catalogues and literature (electronic preferred).	**Y** **Emerson maintains major facilities in Waller, TX, Singapore and The Netherlands that are able to service MRC's needs.** **Technical support provided through Emerson technical staff.** **Available through the Internet**	
Provide a description of all critical manufacturing steps in production of manufacturer's product, including and identifying steps outsourced to others.	**Attached**	
If available, provide most recent audited financial statements for operations directly related to manufacturing.		
Valve manufacturers only – provide: • Up-to-date list of all manufacturing and / or assembly facilities for products supplied to MRC, and current capacity available to the manufacturer at each facility. Identify the ownership of each facility by percentage. • List sources for major components (e.g. castings, forgings, etc.). • List test facilities and types of testing performed for tests conducted outside of manufacturer's own facilities (such as API RP591, X-Ray testing, emissions testing, etc.). If possible, include brief summaries of test results. • Historical data to support evidence of casting or forging quality (typically – summaries of X-Ray results on random castings, or metallurgical tests on random forgings). • If the manufacturer has an authorized repair / modification program, briefly describe it and include a list of authorized valve repair / modification shops.		**N/A**
(Manufacturer is asked to update this information as changes occur.)		

Comments:

4.0 Quality Management System	**In Use Y / N**	**Effective Y / N**	**N/A**
4.1 General Requirements		**Rating:**	**S**
Is there a documented Quality Management System (QMS)?	**Y**	**Y**	
Does it contain a continuous improvement process?	**Y**	**Y**	
Does the QMS:			
• identify processes needed for the QMS and their application throughout the organization?	**Y**	**Y**	
• determine sequence and interactions of these processes?	**Y**	**Y**	
• determine if the operation and control of these processes are effective?	**Y**	**Y**	
• ensure availability of resources to support and monitor these processes?	**Y**	**Y**	
• monitor, measure, and analyze these processes?	**Y**	**Y**	
• implement actions to achieve planned results and continual improvement of these processes?	**Y**	**Y**	
Are any processes outsourced that affect product conformity with requirements?	**Y**	**Y**	
If yes, how are these outsourced arrangements controlled? **Emerson outsources casting and machining of the housing, yoke, piston, & end plates. They also outsource manufacturing of the spring, spring cylinder, spring cylinder caps, and power cylinder. Controlled through qualification of suppliers, supplier audits, first article inspection, first production lot approval, & incoming inspection. First article inspection is for 2 pieces, first production lot approval requires 100% inspection. Normal incoming inspection is to standard ANSI Z1.4 AQL of 0.4.**			
Comments:			

4.0 Quality Management System (Continued)	**In Use Y / N**	**Effective Y / N**	**N/A**
4.2 Documentation Requirements		**Rating:**	**S**
Does the QMS include:			
• documented statements of a quality policy and quality objectives?	**Y**	**Y**	
• a quality manual?	**Y**	**Y**	
• documented procedures and work instructions appropriate to the complexity of the organization?	**Y**	**Y**	
• a document control procedure that ensures:			
o documents are approved prior to issue?	**Y**	**Y**	
o documents are updated and re-approved as necessary?	**Y**	**Y**	
o changes and current revision status are identified?	**Y**	**Y**	
o relevant versions of documents are available at points of use?	**Y**	**Y**	
o documents remain legible and identifiable?	**Y**	**Y**	
o external documents are identified and controlled?	**Y**	**Y**	
o obsolete documents are prevented from use?	**Y**	**Y**	
• a documented control of records procedure that defines the storage, protection, retrieval, retention time, and disposition of records?	**Y**	**Y**	
o What are typical retention periods for critical records? **MTR's are held permanently, other critical records are maintained for 5 years.**			
Were documents and records requested during this assessment readily accessible and legible?	**Y**	**Y**	
Is there a 'Master list' of documents?	**Y**	**Y**	
Is it current?	**Y**	**Y**	
How is it controlled? **Controlled by revision number and date.**			

Comments: **Reviewed the following work instructions for currency against the Master Document List:**
WI-OP-13 Rev 01 3/9/11 - G Power Module assembly
WI-OP-21 Rev 01 3/19/09 - CBA 300 Bettis sub-assembly
Both are the current revision.

5.0 Management Responsibility	In Use Y / N	Effective Y / N	N/A
5.0 Management Responsibility		**Rating:**	**S**
5.1 Management Commitment			
Does management demonstrate commitment to the QMS through: • communicating the importance of meeting customer and statutory / regulatory requirements? • ensuring quality objectives are established? • ensuring resources are available? How is this accomplished? **Through annual planning for quality and growth rate through Emerson corporate, quarterly plant meetings with employees to discuss quality objectives and accomplishments, and weekly meeting with plant leaders.**	 **Y** **Y** **Y**	 **Y** **Y** **Y**	
5.2 Customer Focus			
Does management ensure customer requirements are determined and met? How is this accomplished? **This plant produces primarily standard product to an Emerson product code. Special requirements for testing, coating, etc., included in the customer purchase order are relayed to operations through the work order system.**	**Y**	**Y**	
5.3 Quality Policy			
Is the Quality policy statement: • appropriate to the purpose of the organization? • communicated and understood within the organization? • reviewed for continuing suitability? Does the Quality Policy: • include commitment to comply with requirements and continually improve the effectiveness of the QMS? • provide a framework for establishing and reviewing quality objectives?	 **Y** **Y** **Y** **Y** **Y**	 **Y** **Y** **Y** **Y** **Y**	
5.4 Planning			
Has Management established a quality plan and measurable quality objectives for the organization? What are the objectives? **New sand blasting booth installed, expand to G7 production at Wuqing Plant, move production from #2 building to #1 building, OTD of 85%, Inventory turn over of 8.3 turns per year, cost of quality of 0.03%, delivery days late of 10, personnel accidents of 0.**	**Y**	**Y**	
5.5 Responsibility, Authority, and Communication		**Rating:**	**S**

Has management defined and communicated organizational responsibilities and authorities?	**Y**	**Y**	
Has a Management Representative been appointed?	**Y**	**Y**	
Is the Management Representative a member of management?	**Y**	**Y**	
Does the Management Representative report to management on the performance of the QMS?	**Y**	**Y**	
Comments:			

5.0 Management Responsibility (Continued)	**In Use Y / N**	**Effective Y / N**	**N/A**
5.6 Management Review		**Rating:**	**S**
Are management review meetings held?	**Y**	**Y**	
Where are the 'intervals' defined? **Defined in the Quality Manual as once per year.**			
Who attends? **Vice President of Asia-Pacific Valve Automation, and all relavent department heads within Wuqing Plant.**			
Does the review inputs include:			
• results of audits?	**Y**	**Y**	
• customer feedback?	**Y**	**Y**	
• process performance and product conformity?	**Y**	**Y**	
• status of preventive and corrective actions?	**Y**	**Y**	
• follow-up actions from previous management reviews?	**Y**	**Y**	
• changes that could affect the QMS?	**Y**	**Y**	
• recommendations for improvement?	**Y**	**Y**	
Do the review outputs include decisions and actions related to:			
• improvement of the effectiveness of the QMS?	**Y**	**Y**	
• improvement of product related to customer requirements?	**Y**	**Y**	
• resources needed?	**Y**	**Y**	
Are records / minutes of these reviews kept?	**Y**	**Y**	
Where are they filed/stored? **Stored in the plant computer system.**			
Date of last review? **8/20/2010**			
Comments:			

6.0 Resource Management	**In Use Y / N**	**Effective Y / N**	**N/A**
6.1 Provision of Resources		**Rating:**	**S**
6.2 Human Resources			
Does management ensure personnel performing work affecting product quality are competent on the basis of appropriate education, training, skills, and experience?	**Y**	**Y**	
Has management:			
• determined the necessary competence for personnel through training reviews or other means?	**Y**	**Y**	
• provided training or taken other actions to satisfy these needs?	**Y**	**Y**	
• evaluated the effectiveness of these actions?	**Y**	**Y**	
• maintained records of education, training, skills, and experience?	**Y**	**Y**	
How? **Maintain a training matrix of required training for all positions and a database of each person's training. Inspector &/or supervisor signs off on operator qualification following training. Flow chart lays out the process. Reviewed the training records of the following individuals:** **Xing Jun Assembler CBA & CBB area** **Gong Peng Section IX Qualified Welder** **Wu Jing Guo PED Tester**			
6.3 Infrastructure			
Has management provided and maintained the infrastructure needed to achieve conformity to product requirements?	**Y**	**Y**	
Are the following appropriate to the needs of the organization:			
• buildings, workspace, and utilities?	**Y**	**Y**	
• process equipment?	**Y**	**Y**	
• equipment maintenance systems?	**Y**	**Y**	
• support services (transport, communication, etc.)	**Y**	**Y**	
Describe equipment maintenance systems in use (preventive / predictive maintenance, etc.). **Have preventive maintenance system in place. Operators have a daily check list for machines within their area of responsibility. Maintenance is performed by an outside company with employees resident in the Wuqing plant.**			
6.4 Work Environment			
Has management provided an appropriate work environment needed to achieve conformity to product requirements?	**Y**	**Y**	
List any outstanding features of the work environment (positive or negative).			
Comments:			

7.0 Product Realization	In Use Y / N	Effective Y / N	N/A
7.0 Product Realization		**Rating:**	**S**
7.1 Planning of Product Realization			
In planning product realization has management:			
• determined quality objectives and requirements for the product?	**Y**	**Y**	
• provided resources appropriate to meet these requirements?	**Y**	**Y**	
• required verification, validation, monitoring, inspection, and test activities appropriate to the product?	**Y**	**Y**	
• developed records needed to provide evidence that the realization processes and product meet requirements?	**Y**	**Y**	
Comments:			
7.2 Customer-Related Processes			
Has the organization determined:			
• requirements are specified by the customer, including delivery requirements?	**Y**	**Y**	
• requirements not specified by the customer but necessary for specified or intended use?	**Y**	**Y**	
• statutory and regulatory requirements related to the product?	**Y**	**Y**	
• differences between standard product offering and customer requirements are resolved?	**Y**	**Y**	
• it has the ability or meets defined requirements?	**Y**	**Y**	
Where requirements are changed does the organization have a process to ensure the relevant documents are changed and relevant people are notified?	**Y**	**Y**	
How? **Managed through the ERP system. After Wuqing customer service acknowledges order change to the customer, the planner enters a changed manufacturing order to the ERP system that triggers change to the work order on the shop floor.**			
What are the records of contract review? **Maintained in sales files in Waller, TX for MRC orders.**			
Does the organization have an effective arrangement for communicating with the customer in relation to:			
• product information?	**Y**	**Y**	
• enquiries, contracts, and order handling (including amendments)?	**Y**	**Y**	
• customer feedback, including customer complaints?	**Y**	**Y**	
What is the inventory philosophy of the supplier? (Make to stock, make to order, combination) **Make to order only.**			
Is there a forecasting system in place?	**Y**	**Y**	

What are the inventory goals (in days of production) for:

- raw material? **Small components are ordered to stock (goal is 9 inventory turns per year). Major components that may be in shortage, or have long lead times may also be ordered to stock. Other major components are ordered from raw material suppliers when Wuqing receives order from their customer.**
- finished product? **N/A**

Comments:

7.0 Product Realization (Continued)	**In Use Y / N**	**Effective Y / N**	**N/A**
7.3 Design and Development		**Rating:**	**N/A**
7.3.1 Design and Development Planning			
Does the organization plan and control the design and development of product?			
7.3.2 Design and Development Inputs			
Are design inputs determined and recorded? Do design inputs include: • functional and performance requirements? • applicable specification, statutory, and regulatory requirements? Are inputs reviewed for adequacy?			
7.3.3 Design and Development Outputs			
Are design outputs verified against inputs, and approved prior to release?			
7.3.4 Design and Development Review			
At suitable stages, does the organization hold systematic reviews of design and development according to planned arrangements? Are records available?			
7.3.5 Design and Development Verification			
Are designs verified to ensure design outputs have met input requirements? Are records available?			
7.3.6 Design and Development Validation			
How is validation performed to ensure product is capable of meeting requirements?			
7.3.7 Control of Design and Development Changes			
Are design changes: • identified • documented • reviewed • approved before implementation?			
Comments:			

7.0 Product Realization (Continued)	**In Use Y / N**	**Effective Y / N**	**N/A**
7.4 Purchasing		**Rating:**	**S**
7.4.1 Purchasing Process			
Does the organization have a process in place to ensure purchased product conforms to specified requirements?	**Y**	**Y**	
• Are subcontractors evaluated based on their ability to meet subcontract requirements?	**Y**	**Y**	
• How are approved subcontractors identified? **On Qualified Supplier List - maintained on the computer system as a live document.**			
• Are all purchasers informed of approved subcontractors?	**Y**	**Y**	
Are quality records maintained for acceptable subcontractors?	**Y**	**Y**	
Are available records:			
• up to date?	**Y**	**Y**	
• complete?	**Y**	**Y**	
• adhere to procedure(s)?	**Y**	**Y**	
Comments:			
7.4.2 Purchasing Information			
Do purchasing documents clearly describe the item(s) ordered by:			
• type, class, grade, etc.?	**Y**	**Y**	
• identification of specifications and other technical data?	**Y**	**Y**	
• title, number, and issue of quality-system standard to be applied?	**Y**	**Y**	
Are purchasing documents reviewed (where required) and approved prior to release?	**Y**	**Y**	
Reviewed the following purchase orders for conformance to requirements:			

PO#	Material	Date
110701	**G2 Housing**	**8/29/11**
110773	**G7 Spring Cylinder**	**9/8/11**
110707	**G1 Spring Cylinder**	**8/22/11**

7.4.3 Verification of Purchased Product			
Does the organization verify purchased product at the supplier's premises?	**N**		
Are verification arrangements and method of product release stated in the purchasing documents?	**N**		
Do customers verify purchased product at the organization's premises?	**Y**	**Y**	
Are verification arrangements and method of product release stated in the purchasing documents?	**Y**	**Y**	
Comments:			

7.0 Product Realization (Continued)	In Use Y / N	Effective Y / N	N/A
7.5 Production and Service Provision		Rating:	S
7.5.1 Control of Production			
Does the organization have a production planning process in place that directly ties customer orders and requirements to production requirements?	Y	Y	
Does the organization have a process in place that describes to production personnel:			
• the product and quantity to produce?	Y	Y	
• the specifications or drawings applicable to the product?	Y	Y	
• appropriate processing steps and material movement steps?	Y	Y	
• measurement steps and acceptance criteria?	Y	Y	
Describe the nature of this process (travelers, work orders, production schedule, etc.). **Managed through manufacturing orders that indicate the order of production, materials required, inspection steps & any special requirements. ERP system has a material requirements planning (MRP) component that breaks down a bill of material and informs buys when material is needed. Have monthly and daily production planning meetings to review status of orders and expedite as needed.**			

Reviewed the following work orders:

WO #	Material
116884	**CBB actuator - low temperature**

7.5.2 Validation of Processes for Production			
Does the organization validate any processes for production where the resulting output cannot be verified by subsequent monitoring or measurement (formerly special processes under ISO 9001-1994)?	Y	Y	
Does the validation include:			
• approval of equipment and qualification of personnel?	Y	Y	
• use of specific procedures?	Y	Y	
• requirements for records?	Y	Y	
List processes the organization considers under this provision. **Only welding. Managed through welder qualification, WPS & PQR. Nondestructive testing is available upon customer request.**			

Comments:

7.0 Product Realization (Continued)	**In Use Y / N**	**Effective Y / N**	**N/A**
7.5.3 Identification and Traceability		**Rating:**	**S**
Does the organization identify the product by suitable means throughout production? How? **Emboss or stamp heat number (or serial number traceable to heat number) on major components. If stated on the customer purchase order, traceability on all components can be maintained.**	**Y**	**Y**	
Does the organization identify the product status with respect to monitoring and measurement requirements? How? **Managed through the manufacturing order process.**	**Y**	**Y**	
Does the organization control and record the unique identification and traceability of the product and maintain these records? How? **Maintain through the serial number in permanent records.**	**Y**	**Y**	

Observed traceability on the following materials:

Material	Heat #	PO#	Date	Reviewed MTR
G2 Housing	**1G31**	**110701**	**8/29/11**	**Y**
G4 Power Cylinder	**10CD2551**	**110708**	**8/15/11**	**Y**
G7 Spring Cylinder	**92S2H350**	**110773**	**9/8/11**	**Y**
G1 Spring Cylinder	**102C06D70**	**110707**	**8/22/11**	**Y**
				Y
				Y

Comments:

7.0 Product Realization (Continued)	**In Use Y / N**	**Effective Y / N**	**N/A**
7.5.4 Customer Property		**Rating:**	**N/A**
Does the organization manage any customer-supplied material? (if not applicable, skip this section)			
If yes, is there a procedure for: • receipt? • verification? • storage? • maintenance? of customer supplied product.			
• Is loss or damage to customer supplied product recorded and reported to the customer?			
Are records up-to-date and complete? Do they adhere to procedure(s)?			
Comments:			
7.5.5 Preservation of Product		**Rating:**	**S**
Does the organization have appropriate processes and facilities for storage, preservation, and dispatch of raw materials? Does the organization preserve the conformity of the product during: • internal processing? • warehousing/storage? Are there shelf-life considerations? How are they managed? **Store "O" rings in UV blocking envelopes until needed.**	**Y** **Y** **Y** **Y**	**Y** **Y** **Y** **Y**	
Is material appropriately identified in finished product storage to facilitate correct shipment to customers? Is material appropriately packaged to prevent damage during shipment?	**Y** **Y**	**Y** **Y**	
Comments:			

7.0 Product Realization (Continued)	**In Use Y / N**	**Effective Y / N**	**N/A**
7.6 Control of Monitoring and Measuring Devices		**Rating:**	**S**
Does the organization have a system in place to determine the monitoring and measurement to be undertaken and the devices needed to provide evidence of conformity of the product?	**Y**	**Y**	
Is measuring equipment: • calibrated or verified at specified intervals, or prior to use, against standards traceable to national or international standards? o Where no such standards exist, is the basis for calibration recorded? • adjusted or re-adjusted as necessary by qualified personnel? • identified to enable calibration status to be determined? • safeguarded from adjustment that would invalidate measurement results? • protected from damage? Are records of calibration maintained? Does the organization have a process in place to identify, isolate and retest material when measuring equipment is found not to perform to requirements?	**Y** **Y** **Y** **Y** **Y** **Y** **Y**	**Y** **Y** **Y** **Y** **Y** **Y** **Y**	**N/A**

Comments:

Item	S/N #	Date Cal.	Due Date
Deep throat micrometer 0-1"	**VAD-019**	**6/21/11**	**6/20/12**
Test stand pressure gauge	**VAD-Q051**	**2/25/11**	**2/24/12**

Comments:

8.0 Measurement, Analysis, and Improvement	**In Use Y / N**	**Effective Y / N**	**N/A**
8.1 Monitoring and Measurement of Customer Satisfaction		**Rating:**	**S**
Does the organization have a method in place to monitor information relating to customer satisfaction?	**Y**	**Y**	
Comments: **Conduct a customer survey twice per year with direct customers. It is part of the quality objectives for the year.**			
8.2 Monitoring and Measurement - Inspection			
8.2.1 Monitoring and Measurement – Receiving Inspection		**Rating:**	**S**
Is PMI performed where appropriate? • Is there a procedure? • Are people trained in the procedure? • What type equipment (brand & model)? What methodology is used to select material for testing (AQL, percentage, random, etc.)?			**N/A**
How are incoming goods controlled to prevent their use prior to verification? **Held in receiving area until inspected.**			
Is acceptance criteria clearly defined?	**Y**	**Y**	
Who is responsible for receiving inspection? **QC Inspectors conduct.**			
Are records of Inspection and Test kept? Do they show • passed items? • rejected items?	**Y** **Y** **Y**	**Y** **Y** **Y**	
Is there a 'positive recall' system?	**N**		**N/A**
Is supplier performance recorded?	**Y**	**Y**	
Comments:			
8.2.2 Monitoring and Measurement – In-Process Inspection		**Rating:**	**S**
Are there documented procedures for in-process inspection and testing?	**Y**	**Y**	
Is acceptance criteria clearly defined?	**Y**	**Y**	
Who is responsible for in-process inspection? **Conducted by the assemblers with random spot check by roving inspectors. Inspections are recorded on the manufacturing order.**			
How is product held until tests / inspection results are cleared? **Tested as produced.**			
Are records kept? Do they show: • passed items? • rejected items?	**Y** **Y** **Y**	**Y** **Y** **Y**	
Comments:			

8.0 Measurement, Analysis, and Improvement (Continued)	**In Use Y / N**	**Effective Y / N**	**N/A**
8.2.3 Monitoring and Measurement – Final Inspection		**Rating:**	**S**
Are there documented procedures for final inspection?	**Y**	**Y**	
Is acceptance criteria clearly defined?	**Y**	**Y**	
Who is responsible for final inspection? **Conducted by QC inspectors according to an inspection plan developed from the customer order.**			
Are records kept? Do they show • passed items? • rejected items?	**Y** **Y** **Y**	**Y** **Y** **Y**	
Do records show evidence of conformance to the specified requirements?	**Y**	**Y**	
How is product held until all tests / inspections results are cleared? **Conduct final inspeciton in the packing area. Inspectors must sign off on material before it can be released to packers.**			
Comments:			
8.3 Internal Audit		**Rating:**	**S**
Is there a procedure for Quality Audits? Does it cover: • planning? • implementation? • recording? • follow-up? • effectiveness (management review)?	**Y** **Y** **Y** **Y** **Y** **Y**	**Y** **Y** **Y** **Y** **Y** **Y**	
Are internal quality audits carried out?	**Y**	**Y**	
Are the auditor/s trained? • Do records show this?	**Y** **Y**	**Y** **Y**	
Is there an audit schedule? • Who prepared it? **Senior Quality Engineer** • Is it up to date?	**Y** **Y**	**Y** **Y**	
Is there a report for each audit?	**Y**	**Y**	
Do the records show timely corrective action for deficiencies found during the audit?	**Y**	**Y**	
Comments: **Reviewed audit of the Purchasing Department and the NCR associated with using the Shortage List to order material instead of the Puschase Order system. Opened 8/31/11. Target completion by 10/1/11.**			

8.0 Measurement, Analysis, and Improvement (Continued)	**In Use Y / N**	**Effective Y / N**	**N/A**
8.4 Control of Nonconforming Product		**Rating:**	**S**
How does the company prevent non-conforming product from being released?			
Are there documented procedures?	**Y**	**Y**	
Does control cover: • documentation? • evaluation? • segregation? • disposal? • notification of concerned functions?	 **Y** **Y** **Y** **Y** **Y**	 **Y** **Y** **Y** **Y** **Y**	
Who is responsible for the review of nonconforming product? **QC reviews** Who has the authority for the disposal of nonconforming product? **Manufacturing Engineer and QC** Where are these responsibilities defined? **Nonconformance Product Control procedure QP-2006**			
Does the disposition of nonconforming product cover: • rework? • concession (with customer's approval)? • re-grading? • reject / scrap? Are records kept of all these?	 **Y** **Y** **Y** **Y** **Y**	 **Y** **Y** **Y** **Y** **Y**	
Where nonconforming product has been released with concession, was the actual condition of product recorded? How? **Must be documented through e-mail from the customer stored in customer complaint file (maintained by month of occurance).**	**Y**	**Y**	
Is reworked product re-inspected in accordance with the quality plan and/or documented procedures?	**Y**	**Y**	
Comments:			

8.0 Measurement, Analysis, and Improvement (Continued)	In Use Y / N	Effective Y / N	N/A
8.5 Analysis of Data		Rating:	S
Does the organization determine, collect, and analyze appropriate data to demonstrate the effectiveness of the QMS? • If yes, give examples of how this is done. **Done through analysis of customer complaints, in-process quality performance, cost of quality, and others.**	Y	Y	
8.5.1 Improvement		Rating:	S
Does the organization show evidence of continually improving the effectiveness of the QMS through use of the quality policy, quality objectives, audit results, analysis of data, corrective and preventive actions, and management review? • If yes, give examples of how this is done. **Develop proposals through the Management Review for Continuous Improvement proposals each year.**	Y	Y	
8.5.2 Corrective Action			
Do the procedures cover:			
• the effective handling of customer complaints?	Y	Y	
• the effective reporting of product nonconformities?	Y	Y	
• investigation of the cause of nonconformities in:			
▪ product?	Y	Y	
▪ process?	Y	Y	
▪ quality system?	Y	Y	
• recording the results of these investigations?	Y	Y	
• determination of the corrective action necessary to eliminate the cause of these problems?	Y	Y	
• application of controls to ensure that corrective action is taken and is effective?	Y	Y	
• submitting relevant information for management review?	Y	Y	
8.5.3 Preventive Action			
Do the procedures cover:			
• gathering information to detect, analyze and eliminate potential causes of nonconformities?	Y	Y	
• determination of the steps needed to deal with any problems requiring preventive action?	Y	Y	
• initiation of preventive action?	Y	Y	
• controls to ensure that it is effective?	Y	Y	
• submitting relevant information for management review?	Y	Y	
Comments: **Reviewed CAR from MRC associated with mixed packing lists between pallets. Opened 2/18/11 - closed 3/18/11. No recurrence of the issue.**			

RATINGS

"O" Outstanding – Systems in Place with Evidence of Continuous Improvement

"S" Satisfactory – Systems in Place
Minor Improvement Needed or
No Evidence of Continuous Improvement

"I" Improvement Needed –

- **Systems in Place with Major Improvements Needed**
- **Systems in Place, but Not Being Fully Implemented**
- **No Systems in Place – No Commitment to Improvement**