Any procedure changes within this manual will result in an update of the complete manual revision date and number.

This manual is a controlled document. No changes or revisions to be made unless submitted by Johnson Controls Inc. Supplier Quality.

Copies of this manual may be obtained by notifying Johnson Controls Inc. Supplier Quality.

Supplier Quality or may be viewed on website www.JohnsonControls.com
Supplier Quality Manual Tab

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1 Purpose and Scope

The purpose of this document is to communicate the supplier quality expectations of Johnson Controls-Power Solutions (JCI-PS). The quality of supplied direct parts, material, services, tooling and equipment, etc. is a direct reflection on the supplier’s management of quality systems, product development cycle, manufacturing processes, capital expenditures and maintenance, customer focus, organizational leadership and continuous improvement efforts.

This standard applies to all direct production and select critical indirect production and service suppliers to JCI-PS worldwide locations.

Suppliers are expected to comply with all sections of the ISO/TS standard. Any ISO/TS standard requirement section not referenced in this document indicate there are no additional requirements from Johnson Controls, Inc. JCI-PS Procurement and Supplier Quality will provide additional clarification or direction, as needed.

2 References

References cited by this document are the latest versions available at the date of publication. When the cited document is revised after the date of publication, the newer version shall apply.

ISO 9001:2008: “Quality management systems- Requirements”
ISO/IEC 17025: 2005: “General requirements for competence of testing and calibration laboratories”
AIAG PPAP Manual 4th Edition
German Association of the Automotive Industry (VDA)
ISO/TS 16949 rules for becoming certified

3 Terms and Definitions

Critical Indirect – Any material not listed on the Bill of Material (BOM), but is critical for the manufacture process of components or a final product.

Direct Materials – Materials used by JCI-PS plants to manufacture components or a final product and are included in the BOM.

ECR – Engineering Change Request

ECO – Engineering Change Order

Statement of Review and Acceptance (SRA) – Form used to review and confirm that a supplier can meet a material specification or drawing.
**Supplier Non-Conformance Report (SNR)** – Report used when a JCI-PS Plant location receives material out of specification from a supplier.

**8D Report** – 8D methodology uses a structured eight step approach to problem solving. The objective is to face the problem and discover the weaknesses in the manufacturing/management systems that permitted the problem to occur in the first place. The output of an 8D process is an 8D report.

**PSW** – Part Submission Warrant - This is the form that summarizes the whole PPAP package. This form shows the reason for submission (design change, annual revalidation, etc.) and the level of documents submitted to the customer.

**Production Part Approval Process (PPAP)** – Evidence that all customer engineering design record and specification requirements are properly understood by the supplier and that the manufacturing process has the potential to produce product consistently meeting these requirements during an actual production run at the quoted production rate.

**SAS** – Supplier Assessment Survey a process to determine if a new or existing direct material suppliers meet the minimum quality system requirements established by Johnson Controls.

**SQE** – Supplier Quality Engineer

### 4 Quality Management System

#### General Requirements

- Suppliers that have not achieved certification to TS16949 must have at a minimum achieved certification to ISO9001 and a formal plan to demonstrate compliance to TS16949. Suppliers are required to submit updated copies of all certifications (ISO9001, TS16949, and ISO14001) on an annual basis to designated SQE.
- SQE should be contacted if your organization does not meet the above requirement.
- Certification requirements are for all central, technical and manufacturing sites.
- All renewal certificates must be submitted before the expiration date of the certificate. Failure to submit certificates or valid transition timelines will have a negative impact on the supplier’s scorecard and may jeopardize future business.
- Johnson controls may verify the suppliers manufacturing location for compliance to these standards by performing an audit by a supplier quality representative.
- The TS 16949 core elements are expected to be incorporated in the quality system. The core elements of APQP, PPAP, FMEA, MSA, & SPC (blue books) are available at AIAG.org. (3.6.3)
- JCI-PS may assist in supplier development/ improvement, if required. (JCI-PS)
- JCI-PS and its customers may audit the quality system, JCI-PS product, and process of the supplier with agreed advance notice. (JCI-PS)
- JCI-PS Global Supplier Quality Organization may support regionally, as required. (JCI-PS)

#### 4.2.4 Control of Records

JCI suppliers shall maintain quality records such that they remain retrievable and legible upon request by JCI and subsidiaries. JCI requires record retention duration for “life of program”. Records related to nonconforming product for trend analysis and problem identification shall also be maintained. This requirement also applies to any supplier’s sub-supplier. Additional record retention requirements can be referenced per AIAG or ISO 9001 and/or ISO/TS16949 (latest editions).
5 Management Responsibility
Management Responsibility - Supplier management at highest levels shall demonstrate involvement and support for process efficiency, customer focus, quality policy, planning, defining responsibility, authority and communication and management review. (5.1, 5.2, 5.3, 5.4, 5.5, 5.6)

6 Resource Management

6.1 Provision of Resources
The supplier shall determine and provide the necessary resources to maintain and continually improve the system of quality management and also customer satisfaction by meeting customer requirements.

6.2 Human Resources

6.2.2.2 Training
Effective training and development system is established. Training records are available and tracked for all key processes affecting quality. (6.2.2.2).
All employees affecting quality are included, including design engineering.

6.2.2.3 Training on the Job
The supplier must ensure that every person in all levels of the company, which may affect product quality, has professional training and receive adequate training to function performance. Including direct and indirect staff.

The supplier shall:
• Provide training to perform the function
• Evaluate the effectiveness of these trainings.
• Implement a system that ensures staff retraining at a frequency determined. Employees who remain away for more than three months of the job must be retrained or recertified.
• Provide “on-the-job” training for any new job or modified process that affects product quality.
• Keep records of internal / external trainings, education and job retraining or recertification.
• Have a process to encourage employees to achieve quality objectives and to make continual improvements.
• Effective training and development system is established. Training records are available for all key processes.

6.3 Infrastructure
The supplier shall have an infrastructure that ensures compliance with the requirements of the product. The plant layout should be optimized in order to avoid excessive handling and transport, facilitating the material flow.

6.3.1 Plant, facility and equipment planning
Lean Manufacturing principles should be understood with evidence of implementation. If not fully implemented, a plan for managing, training and implementation is in place and implementation tracked with progress evident. Examples of Lean: (5S, Value Stream Mapping, Error Proofing, Quick Change-Over, Kan Ban, Kaizen, Total Productive Maintenance, Visual Management). (6.3.1)
6.3.2 Contingency plans

Contingency plans shall be in place to ensure JCI-PS deliveries and other requirements are met despite emergencies that arise such as utility interruptions, labor shortages, key equipment failure and field returns. (6.3.2)

6.4 Work Environment

6.4.1 Personnel safety to achieve conformity to product requirements

The use of Personal Protective Equipment is defined and in place. (6.4.1)

6.4.2 Cleanliness of Premises

Supplier is expected to follow 5S principles. The supplier’s manufacturing areas are well lit, free of clutter, clean and safety practices are evident that prevent injury or discomfort. (6.4.2)

7 Product Realization

7.1 Planning of product realization

No Johnson Controls, Inc. Customer Specific Requirements for this section.

7.1.2 Acceptance criteria

The expectation for supplier performance is Zero (0) Parts per Million (PPM) (zero defects). Product received into JCI-PS facilities that does not conform to the drawing, specifications and/or agreed upon standards will be counted against a supplier’s PPM record. Quantities will be reported in the units of measure in which they are purchased. This includes, but is not limited to, product, packaging, mixed or miscounts, damage, etc. (7.1.2)

7.1.4 Change Control

Change Management: Supplier requested changes must be approved prior to implementing. A Supplier Engineering Change Request or Temporary Deviation Form must be completed by the supplier and approved by JCI-PS Supplier Quality. (4.2.3.1; 7.1.4)

Any change to design, material, sub-supplier, process, equipment location, tooling inactive for 12 months, etc. (As described in Section 3 of the PPAP manual) will require JCI-PS notification and another PPAP (Submission- Level dependent on change request). A new PPAP with PSW approval from Supplier Quality in writing must be given prior to serial production.

7.2 Customer related processes

7.2.1.1 Customer- designated special characteristics

Special Characteristics (SC’s, CC’s) may be identified on drawings or specifications that depict the minimum characteristics that are assigned for statistical control and capability, poke yoke or 100% inspection, as approved on Control Plan. Symbols and letters may be used, examples: K, *, SC, CC or below, but not limited to your sourced local region:

| ▼ | Designates critical characteristic requiring process performance studies and ongoing monitoring per the Control Plan. Capability Indices > 1.67 or 100% inspection |
7.2.3.1 Customer Communication

Performance Reporting - unless otherwise waived in writing, an accounting with actual data will be provided with lot traceability. This data should be in the form of an electronic spreadsheet showing capability study results, end-of-line test results, inspection results, or for bulk materials - Certificates of Analysis (CoA) that must show results versus JCI-PS specification. An email with lot test data to the JCI-PS Plant Quality department and SQE is to be sent monthly as requested or other agreed upon timeframe, for trend analysis. (7.2.3.1)

Certificates of Analysis - in most cases CoA’s are expected to be sent to JCI-PS Plant with shipment and emailed to: www.PS-Supplier-Quality@jci.com  CoA’s are expected to display data to JCI-PS specification limits as specified on the material specification for most supplied parts unless directed otherwise by the SQE.

Certificate of Analysis (COA) for all raw material used in the manufacturing of a purchased component are required to be kept on file at the supplier and made available to Johnson Controls Inc. upon request. Material certifications are required with each shipment of direct raw materials, such as chemicals and plastic resins. COA must include Johnson Controls specification limits for required significant and critical characteristics identified.

The supplier will have an effective process to cascade customer specific requirements. This includes but limited to their quality system, drawings, specifications, and customer specific requirements (CSR’s) to JCI-PS. These requirements may also require cascading to sub-suppliers. In these cases, the Buyer and Supplier Quality Engineer will review with supplier.

7.3 Design and development planning

7.3.1 Design and development planning

Suppliers shall develop products according to the AIAG Advanced Product Quality Planning (APQP) Process.

AIAG (latest version) Production Part Approval Process (PPAP) and Advance Product Quality Planning (APQP) must be followed and is required for all critical/significant parts and materials prior to serial production and during Program Management Phases, as required. (AIAG PPAP)

The supplier will designate a contact person responsible for determining a cross functional team, establishing the Advance Product Quality Planning (APQP) documents and submitting documentation as required to JCI-PS Launch or change requirements. (AIAG APQP)
7.3.2.2 Manufacturing process design input

Poke-Yoke, Mistake-Proofing or Error Prevention practices, as appropriate, should be evident and reviewed. (3.1.3; 7.3.2.2)

7.3.6.3 Product approval process

Prior to serial production, JCI-PS expects to have an approved Part Submission Warrant (PSW); Level 3 PPAP requirements are the JCI-PS default, but may be amended by JCI-PS Supplier Quality/Development to a different level defined per local requirements after supplier assessment and review. Bulk Material suppliers should follow the Bulk Material Requirements provided by JCI-PS Supplier Quality/Development. A separate PPAP is required for each part or material supplied. (7.3.6.3)

Suppliers are expected to execute the process of qualification and PPAP by their own means, supported by JCI PS.

During Prototype and Pre-Production Program Management Phases, prior to serial production shipments, APQP documents (e.g. – Process Flow Diagram, Design and/or Process Failure Mode and Effects Analysis (D/PFMEA), Controls Plans, Measurement System Analysis (MSA), Inspection Reports, and Capability Studies), Feasibility Analysis, etc. are to be developed. Special characteristics must be identified on the JCI-PS drawing or specification and must be on the supplier’s Process Flow Diagram, FMEAs and Control Plans. (7.3.6.3; 8.2.2.2)

DFMEA is required where supplier is responsible for design. (JCI-PS)

Prototype, Pre-Production trial and initial production run after PPAP parts or material are expected to receive extra attention, testing, inspection and containment. These parts are to be clearly identified on the parts and/or containers as “Prototype” or “Pre-Production”, as well as the quantity, date, JCI-PS Part Number and Description of the part. (7.3.6.3)

The supplier is responsible for packaging the parts/ material in such a fashion as to ensure product integrity and prevent damage upon receipt at JCI-PS and is evaluated at PPAP.

Product identification is to be per the drawing or Component Specification. Package labels, at a minimum, must show JCI-PS Part Number, Description, Lot Number and/or Ship Date, Quantity, and barcode, if requested.

Sub-Suppliers - JCI-PS expects suppliers to utilize the AIAG PPAP Process to document conformance of their purchased component and raw material suppliers (Sub-Suppliers). Sub-suppliers are assessed, approved and ongoing quality monitored. Suppliers will be requested to provide a list of sub-suppliers that are being used as required. (JCI-PS customers)

7.4.

7.4.1 Purchasing Process

Supplier Review and Acceptance (SRA) of drawings/material specifications or Supplier Statement of Work document will be required by JCI-PS Procurement.
Supplier Qualification Process - In conjunction with the Global Supplier Scorecard, suppliers may go through a qualification process to determine their maturity levels in several core competencies including Supplier Assessment Survey, Process Sign-Off, Global Supplier Manual, PPAP, Non-conformance handling, Problem Solving and Cost Recovery expectations. (7.4.1)

Sub-Suppliers - JCI-PS expects suppliers to utilize the AIAG PPAP Process to document conformance of their purchased component and raw material suppliers (Sub-Suppliers). Sub-suppliers are assessed, approved and ongoing quality monitored. (7.4.1)

7.4.1.2 Supplier quality management system development

JCI-PS may conduct a Supplier Assessment Survey (SAS) and/or request a self-assessment. The SAS will assess the supplier’s documentation and processes to ensure JCI-PS expectations are being met. JCI-PS may schedule audits depending on performance. (7.4.1.2)

7.4.1.3 Customer Approved Sources

Where specified by the JCI PS Contract (e.g. customer engineering drawing, specification), the supplier shall purchase products, raw materials or services from approved sources.

The use of customer-designated sources, including tool/gauge suppliers, does not relieve the supplier of the responsibility for ensuring the quality of purchased products.

7.4.3.1 Incoming product conformity to requirements

Adequate controls and inspections and storage are in place for incoming goods. (7.4.3.1)

7.4.3.2 Supplier Monitoring

Supplier defective part PPM will be tracked and evaluated for continued or new business recommendations. If the supplier notifies JCI-PS of defective product sent, but prior to use in the JCI-PS process, and is contained, the PPM found will not be counted against the supplier.

The supplier is to monitor performance of their manufacturing processes (7.4.3.2)

Global Supplier Scorecard (GSS) - JCI-PS will track performance of suppliers in several categories. Evaluations are made for considerations for global expansion, volume considerations, etc., based on GSS scores. Categories are in:

- Quality
- Commercial
- Supply Chain Management
- Service and General Expectations
- Social and Environmental Sustainability

Delivery Performance - Parts/ materials are expected to be received at JCI-PS 100% on-time and at ordered quantities, per JCI authorization on the purchase order or contractual agreement. Use of premium freight should be minimized and tracked.

7.5.3 Identification and traceability

Product identification is to be per the drawing or Component Specification. Package labels, at a minimum, must show JCI-PS Part Number, Description, Lot Number and/or Ship Date, Quantity, and barcode, if requested. (7.5.3)
All product is to be traceable from incoming to delivery at JCI-PS (7.5.3)

7.5.5 Preservation of product

The supplier is responsible for packaging the parts/ material in such a fashion as to ensure product integrity and prevent damage upon receipt at JCI-PS and is evaluated at PPAP or PSO. (7.5.5)

JC-PS owned tooling must be adequately identified. (JCI-PS)

7.6.1 Measurement system analysis

The supplier shall conduct statistical studies to analyze the variation present in each type of measurement system and means of control. This requirement must be applied to all measurement systems cited in the control plan. JCI-PS adopts as reference the AIAG - MSA Manual.

MSA Study including Gage Repeatability and Reproducibility (GRR) must adhere to AIAG rules- <= 10% is acceptable, >10 and <30% is marginal, requiring discussion and action, > 30% not acceptable. (7.6.1)

Sample sizes for variable data should be 100 parts minimum with control chart; for attribute data sample size should be 100 parts minimum. (AIAG Core Tools)

All inspection, measuring gages, test equipment, fixtures, etc., for product and key processes are to be calibrated to NIST (or national equivalent) standards.

7.6.2 Calibration/verification records

All inspection, measuring gages, test equipment, fixtures, etc., for product and key processes are to be calibrated to NIST (or national equivalent) standards (7.6.2)

7.6.3 Laboratory Requirements:

Internal Lab- The supplier shall have conditions to perform tests, inspection or calibration services and the laboratory must have a written scope which includes the activities to perform. Must have procedures to perform the tests and meet customer specifications, as well as, trained staff to execute the activities.

External Lab- When the supplier cannot conduct tests, inspections and calibration services internally, external laboratories are to be accredited to ISO/IEC 17025 or national equivalent. Use of any non-certified outside lab must have written agreement with JCI-PS.

When there is no qualified laboratory for specific equipment, the calibration service can be done by the equipment manufacturer.

Bulk material testing frequency is usually on specification. If not, full specification to be tested at least annually.

Suppliers are to maintain master samples and production retains, as agreed. (AIAG PPAP)
8 Measurement, Analysis and Improvement

8.1.1 Identification of statistical tools
Statistical Process Control (SPC), Process Capability (Ppk/Cpk) Analysis (The long-term criteria for Capability Indices are > 1.67 for Critical Characteristics and 1.33 or greater for Significant Characteristics), Testing and Inspection are done per an approved Supplier Process Control Plan. Where no JCI-PS characteristics are identified on drawings and/or material specifications the supplier will manage SPC/process capability on critical processes or key product characteristics identified in their management system. (8.1.1; 8.1.2; 8.2.3.1)

8.2 Monitoring and Measurement

8.2.1.1 Layout Inspection and functional testing (Requalification)
The supplier will track customer, sub-supplier and internal quality issues and have a continuous improvement process to improve process capability, return/defect rates, customer complaints, manufacturing costs, delivery, etc. Use of Six Sigma or a similar approach is recommended. (8.2.1.1)

Requalification- all dimensions and tests are to be redone at least annually and at initial PPAP. This frequency is expected to be on the control plan. Submit results to JCI-PS Supplier Quality. 5 total parts and at least 1 part per cavity is recommended for requalification. Specific requirements will be provided by Supplier Quality.

8.2.1.2 Quality Management system audit
Some JCI-PS Plants operate under VDA and TS. In those cases, suppliers who supply specific parts will be informed and will be expected to participate in a combined VDA 6.3 and/or SAS audit.

8.2.2.2 Manufacturing process audit
JCI-PS may conduct a Supplier Assessment Survey (SAS) and/or request a self-assessment. The SAS will assess the supplier’s documentation and processes to ensure JCI-PS expectations are being met. JCI-PS may schedule regular annual audits or longer, depending on performance.

Supplier Process Sign-Off (PSO) may be required prior to PPAP approval or as needed for new/relocation manufacturing facilities. (8.2.2.2)

Suppliers should perform internal quality systems/process audits as required. (8.2.2)

8.3 Control of nonconforming product
If parts/material are found defective at JCI-PS, or field, an SMRR or SNR will be sent to the supplier. This may be in the form of electronic notification or interactive system. Initial response in 24 hours, initial containment in 24 hours, root cause analysis and corrective action plan in 7 days.

Containment at JCI-PS or its customer for defective supplier parts/material is the responsibility of the supplier. The supplier may choose to contain the issue with supplier provided labor. Containment and/or replacement costs incurred by JCI-PS will be charged back to the supplier. These costs may include extra freight, travel costs, line stoppages, rework, sort, scrap, recalls, etc. (JCI-PS)
JCI-PS may require additional inspection or test certification until there is confidence that the problem is resolved. These parts and/or containers will be identified as “certified” with an agreed marking or label. *(JCI-PS)*

If product is to be shipped back to the supplier, the supplier will provide a Returned Material Authorization (RMA) Number, or equivalent and any special return instructions. *(JCI-PS)*

### 8.5 Improvement

#### 8.5.2 Corrective action

Management Quality Review (MQR) - JCI-PS may require an on-site supplier management review of 8D’s or resolution explanation for major, recurring or multiple issues at JCI-PS site. Escalation to the supplier’s highest management levels may be required. This formal process is managed by the JCI-PS Management Quality Review (MQR) process.

<table>
<thead>
<tr>
<th>MQR / New Business Hold Criteria</th>
<th>MQR1</th>
<th>MQR2</th>
<th>MQR3</th>
<th>Business Hold</th>
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<tbody>
<tr>
<td>Chronic documented problems in the area of quality, delivery or logistics, including prototype, pre-production, or production issues.</td>
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<td>Production suspended at Johnson Controls plant due to a supplier’s product quality, parts shortage, or logistical issue.</td>
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<td>Supplier has an unresolved SMRR, DMR, containment issue, or unacceptable response regarding an issue.</td>
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<td>Chronic documented unresolved MQR problems or unacceptable response from the supplier indicating that no progress has been made to resolve similar MQR1 issues at other locations.</td>
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<td>Discovery that a supplier has not notified Johnson Controls personnel and/or PPAP’d for a product / process change (i.e. tool move to different location / sub-supplier, material / part change, process controls changed from the last approved PPAP, etc.)</td>
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<td>Supplier is issued a SNR that is verified to be the responsibility of the supplier. MQR2 is called only when the SNR has been confirmed to be their responsibility, and with agreement from the Supplier Quality Director.</td>
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<tr>
<td>Johnson Controls RPPM or OEM customer disruption due to a supplier’s product quality, parts shortage, or logistical issue.</td>
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### Chronic documented unresolved MQR2 problems or unacceptable response from the supplier indicating that no progress has been made to resolve similar MQR2 issues at other locations.

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### Continued customer dissatisfaction on a supplier's product quality, delivery or logistical issue including a customer mandate to change suppliers to a known capable supplier.

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### Supplier inability or unwillingness to work with JCI to make fundamental quality, delivery or logistical improvements.

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### Excessive / unresolved SNR's at the supplier.

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### Unauthorized tool move, product / process change, etc.

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An MQR3 requires supplier and customer senior management review at JCI Power Solutions Headquarters (unless otherwise specified) for issues that meet the defined MQR3 / New Business Hold criteria. For plants using the JCI SAP Compliant Cockpit Solution, the MQR3 notification will be sent directly out of SAP electronically.

The MQR3 meeting is an executive discussion and the format and agenda is prepared as appropriate.
Additional Johnson Controls, Inc. Specific Requirements

Controlled Shipping Level 1 and 2 (CS1 and CS2) - JCI Specific Requirement

Controlled Shipping- The supplier will be placed in Controlled shipping to protect JCI-PS and customers when non-conformance is found at final customer, stoppage of production lines, and recurrence of same problem with product.

CS1 - The supplier’s quality manager will be notified that they are at Controlled Shipping Level 1 and supplier shall:

- In 24 hours, implement a control area away from the process
- Develop an inspection plan for characteristic
- 100% inspect the affected characteristic.
- Develop and train personnel to the inspection plan
- Create visual standard with acceptance limits
- Submit action plan to JC-PS within 48 hours- include timeline and responsibilities
- All material inspected to be identified with agreed to marking
- Packages sent to JCI-PS must be identified with label for “controlled shipping” advising what characteristic under inspection
- Control area kept in place minimum of 30 days with no defects found
- Supplier to send evidence of training, control area and results to JCI-PS
- All costs associated with this controlled shipping will be paid by the supplier.

CS2 - If level 1 is not effective in containment or there is recurrence of non-conformance, the supplier will be placed in Controlled Shipping Level 2 and both supplier’s quality manager and plant manager or above will be notified.

- In addition to CS1, the supplier will hire a 3rd Party Inspection service approved or designated by JCI-PS for 100% re-inspection, in the supplier’s control area.
- All costs associated with 3rd party to be paid by supplier.
- The control area must be in place for 60 days minimum with no rejects found.

Notification of Certification Body – JCI Specific Requirement

The certification body could be notified in the following situations:

- When the reports of non-compliance sent to the supplier are not answered within an agreed timeline.
- When the deadlines set in the action plan for Controlled Shipping Level 1 are not obeyed.
- When the supplier enters in Controlled Shipping Level 2.

Quick Response Problem Solving – JCI Specific Requirement

When purchased material does not meet JCI-PS requirements (e.g. quality, engineering change level, adherence to test specifications, etc.), or last qualified PPAP, a quality claim is issued by JCI-PS Plants through our quality system. An immediate response is expected from the supplier with the submission of a standard 8D form is required.

JCI expect within 24 hours (from initial complaint)
- Problem description
• Problem understanding and problem solving launch
• Containment actions to secure JCI-PS (customer) (D3)

JCI expect 3D within 2-3 working days (from …)
• Root cause analysis for “Non-Detection”
• Root cause analysis for “Occurrence”
• Definition of actions to remove the root-cause

JCI expect 5D/7D within 7 working days (from …)
• Confirmation of implemented actions
• Confirmation of effectiveness of actions to remove Containment actions

JCI expect 8D within 30 working days (from …)
• Actions to prevent reoccurrence
• Official closure of 8D

An action plan shall be provided including due dates for each improvement/ action. An updated copy of this plan showing progress made shall be sent to the relevant JCI SQE on a weekly basis (or as otherwise agreed), until all items are complete with proven capability of the long-term solution. In the event verification of actions cannot be made with the expected 30 days SQE will review on a case by case basis.

Supplier Material Rejection Report (SMRR) and Supplier Charge Back (SCB)

Supplier Material Rejection Report
Suppliers are notified of nonconforming material through a documented rejection notice, called a Supplier Notification Report (SNR). Nonconforming material is defined as suspect or rejected product that is deemed defective according to the drawing or established quality standards (i.e. customer specifications, inspection requirements, test results, etc.).

The SNR may be automatically generated from a JCI electronic system (CAS/Eval Pro/Other) or provided as an E-mail attachment or hard copy form wherever electronic systems are unavailable.

Supplier Chargeback Communication and Expectations
Similar to the SMRR notification, SCB notices may be automatically generated from JCI Electronic System(s) or provided as an E-mail attachment or hard copy form where electronic systems are unavailable.

Suppliers are expected to respond to an SCB with an RMA number within three working days.
In cases where a supplier disagrees with the Supplier Chargeback, a written response is still required by the specified due date. Disputed Chargebacks shall be escalated to the responsible Procurement representative for assistance with final disposition. All Chargebacks should be targeted for closure within 30 days.

Ethics Policy
The Johnson Controls, Inc. Ethics Policy is expected to be understood and followed by the supply base. This JCI standard policy may vary from contract to contract. This policy can be found at:

The supplier should have their own equivalent Ethics Policy that is documented, reviewed and accepted by all employees.
Hierarchy of Documented Requirements- precedence of JCI-PS documented requirements:

1) Purchase Orders/ Supplier Statements of Work/ Contracts;  
2) Engineering Drawings/ Component Technical Specifications;  

International Material Data System

JCI-PS requires all suppliers to submit materials information as part of the PPAP Qualification Process. JCI-PS utilizes the IMDS to manage material and substance information for all products. The substances report shall be submitted on the IMDS web site (www.mdsystem.com) or otherwise specified by our customer. To approve the PPAP it is necessary to place the MDS ID on PSW. (See AIAG PPAP Section 2.2.1.1 and 2.2.18). For further information call your regional SQE.

Cost of Nonconforming – Specific JCI-PS

All costs due to quality problems detected in our process or in our customer caused by the supplier, when proven, will be transferred to the supplier. The method of payment will be negotiated with the Procurement area of JCI-PS. The cost of non-conformance includes: extra freight, internal or client line stoppages, rework, sort of material, scrap in the process, travel costs, yard operations, recalls, etc.

Environmental

It is expected that all government regulations are met. Suppliers should adopt an environmental management system that is in accordance with ISO 14001, or equivalent.

Safety

Suppliers will provide Safety Data Sheet (SDS) or national equivalent on products, upon request. (JCI-PS)

Supplier Routing Instruction

Where Johnson Controls-Power Solutions is responsible for paying freight charges, a routing instruction will be provided to the supplier. It is the supplier’s responsibility to ensure compliance and availability. Contact your buyer if you have not received a supplier specific routing instruction.

Reference Forms

It is the responsibility of the supplier to utilize the latest revision of any form referenced of this manual. Suppliers should contact the appropriate Johnson Controls Inc. buyer or Supplier Quality to obtain these documents.

Automotive Industry Action Group Manuals (see http://www.aiag.org/)
IMDS Form (International Standard http://www.mdsystem.com/)
Management Quality Review procedure- Upon Request Only
Supplier Assessment Survey (SAS) – A form used to assess a supplier Quality Management System and Capabilities –Provided by the SQE
8D Report – Corrective Action form (HV-LOS-FR-14-01) or workbook – Available upon request

Websites References

http://www.iatfglobaloversight.org – International Automotive Task Force
https://www.vda.de/en/ - German Association of the Automotive Industry (VDA)