Supplier Quality Manual

Green Industrial Supply, Inc.

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Table of Contents

1.0 Vision and Exclusions

Vision

Green Industrial Supply, Inc. is pleased to present our Supplier Quality Manual (SQM). This manual represents our practices, processes and philosophies. All suppliers of product and services to Green Industrial Supply, Inc. must comply with the requirements contained in this manual.

The SQM is intended to be used as a tool to clarify expectations and communications with our supplier base, and to foster continuous improvement. Green Industrial Supply, Inc. expects our suppliers to embrace the contents of this manual and integrate it into their daily operations and product development activity to assure the highest possible product quality.

Our vision includes all of our suppliers implementing and maintaining a quality system that allows them to produce and deliver to Green Industrial Supply, Inc. globally competitive products and services that are clearly seen by our customers as superior in performance and value.

Suppliers are expected to discuss and understand the specific applicability of this SQM with their Green Industrial Supply, Inc. representative in order to make more effective business decisions.

Our suppliers are welcome to use this SQM as an aid in further developing their own Quality Management System (QMS). We are committed to integrating our suppliers into our business processes, and in turn, maximizing the genuine value for all Green Industrial Supply, Inc. customers, employees, suppliers and our communities.

This Supplier Quality Manual is part of that commitment.

This Quality Manual contains processes and policies that have been implemented at Green Industrial Supply, Inc.

This manual pertains to processes and policies relating to: product consolidation, sub-assembly, warehousing and shipping of quality products to John Deere C&F Division and Deere & Company Worldwide.

Exclusions

At this time, Green Industrial Supply, Inc. has 3 (three) exclusions:

7.3 Design and Development
Justification: Green Industrial Supply, Inc. does not design or develop products for our customers.

7.5.2 Validation of processes for production and service provision
Justification: Green Industrial Supply, Inc. does not have any processes to defect deficiencies that become apparent only after the product is in use.

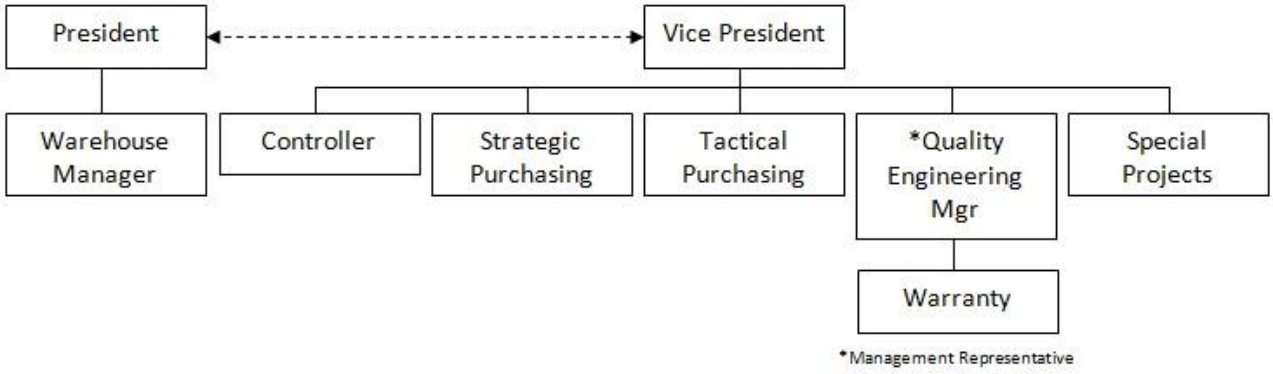
7.6 Control of monitoring and measuring equipment
Justification: Green Industrial Supply, Inc. does not use any equipment to monitor and measure processes for products delivered to the customer.

2.0 Company

Company Overview

Green Industrial Supply, Inc. is an industry leader as a product consolidator, sub-assembler, warehouse and shipper of quality products to John Deere C&F Division and Deere & Company Worldwide.

Company Organizational Chart

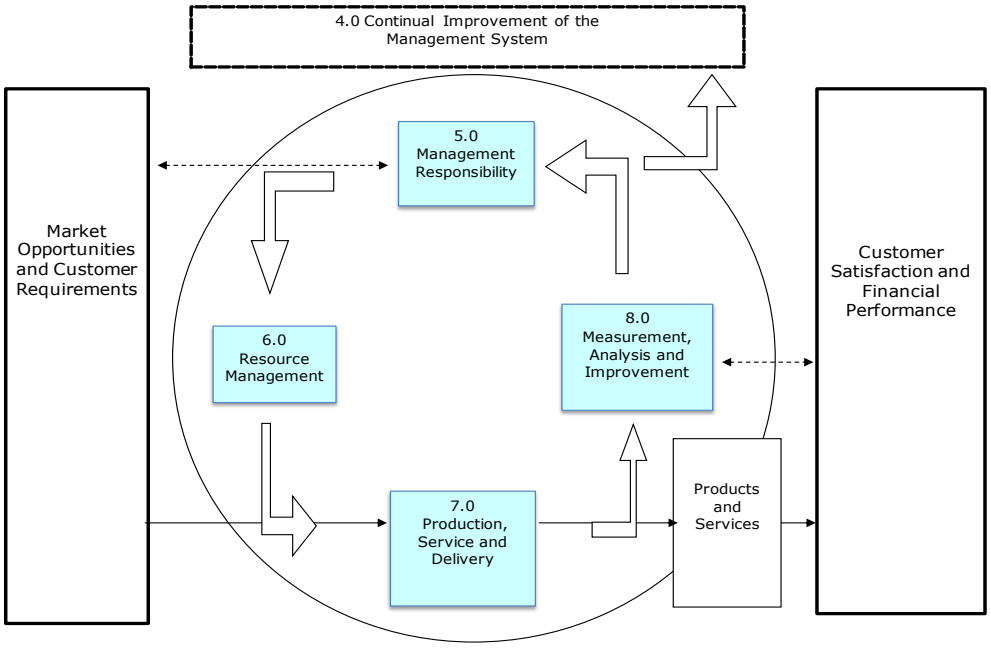


3.0 Terms and Definitions

Throughout this Quality Manual, the term "organization" refers to Green Industrial Supply, Inc.

Quality Management System (QMS) refers to a system that considers the three main components: quality control, quality assurance and quality improvement. Quality management is focused not only on product or service quality, but also the means to achieve it. A QMS, therefore, uses quality assurance and control of processes, as well as products/services to achieve more consistent quality.

Quality Management System Model



4.0 Quality Management System

4.1 General requirements

Green Industrial Supply, Inc. has established, documented, implemented and currently maintains a quality management system.

The organization:

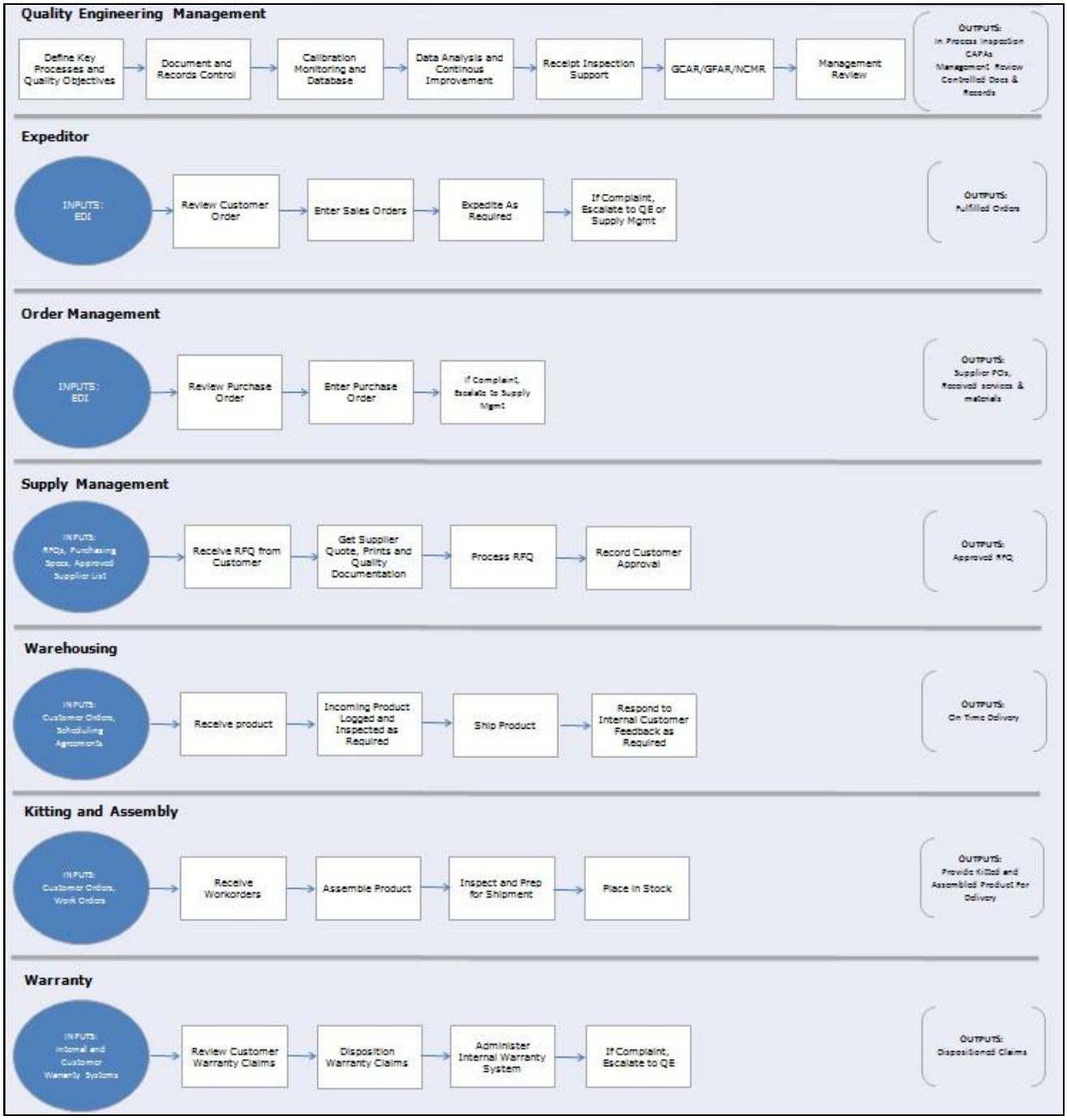
- has determined the processes needed for the quality management system and their application throughout the organization,
- determined the sequence and interaction of these processes,
- determined criteria and methods needed to ensure that both the operation and control of these processes are effective,
- ensures the availability of resources and information necessary to support the operation and monitoring of these processes,
- monitors, measures where applicable, and analyzes these processes, and
- implements actions necessary to achieve planned results and continual improvement of these processes.

The Key Business Processes of the organization are:

- Quality Engineering Management
- Warranty
- Supply Management
- Order Management
- Expediting
- Kitting and Light Assembly
- Warehousing

The following page provides a Process Map showing the sequence and interactions of these processes.

Process Map


Quality Engineering Management
Define Key Processes and Quality Objectives
Document and Records Control
Calibration Monitoring and Database
Data Analysis and Continous Improvement
Receipt Inspection Support
GCAR/GFAR/NCMR
Management Review
OUTPUTS: In Process Inspection CAPAs Management Review Controlled Docs & Records
Expeditor
INPUTS: EDI
Review Customer Order
Enter Sales Orders
Expedite As Required
If Complaint, Escalate to QE or Supply Mgmt
OUTPUTS: Fulfilled Orders
Order Management
INPUTS: EDI
Review Purchase Order
Enter Purchase Order
If Complaint, Escalate to Supply Mgmt
OUTPUTS: Supplier POs, Received services & materials
Supply Management
INPUTS: RFQs, Purchasing Specs, Approved Supplier List
Receive RFQ from Customer
Get Supplier Quote, Prints and Quality Documentation
Process RFQ
Record Customer Approval
OUTPUTS: Approved RFQ
Warehousing
INPUTS: Customer Orders, Scheduling Agreements
Receive product
Incoming Product Logged and Inspected as Required
Ship Product
Respond to Internal Customer Feedback as Required
OUTPUTS: On Time Delivery
Kitting and Assembly
INPUTS: Customer Orders, Work Orders
Receive Workorders
Assemble Product
Inspect and Prep for Shipment
Place in Stock
OUTPUTS: Provide Kitted and Assembled Product for Delivery
Warranty
INPUTS: Internal and Customer Warranty Systems
Review Customer Warranty Claims
Disposition Warranty Claims
Administer Internal Warranty System
If Complaint, Escalate to QE
OUTPUTS: Dispositioned Claims

Key Objectives

Process Effectiveness Matrix		Quality Objectives			
		Quality	Delivery	Continuous Improvement	Customer Satisfaction
Key Processes	Quality Eng'g Management	X	X	X	X
	Expeditor		X	x	x
	Order Mgmt		x	x	x
	Supply Mgmt	X	X	x	x
	Warehousing	X	X	x	x
	Kit & Assy	X		x	x
	Warranty	X		x	x

Where the organization chooses to outsource any process that affects product conformity to requirements, the organization ensures control over such processes. The type and extent of control to be applied to these outsourced processes are defined within the quality management system.

Outsourced Processes

Outsourced Process	**Provider**	**Controls**
Non-Destructive Testing	Various/Supplier	Approved Supplier/Reports from Supplier to confirm
Destructive Testing	Various/Supplier	Approved Supplier/Reports from Supplier to confirm
Machining	Various/Supplier	Approved Supplier/Reports to confirm dimensions/Receipt Inspection
Fabrication	Various/Supplier	Approved Supplier/Reports to confirm dimensions/Receipt Inspection
Coatings	Various/Supplier	Approved Supplier/Receipt Inspection
Outsourced Process	**Provider**	**Controls**

Forklift Maintenance	Hodge Company	Daily Inspection
Temporary Employees	Sedona Staffing	Supervision, Management Reports
Calibration Services	Various	Calibration Certificates and Stickers
General Testing	Various	Approved Supplier, Inspection and Test Reports
Rework	Various	Approved Supplier/Receipt Inspection
Computer/Database Services	Various	Approved Supplier

4.2 Documentation Requirements

4.2.1 General

The quality management system documentation includes:

- documented statements of a quality policy and quality objectives,
- a quality manual,
- documented procedures and records, including Document Control, Record Control, Internal Audit, Control of Nonconforming Product, Corrective and Preventive Action,
- documents, including records, determined by the organization to be necessary to ensure the effective planning, operation and control of its processes.

4.2.2 Quality Manual

The organization has established and currently maintains a quality manual that includes:

- the scope of the quality management system, including details of and justification for any exclusions,
- the documented procedures established for the quality management system, or reference to them, and
- a description of the interaction between the processes of the quality management system.

The Quality Engineering Manager is responsible for maintaining the quality manual.

4.2.3 Document Control

Documents required by the quality management system are controlled. Records are a special type of document and are controlled according to the requirements given in section 4.2.4.

A documented procedure has been established (see Control of Documents Procedure) to define the controls needed:

- to approve documents for adequacy prior to issue,
- to review and update as necessary and re-approve documents,
- to ensure that changes and the current revision status of documents are identified,
- to ensure that relevant versions of applicable documents are available at points of use,
- to ensure that documents remain legible and readily identifiable,
- to ensure that documents of external origin determined by the organization to be necessary for the planning and operation of the quality management system are identified and their distribution controlled, and
- to prevent the unintended use of obsolete documents, and to apply suitable identification to them if they are retained for any purpose.

The Quality Engineering Department is responsible to maintain the Document Control Procedure, to ensure that relevant versions are available at points of use, to remove obsolete documents, and to control external documents. Documents are reviewed and approved, including re-approval as required, by the appropriate functional manager along with the Quality Engineering Manager or his designated representative.

4.2.4 Control of Records

Records established to provide evidence of conformity to requirements and of the effective operation of the quality management system shall be controlled.

A documented procedure has been established (see Control of Records Procedure) to define the controls needed for the identification, storage, protection, retrieval, retention and disposition of records.

Records are legible, readily identifiable and retrievable.

Quality Engineering is responsible to maintain the Records Control Procedure.

5.0 Management Responsibility

5.1 Management Commitment

Green Industrial Supply, Inc. Management will provide evidence of its commitment to the development and implementation of the quality management system and continually improve its effectiveness by:

- communicating to the organization the importance of meeting customer as well as statutory and regulatory requirements,
- establishing the quality policy,
- ensuring that quality objectives are established,
- conducting management reviews, and
- ensuring the availability of resources.

Top management includes the following members: President, Vice President, Controller, Quality Engineering Manager, Warehouse Manager and Supply Base Management.

5.2 Customer Focus

Green Industrial Supply, Inc Management ensures that customer requirements are determined and are met with the aim of enhancing customer satisfaction.

5.3 Quality Policy

Green Industrial Supply, Inc. Management ensures that the quality policy:

- is appropriate to the purpose of the organization,
- includes a commitment to comply with requirements and continually improve the effectiveness of the quality management system,
- provides a framework for establishing and reviewing quality objectives,
- is communicated and understood within the organization, and
- is reviewed for continuing suitability.

The stated quality policy is as follows:

"Green Industrial Supply, Inc. is committed to consistently provide customer satisfaction for product quality, on-time delivery and outstanding service. This policy is achieved through customer focus, continuous improvement and employee empowerment, training and teamwork. Our company values integrity and honesty in all our dealings with customers, suppliers and employees."

The Management Representative is responsible for ensuring the quality policy is reviewed during the Management Review process.

5.4 Planning

5.4.1 Quality Objectives

Green Industrial Supply, Inc. Management ensures that quality objectives, including those needed to meet requirements for product, are established at relevant functions and levels within the organization. The quality objectives are measurable and consistent with the quality policy.

Management is responsible for establishing and maintaining the following quality objectives:

Measure/ Quality Objective	Owner/Dept.	Reporting Frequency	Target

Product quality (internal)	Quality Engineering	Monthly	≤120 PPM
Product quality (external)	Quality Engineering	Monthly	≤120 PPM
Product delivery (internal)	Supply Base Management	Monthly	100% On time delivery
Product delivery (external)	Supply Base Management	Monthly	≤5000 PPM

5.4.2 Quality management system planning

Green Industrial Supply, Inc. ensures that:

- the planning of the quality management system is carried out in order to meet the requirements given in section 4.1, as well as the quality objectives, and
- the integrity of the quality management system is maintained when changes to the quality management system are planned and implemented.

5.5 Responsibility, Authority and Communication

5.5.1 Responsibility and Authority

Green Industrial Supply, Inc. Management ensures that responsibilities and authorities are defined and communicated within the organization. This is achieved through job descriptions, departmental assignments and the Organizational Chart.

5.5.2 Management Representative

Green Industrial Supply, Inc. Management has appointed a member of management who, irrespective of other responsibilities, has responsibility and authority that includes:

- ensuring that processes needed for the quality management system are established, implemented and maintained,
- reporting to Green Industrial Supply, Inc. Management on the performance of the quality management system and any need for improvement, and
- ensuring the promotion of awareness of customer requirements throughout the organization.

The appointed management representative is the Quality Engineering Manager who also serves as the liaison to external parties on matters relating to the quality system.

5.5.3 Internal communication

Green Industrial Supply, Inc. Management ensures that appropriate communication processes are established within the organization and that communication takes place regarding the effectiveness of the quality management system. This is achieved through training, email announcements, company bulletin board postings and monthly company meetings.

5.6 Management Review

Green Industrial Supply, Inc. Management reviews the organization's quality management system at monthly intervals to ensure its continuing suitability, adequacy and effectiveness. This review includes assessing opportunities for improvement and the need for changes to the quality management system, including the quality policy and quality objectives.

Records from management reviews are maintained by Quality Engineering.

The input to management review may include information on:

- results of audits,
- customer feedback,
- process performance and product conformity,
- status of preventive and corrective actions,
- follow-up actions from previous management reviews,
- changes that could affect the quality management system, and
- recommendations for improvement.

The output from the management review includes:

- any decisions and actions related to improvement of the effectiveness of the quality management system and its processes,
- improvement of product related to customer requirements, and
- resource needs.

The following individuals attend Management Reviews:

- Senior Management
- Quality Engineering
- Controller
- Supply Base Management
- Warehouse Management

6.0 Resources Management

6.1 Provision of Resources

The organization determines and provides the resources needed to implement and maintain the quality management system and continually improve its effectiveness and to enhance customer satisfaction by meeting customer requirements. Resource needs are discussed during management review.

6.2 Human Resources

6.2.1 General

Personnel performing work affecting conformity to product requirements are deemed competent on the basis of appropriate education, training, skills and experience. Human Resources is

responsible for assessing competence. Competency requirements are defined in company job descriptions and training records.

6.2.2 Competence, training and awareness

The organization:

- determines the necessary competence for personnel performing work affecting conformity to product requirements,
- where applicable, provides training or takes other actions to achieve the necessary competence,
- evaluates the effectiveness of the actions taken,
- ensures that personnel are aware of the relevance and importance of their activities and how they contribute to the achievement of the quality objectives, and
- maintains appropriate records of education, training, skills and experience.

Human Resources is responsible to determine competency requirements and to oversee the training process. Training requirements are defined in company training records.

Human Resources will maintain appropriate records of education, training, skills, and experience.

As of the initial release of this document, all current employees are considered to be competent.

6.3 Infrastructure

The organization determines, provides and maintains the infrastructure needed to achieve conformity to product requirements.

Infrastructure includes, as applicable:

- buildings, workspace and associated utilities,
- process equipment (both hardware and software), and
- supporting services (such as transport, communication or information systems).

Scheduled maintenance, including data backup, is performed on the following:

- Maintenance/data backup of company computer systems
- Warehouse equipment
- Assembly room equipment
- Kitting room equipment

6.4 Work Environment

The organization determines and manages the work environment needed to achieve conformity to product requirements. Green Industrial Supply, Inc. Management is responsible to identify and control work environment requirements. Work environment controls include the following

Condition	Control
Temperature	Thermostat
QA Lab (Temperature / Humidity)	Monitor

7.0 Product Realization

7.1 Planning of Product Realization

The organization plans and develops the processes needed for product realization.

Planning of product realization is consistent with the requirements of the other processes of the quality management system.

In planning product realization, the organization determines the following, as appropriate:

- quality objectives and requirements for the product,
- the need to establish processes and documents, and to provide resources specific to the product,
- required verification, validation, monitoring, measurement, inspection and test activities, specific to the product and the criteria for product acceptance,
- records needed to provide evidence that the realization processes and resulting product meet requirements.

The output of this planning is in a form suitable for the organization's method of operations. Planning output includes RFQs (Requests for Quotation), Early Warning Forecasts, Quotes System, Pick Ticket Management, Ordering and Shipping Assistware, Sharktank (Inventory Control) and Part Identity.

Supply Base Management is responsible for planning production or service provision and for maintaining associated records.

7.2 Customer-related Processes

7.2.1 Determination of requirements related to the product

The organization determines:

- requirements specified by the customer, including the requirements for delivery and post-delivery activities,
- requirements not stated by the customer but necessary for specified or intended use, where known,
- statutory and regulatory requirements applicable to the product, and
- any additional requirements considered necessary by the organization.

Supply Base Management is responsible for determining all customer requirements, whether specified; not stated, but necessary; or statutory and regulatory. Requirements are determined by customer and supplier documentation, market research and competitive analysis.

7.2.2 Review of requirements related to the product

The organization reviews the requirements related to the product. This review is conducted prior to the organization's commitment to supply a product to the customer (i.e., acceptance of orders, acceptance of changes to orders) and ensures that:

- product requirements are defined,
- contract or order requirements differing from those previously expressed are resolved, and
- the organization has the ability to meet the defined requirements.

Requirements can be reviewed through any of the following: RFQs, specification review, DPAR (Design, Process and Assembly Review), order review during order entry, receipt inspection and PPAP.

Records of the results of the review and actions arising from the review are maintained. Supply Base Management is responsible for the review and for maintaining the records.

Where the customer provides no documented statement of requirement, the customer requirements are confirmed by the organization before acceptance. Confirmation of verbal orders is done by a documented deviation with electronically stored copies of communications.

Where product requirements are changed, Supply Base Management ensures that relevant documents are amended and that relevant personnel are made aware of the changed requirements.

7.2.3 Customer communication

The organization determines and implements effective arrangements for communicating with customers in relation to:

- product information,
- enquiries, contracts or order handling, including amendments, and
- customer feedback, including customer complaints.

Product information is communicated via company websites, company catalogs/brochures, standard mail, electronic mail or fax. Product information is maintained by Supply Base Management.

Customer inquiries, contracts, orders, etc. are received by telephone communications, fax, email or EDI.

Customer feedback is recorded and managed by customer phone calls, emails, business notifications and meetings.

7.3 Design and Development

7.3.1 Design and development planning

Excluded

7.3.2 Design and development inputs

Excluded

7.3.3 Design and development outputs

Excluded

7.3.4 Design and development review

Excluded

7.3.5 Design and development verification

Excluded

7.3.6 Design and development validation

Excluded

7.3.7 Design and development changes

Excluded

7.4 Supply Base Management

7.4.1 Supply Base Management process

The organization ensures that purchased product conforms to specified purchase requirements. The type and extent of control applied to the supplier and the purchased product is dependent upon the effect of the purchased product on subsequent product realization or the final product.

The organization evaluates and selects suppliers based on their ability to supply product in accordance with the organization's requirements. Criteria for selection, evaluation and re-evaluation are established.

Criteria	Selection	Evaluation/ Re-evaluation
Customer specified supplier	x	
Project completion		x
Technical specifications	x	x
Price and availability	x	x
Product quality		x
On time delivery		x

Records of the results of evaluations and any necessary actions arising from the evaluation are maintained by Supply Base Management with the assistance of Quality Engineering.

Supply Base Management is responsible for controlling the Supply Base Management process and for maintaining appropriate records. Approved suppliers are listed and maintained in the company accounting system.

As of the initial release of this document Green Industrial Supply, Inc. reserves the right to evaluate and approve their existing supplier base on a case-by-case basis.

7.4.2 Supply Base Management information

Supply Base Management information describes the product to be purchased, including where appropriate:

- requirements for approval of product, procedures, processes and equipment,
- requirements for qualification of personnel, and
- quality management system requirements.

Supply Base Management information is communicated to suppliers via purchase orders, applicable drawings, product specifications, 3D models and customer requirements.

The organization ensures the adequacy of specified purchase requirements prior to communication to the supplier.

7.4.3 Verification of purchased product

The organization establishes and implements the inspection or other activities necessary for ensuring that purchased product meets specified purchase requirements. Purchased product is verified by receipt inspection.

Where the organization or its customer intends to perform verification at the supplier's premises, the organization states the intended verification arrangements and method of product release in the Supply Base Management information or by prearranged agreement.

7.5 Production and service provision

7.5.1 Control of production and service provision

The organization plans and carries out production and service provisions under controlled conditions. Controlled conditions include, as applicable:

- the availability of information that describes the characteristics of the product,
- the availability of work instructions, as necessary,
- the use of suitable equipment,
- the availability and use of monitoring and measuring equipment,
- the implementation of monitoring and measurement, and

- the implementation of product release, delivery and post-delivery activities.

Management or its designated representative is responsible for controlling all phases of product and service provisions and for maintaining appropriate records.

7.5.2 Validation of processes for production and service provision

Excluded

7.5.3 Identification and traceability

Where appropriate, the organization identifies the product by suitable means throughout product realization. Products are identified by means of bar codes and customer approved packaging.

The organization identifies the product status with respect to monitoring and measurement requirements throughout product realization.

Where traceability is a requirement, Warehouse Management controls the unique identification of the product and maintains records. Traceability is documented by use of the Quickbooks Accounting system and receipts documentation.

7.5.4 Customer property

The organization exercises care with customer property while it is under the organization's control or being used by the organization. The organization identifies, verifies, protects and safeguards customer property provided for use or incorporation into the product. If any customer property is lost, damaged or otherwise found to be unsuitable for use, the organization shall report this to the customer and maintain records. Customer property can include intellectual property and personal data.

Customer property includes drawings and other customer documentation, etc. Customer property is controlled by means of secure business system and associated programs.

Management or its designated representative is responsible for controlling and recording customer property. Management or its designated representative is responsible for all communication with the customer regarding their property.

7.5.5 Preservation of product

Warehouse Management is responsible for preserving the product during internal processing and delivery to the intended destination in order to maintain conformity to requirements. As applicable, this preservation includes identification, handling, packaging, storage and protection. Preservation also applies to the constituent parts of a product.

Special handling techniques include the use of PPE (Personal Protective Equipment), storage/transportation methods, packaging, handling equipment, FIFO (First In-First Out) procedures and Standard Work documentation.

7.6 Control of monitoring and measuring equipment

The organization determines the monitoring and measurement to be undertaken and the monitoring and measuring equipment needed to provide evidence of conformity of product to determined requirements. The organization establishes processes to ensure that monitoring and measurement can be carried out and are carried out in a manner that is consistent with the monitoring and measurement requirements. Quality Engineering is responsible for all aspects related to the system of controlling monitoring and measurement.

Where necessary to ensure valid results, measuring equipment is:

- calibrated or verified, or both, at specified intervals, or prior to use, against measurement standards traceable to international or national measurement standards; where no such standards exist, the basis used for calibration or verification is recorded,
- adjusted or re-adjusted as necessary,
- identified in order to determine its calibration status,
- safeguarded from adjustments that would invalidate the measurement result,
- protected from damage and deterioration during handling, maintenance and storage

In addition, the organization assesses and records the validity of the previous measuring results when the equipment is found not to conform to requirements. The organization takes appropriate action on the equipment and any product affected. Records of the results of calibration and verification are be maintained.

Equipment requiring calibration and/or verification includes calipers, Go No-Go thread gages, micrometers, torque testers, torque wrenches and torque screwdrivers.

When used in the monitoring and measurement of specified requirements, the ability of computer software to satisfy the intended application is confirmed. This is undertaken prior to initial use and reconfirmed as necessary.

8.0 Measurement, analysis and improvement

8.1 General

The organization plans and implements the monitoring, measurement, analysis and improvement processes needed:

- to demonstrate conformity to product requirements,
- to ensure conformity of the quality management system, and
- to continually improve the effectiveness of the quality management system.

This includes determination of applicable methods, including statistical techniques, and the extent of their use. Quality Engineering is responsible for systems related to monitoring, measurement, analysis and improvement.

8.2 Monitoring and measurement

8.2.1 Customer satisfaction

As one of the measurements of the performance of the quality management system, the organization monitors information relating to customer perception as to whether the organization has met customer requirements.

Customer satisfaction is monitored by means of quality metrics, delivery metrics and customers Achieving Excellence Program.

The methods for obtaining and using this information are determined by Supply Base Management, Controller, Quality Engineering and Senior Management.

8.2.2 Internal audit

The organization conducts internal audits at planned intervals to determine whether the quality management system:

- conforms to the planned arrangements and to the quality management system requirements established by the organization, and
- is effectively implemented and maintained.

An audit program has been planned, taking into consideration the status and importance of the processes and areas to be audited, as well as the results of previous audits. The audit criteria, scope, frequency and methods are defined. This selection of auditors and conduct of audits ensures objectivity and impartiality of the audit process. Auditors do not audit their own work.

A documented procedure has been established (see Internal Audit Procedure) to define the responsibilities and requirements for planning and conducting audits, establishing records and for reporting results. Records of the audits and their results are maintained. Quality Engineering is responsible to oversee the internal auditing system and for maintaining appropriate records.

The management responsible for the area being audited ensures that any necessary corrections and corrective actions are taken without undue delay to eliminate detected nonconformities and their causes. Follow-up activities include the verification of the actions taken and the reporting of verification results.

8.2.3 Monitoring and measurement of processes

The organization applies suitable methods for monitoring and, where applicable, measurement of the quality management system processes. These methods demonstrate the ability of the processes to achieve planned results. When planned results are not achieved, correction and corrective action is taken by the appropriate personnel, to ensure conformity of the product.

Methods for monitoring and measuring of processes include internal audits, delivery and quality performance data and key process objectives.

8.2.4 Monitoring and measurement of product

The organization monitors and measures the characteristics of the product to verify that product requirements have been met. This is carried out at appropriate stages of the product realization process in accordance with the planned arrangements.

Methods for monitoring and measuring of products include receipt inspection and product audits of returned material.

Evidence of conformity with the acceptance criteria is maintained. Records indicate the person(s) authorizing release of product for delivery to the customer. Product release is indicated by means of an approved PPAP or customer approved deviation. Service release does not require PPAP approval but may require customer approved deviation.

The release of product and delivery of service to the customer does not proceed until the planned arrangements have been satisfactorily completed, unless otherwise approved by a relevant authority and, where applicable, by the customer.

8.3 Control of nonconforming product

The organization ensures that product which does not conform to product requirements is identified and controlled to prevent its unintended use or delivery. A documented procedure has been established (GIS NCMR, GCAR System and GISS-003 B) to define the controls and related responsibilities and authorities for dealing with nonconforming product.

Where applicable, the organization deals with nonconforming product by one or more of the following ways:

- by taking action to eliminate the detected nonconformity;
- by authorizing its use, release or acceptance under concession by a relevant authority and, where applicable, by the customer;
- by taking action to preclude its original intended use or application;
- by taking action appropriate to the effects, or potential effects, of the nonconformity when nonconforming product is detected after delivery or use has started.

When nonconforming product is corrected, it is subject to re-verification to demonstrate conformity to the requirements.

Records of the nature of nonconformities and any subsequent actions taken, including concessions obtained, are maintained.

8.4 Analysis of data

The organization determines, collects and analyzes appropriate data to demonstrate the suitability and effectiveness of the quality management system and to evaluate where continual improvement of the effectiveness of the quality management system can be made. This includes data generated as a result of monitoring and measurement and from other relevant sources.

The analysis of data provides information relating to:

- customer satisfaction,
- conformity to product requirements,
- characteristics and trends of processes and products including opportunities for preventive action, and
- suppliers.

Data analysis is conducted by means of management review and team review.

Quality Engineering is responsible for determining the data requirements and for coordinating with other departments to collect and subsequently analyze the data in order to make improvements.

8.5 Improvement

8.5.1 Continuous improvement

The organization continually improves the effectiveness of the quality management system using the quality policy, quality objectives, audit results, analysis of data, corrective and preventive actions and management review.

8.5.2 Corrective Action

The organization takes action to eliminate the cause of nonconformities in order to prevent their recurrence.

Corrective actions are appropriate to the effects of the nonconformities encountered

A documented procedure has been established that defines requirements for:

- reviewing nonconformities (including customer complaints),
- determining the causes of nonconformities,
- evaluating the need for action to ensure that nonconformities do not recur,
- determining and implementing action needed,
- recording and maintaining records of the results of action taken, and
- reviewing the effectiveness of the corrective action taken.

Quality Engineering is responsible for maintaining the procedure and the associated records.

8.5.3 Preventive Action

The organization determines action to eliminate the causes of potential nonconformities in order to prevent their occurrence.

Preventive actions are appropriate to the effects of the potential problems

A documented procedure has been established (see Corrective and Preventive Action Procedure) to define requirements for:

- determining potential nonconformities and their causes,

- evaluating the need for action to prevent occurrence of nonconformities,
- determining and implementing action needed,
- recording and maintaining the results of action taken, and
- reviewing the effectiveness of the preventive action taken.

Quality Engineering is responsible for maintaining the procedure and the associated records.

10.0 Product Part Approval Process

10.1 General

The Production Part Approval Process will be used for:

1. a new part or product.
2. correction of a discrepancy on a previously submitted part.
3. product modified by an engineering change to design records, specifications, or materials.
4. any situations required by the following table 10.2 #1:

NOTE: If there is any question concerning the need for production part approval, contact should be made with GIS Quality Engineering.

10.2 PPAP Process Requirements

10.2.1 Significant Production Run

For production parts, product for PPAP shall be taken from a significant run. This production run shall total a minimum of 2 consecutive parts (unless specifically agreed otherwise with the GIS or its customer) and be manufactured at the production site, at the production rate, using the production tooling, gaging, process, materials, and operators. Parts from each unique production process stream shall be measured and representative parts tested.

10.2.2 PPAP Requirements

Suppliers shall meet all specified requirements, e.g. design record, specifications. Any results that are outside specification are cause for Green Industrial Supply, Inc. and its suppliers not to ship or receive components. Every effort shall be made to correct the process so that all design record requirements are met. If Green Industrial Supply, Inc. and its suppliers are unable to meet any of these requirements, the customer(s), where we have an agreement to do so, shall be contacted for determination of appropriate corrective action.

Green Industrial Supply, Inc. and its suppliers shall have the applicable items and records listed below, for each part, or family of parts, and be readily available.

Green Industrial Supply, Inc. and its suppliers shall obtain approval from the customer for exceptions or deviations to PPAP requirements.

NOTE: All items or records may not necessarily apply to every part number. For example, some parts do not have appearance requirements, and others do not have color requirements. In order to determine with certainty which items must be included, consult the design record, e.g. part print, the relevant Engineering documents or specifications, and the customer.

10.2.3 Design Record

Suppliers shall have the design record for the saleable product. In all cases, the official design record is the top-level customer drawing relating to the part / component under consideration along with any other drawings, specifications, or electronic files referenced therein. If the customer does not have a top-level drawing for the part under consideration, the customer must have approved the drawing to be used. Where the design record is in electronic format, a hard copy (e.g. pictorial, geometric dimensioning & tolerancing (GD&T) sheets, drawing) should be included to identify measurements taken.

10.2.4 Engineering Change Documents

Suppliers shall have any authorized engineering change documents, not yet recorded in the design record but incorporated in the product, part or tooling, in an engineering change management system.

10.2.5 Engineering Approval

When required by customer agreement, Green Industrial Supply, Inc. and its suppliers shall have evidence of customer engineering approval.

10.2.6 Design Failure Mode and Effects Analysis (DFMEA)

Suppliers shall have a Design FMEA for parts or materials for which they are design-responsible. In most cases, the Design FMEA will be considered proprietary and will therefore not be submitted as part of the PPAP package. Whether submitted or retained, it must be prepared prior to PPAP submittal and made available to the customer for review.

10.2.7 Process Flow Diagrams or Descriptions

Green Industrial Supply, Inc. and its suppliers shall have a process flow diagram or description that clearly describes the production process steps and sequence.

NOTE: Process flow diagrams or descriptions for 'families' of similar parts are acceptable if the new parts have been reviewed for commonality.

10.2.8 Process Failure Mode and Effects Analysis (PFMEA)

Suppliers shall have a Process FMEA. A single Design or Process FMEA may be applied to a process manufacturing for a family of similar parts or materials.

10.2.9 Control Plan

Suppliers shall have a Control Plan that defines all controls used for process control.

10.2.10 Measure Systems Analysis Studies

Suppliers shall submit Gage Repeatability and Reproducibility (Gage R&R) studies upon request or if required based on the applicable PPAP QPL (Quality Planning Level).

Variable (vs. Attribute) gaging is to be used for all Critical and Key Characteristics (Features) unless prior approval has been obtained. In cases where the measurement systems are determined to be incapable according at the time of PPAP submittal, this should be clearly noted on both the GR&R form and on the Part Submission Warrant (PSW form). It will then be the decision of the customer whether to reject the PPAP and require resubmittal with satisfactory results prior to production shipment or to grant conditional approval while the corrective action plan for the discrepant condition is performed.

10.2.11 Dimensional Results – Initial Sample Inspection Report (ISIR)

Suppliers shall provide evidence that dimensional verifications required by the design record (Engineering Print requirements as specified in the customer's top-level drawing) have been completed and results indicate compliance with specified requirements. In cases where dimensional results do not meet the specifications, this should be clearly noted both in the ISIR form and in the Part Submission Warrant (PSW). It will then be the decision of the customer whether to reject the PPAP and require resubmittal with satisfactory results prior to production shipment or to grant conditional approval while the corrective action plan for the discrepant condition is performed.

10.2.11.1 Records of Material / Performance Test Results

Green Industrial Supply, Inc. and its suppliers shall have records of material and/or performance test results for tests specified on the design record or Control Plan.

10.2.12 Dimensional Material Test Results

Suppliers shall perform tests for all part(s) and product material(s), when chemical, physical, or metallurgical requirements are specified by the design record or control plan.

All tests required by the design record and related specifications should be listed in a convenient format along with the quantity tested and the actual results of each test. Also indicate any authorized engineering change documents that have not yet been incorporated in the design record.

A material test report shall indicate the:

- Design record revision level of the parts tested, and the number, date, and revision level of the specifications to which the part was tested;
- Date on which the testing took place;
- Material subcontractor's name and, when required by the customer, their Green Industrial Supply, Inc. or supplier code number for the material from the customer approved subcontractor list.

NOTE : For products with customer-developed material specifications and a customer-approved subcontractor list, Green Industrial Supply, Inc. and its suppliers shall procure materials and/or services (e.g. painting, plating, heat-treating) from subcontractors on that list.

10.2.13 Performance Test Results

Suppliers shall perform tests for all parts or product materials when performance or functional requirements are specified by the design record or Control Plan.

The test report shall indicate:

- Design record revision level of the parts tested, and the number, date, and revision level of the specifications to which the part was tested;
- Any authorized engineering change documents that have not yet been incorporated in the design record;
- Date on which the testing took place.

NOTE: Results for all tests required by the design record or related specifications shall be documented.

10.2.14 Initial Process Studies

10.2.14.1 General

The level of initial process capability (Pp, Ppk=Short Term Capability) shall be determined to be acceptable prior to submission for all Critical and Key Characteristics (Features), designated by the customer or supplier.

NOTE: In the case of characteristics which are not deemed critical or key but are important enough to the customer that additional supporting data is requested, the required initial process capability for these characteristics must be > 1.00. These characteristics will be agreed upon between the customer, GIS and the supplier prior to PPAP submittal and the necessary documentation supplied with the PPAP.

10.2.14.2 Capability Indices

Capability Studies are to be completed using single or multi-feature capability study template (available upon request), or a process equivalent.

10.2.14.2 Non-acceptance Criteria Strategy

The supplier shall contact the GIS if the process cannot be improved.

If acceptance criteria cannot be attained by the PPAP submission promise date, the supplier shall submit to GIS for approval a corrective action plan and a modified Control Plan normally providing for 100% inspection. Continued variation reduction efforts must be maintained until the acceptance criteria requirements are met.

10.2.15 Appearance Approval Report (AAR)

A separate Appearance Approval Report (AAR) shall be completed for each part or series of parts for which a submission is required if the product/part has appearance requirements on the design record.

Upon satisfactory completion of all required criteria, Green Industrial Supply, Inc. and its suppliers shall record the required information on the AAR. The completed AAR and

representative production products/parts shall be submitted to the location specified by the customer to receive disposition. AARs (complete with part disposition and customer signature) shall then accompany the PSW at the time of final submission based upon the submission level requested. Additional requirements may be recorded in customer-specific requirements.

NOTE : AAR typically applies only for parts with color, grain, or surface appearance requirements. AAR's are extremely rare for either parts supplied to Green Industrial Supply, Inc. or products supplied by Green Industrial Supply, Inc. to its customers. In general, AAR's will only be performed when specifically requested by a customer.

NOTE : Certain customers may not require entries in all AAR fields.

10.2.16 Sample Production Parts

Suppliers shall provide sample product as requested by the customer and as defined by the submission request.

10.2.17 Master Samples

At the time of the release of this SQM suppliers are not required to maintain Master Samples.

10.2.18 Customer Specific Requirements

Green Industrial Supply, Inc. and its suppliers shall have records of compliance to all applicable customer specific requirements. For bulk materials, any customer-specific requirements shall be documented.

10.2.19 Part Submission Warrant (PSW)

Upon satisfactory completion of all required measurements and tests suppliers shall record the required information on a Part Submission Warrant (PSW).

A separate PSW shall be completed for each customer part number unless otherwise agreed to by the customer.

Green Industrial Supply, Inc. and its suppliers shall verify that all of the measurement and test results show conformance with customer requirements (or note any discrepancies and request deviations if appropriate) and that all required documentation is available.

Green Industrial Supply, Inc. Quality Engineering shall submit the PSW to its customer for approval. Suppliers shall not submit warrants direct to any Green Industrial Supply, Inc. customer. All warrants must be sent to Green Industrial Supply, Inc. for disposition with the customer.

Notification of approval of the Part Submission Warrant (PSW) will be provided on request from the supplier.

10.3 Customer Notification and Submission Requirements

10.3.1 Customer Notification

Green Industrial Supply, Inc. shall notify its customers and/or obtain PPAP approval for the situations outlined in Tables 10.3.1.1, 10.3.2.1, and 10.3.1.3.

Suppliers shall notify Green Industrial Supply, Inc. of any design and process changes as indicated in the table below. Upon approval of the change, PPAP submittal and approval is required prior to shipment of the modified product or product from the modified process.

Table 10.3.1.1

Requirement	Clarification or examples
1. Use of other construction or material than was used in the previously approved part or product.	For example, other construction as documented on a deviation or included as a note on the design record and not covered by an engineering change.
2. Production from new or modified tools (except perishable tools of the same grade and type), dies, moulds, patterns, etc., including additional or replacement tooling.	This requirement only applies to tools, which due to their unique form or function can be expected to influence the integrity of the final product. It is not meant to describe standard tools (new or repaired of same make and type), such as standard measuring devices, drivers (manual or power), etc.
3. Production following upgrade or rearrangement of existing tooling or equipment.	Upgrade means the reconstruction and/or modification of a tool or machine or to increase the capacity, performance, or change its existing function. This is not meant to be confused with normal maintenance, repair or replacement of parts, etc., for which no change in performance is to be expected and post repair verification methods have been established. Rearrangement is defined as activity that changes the sequence of product/process flow from that documented in the process flow diagram (including the addition of a new process). Minor adjustments of production equipment may be required to meet safety requirements such as, installation of protective covers, elimination of potential ESD risks, etc. These changes can be made without customer approval unless the process flow is changed as a result of this

Requirement	Clarification or examples
	adjustment.
4. Production from tooling and equipment transferred to a different plant site or from an additional plant site.	Production process tooling and/or equipment transferred between buildings or facilities in one or more sites.
5. Change of subcontractor for parts, non-equivalent materials, or services (e.g.: heat-treating, plating).	Green Industrial Supply, Inc. and its suppliers are responsible for approval of subcontracted material and services.
6. Product produced after the tooling has been inactive for volume production for twelve months or more.	For product that has been produced after tooling has been inactive for twelve months or more: Notification is required when the part has had no active purchase order and the existing tooling has been inactive for volume production for twelve months or more. The only exception is when the part has low volume, e.g. service or specialty vehicles. However, a customer may specify certain PPAP requirements for service parts.
7. Product and process changes related to components of the production product manufactured internally or manufactured by subcontractors. Additionally, Green Industrial Supply, Inc. and its suppliers shall concur with any requests by a subcontractor before submission to the customer.	Any change that affects customer requirements for fit, form, function, performance, and/or durability requires notification to the customer. **NOTE:** The fit, form function, performance, and/or durability requirements should be part of customer specifications as agreed on during review.
8. Change in test/inspection method, equipment, or new technique (no effect on acceptance criteria)	Green Industrial Supply, Inc. and its suppliers should have evidence that the new method or equipment provides results equivalent to the previous method or equipment.
Additionally, for bulk materials: • New source of raw material from new or existing supplier Change in product appearance attributes	These changes would normally be expected to have an effect on the performance of the product.
11. Change in equipment.	Examples are new equipment, alternate or additional equipment, replacement, or change in size.
12. Tooling or equipment moved to a different location within the same plant (unless designed to be mobile).	Based on lean manufacturing initiatives, some equipment is designed for mobility, i.e. on wheels with quick disconnects. Equipment of this type generally does not require

Requirement	Clarification or examples
	disassembly, or special preparation prior to movement, nor activities such as re-leveling or realignment, subsequent to a move.

10.3.2 Submission to Customer

Suppliers successfully perform PPAP prior to the first production shipment in the following situations (See Table 10.3.2.1). Green Industrial Supply, Inc. Quality Engineering shall receive and review all applicable items in the PPAP file to reflect the production process, regardless of whether or not the customer requests a formal submission.

Suppliers shall submit for PPAP approval prior to the first production shipment in the following situations (See Table 10.3.2.1). Suppliers shall review and update, as necessary, all applicable items in the PPAP file to reflect the production process.

Table 10.3.2.1

Requirement	Clarification or examples
1. A new part or product (i.e. a specific part, material, or color not previously supplied to the customer)	Submission is required for initial release of a new product (part). A new part/product or material added to a family may use appropriate PPAP documentation from a previously fully approved part within the same product family.
2. Correction of a discrepancy on a previously submitted part.	Submission is required to correct any discrepancies on previously submitted part. A "discrepancy" can be related to: • The product performance against the customer requirement • Dimensional, capability or GR&R issues • Subcontractor issues • Full approval of a part replacing an interim approval • Testing, including material, performance, engineering validation issues
3. Engineering change to design records, specifications, or materials for production product/part number(s).	Submission is required on any engineering change to production product/part design records, specifications or materials.
Additionally, for bulk materials: 4. Process technology new to the organization, not previously used for this product.	

10.3.3 Submission/Retention of PPAP Components

The standard PPAP submission level for Green Industrial Supply, Inc. is QPL Level 2. This means that a PPAP submittal consists of the items listed below. Other PPAP components may be requested in a QPL II PPAP at the discretion of GIS and/or the customer.

1) A balloon print of the part marked up with the dimensions/data check for the ISIR

2) A completed Initial Sampe Inspection Report (ISIR) (form available on request by supplier)

3) A completed Part Submission Warrant (PSW) (form available on request by supplier)

4) An unmarked copy of the print for our quality system

The table 10.3.3.1 specifies which components may be submitted as part of a standard PPAP package dependent upon the QPL Level and which should be retained but available for GIS and/or the customer to review.

Green Industrial Supply, Inc. will maintain electronic copies of all supplied PPAP components.

Table 10.3.3.1

PPAP Requirements by Quality Plan Level

	Requirement	AIAG Level	Quality Plan Level					Complete By
		2	0	1	2	3	4	
1.	Design Record	S						
	- for proprietary components / details	R						Prior to production
	- for all other components / details	S						Prior to production
2.	Engineering Change Documents, if any	S						First production
3.	Customer Engineering approval, if required	R						Prior to production
4.	Design FMEA (Failure Modes and Effects Analysis)	R					S	Prior to complete design
5.	Design Review						S	Prior to complete design
6.	Design, Process, & Assembly Review (DPAR) – Initiated by John Deere				S	S	S	Prior to production
7.	Functional Geometry Review					S	S	Prior to production
8.	Process Flow Diagrams / Process Map	R				S	S	Prior to production
9.	Process FMEA	R				S	S	Prior to control plan
10.	Control Plan (including Checking Aids)	R			S	S	S	Prior to production
11.	Measurement System Analysis Studies – Gage R & R Studies for Key Characteristics	R			S	S	S	Prior to use
12.	Initial Sample Inspection Report - ISIR (Dimensional Results)	S		S	S	S	S	Prior to production
13.	Material / Metallurgical / Functional / Performance Results (as appropriate)	S		S	S	S	S	Prior to production
14.	Initial Process Studies – Capability Studies	R			S	S	S	Prior to control plan
15.	* Qualified Laboratory Documentation	S						Prior to production
16.	Appearance Approval Report, if applicable (for JD Class A parts)	S				S	S	Prior to production
17.	Verification Warrant	S		S	S	S	S	Prior to production
18.	Experimental Part Inspection (Engineering)				S	S	S	Prior to production
19.	Supplier Functional Verification Testing Results					S	S	Prior to production
20.	* Sample Product	S						
21.	* Master Sample	R						
22.	* Records of Compliance With Customer-Specific Requirements	R						

S = Submit
R = Retain

11.0 Continous Improvement Policy

The supplier shall demonstrate a top management commitment to continuous improvement. A comprehensive philosophy of continuous improvement must be identifiable throughout the entire supplier organization. Suppliers must endeavor to make continuous improvements to the quality, deliveries, schedules and prices, to the supplier's and GIS's benefit. The philosophy of continuous improvement should be extended to all business processes. Specified plans must be drawn up for those processes that are considered important. GIS encourages the supplier to work on:

- Error proofing/Mistake proofing techniques (POKA – YOKE)
- Six Sigma
- Lean manufacturing
- SPC
- SMED (Single Minute Exchange of Die)
- TPM (Total Productive Maintenance)
- The "Five S" philosophy
- Visual systems

12.0 Goods Receipt Notices, Returns and Chargeback Procedures

12.1 Goods Receipt Notice

Green Industrial Supply, Inc. does not support a Goods Receipt Notification process. Products and services received from a supplier are 100% receipt inspected prior to acceptance. Products and services found to be unacceptable are indentified, recorded in the NCMR (QMS) system and notification made to the supplier. Acceptance is implied if the supplier is not notified of a defect or deficiency.

12.2 Return of Non-conforming Products

When GIS returns non-conforming parts to the supplier, a debit note will be created. This debit note will be deducted in future payments to the supplier. The supplier will be informed by mail or email about the debit note. The supplier should not send any credit note to GIS accounts department. If it turns out that returned parts meet specification and GIS agrees, the registered parts will not be counted in PPM. If agreed, the supplier has the possibility to send parts back on a new order.

12.3 Chargeback Guidelines

Costs associated with supplier part quality issues and discovered in our facility, in the field, in the customers' facility or in customers' machines and deemed the supplier's responsibility may be charged back to the supplier. Other costs that are associated with lost production due to supplier quality issues and PPAP rejection issues may also be charged back to the supplier.

On Site defects:
GIS will debit the supplier all costs associated with the repair (including labor), replacement, segregation/containment, lost production and late shipments.

In Field defects:
Green Industrial Supply, Inc. will debit the supplier all costs associated with parts and labor for repair, replacement and segregation/containment.

The supplier may contact GIS upon receipt of an 8-D or problem solving report to review the issue and accept or refute responsibility prior to being charged. The supplier, if found responsible, will pay the costs associated with the quality issue at the prevailing GIS rate.

13.0 Reference Documents

Control of Documents Procedure
Control of Records Procedure
Control of Nonconforming Product Procedure
Corrective/Preventive Action Procedure
Internal Audit Procedure
Part Submission Warrant (PSW)
Initial Sample Inspection Report (ISIR)

14.0 Change Log

Revision #	Document Revision Date	Description of Change	Approval(s)
Rev. A	8/22/2011	Initial Release	Rick Myer
Rev. B.	9/1/2011	Term "Purchasing" changed to "Supply Base Management."	Rick Myer
Rev C.	9/8/2011	ISO references addressed/updated. Supplier evaluation consideration changed.	Rick Myer
Rev D.	10/5/2011	Return/Chargeback Procedures and Continuous Improvement Policies added.	Rick Myer
Rev E.	10/27/2011	Goods Return Notification policy added.	Rick Myer
Rev. F.	9/25/2013	Updated physical address	Brian Lewis