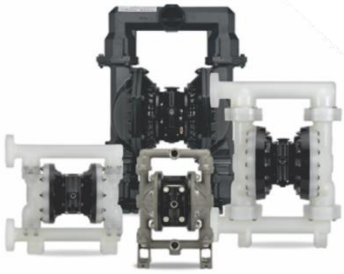
Global Supplier Quality Manual







GPO-Q-PL-0001 - Revision 5

Table of Contents

Revision History

Version No.	Date	Description of Changes
1	20-Mar-14	Initial Release
2	30-June-15	Document number change: Updated links; Removed shipping to new facility bullet from 4.8 Change Control
3	31-Oct-16	Updated verbiage throughout to align with ISO 9001:2015, PPAP links updated, OSA reference links removed, SPDCR definition added
4	31-Aug-19	Updated verbiage throughout, PPAP links removed, ETQ reliance definition & Module usage added, Supplier Dashboard added, Removed majority of detailed logistic requirements
5	2-July-21	Complete rewrite to incorporate multiple new facility QMS's. Section 4 (Advanced Quality Planning) streamlined significantly from previous revision.

Only for ease of readability, all defined terms (i.e. Supplier, Buyer, Products, etc.) are or may be printed throughout this manual in lowercase.

Terms & Definitions

Term	Definition
AIAG	**A**utomotive **I**ndustry **A**ction **G**roup: Not-for-profit association where professionals from a diverse group of stakeholders work collaboratively to streamline industry processes via global standards development and harmonized business practices (www.aiag.org).
Audit	Systematic, independent and documented process for obtaining and objectively evaluating evidence to determine the extent to which criteria are fulfilled.
Buyer	Buyer shall mean the Ingersoll Rand legal entity identified as the Buyer in the applicable contracting document (e.g., purchase order or supply agreement).The term “buyer” is used interchangeably with the term "Ingersoll Rand" in the Global Supplier Quality Manual. The term "Ingersoll Rand" or "buyer", as defined above, may include one or more Strategic Business Units (SBU)
Process Capability	The maximum amount of inherent variation in a process. A statistical study performed on a process to determine if it is capable of meeting the precision and/or accuracy according to specifications (Cp, Cpk, Pp, Ppk and Sigma values)
Confidential Information	1) Information, knowledge or data disclosed by buyer to supplier, regardless of whether disclosed in written, tangible, oral, visual or other form, including, without limitation, sample products, equipment, software, or other objects or material, provided by buyer to supplier, and 2) information, knowledge or data which was obtained from visits to buyer facilities by supplier.
Control Plan (CP)	Methodology to ensure all process outputs remain in a state of control. The plan is used and maintained throughout the product life cycle and is responsive to changing conditions via written descriptions of the actions required at each phase of the process from receiving through shipping.
CTQ	**C**ritical-**T**o-**Q**uality: Any product feature, component, material, assembly or complete system which is selected for production and field traceability in order to satisfy safety reporting requirements, regulatory requirements, or to support reliability analysis of high cost / high interest items.
Defect / Non-Conformance	Non-fulfillment of a requirement related to an intended or specified use, including safety considerations and regulatory requirements.
Deliverable	See Product definition.
ETQ Reliance	The ETQ Reliance system, represents our electronic Quality Management System and will be the primary source of record for **S**upplier **C**orrective **A**ction **R**equests (SCAR), **S**upplier **D**eviation **R**equest (SDR), **S**upplier **P**rocess and **D**esign **C**hange **R**equest (SPDCR), and **P**roduction **P**art **A**pproval **P**rocess (PPAP). This system will provide the supplier a direct interface to our system allowing for near real time communication between the supplier and the IR facility.
FMEA	**F**ailure **M**odes and **E**ffects **A**nalysis: A systematic group of activities intended to (a) recognized and evaluate the potential failure of a product / process and the effects of the failure, (b) identify actions that could eliminate or reduce the chance of the potential failure

Term	Definition
	occurring, and (c) document the entire process. It is complementary to the process of defining what a design or process must do to satisfy the customer
Interested Parties	Relevant customers, employees, suppliers and/or shareholders who may potentially influence the QMS
ISO-9001:2015	International Organization for Standardization: An international technical specification for quality management systems
Major Disruption	Special event resulting from products or services that do not meet the agreed quality and delivery specifications. Results in non-standard operations including: Quality Spills (product out-of-spec, stop shipments, production interruption, etc.) and Stock Outs (product not available).
NBH	**N**ew **B**usiness **H**old: A control that prevents suppliers from quoting or receiving new business until conditions are satisfied to address deficiencies identified by Ingersoll Rand. The supplier may be removed from the approved supplier list for that commodity.
PDP	Ingersoll Rand **P**roduct **D**evelopment **P**rocess: Enterprise wide process to deploy world-class standard product development processes; use systematic feedback for continuous improvement; implement a common approach to project and program management; Invest in our employees' capabilities.
PPAP	**P**roduction **P**art **A**pproval **P**rocess: Defines generic requirements for production part approval, including production and bulk materials. The purpose of the PPAP is to determine that customer engineering design record and specification requirements are properly understood by the supplier. The supplier shall demonstrate that the manufacturing processes have the potential to produce product consistently meeting these requirements during an actual production run at the quoted production rate.
PPM	**P**arts **P**er **M**illion: Reject rate determined by number of parts rejected divided by the number of parts provided times 1,000,000.
Preventive Action	Action to eliminate the cause of a potential non-conformance or other undesirable situations.
Product	The term "product" used in the Ingersoll Rand Global Supplier Quality Manual refers to any kind of product or service. This includes the physical "manufactured" product, a provided service, engineering work such as drawings and specifications or any other internal product provided in a series of processes. The term "deliverable" is used interchangeably with the term product in the Global Supplier Quality Manual.
PSW	**P**art **S**ubmission **W**arrant: An industry-standard document required for all newly-tooled or revised products in which the organization confirms that inspections and tests on production parts show conformance to customer requirements. The submission approval authorizes the supplier to start production based on PO requirements.
QMS	**Q**uality **M**anagement **S**ystem: A formalized system that documents the structure, responsibilities and processes required to achieve effective quality management. It can be based on the requirements detailed in ISO-9001:2015 with additional enhancements.

Term	Definition
SBU	**S**trategic **B**usiness **U**nit: Ingersoll Rand is organized into different operating units, based upon products or customer types.
SCAR	**S**upplier **C**orrective **A**ction **R**equest: A formal request to take action to eliminate the cause(s) of an existing non-conformance or other undesirable situation in order to prevent recurrence. Used to communicate, document, track and drive resolution of verified supplier caused problems.
SDR	**S**upplier **D**eviation **R**equest: Form and process that allows for time bound deviations from Ingersoll Rand engineering specifications or prints.
SPDCR	**S**upplier **P**rocess and **D**esign **C**hange **R**equest: A formal request used by the supplier to notify Ingersoll Rand of any supplier initiated part, process or design changes, prior to the implementing the change.
Supplier	The legal entity identified as the supplier in the applicable contracting document (e.g., purchase order or supply agreement).

1.0 Doing Business with Us

1.1 Our Company

Ingersoll Rand advances the quality of life by creating and sustaining safe, comfortable and efficient environments. Our people and our family of brands work together to ensure that we exceed the expectations of our customers and stakeholders.

Ingersoll Rand is committed to producing high quality, reliable, and cost effective products that are shipped on time, provide customer value, and conform to national and international requirements. Ingersoll Rand and its customers demand and expect defect free products and services. Ingersoll Rand recognizes the importance of our suppliers in providing quality parts and raw materials on time to ensure customer expectations are met.

Suppliers should visit our website (https://www.irco.com) to learn more:
https://www.irco.com/en-us/company/corporate-responsibility/working-with-us

1.2 Purpose

The Global Supplier Quality Manual defines the expectations for all Ingersoll Rand suppliers. The supplier shall meet or exceed the requirements and guidelines defined in this manual, as long as it provides products and/or services to Ingersoll Rand and its customers.

Continuous Improvement: Adhering to the guidelines established in this manual, the supplier should continually improve the processes used to design, manufacture, and deliver products or services to Ingersoll Rand.

Throughout this manual, the word "**shall**" or "must" indicates a requirement. The word "**should**" or "may" indicates a recommendation.

The English version of this manual is the official version. The English version has precedence in the event of discrepancies with manuals translated into different languages.

1.3 Business Partner Code of Conduct

The supplier shall adopt and comply with the buyer's Business Partner Code of Conduct (BPCOC). The supplier shall take all steps necessary to ensure that its sub-suppliers and subcontractors comply with the BPCOC. At the supplier's request, the buyer will mail the supplier a hard copy. The BPCOC may be amended by Ingersoll Rand from time to time.

The complete Business Partner Code of Conduct is available in multiple languages and can be found by accessing our website at:

https://www.irco.com/en-us/company/corporate-responsibility/working-with-us/business-partner-code-of-conduct

1.4 Supplier Diversity

Ingersoll Rand recognizes the value diversity brings to our employees, customers and communities we serve. The goal of our Supplier Diversity program is to promote the inclusion of small and diverse businesses in our purchasing process and to continuously strive to increase our spend with qualifying businesses. Qualified suppliers must meet business-size criteria established by the Small Business Administration, and includes companies across the following categories: Woman-owned, Veteran-owned, Disabled -owned, LGBT-owned businesses, Minority-owned and other qualifying businesses.

Suppliers are evaluated on several criteria, including price, quality, customer service, delivery, and other business requirements. Ingersoll Rand requires third party certification or government registration to be included in our Supplier Diversity Program.

2.0 General Supplier Requirements

The term supplier includes suppliers of products and services (together called "products" or "deliverables" in this manual) and distributors that provide deliverables to Ingersoll Rand. The term supplier also includes suppliers of both custom and commercially available products. The supplier shall:

- Satisfy the requirements established in this manual
- Maintain a working knowledge of all policies and processes governing the relationship between the supplier and Ingersoll Rand
- Accept responsibility for the quality, on-time delivery, regulatory compliance, and technical performance of all deliverables

In the event of a conflict between the terms of this manual and any buyer purchase order or other contract between the parties, unless the parties agree otherwise in writing, the various components of the agreements shall be given the following precedence (in descending order of precedence): 1) the Supply Agreement, if any; 2) a purchase order; 3) an applicable country/region supplement to the buyer's terms and conditions of purchase; 4) the buyer's terms and conditions of purchase and 5) the Global Supplier Quality Manual. Subsequent requirements may take precedence based upon:

- Customer, market, or site specific operating conditions
- Strategic Business Unit (SBU) requirements

NOTE: It is the supplier's responsibility to integrate the contents within this Global Supplier Quality Manual, into their process, quality system and deploy to their respective sub-suppliers.

At Ingersoll Rand's discretion, a waiver of certain manual requirements may be granted and approved for a specific product or duration. All such waivers shall be effective only upon express written approval by Ingersoll Rand.

Additional policies and processes can be found on our web-site at:

https://www.irco.com/en-us/company/corporate-responsibility/working-with-us

Supplier Dashboard

Suppliers will use our Supplier Dashboard for proactive monitoring of Key Performance Indicators (KPIs)

such as Quality Defective Parts per Million (DPPM), On-Time Delivery to Need by Date, On-Time Delivery to stated Lead Time, and Payment Terms.

These KPIs provide a basis for supplier relationship meetings and acquiring preferred status.

2.1 Supplier Quality Management System

The supplier shall establish and maintain an effectively documented Quality Management System (QMS) that satisfies the requirements defined in this manual. The QMS must communicate, identify, coordinate and control all activities necessary to design, develop, produce and deliver a quality product or service to Ingersoll Rand and/or its customers.

Many of the requirements in this supplier quality manual are derived from sections of international quality standards such as ISO-9001:2015. The supplier may be registered by an accredited certification body. Ingersoll Rand may request a copy of the certificate when applicable. Ingersoll Rand may conduct an On-Site Assessment (OSA) of the supplier's QMS, refer to section 3.1 Supplier Assessment for additional information. An OSA may be required to verify the supplier's QMS if the supplier has not achieved compliance, or is not certified. The supplier shall notify Ingersoll Rand of any significant changes in their QMS including loss of certification.

The supplier shall satisfy the requirements of all Interested Parties regarding product quality. However, the customer requirements shall take precedence over any other Interested Party's requirements.

2.2 Supplier Quality Manual

The supplier is not required to have a Quality Manual. However, the supplier must be able to demonstrate the following:

- Existence and compliance to a Quality Management System
- Supplier's quality policy and objectives
- Documented information retention policy

The supplier's management shall be engaged to ensure compliance and continuous improvement of the requirements outlined in their QMS.

2.3 Customer Communications

The supplier shall communicate essential business information to Ingersoll Rand. Such information may pertain to contractual issues including, but not limited to:

- Inquiries, orders, bids, amendments and invoices
- Product quality issues relating to design, specifications, changes and notifications
- Delivery delays and/or shortages
- Customer feedback and information

Other elements of essential information relating to changes in the supplier's business environment must be communicated immediately, such as:

- Acquisitions
- Partial Sale
- Change of control/executive management
- Pending litigation
- Restructuring
- Bankruptcy

The effective transmission of such information requires that all suppliers identify and register key points of contact with their Ingersoll Rand counterparts. The majority of the communication shall be handled through electronic documents and systems. The supplier should adopt the necessary electronic systems to manage these processes and improve communications with Ingersoll Rand. The supplier is responsible for the validity and accuracy of the documents submitted electronically and must comply with all applicable legal requirements regarding electronic signatures.

All communications, both electronic and otherwise, with Ingersoll Rand shall be in English unless this communication is meant for direct communication to a specific Ingersoll Rand facility who has agreed to an exception.

2.4 Document Control

The supplier shall establish and maintain documented information related to the QMS. Documented information must be updated, approved for use, available at points of use and controlled in a consistent manner. The supplier's QMS shall include provisions for Ingersoll Rand design-owned documentation. A master list of documents including the current revision level shall be maintained to prevent use of invalid or obsolete documents. The supplier shall maintain documented information of each change implemented.

When the supplier has design responsibility, Ingersoll Rand may request any documentation including drawings, engineering standards, and specifications. The supplier shall notify Ingersoll Rand of any changes by submitting a Supplier Process and Design Change Request. Refer to section 4.8 Change Control for additional information. Obsolete documents shall be destroyed or appropriately identified as such.

2.5 Documented Information Retention

The supplier shall establish and maintain documented information to provide evidence of regulatory compliance and Ingersoll Rand requirements. Retention policies shall define requirements for paper and electronic documented information. The documented information shall be:

- Legible
- Stored in an environment that prevents document deterioration
- Readily accessible upon request

The supplier's employees, contractors, and agents who create, receive, use or manage this documented information are required to comply with the policies and processes in accordance with customer, warranty, legal and regulatory requirements.

Unless contractually specified, Ingersoll Rand requires the supplier to maintain all documented information relating to deliverables provided for 11 years beyond the life of the product and any applicable contractual requirements, including but not limited to those for warranty and service for the purpose of this manual, unless otherwise specified. The life of the product begins with product concept and extends until the end of active part production and service requirements. Ingersoll Rand may notify the supplier when a product is no longer considered an active part. The supplier shall provide documented information to Ingersoll Rand when requested.

The sections of this manual that require documented information shall conform to this retention policy.

2.6 Confidentiality

The supplier shall use Confidential Information solely for the purposes of supporting the current business relationship with Ingersoll Rand. The supplier shall not disclose Confidential Information to any third party without buyer's express written consent, except that the supplier may disclose Confidential Information to its contractors, sub-suppliers, consultants or agents who have a need to know and have executed confidentiality agreements with the supplier, obligating them to treat such information in a manner consistent with these Terms and Buyer's Non-Disclosure Contract, if any, with supplier. The supplier shall not i) sell buyer parts or components incorporating or containing Confidential Information to any third party, or ii) sell any deliverables produced using Confidential Information to any third party.

Notwithstanding the foregoing, the foregoing shall not restrict or affect supplier's rights to use or disclose information: i) which is or may hereafter be in the public domain through no fault of supplier; or ii) which supplier can show, as reflected by its written documents, was known to it prior to the disclosure by buyer; or iii) which is disclosed to supplier by a third party, with the legal right to disclose, subsequent to buyer's disclosure; or iv) which supplier can show, as reflected by its documents, was independently developed by supplier without the use of the Confidential Information.

The supplier acknowledges that a breach of this Section 2.6 would result in immediate and irreparable harm to buyer, for which there is no adequate remedy at law. The buyer is entitled to equitable relief compelling supplier to cease and desist all unauthorized use and disclosure of Confidential Information. The supplier shall immediately notify buyer of any breach of confidentiality.

Throughout the period of production and service, the supplier shall prevent improper use, loss, or damage to all Ingersoll Rand Confidential Information. At the conclusion of the defined retention period, the supplier shall return or securely dispose of electronic and hard media copies of all such Ingersoll Rand documents. Refer to section 2.5 Documented Information Retention for additional information.

2.7 Risk Assessment & Contingency Planning

The supplier shall conduct a risk assessment of their operations that support Ingersoll Rand's production facilities, quality requirements, and delivery schedules. Each assessment should consider, at a minimum, the impact arising from:

- Natural disasters
- Epidimic / pandemic concerns
- Geo-political hazards
- Supply chain disruptions
- Facility or system issues
- Information loss
- Intellectual property claims
- Personnel concerns
- Equipment problems
- Risk assessment of sub-suppliers
- Manufacturing process risks

The supplier shall prepare contingency plans to ensure continued operations at Ingersoll Rand. The supplier shall communicate any critical risk scenario without a contingency plan that may result in a Major Disruption. The supplier shall provide the contingency plans to the buyer when requested. Refer to Section 4.8 Change Control for additional information.

2.8 Environmental, Health & Safety Compliance

Ingersoll Rand is committed to sound Environmental, Health and Safety (EH&S) operating practices including:

- Decreased use of hazardous substances
- Reduced waste and emissions
- Improved energy and water conservation
- Greater reuse and recycling of materials
- Safe and healthy work environments that prevent accidents and injuries
- Continuous improvement in EH&S performance

Ingersoll Rand suppliers shall actively implement Environmental, Health and Safety management systems including local legal requirements. A robust EH&S program reduces operational impact on human health and the environment in a sustainable manner. Recommended programs include, but are not limited to:

- Occupational Safety and Health Administration (OSHA) VPP
- ISO 14001
- OHSAS 18001 / ISO45001

The supplier shall work with Ingersoll Rand to reduce the impact of packaging waste through:

- Reduction or elimination of unnecessary over packaging
- Implementation of returnable packaging
- Substitution of current packaging materials for recyclable materials
- Recycling incoming packaging material for outgoing packaging when appropriate

The supplier shall comply with all applicable EH&S regulations. The supplier shall adhere to and comply with the environmental policy found on our website at:

https://www.irco.com/en-de/company/corporate-responsibility/environment-health-and-safety

2.9 Cleanliness of Premises

The supplier should adopt a cleanliness standard. The standard should create a state of order consistent with the requirements of the deliverables provided to Ingersoll Rand. The standard should include a process for establishing and maintaining a clean work environment. Ingersoll Rand recommends the 5S program to establish the standard.

2.10 Training

The supplier shall provide appropriate training to ensure that employees are competent and qualified to produce quality deliverables. The supplier shall review and document the required skills and competencies necessary for the production, inspection, handling, and delivery of products to Ingersoll Rand and/or its customers. The supplier shall provide appropriate training to ensure that employees follow applicable processes and instructions. The supplier shall maintain employee documented information of training, performance metrics, and skills.

2.11 Customer Approved Sources

The supplier shall purchase products from Ingersoll Rand approved sources, when specified by the contract, drawing, or any other IR or end customer specification. The use of Ingersoll Rand approved sources, including tooling and gauging suppliers, does not relieve the supplier of the responsibility for ensuring the quality of purchased products. The supplier shall be responsible for managing all aspects of the relationship with the approved source including:

- Quality of product or service
- Technical performance
- Source of materials
- On-time delivery
- Extension of Credit

2.12 Sub-Supplier Management

The supplier shall define expectations for each critical sub-supplier including:

- Understanding of their role in the supplier's and Ingersoll Rand's products and processes
- Involvement in problem solving and corrective actions, 8D methodology recommended.

The supplier shall work with sub-suppliers in order to meet the requirements provided in this manual. Areas of emphasis include:

- Verification of purchased products
- Incoming product quality
- Sub-supplier monitoring

Verification of Purchased Products & Services

For each sub-supplier, the supplier shall establish and implement methods, processes, and systems to verify that all deliverables comply with Ingersoll Rand requirements. The supplier shall complete this verification process prior to use for all deliverables provided to Ingersoll Rand. Consistent methods used for verification may include:

- Control plans
- Standard work instructions
- Regular inspection
- Functional testing
- Audits

To ensure on-going product quality, Ingersoll Rand may conduct an audit to verify product at the supplier or sub-supplier facility. The scope of each audit will be at the sole discretion of Ingersoll Rand. Ingersoll Rand shall notify the supplier of the planned date of the audit. The supplier and Ingersoll Rand will negotiate a mutually acceptable date for the audit. The supplier must notify the sub-supplier of this requirement. Any verification performed by Ingersoll Rand does not relieve the supplier of the responsibility to provide quality products.

Incoming Product Quality

The supplier shall implement a process to ensure the quality of incoming deliverables meets Ingersoll Rand's requirements. The process may incorporate standard methods including:

- Data evaluation from the sub-supplier
- Performance-based receiving inspection
- Testing based on approved sampling plans
- Supplier audits or assessments coupled with documented information of acceptable delivered product quality
- Part evaluation by an approved laboratory as required
- Other methods approved by Ingersoll Rand

All non-conforming material resulting from this process shall be identified and quarantined. The supplier and sub-supplier shall have a process to disposition non-conforming product.

Sub-Supplier Monitoring

The supplier should collect objective data on the performance of its sub-suppliers. This data may be used to generate a performance ranking or scorecard. Performance metrics may include:

- Delivered product quality – Nonconforming Parts Per Million (PPM)
- Delivery schedule performance with incidents of premium freight
- Lead-time improvement
- Major Disruptions
- Special status notifications from sub-supplier pertaining to quality or delivery issues

Continuous improvement activities should be driven by a sub-supplier's performance against such metrics.

In some cases, sub-supplier performance monitoring may not be conducted due to the business, product or other quality considerations. The supplier may be required to notify Ingersoll Rand of such exceptions.

3.0 Supplier Selection & Assessment

Ingersoll Rand expects the supplier to:

- Abide by our Code of Conduct
- Provide high quality products that meet or exceed expectations
- Provide products at a competitive price
- Deliver products on-time
- Maintain financial strength to support current business and promote growth

Ingersoll Rand shall verify compliance during the selection and assessment process.

3.1 Supplier Assessment

Ingersoll Rand may conduct an On-Site Assessment (OSA) of the supplier's QMS, documentation and manufacturing facilities based upon criteria established in the OSA form. The OSA is generally conducted for potential new suppliers or an existing supplier's new facility. An OSA may be conducted if a supplier has not had an assessment in the last three (3) years. The OSA can be conducted in person, virtually, or self- assessment at the supplier's manufacturing facility at Ingersoll Rand's discretion. A Category Specific Process Audit (CSPA) of the supplier may be required in addition to the OSA for new suppliers. The CSPA evaluates the supplier's capability to manufacture the potential product.

Ingersoll Rand shall share the results of the OSA with the supplier.

Generic Supplier Process Audit (GSPA)

Ingersoll Rand may conduct an on-site Generic Supplier Process Audit (GSPA) at the supplier and/or its sub-suppliers. The GSPA ensures the process meets Ingersoll Rand's requirements for capability and error detection and prevention. All processes will be reviewed based on:

- Continuous improvement
- New or changed processes
- Support for global procurement strategy
- Major Disruptions

Category Specific Process Audit (CSPA)

Certain manufacturing processes cannot be verified using normal monitoring and measurement techniques. Ingersoll Rand may conduct Category Specific Process Audit (CSPA). The supplier must demonstrate the ability to control the elements of these processes to achieve the defined results. The supplier shall establish verification methods for these processes, as applicable:

- Defined criteria for review and approval of the processes
- Approval of equipment and documented capability assessments
- Documentation of training, previous experience and qualification of personnel
- Use of specific methods and processes
- Requirements for documented information storing the measurement results
- Revalidation of the processes

After the start of production, the audit is a method for identifying continuous improvement ideas and helping with problem solving.

Ingersoll Rand shall share the results of all process audits with the supplier.

The OSA and CSPA status is manufacturing site specific. Ingersoll Rand reserves the right to conduct more frequent audits and to enter the supplier's facilities to perform an audit. Ingersoll Rand shall notify the supplier of the planned date of the audit.

4.0 Advanced Quality Planning

The supplier shall develop the processes required for the active quality planning of manufactured product. In the planning of product, the supplier shall work with Ingersoll Rand to:

- Develop quality objectives and requirements for the product (as example Defect Parts Per Million (PPM), Cost of Poor Quality (COPQ))
- Establish processes, documents, and allocate resources
- Determine required verification, validation, monitoring, inspection and test activities and the criteria for acceptance prior to delivery to Ingersoll Rand
- Define documented information required to provide evidence of product conformity

4.1 Advanced Product Quality Planning

The supplier shall implement a framework that ensures robust product and process development Capabilities based on product criticality. Advanced Product Quality Planning (APQP), provides a proven and disciplined approach that meets Ingersoll Rand's deliverable requirements. The suppliers quality process should be implemented from initial product concept and continue through the production launch phase of the project.

The supplier shall establish periodic internal reviews during the **design** and **development** process and the production launch. The supplier shall evaluate quality risks, costs, lead-times, critical paths and other items as appropriate throughout the entire APQP process. The reviews shall contain:

- Monitor progress of the design and development of deliverables
- Evaluate the results compared to the product requirements
- Identify potential problems and develop corrective actions
- Analyze the product and/or process utilizing a risk-approach (FMEA/MFR) methodology
- Provide input for management reviews

Ingersoll Rand may request the results of reviews based upon potential criticality and risk that a product has to Ingersoll Rand's business or/and products.

The supplier shall develop a **project plan** in line with product criticality and Ingersoll Rand requirements:

- Project tasks, target dates and assigned responsibilities
- Time allocated for completing initial designs, supplier selection, product development, testing,
- Tool design, manufacturing, supplier production try-outs and Production Part Approval Process (PPAP) or equivalent (FAI, VDA)
- Sample requirements, PPAP (FAI) quantities, and delivery dates

When design responsible, the supplier shall complete the initial product design and maintain documented information of all changes for each product. Ingersoll Rand shall be notified of all changes impacting product form, fit function or potential influence on user experience. All changes shall be reviewed, verified and validated, prior to the implementation and acceptance by Ingersoll Rand. The review of design changes shall include an evaluation of product and mating parts in the assembly, manufacturing and downstream processes and purchasing costs (SDR, SPDCR).

The supplier shall verify that the product meets the requirements established during the planning activities. Design verification shall be conducted independent of the responsible design team. The verification results shall be reviewed periodically with management. The supplier may be required to participate in design reviews with the Ingersoll Rand project team.

The supplier should begin the **Product and Process Validation** phase of APQP when the tooling, capital equipment and/or gauging is available. The supplier shall test and verify that their process outcomes satisfy the designs and/or specifications derived in the Product Design and Development phase. The process capacity shall meet the contracted production rate prior to acceptance. The installed capacity shall be verified during the PPAP (FAI) activity. (Refer to section 4.5 Product Approval Process for additional information).

Ingersoll Rand may specify the validation plan when it has design responsibility. When the supplier has design responsibility, Ingersoll Rand reserves the right to approve the validation plan. The supplier shall perform the validation testing. The testing shall ensure the resulting product satisfies the requirements for the application and its intended use. The supplier's engineering function shall define and finalize specific test processes to validate the design. The supplier is responsible for any outsourced services used in the validation process. Refer to section 4.13 Statutory & Regulatory Conformity for additional requirements. Production intent materials, tooling, processes and sub-suppliers should be used to produce products for validation testing. Ingersoll Rand may require product for testing requirements.

Ingersoll Rand shall approve parts via the PPAP(FAI) submission, utilizing IR approval process or ETQ Reliance system.

The supplier shall not ship any production parts until signed approval is received from Ingersoll Rand per agreed method or documentation (i.e. Part Submission Warrant or equivalent – Sample approval form). Refer to section 4.5 Product Approval Process for additional information.

Production Launch
The supplier begins the Production Launch phase of the APQP when PPAP(FAI) approval or interim approval is provided by Ingersoll Rand. The supplier shall utilize the Early Launch Containment methodology to reduce risk and improve quality prior to product delivery where applicable.

4.2 Customer-designated & Special Characteristics

Ingersoll Rand drawings and specifications may designate product features as Special Characteristics, Critical-to-Quality or other designations. These features may be designated by various symbols depending on each BU. Typically, these characteristics influence:

- Product form, fit or function
- Compliance to regulations
- Safety requirements
- Customer satisfaction

The supplier shall demonstrate process capability through statistical controls for all designated special characteristics and maintain control for all measurement methods used. The target process capability for special characteristics will be determined by Ingersoll Rand together with supplier based on parts criticality and needs. If no special characteristics are defined, the supplier shall determine which product and/or process characteristic should be used to evaluate capability. Ingersoll Rand reserves the right to approve the characteristics selected for evaluation. Ingersoll Rand shall define the requirements in the PPAP(FAI) request letter when the volume does not support conducting a process capability study.

For any deviation of process capability, the supplier shall initiate an internal corrective action plan, including 100% inspection (CS1/CS2), when process capability is not met. The supplier shall maintain documented information of all corrective actions. Any deviation of this clause is subject of Ingersoll Rand approval and decision.

4.3 Measurement System Analysis

The purpose of the Measurement System Analysis (MSA) is to assess the accuracy, repeatability, and reproducibility of each measuring device used in the manufacture of products supplied to Ingersoll Rand. The supplier shall implement a process to evaluate each type of measurement system periodically. An MSA shall be conducted on all new or modified measurement systems for Critical parameters where required. The supplier shall develop a corrective action for any measurement system found that does not meet the requirements, including:

- Containment of suspect and non-conforming products
- Notification to Ingersoll Rand of affected products
- Potential last good inspection/calibration/MSA date
- Interim corrective action

- Repair, replacement and/or recovery plans
- Certification by outside source

4.4 Calibration and Verification Documented Information

The supplier shall implement a calibration and verification system or process to ensure all gauges, jigs, fixtures, poka-yoke devices, master standard, measuring and testing equipment are qualified at defined frequencies. All measuring and test equipment must be:

- Identified with unique traceability and qualification status
- Calibrated and/or verified at a specified frequency to approved standards
- Adjusted or re-adjusted, as required
- Prevented from improper adjustment
- Protected from damage during use, handling and storage
- Documented information shall be maintained for all gauges, measuring and testing equipment including:
- Equipment identification and calibration standard
- Revisions for engineering changes
- Any out-of-specification readings
- Impact assessment for out-of-specification condition
- Statements of conformity after calibration or verification

The supplier shall notify Ingersoll Rand of potential suspect product when an out-of-calibration condition is detected. The supplier shall take appropriate actions to prevent further use of discrepant product at Ingersoll Rand. All suspect products at the supplier must be identified and quarantined. Refer to section 5.0 Non-Conforming Product for additional information.

4.5 Product Approval Process

Ingersoll Rand utilizes the PPAP (FAI) requirements for product approval. Equivalent product – sample approval process is allowable based on Ingersoll Rand approval. All suppliers shall comply with these requirements for all new products and any approved changes to production parts. Ingersoll Rand shall determine the risk level required. Default PPAP (FAI) level is Level2

Ingersoll Rand PPAP owner shall work with the supplier to define the PPAP submission supporting data via the Part Submission Warrant (PSW) or equivalent form and the sample production run quantity. The PPAP run parts and the supporting data should be conducted utilizing production intent process. Reference the PPAP chart for submission requirements:

Level 1

- Parts Submission Warrant (PSW) only with Appearance Approval

  Report for designated appearance items

  This applies for None critical parts, standard product and simple parts

Level 2

- PSW with product samples and limited supporting data (Ingeroll Rand default for majority of product)

Level 3

- PSW with product samples and complete supporting data
- This applies to complex product based on Ingersoll Rand guidance)

Level 4

- PSW and other requirements as defined by Ingersoll Rand

Level reserved for special applications only

Level 5

- PSW with product samples and complete supporting data reviewed at the supplier's manufacturing location.

Requires on site review by Ingersoll Rand reserved for special applications and special processes involved.

Ingersoll Rand will provide a status of:

- **Approved** – the product or service meets all requirements and the supplier is authorized to deliver production quantities.
- **Rejected** – the product or service fails to meet the requirements and the Supplier is not authorized to deliver the product or service. After implementing the corrective actions identified, the supplier must re-submit the new PPAP (FAI) documentation & samples to Ingersoll Rand for approval.
- Ingersoll Rand shall notify the supplier of the concerns and/or issues that result in a product status of Interim Approval or Rejected. The supplier shall not ship any production parts until signed approval is received from Ingersoll Rand. Ingersoll Rand shall utilize standard processes which might include an electronic medium for the execution and submission of PPAP's. We refer to this system as ETQ Reliance system PPAP Module. Contact your IR quality representative for further details.

4.6 Laboratory Requirements

The supplier should establish and maintain laboratory capability for frequently used services, such as gauge calibration in the case it is required by Ingersoll Rand. Laboratory services provided by the supplier, either internal or external, shall be qualified to perform the required inspection, test or calibration services. The laboratory scope shall be defined and technical requirements. External laboratories may require accreditation to ISO/IEC 17025 or equivalent national standard. At any time, Ingersoll Rand may request production samples to perform additional analysis and testing.

4.7 Production Monitoring

The supplier's control plan shall identify all Ingersoll Rand requirements and the method of inspection and when applicable functional verification to be performed. Ingersoll Rand may specify certain criteria for inspection methods and functional verification based on product and parameters criticality. The control plan establishes the method and frequency of monitoring and measuring the product and processes to ensure conformity to Ingersoll Rand requirements. The supplier shall establish processes to control non-conforming product or service. The non-conforming product shall not be released or delivered unless approved by the supplier's authorized representative and, when applicable, Ingersoll Rand. Refer to section 5.5 Customer Waiver for additional information.

4.8 Change Control

After product approval, the supplier shall control all changes to Ingersoll Rand deliverables. The supplier's QMS and control system shall include processes to manage all changes to engineering documented information, manufacturing equipment and tooling, test and measurement equipment and all materials used in the process. Any changes to engineering drawings, specifications, materials, manufacturing processes or other documents require PRIOR APPROVAL by the authorized Ingersoll Rand representative. The Supplier Process and Design Change Request (SPDCR) form shall be used by the supplier to notify Ingersoll Rand prior to any changes. Ingersoll Rand utilizes an electronic medium for the execution and submission of all SPDCR's. We refer to this system as ETQ Reliance system Deviation Module. Contact your IR quality representative for further details.

Some examples requiring notification and when applicable PPAP re-submission:

- Drawing or specification change
- Material change or new material supplier
- Software changes, Special process change including heat treatment, plating, coating, etc.
- New or modified production tooling
- Re-location of equipment within a site and Manufacturing location change
- New sub-supplier or sub-supplier process change
- New or modified testing and/or measuring equipment
- Packaging and/or labeling change if required by Ingersoll Rand

Ingersoll Rand shall be notified of planned changes prior to starting the project. The implementation date shall be determined by Ingersoll Rand and the supplier. Various new process and product capability studies and approvals may be required as a result of the planned changes. The acceptance criteria for a planned change shall be agreed upon by Ingersoll Rand and the supplier prior to implementation on the base of change risk review. The process for accepting a change may require substantial time to complete all tasks identified. Refer to section 4.5

Product Approval Process for additional information. In the event of an unauthorized change, the supplier must notify Ingersoll Rand within 24 hours of detecting the change. The supplier may be placed on New Business Hold (NBH) if the proper notifications and processes are not followed.

The supplier shall request approval from each Ingersoll Rand site affected by a change.

4.9 Preventive & Predictive Maintenance

The supplier shall plan and operate a comprehensive maintenance system for the production equipment used to support products. The maintenance system, at a minimum, shall cover:

- Planned maintenance activities
- Packaging and preservation of equipment, tooling and gauging
- Availability of replacement parts for key manufacturing equipment
- Documenting, evaluating and improving maintenance objectives and performance
- Predictive methods to reduce and/or eliminate unscheduled interruptions (downtimes)

4.10 Customer-owned Assets

Custom products may require Ingersoll Rand-owned assets to be consigned to the supplier. The assets shall be used exclusively for the development, production, and testing of Ingersoll Rand products. Such assets may include, but are not limited to:

- Production tooling and fixtures
- Gauges
- Testing and measuring equipment
- Dedicated processing equipment
- Prototype or production components
- Licensed software and hardware

The purchase order shall identify all required assets, applicable specifications, maintenance requirements and expected life of the asset. The supplier shall adhere to the terms and conditions established by the Bailment Agreement. The supplier must attach an approved Ingersoll Rand asset tag or utilize another approved method of marking. The supplier must maintain a log of all Ingersoll Rand-owned assets. Ingersoll Rand may request the asset log and/or conduct an audit of the assets.

The supplier shall have documented information and maintain a log of operational data for each asset including, but not limited to:

- Maintenance history
- Usage
- Capability information and capacity documented information
- Tool changes for perishable tooling or wear components
- Tool modifications and engineering changes
- Updated pictures of each asset

The supplier shall immediately notify Ingersoll Rand if any asset is found to be defective or unsuitable for production. All tool modifications and design changes shall be documented and maintained. Documented information of all repair or replacements actions must be submitted to Ingersoll Rand.

The supplier shall not transfer, or consign to another party, any Ingersoll Rand-owned nor IR Customer owned assets without prior written approval from Ingersoll Rand. Any asset transfer may require a new PPAP (FAI) approval before production resumes. Refer to section 4.5 Product Approval Process for additional information. The supplier shall not disposition any Ingersoll Rand-owned tooling without prior written approval from Ingersoll Rand. Tracking of tooling might be covered by Ingersoll-Rand ETQ tooling module, for more information contact your Procurement / Quality contact.

4.11 Identification & Traceability

The supplier shall properly identify product throughout the realization process and establish a system that:

- Identifies the production status
- Verifies product acceptance with regards to inspection and testing
- Properly controls product disposition

The supplier shall create a traceability method for unique identification of each part or material lot, unless otherwise agreed upon by Ingersoll Rand. The supplier shall work with Ingersoll Rand to develop and approve an acceptable method, location and content for marking the product. The supplier shall maintain all documented information necessary to ensure product quality, this also includes management of TIER2 suppliers with same traceability requirements.

4.12 Preservation of Material

The supplier shall develop a plan for proper identification, handling, packaging, storage, protection and preservation of all Ingersoll Rand products and materials. The preservation plan shall apply to all internal

and external supplier processes. The plan shall apply to the storage and delivery of all products prior to assembly at Ingersoll Rand or its customer facilities. As required, material handling, packaging and storage shall be designed to:

- Prevent contamination
- Prevent part-to-part contact (except bulk material)
- Reduce environmental effects on product
- Prevent degradation of product
- Rust prohibitive shall be compatible with IR lubricating oil when applied on an internal surface
- Prevent loss or damage in transport
- Properly manage shelf life of perishable products

The supplier should utilize an inventory management system to optimize inventory, reduce risk of obsolete product, and ensure stock rotation.

4.13 Statutory & Regulatory Conformity

The supplier's product shall be certified to applicable standards as required (e.g. Underwriters Laboratory (UL), European Union (CE mark), UKCA, Canadian Standards (CSA), AMSE, RoHS WEEE, REACH and others). The supplier shall ensure that certification is maintained. Evidence shall be submitted along with PPAP (FAI) documentation, when required.

The supplier's product or service shall meet all statutory and regulatory requirements for the locations where it is manufactured and used. These requirements shall be properly documented and documented information maintained.

The supplier shall comply with all buyer requests for information and other reasonable buyer requirements regarding Conflict Minerals.

For more information see the Conflict Minerals section of our website at:

https://www.irco.com/en-us/company/corporate-responsibility/working-with-us/business-partner-code-of-conduct

The supplier shall provide samples, testing, environmental and most current and valid material Safety Data Sheet (SDS) information when requested.

5.0 Non-Conforming Product

When a non-conformance occurs, and to prevent their unintended use or delivery, the supplier shall:

- Identify the non-conformance (According to supplier applicable documented procedure)
- Minimize its impact through proper containment
- Determine the true root cause
- Implement corrective action
- Establish controls to prevent the non-conformance from recurring including validation

In the process of resolving the non-conformance, corrective actions, lessons learned and best practices are documented and shared, when appropriate.

5.1 Control of Non-Conforming Product

The supplier shall identify and control in a quarantined location any non-conforming product when:

- Product requirements are not met
- Packaging is incorrect
- Labeling or marking misidentifies the product
- Product status is unknown or suspect

The supplier shall establish a documented process to ensure that outputs (i.e. products, processes, services...) that do not meet applicable requirements are identified and controlled to prevent their unintended use or delivery. The non-conforming product must be controlled until the supplier can:

- Determine and eliminate root cause of non-conformance through process improvements
- Eliminate the detected non-conformance by Ingersoll Rand-approved rework and/or repair
- Obtain approval to “Use-As-Is” (U.A.I.) from Ingersoll Rand. Refer to section 5.5 Customer Waiver for additional information.
- Scrap or reject product to prevent unintended use
- Re-allocate product to a different Ingersoll Rand-approved application (known as re-grade)

The supplier shall establish a documented process to define and control rework and repair processes. Any rework or repair process, not identified within the approved Ingersoll Rand Process (PPAP / First Article Inspection) documents, must be approved by Ingersoll Rand prior to being applied/delivered. Customer approval does not relieve the supplier of any liability regarding product quality. All corrected non-conforming product must be re-verified to demonstrate conformity to the requirements. The supplier must properly identify each product or package as repaired or reworked.

The supplier shall immediately notify Ingersoll Rand of any defective products found at their facility that may have been delivered to Ingersoll Rand and/or its customers. When potential non-conforming products have been shipped, the supplier must implement immediate (within one business day after notification) and appropriate containment processes and actions. The actions should include:

- Containment of product at the supplier's or sub-suppliers facility, in transit and at Ingersoll Rand and/or its customer
- Notification to the Ingersoll Rand plant of conforming product availability and shipment dates
- Product sorting at Ingersoll Rand and/or its customer
- Approved third party sorting provisions when supplier is unable to send representatives

The supplier shall maintain documented information of the non-conformance and subsequent actions taken. Ingersoll Rand reserves the right to audit any non-conformance. Ingersoll Rand may issue a Supplier Corrective Action Request (SCAR) for supplier identified non-conformances with the product(s).

5.2 Corrective Actions

Ingersoll Rand may issue a Supplier Corrective Action Request (SCAR) in the identification and resolution of non-conformance detected at Ingersoll Rand's facilities or by our customers. The SCAR may be issued based upon incoming inspections, in-process rejects, customer rejects, field failures, packaging or labeling issues.

The supplier is expected to respond to all SCARs issued in the format received. Ingersoll Rand may utilizes an electronic medium for the execution and submission of all Supplier Corrective Action Requests (SCAR's). We refer to this system as ETQ Reliance system SCAR Module. Contact your IR quality representative for further details. When a supplier receives a SCAR, Ingersoll Rand's 24-14-30 timing policy shall be followed:

Initial Response within 24 hours:

- Acknowledge receipt of SCAR upon notification
- Identify all suspect product
- Notification of quantity of suspect material in route to Ingersoll Rand and/or its customers
- Immediate containment action taken
- Interim plan for supporting Ingersoll Rand production with certified product

Corrective Action Plan within 14 days:

- Use problem solving techniques to determine the root cause of the non-conformance. Refer to section 5.3 Problem Solving for additional information
- Detailed plan for implementing corrective actions to control and prevent recurrence
- Disposition of suspect products

Final Report within 30 days:

- Implemented corrective actions with supporting data
- Verify effectiveness of corrective actions

If the supplier fails to respond appropriately, the supplier may be placed on New Business Hold.

Controlled Shipping

If escalation of a non-conformance is necessary, Ingersoll Rand may place a supplier in Controlled Shipping (CS). Controlled Shipping ensures a rigorous inspection process to protect Ingersoll Rand and its customers from receiving non-conforming product. The supplier shall utilize a separate and distinct area for redundant inspection of the product. Ingersoll Rand will determine when a supplier shall be placed into Controlled Shipping Level 1 (CS1) and/or Controlled Shipping Level 2 (CS2). Ingersoll Rand may place a supplier immediately into CS2, bypassing CS1.

For CS1, the supplier must provide certified product to Ingersoll Rand. The supplier shall provide the CS1 inspection results at the specified frequency determined by Ingersoll Rand. The supplier shall continue its problem solving activities and corrective action implementation.

In the event that CS2 is required, a meeting will be scheduled between key stakeholders within Ingersoll Rand and the supplier. An approved third party provider must be utilized to certify the supplier's product prior to use. Ingersoll Rand shall determine the location where the third party provider must perform the inspections. The results of the third party inspections shall be provided to Ingersoll Rand at the specified frequency. The supplier shall continue its problem solving activities and corrective action implementation. If a CS1 inspection has been established, the CS1 requirement remains in effect even with the addition of a CS2 inspection requirement.

The supplier is responsible for all costs associated with CS. The supplier shall remain in CS1 and/or CS2 until the Exit Criteria have been met. When placing a supplier in CS, Ingersoll Rand may consider:

- Severity or duration of a non-conformance
- Repeat SCARs
- Supplier's process is not capable
- Warranty issues
- Major Disruptions
- Current containment activity is inadequate
- Production Launch first pass yield results inadequate

Additional details necessary for each occurrence shall be defined when the CS process is initiated. Ingersoll Rand shall provide the Exit Criteria for CS1 and/or CS2 when the process is initiated.

5.3 Problem Solving

The supplier should adopt the “Zero Defects” mindset to reduce and eliminate non-conformances. When a non-conformance occurs, the goal is to quickly and effectively identify the problem, minimize its impact, determine the root cause, implement corrective actions and prevent recurrence. A robust problem solving methodology leads to effective root cause identification and elimination. Ingersoll Rand recommends the use of 8D Problem solving method. The supplier should adopt this method or another industry recognized disciplined approach that covers, at a minimum:

- Establish the problem solving team and key contact person – include key stakeholders, experts and direct involved personnel
- Define the problem scope – state the problem using quantitative terms identifying who, what, where, why, when and how
- Develop an interim containment plan – immediate actions to contain product at all locations
- Identify all potential root causes – analyze and verify source of the problem including what process failed, why failure was not detected and what systems failed to prevent the non-conformance (3 root cause approach)
- Develop corrective actions to prevent recurrence – verify actions resolve the problem and do not create unintended effects
- Implement corrective actions – update required process documentation and validate effectiveness
- Implement preventive actions – take steps to prevent similar problems from occurring in other products or processes and document Lessons Learned and Best Practices
- Review and recognize the team – review and approve completion with management

The supplier shall evaluate the effectiveness of its problem solving process through feedback of internal audits, process audits, performance data and review of repeat SCARs.

Error-proofing methods are effective corrective actions to eliminate recurrence of a root cause when properly implemented. The supplier shall use error-proofing methods to identify potential design and/or process improvements and implement when applicable.

5.4 Cost of Poor Quality (COPQ) Recovery

The supplier shall be responsible for all costs incurred by Ingersoll Rand and its customers in conjunction with a SCAR or any failure of the supplier’s deliverables. Ingersoll Rand may take immediate actions to

satisfy customer requirements while notification of the issue is provided to the supplier. A Cost Recovery Notice shall be provided with details regarding costs incurred. The supplier shall respond to a Cost Recovery Notice when received within 10 working days.

Potential costs incurred include, but are not limited to:

- Incoming inspections
- Necessary sorting activities
- Return shipments or shipments to third party locations
- Customer management for warranty and field inspections
- Analysis of warranty and field returns
- Rework, repair or scrap of product at Ingersoll Rand and/or its customer's facilities
- Premium freight charges
- Production downtime
- Additional labor costs including overtime and extra manpower
- Process changes for accommodating product
- Additional inspections or process controls
- Costs to manage actions taken

Ingersoll Rand may place a supplier on New Business Hold as a result of COPQ, SCARs, or other concerns. The supplier may be removed from the approved supplier list.

5.5 Customer Waiver

The supplier must obtain approval from Ingersoll Rand for temporary changes to existing product and processes prior to releasing product for shipment or authorizing production to proceed. The supplier shall utilize the Supplier Deviation Request (SDR) for these basic steps:

- Initiate a deviation with detailed information
  - Including root cause investigations and why change is needed
- Review deviation with Ingersoll Rand representative
- Notify Ingersoll Rand of delivery date
- Mark affected product accordingly
- Manage deviation quantity or time
- Monitor completion of corrective actions

The supplier and Ingersoll Rand shall evaluate the SDR to reduce adverse impact on the customer, operations, safety, and environment. Product engineering may be required to perform analysis to validate any adverse effects the deviation may have on the design integrity for form, fit or function. The supplier shall provide samples, when requested, of the deviation to evaluate impact of the change in both the

design and in use at the Ingersoll Rand facility. Any costs associated with testing, evaluating or accommodating deviated product are the supplier's responsibility. Ingersoll Rand will approve or reject the SDR. Excessive use of deviation requests is an indication that the supplier's QMS may not be performing as expected.

Ingersoll Rand may utilize an electronic medium for the execution and submission of all Supplier Deviation Request (SDR). We refer to this system as ETQ Reliance system Deviation Module. Contact your IR quality representative for further details.

5.6 Continuous Improvement

The supplier shall strive to continually improve its products, processes and systems. The supplier shall conduct regular reviews of:

- Quality policy and objectives
- Audit results
- Data analysis
- Corrective and preventive actions

The process of continuous improvement must be included in the goals and objectives of the entire supplier organization. Continuous improvement can reduce potential risks and prevent possible non-conformances. Refer to section 4.8 Change Control for additional information.

6.0 Customer Satisfaction

Customer satisfaction provides an important feedback to the supplier on their performance. The supplier shall establish a method to evaluate feedback from Ingersoll Rand in these areas:

- Part quality performance
- Warranty and field returns
- Delivery schedule performance
- Ingersoll Rand issued SCARs
- Major Disruptions

The supplier shall monitor the performance of their manufacturing processes to demonstrate compliance

with Ingersoll Rand requirements for product quality and efficiency of the process. The supplier should retrieve information from their supplier scorecard or contact Ingersoll Rand representative to receive additional feedback.

Ingersoll Rand monitors its suppliers for these items and may place a supplier on New Business Hold as a result.

7.0 Global Logistics

The supplier shall comply with the requirements established by Ingersoll Rand Global Logistics and any specific regional and production plant requirements.