



SUPPLIER QUALITY ASSURANCE MANUAL

POLARIS

POLARIS INDUSTRIES INC.
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REV	DATE	OWNER	APPROVER	DESCRIPTION OF CHANGES
01	15-NOV-2017	Tracy Walters	Doug Scites, Brad Clark	Prior revisions, noted as OPS-MANL-0100, released outside of Reliance. Review of all sections by owners to reflect safety initiatives, CCB review of all sections, link removal, references updated to point to Reliance.
02	1-MAR-18	Tracy Walters	Quality CCB Board	Added: Supplier Onboarding, Management Responsibility, Resource Management, Continuity of Supply, Qualified Supply Base, Polaris Supplier University. Updates made to Traceability, Sub-Tier Management, DCR, PCR, Deviation. Resources updated for AQPQ, SPEP. Renamed Scope to Conflict Management.
03	20-DEC-18	Tracy Walters	Quality CCB Board	Updates made to CAPA, Safe Launch, Non-conformance, SIR, Process Controls, Sub-Tier Supplier Management, Product Identification and Traceability, and PPAP. All training references updated to Supplier University of Polaris. Removed Appendix C-References (all are noted in their relevant sections).
04	10-OCT-19	Jillian Koenigsmark	CJ Rutten	<p>GENERAL CHANGES THROUGHOUT:</p> <ul style="list-style-type: none">• Rebranding and other template corrections• Updates for consistency in terminology• Updated documentation and training references• Various typo corrections and editorial cleanup• Addition, removal, and combining of several sections, resulting in slightly restructured TOC <p>SPECIFIC UPDATES TO SECTIONS:</p> <ul style="list-style-type: none">• 1 – 1.1.2 Purpose/Scope: Clarified scope and added conventions• 3.1 Conflict Management: Small clarifications<ul style="list-style-type: none">• 4.1 – Escalation Management: Small clarifications• 5 – Supplier Qualification & Onboarding: Complete rewrite for clarifications• 5.1.1 – Polaris Supplier Assessment – Small clarifications and removed segment information

				<ul style="list-style-type: none"> • 6.1 – Polaris Development Process (PDP): A few small clarifications and added much greater detail surrounding what the gates entail • 6.6. – Sample Inspection Report (SIR): Small clarifications <ul style="list-style-type: none"> • 6.8 – Pulse Orders: Small clarifications • 6.10 – Production Part Approval Process (PPAP): Small clarifications • 6.11 – Appearance Approval Report (AAR): Small clarifications • 6.12 – Safe Launch: Very minor update for clarification • 7.1.3 – Product Assurance: Small clarifications • 7.2 – Packaging, Labeling, & Logistics: Small clarifications • 8.5 - Supplier Performance Escalation Process (SPEP): Added CAPA or CAR to list of circumstances that may initiate SPEP
05	19-JUN-20	Jillian Koenigsmark	CJ Rutten	<ul style="list-style-type: none"> • Small spelling and grammatical corrections throughout <ul style="list-style-type: none"> • Changed “QMS” to “QOS” throughout • 2.0 - Glossary: Small corrections and updates • 4.4 – Quality Management: Updated to note that Polaris does not keep copies ISO/IATF information (only suppliers must keep these copies) • 4.9 - Qualified Supply Base (QSB): Removed this section <ul style="list-style-type: none"> • 6.6 - Sample Inspection Report (SIR): Extensive updates to clarify the dependencies between SIR, PPAP, and APQP • 6.7 - Pilot Build Order Process: Renamed to “Pilot Build Material Supply: Engineering & Quality Requirements” and noted that SIR data may be requested for this • 6.10 – Production Part Approval Process (PPAP): <ul style="list-style-type: none"> ○ Added a new bullet to the expectations to clarify that supplier scorecards can be negatively impacted if a supplier allows automatic acceptance to occur, rather than actively responding to the phase ○ Added retention time for sample parts

				<ul style="list-style-type: none"> 7.2 - Packaging, Labeling, and Logistics: Small wording change due to new scorecard 8.1 - Reject Material Order (RMO): Small wording change due to new scorecard 8.1.1 – RMO Disposition Codes: Small wording change due to new scorecard 8.1.2 - Non-Conforming PPM Rate: Small wording change due to new scorecard
06	21-JUN-21	Jillian Koenigsmark	CJ Rutten	<ul style="list-style-type: none"> Brand new front cover page Updated the name of the supplier portal and navigational references for it throughout the manual <ul style="list-style-type: none"> Updated and verified all reference documentation throughout the manual Removed the Supplier Productivity Metrics (SPM) section Merged the Supplier Continuous Improvement Program (SCIP) and Supplier Performance Escalation Process (SPEP) sections with the new Supplier Performance Management section 1.1.2 - Critical Definitions: Added clarification for "must" and "may" and verified all mandatory and optional language throughout the manual 2.0 - Glossary: Updates to a few definitions so they match corresponding updates in the applicable manual sections, added a few new definitions that were missing 4.3 Sub-Tier Management: Added clarification about timely communication 4.8 - Supplier Communications: Very small clarification 5.2 - Test & Measurement Equipment: One small correction and updated tire graphic 6.1 - Polaris Development Process (PDP): Added Pre-Gate 1 information, some APQP clarifications, and did some small corrections 6.4 - Key Product Characteristics (KPCs): Entirely rewritten for clarify and correctness 6.6 - Sample Inspection Report (SIR): One small correction 6.7 - Pre-Production Build Material Supply:

				<p>Engineering & Quality Requirements: Some small corrections, removed the example, and added a clarifying sentence</p> <ul style="list-style-type: none"> • 6.8 - Pulse Orders: Entirely rewritten for clarity and correctness • 6.9 - Run-At-Rate (R@R): Added one sentence about virtual audit • 6.10 - Production Part Approval Process (PPAP): Several small corrections, clarifications for PV build, charges, and proprietary information, removed sentence about non-response to Supplier Acceptance affecting scorecard • 6.11 - Appearance Approval Report (AAR): One small correction • 7.1.3 – Product Assurance: Entirely rewritten for clarity and correctness • 7.3 - Process Controls: Entirely rewritten for clarity and correctness • 7.5 - Deviation Request: One small correction • 7.7 - Process Change Request (PCR): Added one small clarification • 8.1.1 - RMO Disposition Codes: Added a clarification regarding code 00 • 8.2.1 - Supplier Corrective Action & Preventive Action (CAPA): Corrected title by adding missing word • 8.3.2 - Third-Party Containment: Added a few clarifications • 8.5 - Supplier Performance Management: Renamed from Supplier Performance Escalation Process (SPEP) and entirely rewritten
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1. **PURPOSE/SCOPE**

This manual communicates the quality processes, systems, and procedures necessary to ensure all members of the global Supply Chain meet Polaris expectations. The expectations set forth in this manual are applicable to existing and new suppliers of parts, materials, and services that directly impact the quality of Polaris products.

We recognize that suppliers are instrumental in meeting Polaris' commitment to obtaining on-time, defect-free product with unmatched value to make us successful. Our relationship shall instill a passion for "Zero Defects" across the entire global supply chain. Having a zero defects mindset is not a "business as usual" approach to resolving quality problems. It requires a proactive approach to managing quality that focuses on prevention and continuous improvement that is deeply embedded within the global supply chain. We shall transform our mindset regarding quality from "as received" at the factory to zero defects "as delivered" to the end customer. The focus shall be on customer-perceived quality with metrics linked to leading product quality and reliability. Polaris seeks suppliers who will make a commitment to continuous improvement (using tools such as Lean Manufacturing, Six Sigma and AIAG Core Tools) and provide objective evidence of measurable improvements in quality and delivery.

Working together with the processes outlined in this manual, the *Supplier Business Practice Manual (SBPM)*, and the *Supplier Delivery Manual (SDM)*, we can successfully generate breakthrough quality improvements, create world-class products, and deliver them effectively while contributing to each other's success.

Polaris shall provide updates and revisions to this manual, as necessary. Suppliers are expected to incorporate these updates and revisions into their quality system in a timely manner. If these changes generate a question or potential problem for a supplier, it is the supplier's responsibility to bring the matter to the attention of Polaris by contacting their Sourcing representative or Supplier Quality representative.

1.1. **CONVENTIONS**

1.1.1. **Reference Documentation**

Where applicable, supporting document and training titles are provided in this manual. These titles reference documents found in Reliance, on the Polaris Supplier Portal (www.polarissuppliers.com), or on the Supplier University of Polaris. Reliance is Polaris' document control system and is available to all approved Polaris suppliers. A login is required to view the additional resources. Use these references, which are designated in a gray box like the one below, to ensure your information, training and/or templates are of the latest revisions.

SUPPORTING DOCUMENT TITLES WILL BE LISTED IN FIELDS LIKE THIS ONE.

1.1.2. Critical Definitions

Shall/Must – The words “shall” or “must” indicate mandatory requirements.

Should/May – The word “should” or “may” indicate a recommendation.

2. GLOSSARY*Table 1: Supplier Quality Assurance Manual Glossary*

TERM	DEFINITION
Advanced Product Quality Planning (APQP)	Structured method of defining, updating, establishing and documenting all steps to assure that critical customer requirements are considered throughout the planning processes, and that failure modes are identified and mitigated early in the development process.
Appearance Approval Report (AAR)	Completed for each part or series of parts if the product/part has appearance requirements on the design record.
Benchmarking	Improvement tool whereby a company measures its performance or process against other companies' best practices, determines how those companies achieved their performance levels, and uses the information to improve its own performance. It is a continuous process whereby an enterprise measures and compares all its functions, systems and practices against strong competitors, identifying quality gaps in the organization and striving to achieve competitive advantage locally and globally.
Certified ID Requirement	Certified ID requirements define how to properly identify material when requested to ship certified product.
Containment	Immediate short-term supplier actions taken or planned to identify and segregate defective product in order to eliminate further product impact to Polaris during the cause and corrective- action processes.
Continuous Improvement	Adopting new activities and eliminating those that are found to add little or no value. The goal is to increase effectiveness by reducing inefficiencies, frustrations, and waste (rework, time, effort, material, and so on).
Control Plan	Documented description of the systems and processes for controlling product. The control plan describes the actions that are required at each phase of the process, from receiving to shipping, to ensure that all process outputs remain in a state of control. The control plan reflects a strategy that is responsive to changing process conditions and is maintained and used throughout the product life cycle.
Corrective Action (CA)	Permanent, documented, systemic corrections to the failed processes that shall prevent a recurrence of the identified nonconformance, and ensure future defect detection.
Cp	Ratio of tolerance to 6 Sigma, or the upper specification limit (USL), minus the lower specification limit (LSL), divided by 6 Sigma. Sometimes referred to as the engineering tolerance divided by the natural tolerance and is only a measure of dispersion.

Cpk	Equals the lesser of the USL minus the mean divided by 3 Sigma (or the mean) minus the LSL divided by 3 Sigma. The greater the Cpk value, the better.
Critical Characteristic	Used to communicate high severity aspects of a design where a standard dimensional KPC does not apply or the statistical control is not needed. Critical Characteristics are used to define high severity parts (DFMEA severity of 9 or 10) and dictate special controls needed, based on what type of parameter it is attached to.
Design for Manufacturability and Assembly (DFM/DFA)	Simultaneous engineering process designed to optimize the relationship between design function, manufacturability, and ease of assembly.
Design Record	Contractual requirements as stated on the purchase order (for example, engineering drawings, math data, referenced specifications, and additional requirements as noted on the PO). This may also include supplier specification in instances of supplier designed parts.
Deviation Request	Initiated to request temporary acceptance to ship product that is nonconforming to the Polaris drawing, engineering specification, or quality standards.
Drawing Change Request (DCR)	Initiated to request a permanent change to a Polaris drawing, engineering specification, or quality standard.
Engineering Change Level (ECL)	New revision level applied to a current part.
Failure Modes and Effects Analysis (FMEA)	Systematic group of activities intended to recognize and evaluate the potential failure of a product, and the effects and causes of that failure, identify actions that could eliminate or reduce the chance of the potential failure occurring, and document the process.
Gauge Repeatability	Variation in measurements obtained with one measurement instrument, when used several times by one appraiser, while measuring the identical characteristic on the same part.
Gauge Reproducibility	Variation in the average of the measurements made by different appraisers, using the same measurement instrument, used several times by each appraiser, while measuring the identical characteristic on the same part.
Geometric Dimensioning and Tolerancing (GD&T)	Set of rules and standard symbols used to define the part features and relationships on an engineering drawing according to ASME Y14.5M 1994.
Intellectual Property	Creative ideas and expressions of the human mind that have commercial value and receive the legal protection of a property right. It includes ideas, inventions, business methods and manufacturing processes. The major legal mechanisms for protecting intellectual property rights are copyrights, patents, and trademarks.
Interim Corrective Action (ICA)	Ensures all suspect product is quarantined and certified prior to use by Polaris as soon as possible to minimize any production delays on the part of Polaris.

Key Product Characteristics (KPC)	A product characteristic defined by Polaris design engineering where variation would significantly affect the product's intended usage, the product's safety or its regulatory compliance or is likely to significantly affect customer satisfaction with a product.
Manufacturing Feasibility Commitment (MFC)	Key step in the Polaris Development Program (PDP) process. The MFC shall be completed by the supplier to analyze and determine their ability to commit to all requirements as specified in Polaris design record prior to acceptance of any pre-production order.
Error-Proofing	The use of any reliable and efficient method that makes an error immediately obvious once it has occurred.
Measurement System Analysis (MSA)	An experimental and mathematical method of determining how much the variation within the measurement process contributes to overall process variability.
No New Business (NNB)	Status to prevent additional business to be sourced to a supplier in the event that the supplier is experiencing chronic performance issues.
Parts Per Million (PPM)	Method of stating the performance of a process in terms of actual nonconforming material calculated as $1,000,000 * \text{Reject/Receipt}$.
Ppk	Term used to predict the process capability of a new process (also referred to as the performance index).
Polaris Development Process (PDP)	Five-phase business process for integrated product development and validation that is designed for speed and flexibility. It emphasizes quality and teamwork, focusing heavily on analyzing risk in order to make well-informed decisions.
Pre-Delivery Inspection (PDI)	Secondary act of inspecting a product for quality defect(s) prior to shipment to ensure nonconforming product does not reach the customer.
Preventive Action (PA)	Actions taken to eliminate the causes of a potential nonconformity or other undesirable situation in order to prevent occurrence (must be validated to be complete).
Preventive Corrective Action (PCA)	8D/Six Sigma term, quantitatively confirm that the selected corrective action will resolve the problem.
Process Capability	Range over which the natural variation of a process occurs as determined by the system of common causes. Process capability is comprised of three important components: the design tolerance, the centering of the process, and the range or spread of the process variation.
Process Change	Any supplier method changes (for example, process, tooling, material, or location) potentially affecting any attributes or dimensions.
Process Change Request (PCR)	Documents a change in the supply or manufacture of material/product that is not covered by a DCR.
Process Control	Monitoring of characteristics for capability to produce a feature under stable conditions to maintain ongoing acceptable quality levels. Examples of process control documents include process sheets, inspection and test instructions, test procedures, standard operating procedures, preventive maintenance instructions, and specific part control plans.

Process Failure Modes and Effects Analysis (PFMEA)	Systematic group of activities intended to recognize and evaluate the potential failure of a process and the effects / causes of that failure, identify actions that could eliminate or reduce the chance of the potential failure occurring, and document the process.
Product Acceptability Requirements (PAR)	General requirements that suppliers need to adhere to that enables part / product shipment to a Polaris facility.
Product Assurance	Part or assembly characteristics that are critical to the operation of the process or the function of the product require intense monitoring and control in order to ensure product quality for the customer.
Production Part Approval Process (PPAP)	Rigorous and structured process for part qualification that applies to supplier sites supplying production parts, service parts, production materials, or bulk materials to Polaris. PPAP is used for production approval of all new or changed parts used in Polaris production.
Pulse Order	Risk mitigation tool used throughout the PDP process to evaluate the readiness of a supplier's production process prior to SOP.
Quality Audit	On-site verification activity based upon a sample used to determine the effective implementation of a supplier's documented quality system.
Quality Operating System (QOS)	Fundamental quality system that provides for risk management, continuous improvement, emphasizing defect prevention and the reduction of variation and waste in the Supply Chain.
Quality Record	Records established to provide evidence of conformity to requirements, and the effective operation of the Quality Operating System (QOS).
Quality System	Organizational structure, responsibilities, procedures, processes and resources required to achieve management's goals or objectives.
Reject Material Order (RMO)	Established to document and disposition product that is nonconforming to the design record.
Risk Priority Number (RPN)	Product of severity, detection, and occurrence in a Failure Mode Effects Analysis (FMEA).
Root Cause (RC)	Primary, proven reason(s) for the product defect(s), or defect detection failure(s). The most basic reason(s) that, if eliminated, would prevent recurrence.
Root Cause Analysis	Study of original reason for nonconformance within a process. When the root cause is removed or corrected, the nonconformance shall be eliminated.
Run Chart	Simple line chart that plots one characteristic over time. It is used to plot individual observations and detect patterns in the data.
Safe Launch	Enhanced quality-control method that manufacturers/suppliers use to help ensure production excellence at launch.
Safety Data Sheet (SDS)	Document that contains information on the potential health effects of exposure to chemicals or other potentially dangerous substances, and on safe working procedures when handling chemical products. Per OSHA regulations and to ensure safety standards, suppliers of incoming materials and products shall utilize chemicals that comply with general lubrication guidelines and provide complete

	SDS documentation as proof of that compliance. Also known as Material Safety Data Sheet (MSDS).
Sales Inventory Operations Planning (SIOP)	The process Polaris uses to manage inventory levels, production lead times, and finished goods.
Site	Supplier location at which value-added production processes occur. "Site" also includes distributors of parts manufactured by other companies.
SOP	Start of production.
Statistical Process Control (SPC)	Application of statistical methods to identify and control the special cause of variation in a process.
Subject Matter Expert (SME)	Skilled professional with significant knowledge regarding the products, service or solution delivered by a supplier.
Sub-Supplier (Tier 2, 3, and so on)	Supplier(s) or sub-contractor(s) to Polaris' tier I suppliers/providers.
Supplier (Tier I)	Direct provider of 1) production material, 2) indirect material, 3) production or service parts, or 4) services such as heat treating, plating, painting or other finishing processes. The party that produces, provides or furnishes a part or service to a purchasing organization.
Supplier Assessment	Used by Polaris supply chain personnel to evaluate a supplier's business capabilities. The tool assesses quality, engineering and business practices to ensure the supplier's capabilities align with Polaris business needs.
Supplier Business Practices Manual (SBPM)	Outlines a successful commercial business partnership with Polaris.
Supplier Designed Component (SDC)	Part (for example, an assembly, electrical device, mechanical device or control module) where design responsibility belongs to the Supplier. SDC requirements are generally limited to those characteristics/parts required for Polaris interface connections and verification of functional requirements. Outside Design and Development (ODD) has the equivalent meaning. A supplier drawing that is placed onto a Polaris border shall be considered an SDC part and all related supplier owned drawings and specifications shall be considered part of the design record.
Sample Inspection Report (SIR)	Formal method of providing a measurement report for a given manufacturing process. SIRs may be requested at any time for any pre-production or post-production part.
Supplier Continuous Improvement Program (SCIP)	Process to strategically increase a supplier's quality according to Polaris expectations through the application of systemic improvements.
Supplier Manufacturing Assessment	Tool used by Polaris Supply Chain personnel to evaluate a supplier's process capabilities. The tool gauges all aspects of manufacturing including process controls, maintenance, tool support, technology, and quality systems specific to the

	supplier's core competencies. The goal is to ensure the supplier's capabilities align with Polaris business needs.
Supplier Performance Escalation Process (SPEP)	Systematic, multi-level process which is applied to critical quality performance issues and ensures suppliers are placing the proper internal focus on resolution.
Supplier Performance Management	Program used by Polaris to improve the quality and capacity of a previously qualified, but consistently underperforming, supplier.
Third-Party Containment	Act of inspecting a product for quality defect(s) by a third party to ensure nonconforming product does not reach Polaris' assembly lines.
Tool	Portion of process machinery that is specific to a component or sub-assembly. Tools (or tooling) are used in process machinery to transform raw material in to a finished part or assembly.
Total Variation	Ratio of the uncertainty of the repeatability and reproducibility of the gaging system to the tolerance range of the characteristic to be measured.
TS 16949	International standard replacing QS-9000. TS 16949 contains all ISO-9000, QS-9000, and many European standards. It defines the business as a set of processes with inputs and outputs that need to be defined, controlled, improved or optimized, and so on.
Validation	Confirmation by examination and provision of objective evidence that the particular requirements for a specific intended use or requirements are fulfilled.

3. POLARIS BUSINESS INTEGRATION

3.1. CONFLICT MANAGEMENT

Overview: Our relationship with suppliers is defined by the provisions, terms and conditions of any fulfilled purchase order or signed Master Supply Agreement (MSA) between Polaris and the supplier.

Compliance with the guidelines of this manual or acceptance or approval of the supplier's parts or materials does not relieve the supplier of any of the obligations or liabilities stated in the applicable purchase order or contract. In the event of conflict, the following order of precedence will apply:

- Design record
- Purchase order/contract
- Procurement specifications
- This manual, the *Supplier Business Practice Manual (SBPM)*, and the *Supplier Delivery Manual (SDM)*

3.2. COMMITMENT

Overview: Suppliers shall comply with this *Supplier Quality Assurance Manual (SQAM)* and all related standards, processes, engineering specifications, and procedures.

This commitment begins with a strong management dedication to zero defects, problem prevention and resolution, and continuous improvement to the manufacturing process.

3.3. BUSINESS PRACTICES

Overview: The *Supplier Business Practice Manual (SBPM)* outlines a successful commercial business partnership with Polaris, defines both our customary and general guidelines of how Polaris conducts business, and provides an overview of the global business practices that define our expectations of being a business partner to Polaris.

This manual outlines our expectations for the commitments needed from our suppliers to create a strong, competitive, and value-added Supply Chain.

Polaris' success is dependent upon our ability to provide the highest value to our customers through price, quality, timely delivery, and service. A close working relationship with our Supply Base is critical to the achievement of this objective. The SBPM provides you with the necessary information that will be critical to our mutual efforts of conducting business in a professional, efficient, and profitable manner.

Finally, suppliers violating the requirements of this manual will be subject to recovery fees, which are explained in more detail in the SBPM.

POLARIS SUPPLIER PORTAL

SUPPLIER BUSINESS PRACTICES MANUAL (SBPM), LOCATED UNDER RESOURCES > SUPPLIER MANUALS

4. SUPPLIER EXPECTATIONS & REQUIREMENTS

4.1. ESCALATION MANAGEMENT

Overview: Polaris requests all Suppliers provide an escalation contact matrix that shall be maintained with up-to-date contact information. Suppliers are also required to make known the person accountable for final approval of product quality.

At Polaris we strive to maintain fluid communication with our global Supply Chain and in the event of any senior leadership changes (Operations, Quality, Finance) at the supplier, it is required that within 10 working days of the change, Polaris be notified in writing.

4.2. RESOURCE MANAGEMENT

Overview: It is expected that suppliers offer a learning environment to their employees that provides the opportunity to become knowledgeable about appropriate quality tools and processes that affect the quality of products and services provided to Polaris. Employees shall be provided with equipment, facilities, and a work environment conducive to producing high quality products and services that consistently meet functional requirements and product specifications.

Polaris has invested in supplier success by creating supplier training programs to support supplier qualification, onboarding, and performance improvement processes. Partnering together to create a highly skilled workforce can drive Polaris and our global Supply Chain to provide quality products and services that will lead to Best in Class and significant market opportunities.

POLARIS SUPPLIER PORTAL

SUPPLIER UNIVERSITY OF POLARIS, LOCATED ON THE APPLICATIONS & TOOLS TAB

4.3. SUB-TIER MANAGEMENT

Overview: Tier I Suppliers shall be solely responsible for their sub-tier supplier performance and compliance to all Polaris requirements.

Suppliers shall establish and maintain documented procedures to ensure sub-tier suppliers comply with the supplier requirements defined in this manual. These procedures shall include proper distribution of Polaris drawings/specifications, raw material, quality and testing, and packaging and identification (labels). Proper levels of part traceability (lot codes or date codes) shall be defined and the sub-tier suppliers shall maintain revision control methods that are properly embedded in their systems. Polaris Tier I suppliers shall ensure sub-tier suppliers are managing material lead times and maintenance of fixtures and tooling. Tier I suppliers shall provide the remaining useful life of tools, including those within sub-tier Supply Base, on an annual basis to Polaris.

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Sub-tier performance and compliance includes, but is not limited to, adherence to all requirements defined in the Design Record and KPC designations. Minimum Polaris requirements are defined to have current supplier quality audits for critical sub-tier suppliers on file, including a record of PPAP submissions. Tier I suppliers are also responsible for change management through Process Change Request (PCR) compliance at their respective sub tiers and ensuring changes are shared with Polaris. Tier 1 suppliers are also responsible for the timely communication (and containment) of any quality issue that is deemed to originate from the sub-tier Supply Base, following compliance with the “Control of Nonconforming Products & Correction Action Procedures” section, the “Controlled Shipping Levels” section, and the “Certified ID Requirement” section of this manual. It is strongly encouraged that this manual is distributed to the sub-tier suppliers.

4.4. **QUALITY MANAGEMENT**

Overview: A Quality Operating System (QOS) is the fundamental quality system that provides for risk management, continuous improvement, emphasizing defect prevention and the reduction of variation and waste in the Supply Chain.

The supplier shall establish, document and maintain a QOS as a means of ensuring the product conforms to Polaris specified requirements. The supplier shall structure their QOS from the current release of either ISO 9001 or IATF 16949 standards.

Polaris requires our suppliers to have a QOS that is registered to either ISO 9001 or IATF 16949 standards. The supplier shall use the most current release of either of these standards and their certification must be registered through an accredited registrar. If the supplier is not registered to one of the aforementioned standards, the supplier shall document an action plan to become registered.

The supplier’s responsibilities regarding the QOS include:

- Ensure Polaris is updated with any changes to your QOS, ISO/IATF certification and primary quality contacts by communicating these changes with your Sourcing representative.
- Ensure registration to the requirements of ISO 9001 or IATF 16949; suppliers are required to retain copies of this information to be provided upon request to Polaris.
- Ensure your QOS supports all Polaris supplier quality requirements as defined in this manual.

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- Ensure no less than annually, a comprehensive quality system audit is conducted, and results are made available to Polaris. This audit may be conducted internally, by a third party, or by Polaris. Submitted results shall include the corrective action taken or planned actions against significant (major) findings resulting from the audit. All audit results, including any actions taken, shall be part of the supplier's document control. Polaris will reserve the option of requesting the supplier to take specific action(s) upon review of the internal audit.

SUPPLIER UNIVERSITY OF POLARISQUALITY MANAGEMENT EXPECTATIONS (QME) TRAINING (OPS B SQ 00954)

4.5. QUALITY RECORDS

Overview: Supplier Quality Records shall be established to provide evidence of conformity to Polaris and industry requirements and the effective operation of the Supplier's QOS.

Quality records are the documented evidence that the supplier's processes were executed according to their QOS documentation. Unless otherwise specified by Polaris, suppliers are responsible for maintaining records and test specimens for the life of the product plus one year.

4.6. CONFIDENTIAL INFORMATION & INTELLECTUAL PROPERTY RIGHTS

Overview: Creative ideas and expressions of the human mind that have commercial value and receive the legal protection of a property right that may include ideas, inventions, business methods and manufacturing processes shall be protected.

Suppliers serving as Tier I to Polaris shall comply and ensure that their respective sub-tier suppliers (Tier 2,3, and so on) are advised of and agree to the obligations set forth in the *Supplier Business Practice Manual (SBPM)* relating to Confidential Information and Intellectual Property Rights.

POLARIS SUPPLIER PORTALSUPPLIER BUSINESS PRACTICES MANUAL (SBPM), LOCATED UNDER RESOURCES > SUPPLIER MANUALS

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4.7. RESOURCES & TECHNOLOGY

Overview: Polaris expects Suppliers to maintain and use the highest and most current levels of technology reasonably available and required for design and production of quality products, in addition to electronic communication.

Suppliers shall possess and maintain relevant resources and technology necessary to interpret and comply with Polaris requirements. Some examples are CAD systems to interpret Polaris drawings and models, CMM and measurement technologies, digital scanning capabilities, computerized aids to assist in the analysis of data, flow mold technology, tool life and management, electronic communication including email, and the distribution of quality graphs, drawings and specifications.

4.8. SUPPLIER COMMUNICATIONS

Overview: Quality is everyone's job and effective communication is an important element to ensure our success. All communications to Polaris must be in English, including but not limited to forms, part approval submissions, product assurance documentation and general communication.

To maintain schedules and builds, effective communication regarding part qualification and quality requirements shall be communicated in a timely manner to the appropriate Polaris personnel. All communication shall include the Sourcing representative and Supplier Quality/Development Engineer. In addition, pre-production information shall include the NPI Materials Coordinator and NPI Strategic Sourcing Lead. Production information shall include the Planning representative.

Immediate notification is required regarding all non-conformance situations (including sub-tier suppliers). The supplier shall champion the nonconformance reaction plan including containment and resolution activities in order to minimize impact to Polaris. The Sourcing representative, Supplier Quality/Development Engineer, and Planning representative shall be kept informed as to the status of the nonconformance.

It is the Tier I's responsibility to convey all relevant information for sub-tier suppliers to Polaris.

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Oral communication may be effective for a quick avenue of notice, but all official communications shall be conducted in writing electronically by use of appropriate forms or email notifications. Some examples of appropriate forms are:

- Process Change Request (PCR) including rework
- Corrective Action/Preventive Action (CAPA)
- Deviation Request
- Design Change Request (DCR)
- Contact information (Polaris Supplier Portal and Zycus Supplier Profile)

Note: All communication shall be conducted electronically. Direct issues regarding any of these systems to purchasing.systems@polaris.com.

5. SUPPLIER QUALIFICATION & ONBOARDING

Overview: Polaris follows a structured phased-gate Supplier Qualification and Onboarding Process which provides reasonable assurance that the most qualified supplier is chosen to fulfill a specific business need. This process has mutual benefits for both the supplier and Polaris, including improved alignment of goals, reduced risk at launch, and a successful long-term business partnership.

Qualification assesses and proves the capabilities of a potential supplier. These deliverables are dependent on the criticality of the part being supplied, as well as the business need path. Common qualification deliverables may include the following:

- Supplier-led Self-Assessment
- Polaris-led Quality Operating System (QOS)/Manufacturing Assessment
- Agreed-upon action plan for closing gaps and implementing countermeasures before business award

Onboarding integrates a potential supplier into Polaris systems. These deliverables are dependent on the business need path, and may include the following:

- Comprehensive training plan, which may include participating in the Polaris on-site Starting Point Training
- Documented listing of specific supplier information, such as addresses and contacts
- Integration into Polaris purchase order and logistics systems

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Your Polaris Sourcing representative will detail the specific deliverables for each phase of the process.

POLARIS SUPPLIER PORTAL

TO GET STARTED AS A POTENTIAL SUPPLIER, REGISTER FOR THE ZYCUS SUPPLIER NETWORK UNDER RESOURCES >
SUPPLIER ONBOARDING

5.1. SUPPLIER ASSESSMENTS

5.1.1. Polaris Supplier Assessment

Overview: A tool used by Polaris supply chain personnel to evaluate a supplier's business capabilities.

Strategic Sourcing, Supplier Development, and Supplier Quality utilizes the supplier assessment to evaluate the alignment of Supplier capabilities to Polaris business needs. The supplier's perceived capabilities, when initially completed by the supplier, are evaluated against the Polaris on-site audit, which follows. The intent is to improve collaboration in developing Polaris/supplier relationships.

Key elements include:

- Performance
- Quality
- Sales Inventory Operations Planning (SIOP)
- Compliance (for example, environmental, health, safety, and product)
- Process Walk
- Measurement Systems
- New Product Development
- Supply Chain Management
- Process Controls
- Change Management
- Corrective Actions
- Lean Operational Excellence

Corrective actions may be required, based on the Polaris audit findings. Closure of specified corrective actions shall be a condition of being awarded new business or maintaining current business.

5.1.2. Supplier Manufacturing Assessment

Overview: The Supplier Manufacturing Assessment is a tool used by Polaris Supply Chain personnel to evaluate a supplier's process capabilities. The tool gauges all aspects of manufacturing including process controls, maintenance, tool support, technology, and quality systems specific to the supplier's core competencies. The goal is to ensure the supplier's capabilities align with Polaris business needs.

Like the Polaris Supplier Assessment, the manufacturing assessment will begin with Polaris requesting a self-assessment for specific manufacturing processes. Upon receiving the self-assessment from the supplier, Polaris will dictate if an onsite follow-up audit conducted at a supplier's facility is required. During the onsite audit Polaris will evaluate "as-is" conditions and supplier "potential" as related to specific manufacturing practices. The actual audit may contain more than one subject based on the services provided or proposed to Polaris.

Corrective actions may be required, based on the Polaris audit findings. Closure of specified corrective actions shall be a condition of being awarded new business or maintaining current business.

RELIANCE

SEARCH IN DOC CONTROL FOR THE PARTICULAR POLARIS <PROCESS NAME> MFG ASSESSMENT FORM

5.2. TEST & MEASUREMENT EQUIPMENT

Overview: Test and Measurement Equipment may be owned by the supplier or Polaris. The following are Polaris' expectations regarding the responsibilities relating to such equipment when used for Polaris products or services.

Suppliers may use any test and measurement equipment (T&ME), deemed necessary and appropriate to reliably meet Polaris design record requirements. However, when Polaris requires the use of T&ME, it will be specified in the Design Record and supplier shall follow the Design Record.

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Suppliers shall perform internal calibration activities in accordance with ISO 10012 or equivalent. The supplier shall contract all external calibration activities with a calibration supplier who is accredited to ISO 17025 or equivalent, and whose scope of accreditation includes all of the equipment that they are being contracted to calibrate. Inspection gauges, along with test equipment, shall be controlled and comply with a calibration schedule that is designed to be consistent with the organization's calibration reliability target. Additionally, suppliers shall treat all T&ME with reasonable care to prevent loss, damage or out-of-calibration conditions. Suppliers shall not ship product to Polaris tested or measured with T&ME that is not in calibration or not in good working order. If product tested or measured with T&ME in this described condition escapes the supplier's location, Polaris shall be notified immediately with part number, shipping information and calibration results by contacting their assigned SQE and the Planning representative of the Polaris shipping destination.

In some cases, Polaris will provide T&ME to suppliers. This is typical when the T&ME is considered to be non-standard. The supplier is responsible for the care, maintenance, safekeeping, and proper use of Polaris-owned equipment. Suppliers shall promptly report any loss, damage or destruction of gauges and test equipment. This does not include normal wear and tear. Polaris and the supplier will determine who has responsibility for calibration and specify the calibration interval of all Polaris owned T&ME. If Polaris assumes responsibility for calibration, the supplier shall return the recalled T&ME within the timeframe requested.



6. POLARIS DEVELOPMENT PROCESS & SOP READINESS

6.1. POLARIS DEVELOPMENT PROCESS (PDP)

Overview: PDP is a 5-phase business process for integrated product development and validation designed for speed and flexibility. This process emphasizes quality and teamwork, focusing heavily on analyzing risk to make well-informed decisions. PDP is in line with the Polaris' strategic purpose of being a customer centric, highly efficient growth company.

Some of the highlights of the PDP process include:

- A phase-gate process for integrated product development and validation
- Major, Intermediate, Minor, and sourced levels that can be tailored based on the size and scope of individual programs
- Gates which allow management to assess programs to prioritize and make go/no-go decisions
- Pre-production builds which allow teams to validate products and processes from concept to SOP
- Key deliverables provided at builds and reviews during product development

Polaris Long Range Product Planning kicks off the PDP ideation cycle and is a key indicator for Supply Chain Design (SCD). Your prompt support of all Requests for Information (RFI) and Requests for Proposal (RFP) is necessary for a successful SCD.

Pre-Gate 1 – Advanced Development: Suppliers will receive RFIs and RFPs from NPI Strategic Sourcing Lead. Suppliers should work with the NPI Strategic Sourcing Lead to brainstorm and ideate on new and creative ways to tackle customer challenges/opportunities.

Gate 1 — Opportunity: Suppliers will continue to see RFIs and RFPs from NPI Strategic Sourcing enters their Assess & Estimate Phase.

Gate 2 — Development & Validation: The Supply Base focuses on the milestone of being 100% production intent tooled at Validation Build (V Build). Suppliers will also see first requirements and are asked to provide tooled parts for the build along with a Sample Inspection Report (SIR).

Next, suppliers target a smooth ramp to the start of production with a 100% PPAP approval of part(s) by Gate 3. Communicate immediately any issues you may have with your NPI Strategic Sourcing Lead.

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Gate 3 — Finalize and Approve Phase: Suppliers should be 100% on Polaris production processes and receiving communications from multiple teams within Polaris. This marks the Polaris internal Start of Production (SOP) milestone. Suppliers should see parts forecasted on the Polaris planning supplement and should be using the prescribed Advanced Shipping Notice (ASN) process. Communicate immediately any issues you may have with your NPI Strategic Sourcing Lead.

Gate 4 — Launch Phase (“Go/No-Go”): This is a milestone for full SOP. Suppliers should see parts and forecasted ramp up to full rate of production on the Polaris planning supplement, using the prescribed Advanced Shipping Notice (ASN) process. Communicate immediately any issues you may have with your NPI Strategic Sourcing Lead.

Gate 5 — Assess Phase: Suppliers should collect feedback throughout the project to provide after SOP to the NPI Strategic Sourcing Lead. As a supplier your Voice is important. Provide the Voice of the supplier as part of the lessons learned process.

6.2. **ADVANCED PRODUCT QUALITY PLANNING (APQP)**

Overview: Structured method of defining, updating, establishing and documenting all steps to assure that critical customer requirements are considered throughout the planning processes, and that failure modes are identified and mitigated early in the development process.

The goal of product quality planning is to facilitate the communication with everyone involved to assure that all required steps are completed on time.

Effective product quality planning depends on a company's top management commitment to the effort required to achieve customer satisfaction. Some of the benefits of product quality planning include:

- Direct resources to satisfy the customer
- Early identification of required changes
- Avoidance of late changes
- Providing a quality product on time at the optimum cost

Suppliers doing business with Polaris shall be prepared to work on APQP for all new parts launched and complete APQP tasks in a timely manner to ensure successful product launch and avoid impact to their APQP timeliness metric.

RELIANCE

ADVANCED PRODUCTION QUALITY PLANNING (APQP) PROCEDURE (DOC CONTROL 01156)

SUPPLIER UNIVERSITY OF POLARIS

ADVANCED PRODUCT QUALITY PLANNING (APQP) PROCESS TRAINING (OPS B SQ 01060)

ADVANCED PRODUCT QUALITY PLANNING (APQP) SYSTEM TRAINING FOR SUPPLIERS (OPS B SQ 01098)

6.3. DRAWING REVIEW

Overview: The drawing, model and specifications are part of the design record and a clear understanding of Polaris requirements is essential to mutual success.

Suppliers are responsible for the careful review of Polaris drawings, models and related specifications/standards, including KPCs, to ensure comprehension and the ability to meet the requirements as defined.

The drawing review is the appropriate venue to share feasibility concerns through the Manufacturing Feasibility Commitment (MFC) discussed in the “Manufacturing Feasibility Commitment” section of this manual. Upon completion, the MFC should be submitted to the Polaris Sourcing representative.

Drawings are considered a final refinement of the design record and as such when a conflict arises between a specification, purchase order or model, the drawing is the master document. Suppliers shall adhere to the latest revision of said documents and maintain proper document control. Obsolete revision levels shall be controlled in a manner that ensures they are not used for production. This requirement should be defined in the supplier’s Quality Operating System (QOS).

6.4. KEY PRODUCT CHARACTERISTICS (KPCs)

Overview: A product characteristic defined by Polaris design engineering where variation would significantly affect the product’s intended usage, the product’s safety or its regulatory compliance or is likely to significantly affect customer satisfaction with a product.

A KPC is key to the design functionality and considered a special characteristic. KPCs are identified by the symbol of a diamond (◊) on drawings. Targeting control of KPCs is necessary to ensure the part meets its intended design requirements.

A process capability of 1.33 Cpk shall be demonstrated no later than 90 days after initial startup to prove long-term capability. During this 90 day-period, if a Cpk of 1.33 cannot be established there must be error-proofing or 100% inspection in place. After 90 days, a minimum of error-proofing, or 1.33 Cpk must be in place.

KPCs shall receive first order of precedence for continuous improvement, starting with the highest severity failure mode parts on the FMEA, lowest capability study metrics, or non-error-proof (Poka-Yoke) processes.

Note: In the instance when process control is established via a Cpk of 1.33, ongoing statistical process monitoring shall be performed on KPCs unless otherwise error proofed. This monitoring shall be done via X-bar and R, I-M, or other Polaris approved SPC charting process.

SUPPLIER UNIVERSITY OF POLARIS

KEY PRODUCT CHARACTERISTICS (KPCs) TRAINING FOR SUPPLIERS (OPS B SQ 01023)

6.5. MANUFACTURING FEASIBILITY COMMITMENT (MFC)

Overview: Key step in the Polaris Development Program (PDP) process. The MFC shall be completed by the supplier to analyze and determine their ability to commit to all requirements as specified in Polaris design record prior to acceptance of any pre-production order.

Suppliers are required to analyze and determine the ability to commit to all requirements as specified on Polaris Engineering documentation prior to acceptance of any pre-production part purchase orders. Polaris design ownership does not preclude the supplier's obligation to assess manufacturing/assembly feasibility. Polaris and the supplier must be in agreement per requirement of MFC before moving forward in the PDP process.

The MFC is the document record of feasibility including any open issues that require presentation to management for resolution and support. Completion and submission of the MFC is a required step of APQP. Send a completed, signed copy of the MFC to the Planning representative immediately after completing.

6.6. SAMPLE INSPECTION REPORT (SIR)

Overview: Formal method of understanding the initial conformance of a sample part or parts. The SIR consists of dimensional measurements and an inspection of functional, material, attributive, and visual properties of initial sample parts against given specifications communicated through a drawing/CAD. SIRs may be requested at any time for any part for pre-production and/or production parts.

The Sample Inspection Report is the supplier's obligation and financial responsibility. Suppliers should make SIR data available electronically along with ballooned drawing, upon request, for a pre-production and post-production lot.

Polaris pre-production build requirements change throughout the development life cycle and Polaris may need various submissions of SIR information based on the type and quantity of the Polaris pre-build requirements. To capture these requirement changes, Polaris may request, through the Polaris Reliance APQP Application, an SIR task. The measurement data and ballooned drawing must be recorded on the SIR Data Template and be attached and submitted through the Reliance APQP Application SIR task.

A SIR is not a required element of PPAP.

RELIANCE

SIR DATA TEMPLATE (DOC CONTROL 01696)

6.7. **PRE-PRODUCTION BUILD MATERIAL SUPPLY: ENGINEERING & QUALITY REQUIREMENTS**

Overview: Material ordered outside of the production order system on unreleased or Work-In-Process (WIP) drawings shall be exempt from normal quality processing controls such as Process Change Request (PCR), Production Part Approval Process (PPAP), RMO, deviation, and Design Change Request (DCR). Sample Inspection Report (SIR) data may be requested for parts in the pre-production builds to assist Polaris in making informed decisions.

Only released drawings can be processed through Polaris PCR, PPAP, RMO, deviation, and DCR systems. For this reason, Polaris engineering shall control the disposition of non-compliant material purchased outside of the production system. Products ordered for engineering purposes are expected to conform to the current unreleased drawing at the time of order. If production inspection equipment is not in place for pre-production components, the supplier must conduct alternative inspection/measurement methods to confirm the part meets the drawing requirements.

6.8. **PULSE ORDERS**

Overview: Pulse orders are a risk mitigation tool used throughout the PDP process to evaluate the readiness of a supplier's production process prior to SOP. They are designed to benefit the supplier by giving them a chance to run their production process and produce a significant run of production-ready parts.

Pulse orders are focused on critical parts and critical suppliers. They benefit Polaris and Polaris suppliers by allowing the suppliers to:

- Verify manufacturing processes can hit quoted production rates.
- Identify and fix any potential problems that could impact full production.
- Perform Run@Rate, PPAP, capability studies, and other APQP activities in advance of SOP, allowing time to react to identified issues prior to production.
- Develop work instructions, procedures, and processes.
- Help the supplier understand and begin taking responsibility of the quality standards early to reduce risk for later misunderstandings/misinterpretations.
- Avoid expedite and downtime charges caused by late process learnings.

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While there are inventory carrying costs and possible expedites on limited quantities that can be associated with pulse orders, those costs are far outweighed by the potential to miss out on the above benefits which could lead to the following risks:

- Quality issues
- Delivery issues
- Failure to hit Polaris requirement of PPAP completion by PV build

6.9. RUN-AT-RATE (R@R)

Overview: Performing Run-at-Rate audits allows suppliers and Polaris to proactively expose and correct issues discovered in the supplier's processes before they become production problems.

The Run-at-Rate's purpose is to provide the evidence that all customer design records are properly understood by the supplier and that the manufacturing process has the ability to produce product consistently, meeting these requirements during an actual production run at the quoted production rate using production tooling and production personnel.

Run-at-Rates will be scheduled before Production Part Approval Process (PPAP) submission and prior to Start of Production (SOP) and when the conditions described above are congregated. The Run-at-Rate audit may be performed onsite at the supplier manufacturing site or virtually utilizing video recording/streaming tools. The same level of rigor is expected whether the audit is conducted in person or virtually.

RELIANCE

POLARIS RUN AT RATE ASSESSMENT TEMPLATE (DOC CONTROL 00591)

SUPPLIER UNIVERSITY OF POLARIS
RUN@RATE PROCEDURE (OPS B SSQ 00591)

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6.10. **PRODUCTION PART APPROVAL PROCESS (PPAP)**

Overview: PPAP is a rigorous and structured process for part qualification, used within Quality Lifecycle Management (QLM), that applies to supplier sites supplying production parts, service parts, production materials, or bulk materials to Polaris. PPAP is used for production approval of all new or changed parts used in Polaris production. The supplier submittal of a PPAP package, comprised of 18 elements (sometimes referred to as “submission requirements”), is a significant component of PPAP and is based on *Production Part Approval Process (PPAP) 5th Edition* by the Automotive Industry Action Group (AIAG), which incorporates the customer-focused process approach associated with ISO/TS 16949:2002.

When requested, at the sole discretion of the Polaris Supplier Quality Engineer, PPAP submissions are required as a condition of doing business with Polaris. Suppliers will undergo PPAP for parts that meet the following conditions:

Table 2: Parts Meet PPAP Under the Following Conditions

PART	EXAMPLES
New or Changed Parts	<ul style="list-style-type: none"> * New or revised part or product, regardless of tier designation * Correction of a discrepancy on a previously submitted part * Any change to materials used in a previously approved part or product
Tooling Changes	<ul style="list-style-type: none"> * New or modified tools (except perishable tools), dies, molds, and patterns, including additional or replacement tooling * Upgrade or rearrangement of existing tooling or equipment * Tooling and equipment transferred to a different plant site, from an additional plant site, or from a manufacturing/assembly line move within the plant * Tooling has been inactive for volume production for twelve months or more
Supplier Changes	<ul style="list-style-type: none"> * New Supplier supplier for parts, non-equivalent materials, or services (for example, heat treating or plating) * New source of raw material from new or existing supplier
Process and Product Changes	<ul style="list-style-type: none"> * Product and process alterations related to components of the production product manufactured internally (supplier) or manufactured externally (sub-supplier) * New technique in test or inspection method (no effect on acceptance criteria)
Appearance Changes	Alterations to product appearance attributes (this drives an Appearance Approval Report [AAR])

There are several overall expectations for suppliers to be aware of as a part of PPAP:

- Plants shall retain sample parts for one week after a PPAP request has been dispositioned. It is expected that within this one-week timeframe suppliers shall be proactive in contacting Polaris and acknowledging sample parts which may require remeasurement or other disposition to prevent scrapping or delays in Polaris build schedules.

- Although Polaris elements follow the Automotive Industry Action Group (AIAG) guidelines, the Polaris-Specific Element Clarifications appendix contains notable differences for suppliers to be aware of.
- Polaris does not accept separate charges for the cost of PPAP development. Suppliers shall factor the cost of PPAP development into the overall cost of doing business. This includes the cost of PPAP and SIR samples requested by Polaris in order to satisfy an element on the PPAP.
- All PPAP requirements shall have interim or full approval prior to shipping and fulfilling production purchase orders. The only exception to this would be if parts are needed for any builds prior to Production Validation (PV) build.
- Compliance to the supplier due date assigned to the PPAP request is critical to maintain Polaris production schedules.
- Before the start of Production Validation (PV) Build, a PPAP request must either have full approval or interim approval.
- A PPAP is required for all sub-supplier components. The tier 1 supplier is responsible for qualifying all sub-supplier components. Polaris reserves the right to request tier 1 suppliers to provide sub-component PPAPs.
- PPAPs on service parts, standard catalog production, packaging materials, graphic decals, instruction materials or bulk material may be requested at the sole discretion of the Polaris Supplier Quality Engineer.
- Suppliers submitting elements containing proprietary information must alert Polaris at the Supplier Acceptance phase. Failure to do so may result in PPAP request rejection. Coordinate the review of proprietary documents with your Polaris Supplier Quality Engineer.
- Deviations can be used in conjunction with a PPAP for interim approval, but not as a substitute; meaning, a supplier cannot request a deviation to bypass PPAP.
- Once the PPAP request is approved, any changes to the part drawing or any aspect of the production process must be documented by the supplier using a PCR or a DCR, each of which initiates a new PPAP request.

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- Parts not conforming to the drawing will require an approved deviation to gain interim approval to ship or use. A DCR alone is not sufficient to gain PPAP approval.

Table 3: What to Do If a Part Does Not Conform to a Drawing Specification

ISSUE	IMMEDIATE ACTION	FOLLOW-UP ACTION	FINAL STATE
Part does not meet the drawing specification, but will correct issue to meet the drawing	Approved deviation for temporary shipment/use	N/A	Part meets the drawing specification
Part does not meet the drawing specification, requesting specification change		Submit DCR for drawing change	Part manufactured to the updated drawing rev with approved PPAP
Part meets the drawing specification, requesting process change		Submit PCR for process change	Part meets the drawing specification with approved PCR + approved PPAP

- Parts with unreleased drawings/models cannot undergo PPAP, but instead are subject to Sample Inspection Reports (SIR).
- Suppliers must retain the submission records and a master sample of each position of a multiple cavity die, mold, tool or pattern, or production process for one year after discontinuation (the same period as the production part approval records), or until a new master sample is produced for the same part number for Polaris approval. Master samples must be identified as such and must show the Polaris approval date.
- Polaris does not require suppliers to submit elements using standard forms; however, templates are available for the following elements (these can be used in lieu of, or as a supplement to, a supplier's form): Process Control Plan (Element 7), Dimensional Results (Element 9), Initial Process Study (Element 11), Appearance Approval Report (Element 13), Shipping Label (Element 14), Part Submission Warrant (Element 18).
- Polaris uses a module in Reliance to manage PPAP requests. Use of Reliance establishes a formal process for tracking, defining, submitting, accepting, and rejecting PPAP these requests. Additionally, communication is made easier through an automatic notification system, and reports and performance metrics can be readily gathered.

RELIANCEPRODUCTION PART APPROVAL PROCESS (PPAP) SUPPLIER WORK INSTRUCTIONS (DOC CONTROL 01455)

SUPPLIER UNIVERSITY OF POLARIS

PRODUCTION PART APPROVAL PROCESS (PPAP) TRAINING (OPS B SQ 01027)

PRODUCTION PART APPROVAL PROCESS (PPAP) SYSTEM TRAINING FOR SUPPLIERS (OPS E SQ 00775)

6.11. APPEARANCE APPROVAL REPORT (AAR)

Overview: If the product or part has cosmetic requirements on the design record, an Appearance Approval Report (Element 13) shall be required as part of the PPAP for each part.

Upon satisfactory completion of all required criteria, 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 Polaris to receive disposition. AARs shall then accompany the Part Submission Warrant (PSW) at the time of final PPAP submission based upon the submission level requested.

Notes:

- AAR typically applies only for parts with color, grain or surface appearance requirements.
- Polaris requires all fields related to the required finish condition to be completed on the AAR.

RELIANCE

POLARIS APPEARANCE APPROVAL REPORT (AAR) (DOC CONTROL 00580)

SUPPLIER UNIVERSITY OF POLARISPOLARIS AAR FORM (OPS B PS 00580)

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6.12. SAFE LAUNCH

Overview: An enhanced quality-control method that manufacturers and suppliers use to help ensure production excellence at launch. Safe Launch adds a temporary layer of additional inspection and real-time reporting that provides critical support to the Supply Chain during the challenging initial phases of new processes and production.

The goal of Safe Launch is the delivery of zero-defect parts that meet either the period of time or number of lots as defined by Polaris. Safe Launch addresses all direct material suppliers of in-process or finished components to all Polaris facilities. Safe Launch is to be used for PV Build and production requirements, including but not limited to APQP/PDP parts, PA Plan parts, or when requested by a Polaris representative on any parts that present significant risk. This includes build ahead parts for the start of production. Parts manufactured after the agreed upon Safe Launch timing will be monitored through the Pre-Delivery Inspection procedure, if required.

SUPPLIER UNIVERSITY OF POLARIS
SAFE LAUNCH PROCEDURES AND CRITERIA (OPS B SSQ 00592)

7. PROCESS MANAGEMENT**7.1. PRODUCT ACCEPTABILITY REQUIREMENTS (PAR)****7.1.1. Corrosion**

Overview: Polaris does not accept corroded material(s) nor product with inadequate protection from corrosion.

Corrosion is the gradual destruction of material by chemical reaction with its environment (for example, oxidation). Corroded features such as red rust (oxidized ferrous material), white rust (zinc/aluminum casings), or degradation of ceramics or polymers is not allowed.

Special causes contributing to corrosion while under the control of Polaris shall be reviewed on a case-by-case basis. Use of corrosion inhibitors, candidate lubricants, and all other chemicals is subject to Polaris SDS guidelines and must be pre-approved according to the Polaris Product Acceptability Requirement (PAR) process.

Note: Unless otherwise defined in the design record, Polaris shall not accept product exhibiting corroded features within 90 days FOB from Polaris suppliers.

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7.1.2. Safety Data Sheet Requirements (SDS or MSDS)

Overview: Document that contains information on the potential health effects of exposure to chemicals or other potentially dangerous substances, and on safe working procedures when handling chemical products. Per OSHA regulations and to ensure safety standards, suppliers of incoming materials and products shall utilize chemicals that comply with general lubrication guidelines and provide complete SDS documentation as proof of that compliance.

The first priority is the safety of Polaris/supplier employees. Along with safety, numerous Polaris production processes rely on the ability to fully clean metal by removing oils, soils and contaminants in the existing wash process. Therefore, suppliers of incoming materials and products are obligated to utilize chemicals that comply with general lubrication guidelines and provide complete SDS documentation as proof of that compliance. Approval of candidate lubricants and all other chemicals shall be processed through an MSDS submission.

POLARIS SUPPLIER PORTAL
LOCATED ON THE APPLICATIONS & TOOLS TAB

7.1.3. Product Assurance

Overview: Sustainable quality control is a key element in ensuring that supplier parts and assemblies consistently meet Polaris drawing requirements and specifications.

To ensure that product quality is maintained Polaris quality personal may periodically request data, documentation, and/or request for an audit. This is to verify and evaluate compliance to the operational requirements of the defined part quality control plan, product specification, or contract requirements of the product or service. Polaris does not accept separate charges for the cost of maintaining product assurance. Suppliers shall factor any addition costs for ongoing quality assurance needs into the overall cost of doing business.

7.2. PACKAGING, LABELING, & LOGISTICS

Overview: Accurate labeling, proper packaging, and on-time delivery are critical to maintaining production schedules at Polaris' worldwide assembly plants.

Mislabeling causes unnecessary losses that result in rework, inventory instability, late delivery, and negative risk impact to Polaris' operations, dealers, and consumers. Receipt of mislabeled parts will negatively impact the supplier scorecard. Due to the severity and impact of the mislabeling issue, Polaris will seek escalating recovery fees in relation to mislabeled material (recovery fees are defined in the *Supplier Business Practices Manual [SBPM]*).

The supplier shall control all processes related to delivery (including materials used) to the extent necessary to ensure conformance to the requirements outlined in the *Supplier Delivery Manual (SDM)*.

RELIANCE

SUPPLIER PART PACKAGING SPECIFICATION FORM (DOC CONTROL 00551)

POLARIS SUPPLIER PORTAL

SUPPLIER DELIVERY MANUAL (SDM), LOCATED UNDER RESOURCES > SUPPLIER MANUALS

SUPPLIER UNIVERSITY OF POLARISLOGISTICS OVERVIEW AND ASN TRAINING (OPS B PS 00008)

7.3. PROCESS CONTROLS

Overview: Suppliers are responsible for ensuring all parts, regardless of their process sources (for example, sub-tier), meet Polaris specifications.

Suppliers shall be able to provide at any time evidence to Polaris that they have standardized, documented, applied, and monitored all aspects of their manufacturing operations to prevent defective product from being delivered to Polaris and to ensure on-time delivery and avoid non-quality costs. This is best done using a 6M approach:

- **Method:** The supplier shall document, for each phase of the process, the necessary operating instructions for process control, approval, monitoring, and execution. Process inspections shall be referenced in a Control Plan that is approved by Polaris. Acceptance/reject/reaction criteria and parameters must be transparently explicated in the Control Plan itself. All the operating instructions shall be accessible, even in a digital way, at the appropriate workstation for usage by the responsible personnel. A method to deploy Polaris Traceability requirements (see the “Product Identification & Traceability” section of this manual) through sub-supplied material and internal processes must be established and described in a specific procedure.
- **Man:** Qualification of the employees responsible for their application must be documented and ruled out by internal procedure.
- **Measurement:** A plan to assure qualification and suitability of all the instruments used to control, approve, and monitor the internal processes must be documented and ruled out by internal procedure. Evidence of the results must be kept available.

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- **Materials/Components Outsourced:** The supplier shall document procedures operating instructions to income, inspect, and approve outsourced material/components. Supplier shall be able to provide evidence of procedures to qualify the related suppliers and monitor their quality performance. FIFO for incoming material, material in process, and finished products shall be respected and assured.
- **Machine:** The supplier shall document, for each tool/machine/equipment of the process, the reactive and predictive maintenance tasks and schedules necessary to assure with continuity the requested contracted capacity.
- **Management:** The supplier should give evidence of reaction, problem solving and internal escalation procedures able to contain, correct, and prevent any quality issue from being delivered to Polaris. Management should promote the systematic application of the Polaris APQP methodology in the development and ramp up phase of any new product (see the “Polaris Development Process & SOP Readiness” section). Management should promote the EPIC[®] error-proof methodology and apply it to potential or occurred quality problems.

7.4. **PRODUCT IDENTIFICATION & TRACEABILITY**

Overview: Polaris suppliers shall establish and maintain procedures and records for identifying product characteristics and processes down to its lowest level properties. This includes all product from receipt of raw material through delivery to Polaris, including work in process and inventory.

Polaris requires lot traceability on every component. When refined traceability is required, suppliers shall comply with the individual Polaris Component Design Record (Drawing) specification to mark each component with a Part Number, Lot, or Serial 2D barcode.

Suppliers shall collect and retain all required data during production and follow defined shipping and labeling requirements. This expectation applies to all products supplied for PV build through End of Life (EOL), including service requirements. Product identification and traceability shall be approved as part of the PPAP process, presented to Polaris personnel when requested, and may be reviewed during on-site audits.

RELIANCE

POLARIS COMPONENT TRACEABILITY STANDARD (DOC CONTROL 01161)
COMPONENT 2D MARKING AND QUALITY STANDARD, DOC CONTROL 01162

POLARIS SUPPLIER PORTAL

SUPPLIER DELIVERY MANUAL (SDM), LOCATED UNDER RESOURCES > SUPPLIER MANUALS

SUPPLIER UNIVERSITY OF POLARIS

SUPPLIER TRACEABILITY REQUIREMENTS TRAINING (OPS B PS 01223)

7.5. DEVIATION REQUEST

Overview: Polaris must control the products and services provided by our global Supply Chain based on approved/validated products and processes. A deviation must be initiated to request a temporary change to a Polaris drawing, engineering specification, or quality standard. Polaris requires notification and has right of refuse any proposed deviations to the design record. Formal documented Polaris approval is required BEFORE a supplier ships deviated product.

A deviation request is initiated to request temporary acceptance to ship product that is nonconforming to the Polaris drawing, engineering specification, or quality standards. Suppliers shall exhaust all suitable options to manufacture parts to Polaris requirements prior to submitting a deviation request. Deviations shall define a set quantity of affected product for shipment within a prescribed time frame. Approval to ship is obtained through the Electronic Deviation System. A copy of the approved deviation shall be printed and fixed to a container until the deviation has expired, or is no longer needed (for example, new drawing release when a DCR was submitted). All approved deviations expire after 1 year, regardless of quantity. At the time of expiration, the supplier shall request a new deviation if necessary.

A supplier shall never request a deviation to bypass the PPAP system. Deviations can be used in conjunction with a PPAP approval or interim approval, but not as a substitute.

The request for deviation shall be accompanied by a robust corrective action and implementation date. All deviation requests shall be submitted via the online electronic deviation system found on the Polaris Supplier Portal.

POLARIS SUPPLIER PORTAL

LOCATED ON THE APPLICATIONS & TOOLS TAB

SUPPLIER UNIVERSITY OF POLARIS

DEVIATION, DCR, PCR CHANGE REQUEST PROCESS TRAINING (OPS B SQ 01087)

7.6. DRAWING CHANGE REQUEST (DCR)

Overview: Initiated to request a permanent change to a Polaris drawing, engineering specification, or quality standard.

Suppliers are expected to make recommendations for changes to drawings or specifications upon initial part quotation. Change requests shall be submitted and approved prior to the part qualification submission.

Suppliers are not authorized to ship product to Polaris that do not meet the specifications on the drawing, engineering specification, or quality standards, unless accompanied by a deviation that has been approved through the Polaris system. This allows current product to ship until the DCR and the corresponding PPAP are both approved in the Polaris system. A copy of the approved deviation shall be printed and fixed to a container until the deviation has expired or is no longer needed (for example, new drawing release when a DCR was submitted).

POLARIS SUPPLIER PORTAL

LOCATED ON THE APPLICATIONS & TOOLS TAB

SUPPLIER UNIVERSITY OF POLARISDEVIATION, DCR, PCR CHANGE REQUEST PROCESS TRAINING (OPS B SQ 01087)

7.7. PROCESS CHANGE REQUEST (PCR)

Overview: Polaris controls the products and services provided by our global supply chain based on approved/validated products and processes. Polaris requires notification and right of refusal to any proposed changes BEFORE a supplier implements a process change. A process change request documents a change in the supply or manufacture of material/product that is not covered by a DCR.

Suppliers shall submit a PCR for all changes that occur after PPAP approval. This requirement includes the rework of material, which is done outside of the approved process (for example, rework not documented on the approved process flow diagram, PFMEA, and production control plan). A Polaris cross-functional team will validate the proposed change for acceptance. A supplier must receive an accepted PCR, prior to implementing any change. Approval to ship is obtained through the PPAP process.

In the event the PCR process is not properly followed, Polaris shall take appropriate action needed to recover any costs incurred due to the use of material or product produced as outlined in the SBPM.

POLARIS SUPPLIER PORTAL

LOCATED ON THE APPLICATIONS & TOOLS TAB

SUPPLIER UNIVERSITY OF POLARISDEVIATION, DCR, PCR CHANGE REQUEST PROCESS TRAINING (OPS B SQ 01087)

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8. QUALITY EVENT RESOLUTION & PREVENTION

Overview: Polaris is committed to providing its consumers with the highest quality products and services.

Polaris continuously works to improve its systems, processes, and products to ensure high customer satisfaction and expects similar continuous improvement from its suppliers.

8.1. **REJECT MATERIAL ORDER (RMO)**

Overview: The RMO process has been established to document and disposition product that is nonconforming to the design record.

Acceptance or rejection of purchased materials received by Polaris is based upon a representative sample inspection conducted by the Polaris receiving facility. Rejections shall also occur due to out-of-specification parts discovered during assembly or testing failures. Rejection of purchased material is documented and communicated electronically via an RMO.

Suppliers shall follow the procedure below once notified of an RMO:

- Stop shipment of nonconforming product
- Execute and document containment actions
- Inspect/rework parts for certified shipments
- Take appropriate measures to avoid interruption of Polaris production and continuity of supply

In the event of potential production interruption, Polaris shall authorize or request the following:

- Third-party containment at supplier expense
- Polaris sort at supplier expense
- Supplier-executed containment

Suppliers shall respond to all RMOs as soon as possible but no later than 1 business day from the date/time of notification. If a response is not received within that period, the material may be shipped back to the supplier at the supplier's expense.

All RMOs receive a material disposition that is communicated via code. All disposition codes shall affect the supplier's QSTAR rating when it is determined that the supplier is responsible for the nonconformance.

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8.1.1. RMO Disposition Codes

00 – Inventory Adjustment: This code is used when an inventory adjustment is required to adjust received quantity versus labeled quantity. Misidentified parts/materials may be sorted and returned to the supplier at the supplier's expense. This code shall not be used for over/under shipment; instead, use a Delivery Discrepancy Report (DDR).

01 – UAI (Use As Is): This code is used when a nonconformance is identified, but components or material are able to be used in production without further rework or sorting operations. A request for deviation shall be completed and approved for all UAI dispositions prior to the parts being released to production.

02 – RTV (Return to Vendor): This code is used when components or material is identified with a nonconformance and are returned to the supplier without further processing by Polaris.

03 – Scrap at Supplier Expense: This code is used when components or materials are identified with a nonconformance and are scrapped at Polaris. The supplier is debited for the cost of the components.

04 – Rework/Sort at Supplier Expense: This code is used when components or materials are identified with a nonconformance and are sorted or reworked.

All disposition codes shall affect the supplier's QSTAR rating when it is determined that the supplier is responsible for the nonconformance. RMOs that have not been dispositioned by Polaris for >180 days shall be retracted.

Note: All costs incurred by Polaris as a result of an RMO are subject to recovery at the supplier's expense as provided in the SPBM.

In the event of incorrect labeling and incorrect quantities are received, the supplier shall be charged with a one-piece quantity in the RMO per occurrence (see example 5 in the "Rejection Rules for RMOs" appendix). The above consideration is for received goods only. Any mislabeled product that enters the production stream shall be issued a full quantity RMO, including costs associated with the correction.

RMOs shall be issued for delivery of production material without prior PPAP approval and material received that underwent an unapproved process change (see the "Process Change Request (PCR)" section for additional information).

As a result of the rejected material, Polaris may require a response to replenish stock, Certification ID, PDI, supplier CAPA, third-party containment, or other requirements as defined by Polaris to ensure the impact to Polaris production is minimized.

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8.1.2. Nonconforming PPM Rate

The nonconforming PPM rate is defined by the following calculation:

$$\text{Parts per Million (PPM)} = (\# \text{ of Parts Rejected} / \# \text{ of Parts Received}) * 1,000,000$$

For performance purposes, a supplier's PPM is expressed as a part of their QSTAR rating on their scorecard.

The following shall be counted against a supplier's PPM:

- All nonconforming material received at Polaris
- Nonconforming material is subject to an RMO in accordance with this document and the requirements and specifications as defined in the design record.
- Nonconforming material received prior to a Polaris approved deviation or DCR
- Deviation approval after the occurrence shall not affect the RMO's disposition.

The following shall not be counted against a supplier's PPM:

- Supplier notification to Polaris of nonconforming parts prior to Polaris discovery and use; including removal and certified replacement of product without impacting the production schedule.
- Nonconforming parts shipped to Polaris with an approved deviation prior to shipment. Copies of the deviation shall be attached to all containers affected by the deviation.
- Product that is not fit for use but conforms to Polaris design record with exception of unauthorized process changes.

8.2. CONTROL OF NONCONFORMING PRODUCTS & CORRECTIVE ACTION PROCEDURES

Overview: Suppliers shall establish a policy and maintain systems directed toward the control of nonconforming product and corrective and preventive actions.

Robust measures shall be in place to prevent escapes and a documented procedure to strengthen processes shall be built into internal corrective action procedures. This process shall also extend to the supplier's sub-tier levels.

At a minimum, the supplier's policy and systems shall contain:

- Documented reaction plan for a quality event.
- Identification of nonconforming material.
- Containment of nonconforming material throughout the value stream with controls to prevent further material from entering.
- A robust process to evaluate conformity of work in process (WIP) in both directions of the value stream at the point of discovery.

- Immediate notification to Polaris is required in the event that a supplier suspects or confirms a quality escape. Polaris requires written notification of the escapement to your Sourcing representative and your SQE representatives.
- Quantitative production measures and metrics should be utilized to drive improvement or validate corrective actions.
- Documented procedures for the creation and processing of internal corrective and preventive actions (CAPA).

8.2.1. Supplier Corrective Action & Preventive Action (CAPA)

Overview: Supplier corrective and preventive actions are required to establish root cause and prevent occurrence or recurrences of nonconformities.

The supplier shall establish and maintain documented procedures per Polaris requirements for implementing and communicating corrective and preventive actions.

When a quality event occurs, Polaris may request the execution of a CAPA-CAR with required submission for review and approval. Regardless of Polaris request, it is expected that suppliers execute CAPAs for all quality events that occur.

The supplier shall implement and record any changes as a result of the CAPA-CAR to any affected documentation.

RELIANCE

CAPA – CORRECTIVE ACTION PREVENTATIVE ACTION PROCESS OVERVIEW (DOC CONTROL 00347)

CAPA – CORRECTIVE ACTION PREVENTIVE ACTION WORK INSTRUCTIONS (DOC CONTROL 00610)

SUPPLIER UNIVERSITY OF POLARIS

CORRECTIVE ACTION PREVENTIVE ACTION (CAPA) PROCESS TRAINING (OPS B SQ 00988)

CORRECTIVE ACTION PREVENTIVE ACTION (CAPA) SYSTEM TRAINING FOR SUPPLIERS (OPS B SQ 00679)

CAR (CORRECTIVE ACTION REQUEST) SYSTEM TRAINING FOR SUPPLIERS (OPS E SUP 01229)

8.3. CONTROLLED SHIPPING LEVELS

8.3.1. Pre-Delivery Inspection (PDI)

Overview: Pre-delivery inspection (PDI) is a secondary act of inspecting a product for quality defect(s) prior to shipment to ensure nonconforming product does not reach the customer.

PDI is utilized once the product has been through all of its manufacturing/assembly processes and is prepared for shipment to a Polaris production facility.

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Suppliers should implement PDI as a quality gate to:

- Certify a known nonconformity has been properly contained or corrected
- Validate the effectiveness of corrective or preventive action(s)

Suppliers shall implement PDI if Polaris determines it is necessary to prevent disruption to Polaris production. In effect, PDI shall be required based on potential impact to the Polaris production system and need for continuous supply per the delivery schedule.

Polaris shall reserve the right to utilize third-party resources or internal personnel to conduct PDI activities where needed within the value chain as required.

Upon a quality event, Polaris' minimum requirement is the next 5 shipments shall be inspected by the supplier at the rate of 100% and marked as certified. If additional discrepancies are found at Polaris, all shipments are subject to 100% sort. The aforementioned requirement is a guideline, if other instruction is provided by Polaris with regards to number of shipments and inspection rate, such instruction supersedes the guideline.

PDI shall be a temporary procedure to drive corrective actions and shall not become an integrated part of the day-to-day process. All PDI products shall be identified in accordance with certified ID requirement section. Any defects found in a certified shipment that are within the scope of PDI will result in 3rd party containment. Refer to "Third-Party Containment" section for details.

RELIANCE

PRE-DELIVERY INSPECTION (PDI) PROCEDURES AND CRITERIA (DOC CONTROL 00589)

SUPPLIER UNIVERSITY OF POLARIS

PRE-DELIVERY INSPECTION (PDI) PROCEDURES AND CRITERIA (OPS B SQ 00624)

8.3.2. Third-Party Containment

Overview: The act of inspecting and/or sorting a product for quality defect(s) by a third party to ensure nonconforming product does not reach Polaris' assembly lines.

In the event of nonconforming material reaching Polaris or found in incoming inspection, and at the discretion of Polaris' plant quality or supplier quality teams, third-party containment may be required. Third-party containment is required when a supplier has been unable to provide sustainable corrective action to a quality issue, or a single quality issue bears high risk to Polaris' customers. Third-party containment is the most stringent inspection standard implemented by Polaris and suppliers who participate in the process must do so through a third party of Polaris' choice. Third-party shall provide the daily sorting status.

If Polaris personnel or a third party hired by Polaris conducts a supplier caused inspection and sort, the charges for the inspection and sort shall be the responsibility of the supplier. However, if a supplier is already shipping certified product through PDI and Polaris chooses to conduct its own sort, directly or through a third-party, the supplier will not be charged for the sort, unless nonconforming material is found. If nonconforming material is found, the supplier will be given 48 hours (72 hours for Asian suppliers) to replace stock at no cost. Labor charges for an inspection and sort by Polaris will be calculated per the current Polaris burden rate, which is typically higher than that of a third party.

RELIANCETHIRD-PARTY CONTAINMENT PROCEDURE (DOC CONTROL 00590)

8.4. CERTIFIED ID REQUIREMENT

Overview: Certified ID requirements define how to properly identify material when requested to ship certified product.

When requested, suppliers shall affix the proper identifying labels and part markings per Polaris requirements as defined in the Certified ID Label Form in Reliance.

If a defect is found within a certified shipment related to the reason it was certified, Polaris shall, at its discretion, begin sorting subsequent certified shipments related to the original issue.

Polaris will use, if needed, a third-party sorting company, in which case the cost of the sort(s) as described above shall be the responsibility of the supplier.

Suppliers shall not be charged for sorting certified material without just cause.

Material received without certification ID when required shall be considered suspect material and therefore be subject to sort or rejection.

RELIANCE

POLARIS CERTIFIED ID REQUIREMENTS PROCEDURE (DOC CONTROL 00586)

SUPPLIER UNIVERSITY OF POLARISCERTIFIED ID REQUIREMENT PROCESS TRAINING (OPS B SSQ 00615)

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8.5. SUPPLIER PERFORMANCE MANAGEMENT

OVERVIEW: A program used by Polaris to improve the quality and capacity of a previously qualified, but underperforming, supplier. The processes used in this program are Supplier Performance Escalation Process (SPEP), Supplier Continuous Improvement Process (SCIP), and No New Business (NNB). Polaris reserves the right to recover from the supplier all costs incurred by Polaris, per the *Supplier Business Practice Manual (SBPM)*.

Polaris continuously evaluates suppliers' performance by analyzing suppliers' Key Performance Indicators (KPIs) and garnering input from internal stakeholders.

When a downward trend in supplier performance is detected, Polaris initiates steps to clearly define expectations and implement goals, containment actions, corrective actions, charters, and other methods of ensuring an improvement in the supplier's performance:

- **Supplier Performance Escalation Process (SPEP)**—Systematic, multi-level process which is applied to critical quality performance issues and ensures suppliers are placing the proper internal focus on resolution.
- **Supplier Continuous Improvement Process (SCIP)**—Process to strategically increase a supplier's quality according to Polaris expectations through the application of systemic improvements. This process is led by the Supplier Development team.
- **No New Business (NNB)**—Status that prevents supplier from being awarded new business because supplier has chronic performance issues.

The following table outlines the three programs into which a supplier may be placed to correct performance management:

Note: These programs are not mutually exclusive (you can be in more than one at a time) or linear (the progression is not necessarily SPEP -> SCIP -> NNB; for example, you could enter SCIP first and later be entered into SPEP or you could be in NNB and later be placed in SCIP).

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Table 4: Polaris Performance Management Programs

SCENARIOS	SPEP	SCIP	NNB
What causes a supplier to be placed in each program?			
Poor CAPA or CAR performance or timeliness	X		
Poor APQP performance or timeliness	X		
Breach of containment	X	X	
Lack of adherence to traceability requirements	X	X	
Failure of SCIP program	X		X
Failure of SPEP program		X	X
Chronically underperforming suppliers		X	X
Lack of adherence to expectations and requirements in the Supplier Quality Assurance Manual (SQAM) (this manual)			X
Violations of trust, such as unauthorized changes (process, materials, design) made by a supplier after PPAP qualification			X
Unacceptable supplier audit pertaining to manufacturing and/or quality	X	X	X
Inadequate performance as demonstrated on the supplier scorecard	X	X	X
Capacity issues	X	X	X
Supplier-caused warranty, Safety Bulletin, Service Bulletin, or field recall	X	X	X
Quality or delivery issues resulting in a production disruption	X	X	X
What happens in each program?			
Polaris restricts new parts from being awarded to supplier			X
Supplier receives letter from Polaris formally restricting new part development and award activities with supplier			X
Supplier develops long-term improvement plan		X	X
Supplier agrees to and implements requirements and expectations set by Polaris	X	X	X
SQE/SDE monitors suppliers closely evaluates supplier performance	X	X	X
Supplier regularly reports progress to Polaris	X	X	X
How does a supplier know when they have successfully improved?			
Supplier implemented sustainable countermeasures according to Polaris requirements, expectations, and timeline	X	X	X
What if a supplier does not improve?			
Time period for completion may be extended	X	X	
Supplier may be exited (no longer a Polaris supplier)	X	X	X
Other actions, as recommended by the Cross-Functional Governance Committee	X	X	X

9. APPENDIX

9.1. **REJECTION RULES FOR RMOs**

The following examples are to provide additional understanding of RMO disposition, but are not to be interpreted as a comprehensive list that encompasses all potential scenarios.

Example 1 – RMO Qty: A lot of material received contains 2,500 pieces. An issue is identified; the supplier is notified and elects to sort the material at the point of receipt. Twelve pieces are found to be defective and are returned to the supplier as a material rejection (RMO). Only the 12 defective pieces found are counted in the PPM calculation: $(12/2,500) * 1,000,000 = 4,800$ PPM.

Example 2 – RMO Qty: A lot of material received contains 2,500 pieces. An issue is identified; the supplier is notified and elects not to sort the material at the point of receipt. All pieces are returned to the supplier as a material rejection. Investigation by the supplier provides evidence that only 12 of the returned pieces are nonconforming. If the evidence provided indicates that only 12 pieces were nonconforming, the RMO shall be adjusted and only the 12 defective pieces found are counted in the PPM calculation: $(12/2,500) * 1,000,000 = 4,800$ PPM.

Example 3 – Rejection Dispute: A lot of material received contains 2,500 pieces. An issue is identified; the supplier is notified and elects not to sort the material at the point of receipt. All pieces are returned to the supplier as a material rejection. Investigation by the supplier provides evidence that 100% of the returned product is conforming. The supplier shall provide that evidence to the receiving facility for review. If the evidence proves that an error was made by the receiving facility in the disposition of the rejected material, the receiving facility shall change the Quality Indicator on the material rejection (RMO) to hold the supplier harmless. No pieces returned are counted in the PPM calculation: $(0/2,500) * 1,000,000 = 0$ PPM. If nonconformance is found in the returned material, the Quality Indicator shall not be changed and the full amount of the rejection shall be reflected in the PPM Calculation: $(2,500/2,500) * 1,000,000 = 1,000,000$ PPM.

Example 4 – Supplier Rework: A nonconformance (as determined by the receiving facility operations/quality division) is identified after the receipt of material at the receiving facility. The supplier requests the opportunity to perform minor rework. In addition to following normal sort practices as described in the “Reject Material Order (RMO)” section, rework has to be approved by Polaris. All nonconformance pieces received by Polaris, reworked or not, shall be counted against the supplier’s PPM: $(2,500/2,500) * 1,000,000 = 1,000,000$ PPM.

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Example 5 - Mislabeled: Supplier has shipped, and facility has received part number 1234567 in accordance with a scheduled release. The material is determined to be part number 1357891 (mislabeled product). Since part number 1357891 does not meet the design record of the part ordered (1234567) a quantity of one is rejected by way of an RMO. The resulting PPM shall be charged to the supplier's PPM performance per occurrence (regardless of shipment size). This consideration is for received goods only; any mislabeled product put into the production stream shall be charged against the supplier, including costs associated with the correction and an RMO against the actual quantity that was found in production or built product. The intent of the RMO is for defective product that has impacted production. This transaction is completed even if the parts are subsequently received under their actual part number. Mislabeled is considered mislabeled by container labels, shipping labels or related paperwork (packing slips), not mislabeled parts such as color codes or bar code labels. These shall be treated as defective product and processed in the RMO system as such for the full quantity.

Example 6 - Corrosion: Corrosion has been identified as a nonconformance in a product stored in the warehouse as it is delivered to the line. The intended storage life and conditions shall be checked and verified prior to RMO disposition. If the material has been stored longer than the expected life of the corrosion protection, resulting reject charges shall not be charged to the supplier's performance (90 days FOB from Polaris suppliers). In all cases, corrosion protection shall be adequate to provide a minimum of 90 days FOB from date of shipment from supplier to Polaris, unless otherwise specified.

Example 7 – Damage Report: Damaged material is delivered to a receiving facility. It is determined that parts are no longer in the original supplier provided packaging, have been repackaged or otherwise forwarded without adequate packaging protection by a third party. The damaged material shall be rejected to the third-party provider. If the purchase order needed to complete this rejection is not available, the material shall be rejected internally to the division/section responsible for managing the third-party provider.

Example 8 – PPAP Approval: Polaris requires an expedited engineering change to a part number or a new part number release. A PPAP has not been submitted on the new change or part number and the supplier is pressured to ship. Supplier does not receive PPAP approval or PPAP interim approval prior to shipment. In all such cases, Polaris requires one of the forms of PPAP approval before the supplier may ship material. Accordingly, the entire lot shipped without PPAP approval is subject to an RMO upon receipt, resulting in PPM charges against the supplier and possible recovery fees.

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Example 9 – Damage Packaging: The packaging has failed in the delivery truck; the load is visibly damaged upon receipt. The supplier has conformed to the documented packaging requirements. The owner of the packaging design, specification or third-party repackaging shall receive the charge to the PPM reporting. If the trucking company damaged the load, a shipper damage claim or the equivalent documents shall be filed. The appropriate parties shall handle the recovery for damage. Suppliers shall be held harmless for transit damage that is outside their control, such as transit forklift damage, falling off the truck, smashed containers, and so on, if the supplier complied with Polaris approved packaging.

Example 10 – RRDM of Additional Costs: Material is received and processed at Polaris. During the processing (assembly or testing) the supplier supplied product is found to be defective. The defective material is subject to processing as an RMO but also the value add to the product shall also be added to the RMO under extended costs or processed as recovery fees. Suppliers shall be held liable for all losses attributed to the defective material. If the part is defective due to damage and it is unclear who was responsible for the damage, the decision for accountability shall be discussed and agreed upon by both Polaris and the supplier.

9.2. POLARIS-SPECIFIC PPAP ELEMENT CLARIFICATIONS

Polaris submission requirements are based on *Production Part Approval Process (PPAP) 5th Edition* by the Automotive Industry Action Group (AIAG); however, there are a few Polaris-specific clarifications for suppliers to be aware of:

- **Element 1 – Design Record:** Additional information Polaris may request as a part of this element include part container label requirements related to traceability and points of interest noted on the purchase order.
- **Element 2 – Engineering Change Document (ECO):** Polaris considers approved deviations a part of submission requirements.
- **Element 3 – Customer Engineering Approval:** For Polaris, this is generally done for deviations, in which case the approved deviation must be attached as a part of submission requirements.
- **Element 5 – Process Flow Diagram:** Process flow diagrams for similar parts are acceptable if the new parts have been reviewed for commonality by Polaris.
- **Element 17 – Customer-Specific Requirements:** For Polaris, the following parts are required for container label traceability: part container label and traceability data record from PPAP sample lot. Other examples may include: tooling information form, packaging form, inspection plan, PDI checklist, supplier PPAP worksheet.
- **Element 18 – Part Submission Warrant (PSW):** Polaris does not sign or return submitted PSWs.

10. REFERENCES

None

11. END OF DOCUMENT

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