KSS GLOBAL STANDARD

Quality First
Supplier Requirements Manual

KSS 712

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Document History

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C	01.02.97		* Revision to incorporate AIAG Standards, General updates
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15	17-Sep-2014	70070	*Added chapter 31 “Conflict Minerals Policy Requirements”.
16	02-Sep-2015	DCO -104490	* Update chapter 6, “APQP”, sub-chapter 6.1 name was changed to “Early Supplier Involvement (ESI) and Supplier Kick-off Process”. * Update sub-chapter 6.18 Process Audit; added reasons for audits. * Update chapter 7, “Production Part Approval Process (PPAP)”, sub-chapter “Annual Validation per PPAP Level 4 Requirements”, under item “2” the minimum number of parts required for capability study was changed from minimum 30 pcs. to minimum 125 pcs for CC and SC dimensions (where applicable) and “Dimensional Layout Requirement” was updated from min. 2 pcs. dimensional layout to min. 5 pcs. * Update on chapter 14, “Special Process Requirements”.

17	15 Jan 2018	DCO-123549	* Updated in accordance with transition from ISO/TS to IATF 16949. * Chapter 16: Change management process announcement from 90 days (3 months) to 180 days (6 months) * Chapter 20: update Supplier Rating System (SRS) / Performance Indicator (revised) * Chapter 6.18: Tooling (revised) * Chapter 31: Corporate Social Responsibility (CSR) / Sustainability; new added.

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MESSAGE TO OUR SUPPLIERS PARTNERS

The Key Safety Systems mission is to continually deliver best values advanced safety products and services to Customers with a great team of motivated employees who are personally and professionally passionate towards our business of Saving Lives.

Collaborative efforts throughout the entire supply chain are required to enable Key Safety Systems deliver an exceptional value to our customers. Our supplier partners play an integral role in support of our mission, and we rely on their commitment, expertise, and alignment with intense focus on Quality and Total Cost.

The essential in **Saving Lives** is that every single product has to work as predicted and in unison with the other safety restraint system parts, each and every time it is called upon. Therefore KSS has to be a **Zero Defect** company committed to excellence and all of our Supplier partners must do the same.

This manual is designed to outline and communicate the Key Safety Systems Supplier Partners the Quality requirements and to ensure a thorough understanding of what is required to become, and remain, an approved Supplier.

All relevant KSS Procedures, Policies and Standards can be found on the KSS website (www.keysafetyinc.com). It is the Suppliers responsibility to check for updates to the above mentioned documents on a regular basis.

We thank you for your commitment to support the **Saving Lives** business and sustain the **Zero Defect** principles.

_____ Brian Schantz Vice President Global Purchasing	_____ Rodolfo Ventresca Global Director Supplier Quality and Tooling
_____ Jay Phillion Senior Vice President - Global Quality, Executive Group	

1 Introduction

The Key Safety Systems, Inc. (hereafter referred to as “KSS”) Procurement department is the Supplier’s first line of communication and permission-granting authority whenever components or services are contracted and are provided to KSS. KSS Procurement coordinates supplier information and provides the appropriate KSS support activity to the supplier, while relying upon the supplier’s expertise with regard to manufacturing and quality of the product.

While various KSS activities may assist a supplier in achieving quality requirements and improving quality, ***the responsibility for supplier quality remains with the supplier***.

2 Purpose

This manual is intended to communicate uniform quality requirements which KSS expects of all suppliers. It provides general instruction and outlines procedures which are to be followed in order to become, and remain, an approved supplier.

3 Scope

This Quality First Manual applies to all prototype and production intent product related materials (raw materials, processing, components, sub-assemblies, and assemblies) procured by KSS. This manual is a Quality Standard and requires the formation and maintenance of a documented, active, and effective quality system by all suppliers to KSS.

This Quality Standard establishes specific minimum requirements. It shall be the supplier’s responsibility to implement and maintain any additional controls deemed necessary to continually ensure “fitness for use”, reliability, and product conformance.

This Quality First Manual describes the process by which a supplier of components, products, systems, and services can get qualified to supply KSS. It is designed to outline and communicate the KSS supplier quality requirements and to ensure a thorough understanding of what is required to become and remain an Approved supplier. These requirements also apply to KSS internal suppliers (KSS supplying to KSS).

The process includes the initial qualification of the supplier, which will permit KSS to determine if a new supplier meets the minimum requirements established by KSS and can be added to the KSS Global Supplier Directory (GSD) and/or remain an approved Supplier. The next step covers the qualification of the Supplier's

process (manufacturing, designing, sub-contracting) which will be used to supply KSS with a specific component, system, or service.

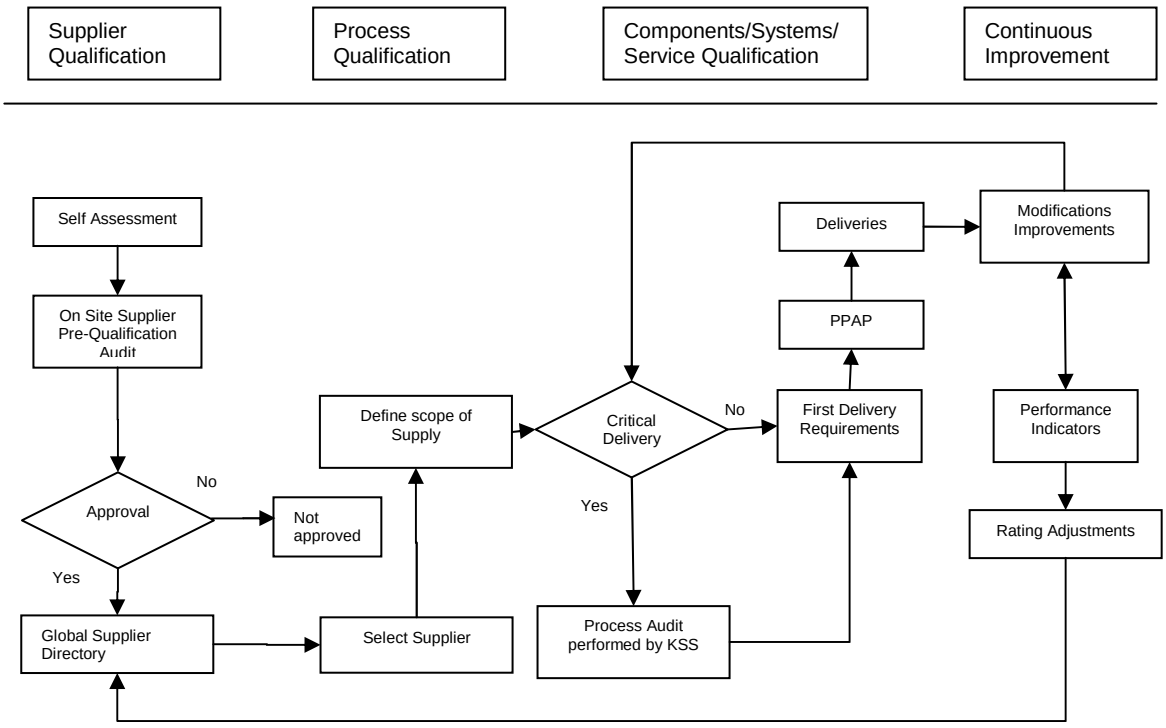
Suppliers are expected to meet the requirements stated herein. These requirements do not supersede any of the purchase order, engineering drawing or specification requirements, or relieve the supplier of exercising independent expertise and skill in providing products and services to KSS.

4 Supplier Selection and Approval

It is required that suppliers be current revision IATF 16949 certified or ISO 9001 certified (compliant with IATF 16949 “Minimum Automotive Quality Management System Requirements for Sub Tier”) third party registered by an accredited third-party certification body prior to being approved for business awards.

Suppliers are selected and approved by KSS on a supplier manufacturing location by location basis (i.e., approval of one supplier manufacturing facility does not constitute approval of any other facility).

SUPPLIER



KSS

4.1 Supplier Qualification

The supplier selection process formally starts within the KSS Procurement Department. The Supplier may be visited by KSS to validate information provided and further evaluate their capability and systems.

KSS will provide the suppliers with:

- KSS Quality First Supplier Requirements Manual
- KSS Purchasing Terms and Conditions
- Confidentiality Agreement (NDA)

These key documents present KSS basic cooperation requirements. No acceptance of these results in the stop of the process and/or no new business.

Upon determination to move forward with qualification of the potential supplier, the Commodity Manager/Buyer will request SQE department to plan the Pre-Qualification audit at supplier location.

4.1.1 Supplier Pre-Qualification Audit (Procedure #1005565)

On-site Pre-Qualification audits shall be conducted as part of the initial introduction as a new supplier, or new supplier location, prior to sourcing. This audit assesses the supplier's entire Quality System and is based on the principles established in current revision IATF 16949 or ISO 9001 (compliant with IATF 16949 "Minimum Automotive Quality Management System Requirements for Sub Tier") and KSS specific requirements.
Notification of the audit will be given well in advance. The SQE shall contact the supplier to schedule the on-site audit. At this time, the supplier will also be provided with the KSS Pre-Qualification Audit form and asked to perform a self-assessment in preparation; the supplier self-assessment shall be provided to the SQE prior to the onsite audit. This will allow the supplier to prepare evidence in advance of the visit, and serves to offer a comparison between the Supplier and SQE assessment. Suppliers must achieve a score of at least 80% to pass the audit. Once the audit is successfully completed, the supplier's location is considered "Approved".
Each Supplier production facility must be approved individually, and suppliers are only authorized to produce KSS product from "Approved" sites. Supplier shall be required to provide corrective actions to any non-conformances identified in the audit and complete implementation in timeframe provided.

Suppliers failing to pass the Pre-Qualification Audit will not be eligible for business with KSS, but may be considered for development; this consideration will be given at the discretion of the Purchasing Director and approved by SQE Director. Supplier will be on hold for business pending achievement of passing score.

4.1.2 Global Supplier Directory (GSD)

KSS maintains a controlled Global Supplier Directory (GSD) which consists of all suppliers to KSS and their approval status (Approved, New Business Hold, or Desource). The GSD is revised as a supplier's status changes.

KSS Purchasing will select a supplier from the GSD based on its technical ability to supply a specific component, system, or service, and to meet Quality, Costs and Delivery criteria.

5 General Supplier Quality System Requirements and Assessment

KSS recognizes the current revision of IATF 16949 & ISO 9001 standards as the supplier quality system requirements.

Suppliers are required to provide to KSS Procurement a copy of their valid quality system registration certificate at Request for Quote (RFQ) if not already on file, and provide updates if / when any changes are made to the certificate (scope, expiration dates, standards, etc.). If at any time a supplier's quality system registration is allowed to expire, or is rescinded by the registrar, KSS Commodity Manager/Buyer and SQE team must be notified immediately.

6 Advanced Product Quality Planning (Standard #1005484)

Advanced Product Quality Planning (APQP) is the process of establishing quality objectives (the voice of the customer) and establishing the schedules or plans for consistently meeting or exceeding these objectives. It is the cornerstone of non-conformance prevention and continual improvement.

APQP is required in the following situations:

- During the development of new processes and products.
- Prior to significant changes in processes and products (as determined by KSS).
- Before tooling is transferred to new producers or new plants.

KSS SQE is responsible to track APQP timing, milestones, and completion as determined during "Supplier kick-off" process (#1012767). Tracking of the progress is done through the KSS Supplier APQP Portal, link below:
http://portal.keysafetyinc.com/SitePages/Home.aspx

KSS SQE will add the part number and first data into the APQP Portal, will grant access to the supplier, and will ask the supplier to add the remaining data and provide updates on a regular basis until the APQP process is closed.

Supplier will add his milestones and compare progress against them, will upload any APQP specific documents as requested by KSS SQE and KSS Tool Engineering and will use the APQP Portal as the platform for any other data exchange.

Suppliers shall set up a quality-planning team for every new or changed product. These teams shall use the quality planning techniques identified in the AIAG APQP manual, as well as KSS specific requirements; typically, the team include design, manufacturing and quality engineers, and production, procurement, and other personnel.

KSS recognizes the AIAG “Advanced Product Quality Planning” (APQP) manual current revision as the supplier APQP requirements; suppliers are required to comply with this manual.
The APQP manual is available directly from the AIAG.

6.1 Early Supplier Involvement (ESI) and Supplier Kick-off Process (Standard #1012767)

The Early Supplier Involvement (ESI) process is applicable to components classified as CDC (Collaborative Development Components) during early development phase due to functional impact, complexity, special requirements. The suppliers involved in the RFQ process for CDC are requested to support the component design with the goal of confirming design feasibility, optimizing manufacturability and costs.

The Supplier Kick-off process is applicable to all components approved for sourcing by the Global Sourcing Council. Meetings between Supplier and the KSS multidisciplinary team shall be held to review and develop consensus on component requirements, program expectations and milestones. Drawings are reviewed specific to manufacturability, dimensional and tolerance schemes; tooling design and realization details are analysed, process capacity, program deliverables and timing are also reviewed.

Refer to procedure “Early Supplier Involvement (ESI) and Supplier Kick-off Process” (#1012767).

6.2 Drawings and specifications

The supplier must maintain the latest revision of the KSS drawing and specifications as part of quality documents. All technical changes and/or revisions must be documented, stating clearly what changes, date of changes, revision of changes, etc.

6.3 Process Flow Diagram

Flow Diagrams of the process establish and document the relationships between operations and control points. Flow Diagrams provide essential information for other quality planning techniques such as the process FMEA and the Control Plan. Flow diagrams are required for PPAP approval and shall be tied to the Control Plan and PFMEA operation steps numerically.

Refer to the AIAG APQP manual for specific details on creating Process Flow Diagrams

6.4 Failure Mode and Effects Analysis (FMEA)

The FMEA assists in the prevention of nonconforming materials and components through a structured analysis of potential failure modes. FMEA's shall be used in both product design and manufacturing process planning. FMEA's are required for all new or changed products and processes. FMEA's are "living documents" and must be updated for design and process changes, as well as lessons learned throughout the product life.
FMEA's are used at two distinct times in the product life cycle:

- Design FMEAs (DFMEA) is to be initiated by the design responsible personnel as an integral part of the design and development process (for design responsible suppliers only); this requirement includes suppliers that develop "black box" and "gray box" designs. In all cases, DFMEA's are to address both the system and component levels.
- Process FMEAs (PFMEA) identify potential process concerns and the actions taken, and to be taken to prevent them. PFMEA's are to be prepared by the supplier prior to the commencement of tooling. Ideally, a DFMEA should be available prior to the preparation of the PFMEA, however, the DFMEA is not a precondition for the PFMEA, and the lack of a DFMEA should never delay development of a PFMEA.

KSS may require a preliminary PFMEA to be submitted in advance of PPAP as part of the APQP process. PFMEAs are required for PPAP approval. DFMEA's are required only if the supplier is responsible for the design of the supplied products.

Refer to the AIAG FMEA manual current revision for specific details on creating FMEA's. Suppliers are required to adhere to KSS specific requirements in addition to AIAG and IATF requirements.

6.5 Product Characteristics Classification CC/SC Standard (Standard #1033079)

There are two different types of product characteristics:

1. **Critical Characteristics (CC)** are product characteristics that may affect the:
   - Safety of product or operator
   - Compliance with legal requirements

- Environmental requirements.

These characteristics are designated in the DFMEA or PFMEA, having a causal relationship to the effect of potential failure modes rated 9-10 for severity.
The manufacturing process (KSS and/or suppliers) may have an influence on characteristics which can result in a CC and may require special control to maintain the required process capability and customer requirements.

2. **Significant Characteristics (SC)** are product characteristics that may affect:
   - Form, fit or function of the product
   - The assembly process (final product/set)
   - The production process (components)

These characteristics are designated in the DFMEA or PFMEA having a causal relationship to the effect of potential failure modes rated 5-8 for severity, or where agreed by the cross-functional team, having severity rated less than 5.
SC characteristics may be influenced by the manufacturing process (KSS and/or suppliers) and may require special control to maintain the required process capability and customer requirements.

6.6 Control Plan

A Control Plan is a document that summarizes the supplier's methods to assure continual conformance to drawing, specification, and Quality First requirements, as well as "fitness for use" for a specific part or family of parts. It provides an effective way for suppliers to develop and document quality controls for products and to review changes made after production begins.

Refinements to Control Plans are encouraged as more data about the process becomes available, with the following notes:

- Changes of significance (form, fit, function, durability, appearance or level of control) are to be approved by KSS via PPAP submission.
- Changes of no significance (document format, spelling, etc.) do not require KSS approval.

If there is any question concerning approval requirements, contact KSS Plant SQA for direction.

The starting point for a Control Plan is the list of control characteristics. Once the control characteristics are identified, control methods must be developed and documented in the Control Plan. The goal of control characteristic monitoring is to determine when action is required to maintain process stability and product conformance, and conversely when no action should be taken (avoidance of over control) because such unnecessary actions would destabilize the process.
Control Plans shall detail all controls from receipt of raw materials through finished product shipment and shall not focus exclusively on CC/SCs. Control Plans shall

include provisions to sample product from all streams of production for all Control Plan characteristics (i.e. multiple out dies, multiple cavity tools, etc.).

All KSS designated CC/SC's shall be included into the Control Plan and must have in place SPC or mistake proofing or 100% inspection/detection.
Mistake proofing controls shall be referenced in the Control Plan, including the supplier's method of minimum daily verification of the continued function of such controls.

All Control Plans must include reference to "**Annual Validation: PPAP level 4 requirements**" (see chapter 7); Control Plans submitted without this reference will not be accepted.

KSS may require preliminary Control Plans to be submitted in advance of PPAP as part of the APQP process; completed Control Plans must be submitted for PPAP approval.

As per KSS SQE/SQA request, Control Plan should include incremental testing applicable for the launch phase in order to reconfirm process stability and product quality; criteria for sample size and number of batched delivered affected had to be established by KSS SQE/SQA as part of the APQP/PPAP process.

IMPORTANT NOTE:
KSS relies upon the supplier to be the expert with regard to the manufacturing and quality of the product being purchased. KSS's approval of supplier Control Plans is required to ensure conformance to the AIAG current revision and KSS "Quality First Manual" requirements. KSS's approval of a supplier's Control Plan is in no way to be interpreted as unconditional approval of the process, or quality of materials / components produced by the process and supplied under that Control Plan. The responsibility for supplier quality remains with the supplier at all times.

Links between Process Flow, PFMEA and Control Plan MUST be established and easily recognizable on all these documents! All references indicated on Process Flow and Control Plans must be available and provided on request.

Refer to the AIAG APQP manual current revision for specific details on creating Control Plans. Suppliers are required to adhere to KSS specific requirements in addition to AIAG and IATF requirements.

6.7 Gaging requirements

It is the responsibility of the supplier to deliver parts according to the drawing dimensions and tolerances. To assure this, the supplier may have to build gages and other measurement devices for his own in-house use. The design and function of those gages shall be reviewed and discussed during the "Supplier Kick-off" meeting(s).

Gages for final component inspection shall be duplicated, one for each supplier and KSS locations.

6.8 Measurement System Analysis (MSA)

Product and process conformance must be determined by measurements made with appropriate test equipment and gages. The supplier must establish the error of measurement to specification ratio since the test equipment or gage is a significant part of the process. Any error in these measurements, whether known or unknown, has a direct bearing on the ability to judge process / product conformance and capability.

KSS requires that test equipment and gages used to evaluate any Control Plan characteristic have Gage R&R studies conducted which meet the requirements of the AIAG MSA Manual current revision, or be removed from service and replaced with a conforming gage. Variable gaging shall be used wherever possible. GR&R studies shall be submitted for all CC/SC gaging for PPAP approval.

Refer to the AIAG Measurement Systems Analysis (MSA) manual current revision for specific details on conducting GR&R studies.

6.9 Process Capability / Statistical Process Control (SPC)

Statistical Process Control (SPC) must be used as an integral part of the supplier's process to provide the information necessary for those process parameters and product characteristics, sometimes referred to as Control, Significant or Critical, (see chapter 6.5: Product Characteristics Classification CC/SC Standard, KSS Standard #1033079), that affects the form, fit, function, durability or appearance of the product. Variables control charts are the preferred method of SPC.

Suppliers are expected to utilize data from the Control Charts to identify opportunities for continually reducing variation in process output. At minimum, all KSS drawing and specification designated CC/SCs must have on-going statistical controls or mistake-proofing. These controls must be referenced in the supplier's Control Plan. KSS does not consider data logs as an acceptable substitute for control charts.

When unique process conditions, historical data, or other factors suggest an exception to the use of Statistical Controls, supporting rationale must be provided with a proposed Control Plan and Part Submission Warrant (PSW) to KSS Plant SQA for approval.

Refer to the AIAG Statistical Process Control (SPC) manual current revision for specific details on appropriate implementation of SPC, as well as available SPC methods.

6.10 Lot Size

Supplier lots must be the quantity of products produced under similar conditions such that the products within the lot are expected to be homogeneous in all significant attributes. Maximum lot size shall be limited as follows:

- One shift of production
- One batch of product produced in a batch process
- One slit coil for heat treated or HSLA (High Strength Low Alloy) products.

Note:
Some processes may require a lot number change based upon major process changes, set-ups, or adjustments within the material lot; in these cases, the material lot identifier must be readily traceable from the lot number change.

Each lot number must contain homogeneous components or raw materials. If a specific product and / or manufacturing process does not lend itself to these requirements, alternate methods may be used if approved in advance by KSS plant SQA.

6.11 Lot Traceability

For all KSS products, the supplier shall establish and maintain procedures for identifying the product during all stages of production including receipt, work in process, storage, and delivery. In addition, lot traceability of all sub-components, raw materials and process inspection data shall be maintained. Each production lot (as defined in Chapter 6.10) shall be identified by a supplier lot number. The supplier may ship more than one lot per pallet, but each container on the pallet must contain only parts from one lot, unless the parts are individually and discretely serialized.

The supplier lot traceability system must provide for the following situations:

- Permit isolation of suspect product on a precise basis based upon lot number on each container.
- Barcode identification of supplier lot number on each container. This lot number must be the key to all traceability in the supplier's system.
- Localize causes of failure and take corrective action at minimal cost to supplier and KSS.
- Determine traceability to component lot numbers and production / quality data specific to the lot number identified on the container (backward traceability).
- Determine supplier finished product lot number(s) produced with a given lot of components or on a given shift of production (forward traceability).
- Each lot of die colorant for plastics.

6.12 Record Retention

Supplier records shall be retained for the length of time required by the current revision ISO 9001 and IATF 16949 standard and referenced AIAG documents. Suppliers must have a procedure for record retention, which defines the retention period for all records (those referenced in ISO 9001 and IATF 16949 and other records generated by a supplier), as well as archive and disposal procedures. Quality records shall be made available to KSS upon request.

6.13 Global Supplier Packaging Guidelines (Standard #1024318)

Suppliers shall establish, document and maintain procedures for handling, storage and delivery of product per current revision ISO 9001 and IATF 16949 requirements. Suppliers must also conform to any specific requirements documented on the KSS purchase order or drawing / engineering specification. KSS specific requirements are as follows:

Handling: The supplier shall utilize methods of handling that prevent damage or deterioration before, during, and after the manufacturing process.

Storage: The supplier shall utilize secure storage areas to prevent damage or deterioration of product pending use or delivery. Appropriate methods for authorizing receipt and dispatch to and from such areas shall be stipulated in order to maintain control and assure FIFO (First In – First Out). In order to detect deterioration, the condition of product in stock shall be assessed during the supplier's "Internal Quality Audit" process per current revision ISO 9001 and IATF 16949 requirements. Shelf life shall be monitored, as applicable, to ensure products shipped to KSS have greater than 50% of the original shelf life remaining, unless approved in advance by KSS Production Control. Shelf life expiration date and / or product manufacture date must be identified on each carton / container. Special storage condition requirements (i.e., temperature / humidity levels) shall be determined, and implemented, to prevent deterioration during storage at supplier locations.

Delivery: The supplier shall arrange for the protection of product quality subsequent to manufacture. This protection shall include delivery to destination. The supplier is responsible to design and utilize packaging which is most cost effective and ensures that when the product reaches KSS it is conforming and "fit for use", regardless of F.O.B. terms, (with the exception of blatant carrier damage and / or neglect). Suppliers are responsible to ship finished product to KSS on a FIFO basis.

Suppliers shall notify KSS Plant Material Control and Purchasing in advance of any planned shutdowns or extended downtime that will affect shipment schedules. This notice shall be communicated as far in advance as necessary to provide sufficient time for the supplier to produce and ship inventory to cover the downtime period.

Suppliers are required to ship on time per KSS release schedules and quantities. Over shipments may be rejected and returned at the supplier's expense, short shipments may require expedited shipments at the supplier's expense. Additionally, packing slips must accurately reflect the KSS purchase order number, part number, revision level, and quantity shipped. Discrepancies may result in customs issues where KSS is moving the material across borders for production. Such incidents may result in a supplier chargeback to recover any related costs to KSS.

Barcode Container Shipping Label requirements: It is the responsibility of the supplier to provide barcoded container shipping labels that meet KSS's requirements as defined in the "Global Supplier Packaging Guidelines" standard (#1024318). Strict adherence to these specifications for the barcode identification labels will reduce implementation cost and increase benefits throughout industry. Failure to comply with these requirements may result in rejection of the shipment.

6.14 Prototype / Pre-Production Product

All prototype or pre-production product supplied to KSS is expected to conform to the applicable drawing, specification, and purchase order requirements in their entirety. Dimensional Layout and Material Certification Reports are required to be provided with pre-production and prototype. If such requirements cannot be met for any reason, the supplier shall notify KSS at the time of order placement, or immediately following subsequent discovery of any discrepancy and request disposition. Non-conforming product shipped without KSS written authorization is subject to rejection / return and chargeback for any related costs incurred by KSS as a result of the non-conformance (product built, test failure, customer impact / costs, etc.).

6.15 Prototype/FOT deliveries

The supplier shall provide a "First Delivery Inspection report" for Prototype and First Off Tool (FOT) samples. This is required for the first batch produced from a new or modified drawing, after a change of the manufacturing process, or as directed by KSS purchase order. A "First Delivery Inspection" is a representative sample size from the batch, which shall be 100%, inspected for conformance to mechanical and/or performance requirements and should also include Material Certifications.

Supplier will develop a plan to monitor the initial delivery of components, products, systems or services to ensure that the manufacturing/delivery process is generating the quality level expected by KSS. The plan may involve submittal of initial samples or demonstration of services by the supplier.
The plan should include necessary actions to detect and contain any nonconformity. The plan should also include corrective actions to be taken in case of non-conformance. This plan should be submitted and approved by KSS.

Initial parts or samples, if required, must be manufactured with the final means and representative of series production component or systems. They must be dispatched on time for the attention of KSS supply chain department. A specific label “Initial Samples” with at least the following information: quantity, part number, and index of the drawing, shall be provided by the supplier.

6.16 Run at Rate (Procedure #1005108)/Launch Readiness Review

To ensure that new components meet yield, rate, and quality requirements, Run at Rates are required. Run at Rates are mandatory on newly tooled components, components with significant volume increases or components with changes that require significant process or assembly changes. KSS Run at Rates (form # 1022008) may be customer monitored (witnessed by KSS personnel), or supplier monitored (performed by the supplier with results submitted to KSS). Run at Rates shall be successfully completed prior to PPAP approval. If this is not accomplished, component PPAP approval will be on-hold.

Specific Run at Rate requirements will be established during ESI and Supplier Kick-off process; this includes Supplier Ramp-Up questionnaire (self-assessment). Suppliers must submit this questionnaire accompanied by supporting documents to respective Commodity Manager/Buyer prior to Run at Rate; this will be reviewed by SQA during Customer monitored Run at Rate.

6.17 Tooling

The KSS purchased tools shall be designed and built by the nominated supplier according to the applicable KSS tool standard:

- Stamping Tool Standard #1003745
- Plastic Injection Tool Standard #1003746
- Die Casting Tool Standard #1045261
- Polyurethane Tool Guidelines #1019412

These documents define the minimum requirements for tool design and construction; where conditions warrant a deviation from these standards, the supplier must obtain written approval from KSS Tooling Engineer.

The supplier is required to provide periodical updates regarding tool design, construction and qualification up to component PPAP approval; Tool Progress Report (TPR) as defined in the applicable KSS tool standard shall be submitted bi-weekly by supplier to the KSS Tooling Engineer.

Each individual die, mould, fixture, equipment, etc. purchased by KSS must be labelled to permanently identify it as property of Key Safety Systems with a tool tag. The tool tag layout and content are defined in the applicable KSS Tool Standard.

Tooling owned by Key Safety Systems' Customer shall be identified with a specific Customer tool tag reporting information to their specifications; KSS Tooling Engineer shall provide to supplier the tool tags and information as received from Customer.

The supplier is required to submit one complete set of “as-built” tool drawings in the form of either blue prints and/or electronic file (in a KSS approved format) along with additional support documents as required.

The supplier is required to submit to KSS Tooling Engineer prior to the component PPAP submission the applicable KSS Tool Info form, for approval:

- KSS Tool Info Form - Stamping-Dies #2036789
- KSS Tool Info Form - Injection Molds #2036788
- KSS Tool Info Form - Die Casting #2036787
- KSS Tool Info Form - Polyurethane Molds #2038045

Lack of KSS Tooling Engineer approval will result in component PPAP approval on-hold status.

The supplier is required to provide an accessible storage area where all tagged KSS / Customer tools are located. If any tooling is stored off-site, approval must be supplied by KSS Tool Engineering prior to any tool movement. Any tool independent of the ownership must be stored for minimum fifteen years after End of Production (EOP), until tool disposal instruction is received by supplier from KSS. The supplier is responsible for proper storage and to apply proper protective methods (corrosion protection, etc.). The supplier shall provide a list of tooling inventory every second year or on request.

6.18 Process Audit

KSS will perform VDA 6.3 Process Audits at the supplier site according to VDA6.3 standard. Process Audits will be performed by KSS for critical components, products, systems, or services, in the case of recurring non-conformances, or any other reason at KSS discretion, as detailed below:

- CLD 3 / Secure a product launch and process approval
- Periodic monitoring audit program
- Supplier performance issues
- Continuous improvement process
- Follow up: failed Process Audit (rating C)
- Requirements (client; standards; legislation)

KSS Process Audits VDA 6.3 questionnaire (#1037333) contains additional KSS customers’ requirements that exceed VDA 6.3 standard requirements.

7 Production Part Approval Process (PPAP)

KSS recognizes the AIAG Production Part Approval Process (PPAP) manual current revision as the requirements for production part approval. PPAP submission date commitments are to be provided by suppliers for all new and changed parts and commitment dates are to be met at all times. If any supplier or KSS issue causes a date to be jeopardized, the supplier must immediately communicate this to the KSS SQE and KSS Purchasing and agree upon a revised submission date that will support program timing.

PPAP submissions are expected to be 100% complete and conforming to the KSS PPAP checklist (form #1022454) distributed by KSS. All PPAP documentation must be submitted in English; submissions in other languages will be rejected.

It is the supplier's responsibility to resolve any issues preventing complete and conforming submission in advance of the submission date. Incomplete and non-conforming PPAP's will be rejected. PPAP submission dates that are not met, or PPAP's that are rejected may result in the issuance of a Quality Notice (QN) by KSS and corrective action response / implementation by the supplier (see chapter 18).

PPAP approval must be granted by the KSS Plant SQA and / or PPAP Analyst prior to any production shipments by the supplier, including PV (production validation). Unless agreed to in writing by KSS Plant SQA prior to submission, all PPAP packages are to be scanned and submitted electronically in Adobe .pdf file format, respecting the order from the PPAP checklist.

Unless otherwise specified by KSS Plant SQA and / or PPAP Analyst, the required PPAP submission level is 3.

For source controlled products with third party owned tooling (i.e., automotive OEM connectors, terminals, etc.), PPAP submission to KSS shall be a copy of the approval document from the governing customer and a PPAP level 1 Part Submission Warrant (PSW) from the supplier.

Each supplier PPAP submission must include actual dimensional, material and test data (as applicable) documenting conformance to all print characteristics, notes and referenced specifications. **Blanket statements of conformance are not acceptable**.

Proprietary Documents: Proprietary documents may be excluded from PPAP submission upon approval of KSS Plant SQA and / or PPAP Analyst. When such conditions exist, the supplier shall notify KSS in the ESI and/or Supplier Kick-off meeting and include a letter in the PPAP submission adequately justifying the reason the document is proprietary and stating that the document is available for review by KSS at the supplier location, or at KSS upon request.

Dimensional Layout requirement: KSS requires that a minimum five (5) five piece dimensional layout be performed. For multiple cavity / die tooling, a minimum of one (1) one piece layout per cavity / die is required for PPAP level 3; where are less than five (5) five cavity / die, additional pieces will be measures till the number of five (5) five results; for other PPAP levels, as requested by KSS Plant SQA. Dimensional report to include info related to the type / measurement equipment used and each measured dimension to be marked with the note as shown on the print. Parts used for verification must be identified and included with PPAP sample provided with submission.
All dimensional, material, and performance data must be less than one (1) year old at the time of PPAP submission.

Capability study requirements: Capability study (Ppk) submission need to be based on a minimum of 125 parts for CC and SC dimensions where applicable, according to the Product Characteristics Classification (CC/SC Standard) # 1033079; in case of multi-cavity tool, the samples shall be equally divided between the tool cavities.

Performance Requirements: KSS requires a minimum of three (3) pieces to be tested, or as indicated in the performance specification.

Sub-Assembly PPAP Submissions: Where KSS maintains design control of components purchased in assembly, KSS requires that sub-supplier PPAP submissions be submitted along with the supplier's PPAP submission to KSS. Example: KSS purchases an assembly from a supplier, the supplier submits assembly PPAP package and approved sub-component PPAP packages (copies). The KSS supplier is responsible to manage the quality and PPAP approval of all sub-supplied components and materials.

Sub-Supplier Initial Sample Approval: Suppliers will maintain approved samples of key components, products, or systems manufactured by their sub-suppliers, which will be used in the supply of the KSS component, system, or service in question. Initial Samples reports shall be kept by the supplier at KSS's disposal.

Master Samples: Additional to the required PPAP samples by KSS SQA, supplier shall submit a minimum of two (2) PPAP master samples (for multiple cavity / die tooling, minimum one (1) part per cavity / die) with the PPAP submission and retain the balance of the master samples as indicated in the AIAG PPAP manual current revision. Master samples are to be identified and numbered to ensure traceability of the sample to the corresponding layout data. KSS and / or the supplier may use these supplier-retained samples for future reference. As such, they must be easily identified and retrievable. If submission of master samples is not practical (i.e. chemicals), contact KSS Plant SQA and / or Plant PPAP Analyst for direction.

Colour / Appearance Approval Submissions: Unless otherwise specified by KSS, the sample size for Colour and Appearance Approval is a minimum of twelve (12) pieces [with a minimum of three (3) pieces per cavity]. Fewer parts submitted

will result in rejection. Colour and Appearance Submissions should take place prior to submission of the PPAP package to KSS, and approved AAR's shall be included with the PPAP documentation package submission.

Regrind: The use of Plastic regrind in moulding processes shall meet the following requirements:

1. PPAP and AAR (for appearance items only) samples shall represent the maximum regrind percentage allowable for production to ensure dimensional and functional performance (as applicable) with regrind.
2. The use of regrind shall be limited to the maximum allowable percentage referenced on KSS drawings, and specifications.
3. If there is no maximum regrind specified on the KSS drawing for a particular component, zero regrind is allowable. In these circumstances, suppliers may request KSS approval to allow the use of regrind via the SREA process.
4. Any changes in the use of regrind after initial PPAP approval shall be approved by KSS via the SREA process. A revised Control Plan, dimensional layout, and functional test results (as applicable) shall be included.
5. Where regrind is allowed / approved, suppliers shall implement controls to ensure regrind is strictly limited to the maximum allowable percentage, proper moisture levels of the regrind are controlled, contamination is prevented, and multi-generation regrind is not used.

Perishable / Expendable / Refurbished Tooling: Perishable / Expendable tooling is defined as tooling that has limited useful life and is expected to be replaced during normal production activity. Tooling replacement and refurbishment activities shall be tracked by the supplier and coordinated with KSS's Tool Engineering Department.

Bulk Material: Bulk material is defined as standard, commercially available material and does not require PPAP resubmission when changing sub-suppliers (i.e. metal products; rod, sheet, or coil; standard plastic: resins and chemicals). At a minimum, a level 1 Warrant with applicable conformance testing / analysis data is required for bulk material PPAP. Welded or rolled tubing and customized special material requires full PPAP submission when changing sub-suppliers. All suppliers used must be approved by KSS and must meet all KSS quality requirements.

Packaging: It is the supplier responsibility to fill KSS "Packaging Approval Sheet" (form #1046656) and obtain approval from the KSS Packaging Engineer prior to PPAP submission; signed version of the KSS Packaging Approval Sheet shall be included into the PPAP package submission; lack of KSS "Packaging Approval Sheet" approval will result in component PPAP approval on-hold status.

PPAP submission is not required for packaging and packaging materials supplied to KSS (i.e. boxes, dividers, plastic wrap, box labels, etc.). Evidence of industry standard testing may be requested by KSS.

International Material Data System (IMDS) Requirements: It is the supplier responsibility to enter all material information into the IMDS system (www.mdsystem.com) and afterwards to fill the KSS "Design for Environment, Restricted Materials certification" (DFE) document (form #82000482) which needs to be approved by KSS IMDS Coordinator prior to PPAP submission;
The approved DFE certification is to be included in the PPAP package submission; this requires:
a) Compliance to KSS restricted materials specification (standard #E3593200)
b) Report release from the IMDS system; in addition, all plastic parts shall be identified with appropriate ISO marking codes.
Lack of KSS IMDS/DFE certificate approval will result in component PPAP approval on-hold status.

Annual Validation - PPAP level 4 requirements: An annual validation is required to be performed by the supplier and documented in the Control Plan (see chapter 6.6); the following items are required:

- A minimum (2) two piece full dimensional layout be performed. For multiple cavity / die tooling, a minimum of (1) one part layout per cavity / die is required.
- Capability study based on a minimum of 125 parts for CC and SC dimensions (where applicable); in case of multi-cavity tool, the samples shall be equally divided between the tool cavities
- For parts with A-surface specific appearance test to be performed.
- All special tests as defined in the drawing's (corrosion, flammability, etc.).

Results shall be maintained by the supplier and are not required to be submitted to KSS, except for the following:

- Specifically requested by Plant SQA.
- Results are not according to applicable drawing/specification/standards requirements; in this case, it is the supplier shall inform plant SQA, together with containment/corrective action plan.

"Annual Validation - PPAP level 4" submissions are subject to random audit by KSS.

Service component PPAP requirements: The AIAG PPAP manual current revision does not require a formal PPAP submission for service component orders, even if tooling has been inactive for 12 months or more - this clause applies to production volume components only. When service parts are ordered by KSS, it is required that suppliers implement the same controls as documented on the most recent Control Plan PPAP approved for volume production. Any changes to the Control Plan for service must be approved in advance by KSS Plant SQA and / or PPAP Analyst.

Lack of PPAP approval is not an acceptable excuse for not meeting KSS shipment releases. It is the supplier's responsibility to submit a complete, conforming PPAP

package on time to KSS Plant SQA and / or PPAP Analyst. First time submission approval is expected of all suppliers. If lack of PPAP approval may affect the supplier's ability to ship product on time per KSS releases, the issue must immediately be brought to the attention of KSS Plant SQA and / or PPAP Analyst, Logistic and Commodity Manager/Buyer.

Refer to the AIAG PPAP manual current revision for specific details on PPAP requirements. Suppliers are required to adhere to KSS specific requirements in addition to current AIAG and IATF requirements.

8 Shipment Certification Requirements

At the request of KSS Plant SQA, suppliers shall submit data demonstrating conformance of raw materials data (i.e. steel, plastic, and chemicals), dimensional inspection, test, and/or SPC data. Supplier must provide data at the request of KSS within 24 hours for any characteristic in the approved Control Plan, even if the data is not required to be submitted with each shipment.

9 Notification of Quality Concerns

KSS requires that suppliers formally notify the affected KSS manufacturing plant(s) of any quality concerns within 24 hours of discovery without exception. This applies to all quality concerns identified by suppliers for which product shipped is suspect. If exposure has not been determined within 24 hours of discovery and product shipped to KSS has not been proven to be void of the concern, notification is required. Suppliers should be prepared to present the concern in detail, the exposure of the concern (i.e., what lot number(s) is / are affected), the containment and corrective action plan.

10 Rework / Repair

Rework consists of any actions to the product that are not part of the documented and PPAP approved production process. For certain commodities, unique terminology exists ("reformulation" for chemical processes, "repair" for electronics) which describes synonymous concepts to rework. Since any action to salvage a product which does not originally meet customer requirements is both a source of variation and inherently costly, KSS's goal is to eliminate such actions.

When rework is necessary as an isolated measure, the supplier must develop written procedures/rework instruction and validation process. These procedures must provide for additional inspection and testing after rework to ensure conformance to KSS's specifications prior to shipment or further processing.

In all cases, rework must be approved in advance by KSS via the SREA process (see Chapter 17). The SREA must be submitted along with all rework procedures, Control Plans and technical justifications.

Where on-line repair is part of the manufacturing process, disposition of such activities will be made by KSS as part of the PPAP process. As such, all PPAP documentation must reflect repair procedures and controls (Process Flow Diagram, PFMEA, and Control Plan). If the repair is not included in the PPAP approved documents, it is not approved by KSS.

11 Returned Product Analysis

The supplier is required to analyse nonconforming product returned from KSS manufacturing plants, engineering tests and vehicles in the field. Records of the results of these analyses must be submitted to KSS upon completion.
Suppliers shall submit corrective actions for any defects discovered during analysis to KSS Plant SQA (see chapter 18: “Corrective Action”).

12 Cost Recovery for Nonconforming Product

The supplier shall absorb any costs associated with nonconforming product as received or processed through a KSS manufacturing plant. These costs shall include, but not be limited to: premium freight (inbound and outbound), scrap, returned material, labour (sorting, rework, repair, teardown, overtime, downtime, etc.), testing beyond normal requirements, customer communications, liaison visits, customs fees, and related customer charge-backs.
Written notification to the supplier as well as written agreement from the supplier shall be obtained by KSS prior to any debit memos being issued. Supplier approval / dispute response to chargeback requests from KSS plants is required within two (2) business days of notice. Any supplier disputes must be accompanied by factual reasons that the charge-back or portions thereof, are not the supplier’s responsibility. Lack of timely response may result in supplier chargeback and product return (as applicable) utilizing the KSS QN number as the Return Material Authorization (RMA) number.

13 Heat Treated Parts

KSS requires that all heat treat suppliers follow the heat treating requirements documented on part prints and in any referenced KSS, industry, or customer specifications, as well as comply with KSS heat treat audit requirements. All heat treat sources utilized by suppliers and their sub-suppliers shall be approved by KSS individually via successful completion of AIAG CQI-9 Special Process: Heat Treat System Assessment, and PPAP submission. Unapproved heat treat sources shall

not be used without specific approval of KSS via PPAP submission. Annual supplier heat treat self-assessments are to be conducted to the AIAG CQI-9 current revision requirements and provided to KSS upon request.

14 Special Process Requirements

KSS requires that suppliers maintain evidence of conformance to all applicable AIAG Special Process requirements for the products they provide. These requirements include, but are not limited to the following standards, at their current revision level:
CQI-9 Heat Treat Assessment
CQI-11 Plating System Assessment
CQI-12 Coating System Assessment
CQI-15 Welding System Assessment
CQI-17 Soldering System Assessment
CQI-19 Sub-Tier Supplier Management Process Guideline
CQI-23 Molding System Assessment
Evidence of conformance to AIAG requirements is to be provided to KSS upon request.

15 Supplier Control of Subcontractors

Suppliers to KSS shall select subcontractors on the basis of their ability to meet subcontract requirements, including KSS quality requirements defined herein.

The KSS supplier shall ensure that subcontractor quality and system controls are effective and meet KSS Quality First requirements. The supplier shall be prepared to show documented evidence of subcontractor quality levels at the request of KSS and also provide KSS, and KSS customers, access to subcontractor facilities and records if requested at any time.
Suppliers shall target subcontracted business with ISO 9001 or IATF 16949 compliant suppliers.

Suppliers are fully responsible for the quality and “fitness for use” of goods and/or services subcontracted. KSS’s recommendation or stipulation of a subcontractor shall in no way relieve the supplier of full responsibility for ensuring the subcontractor, and the products they supply, meet all KSS requirements.

16 Supplier Initiated Changes

KSS encourages material, design, and process improvements to enhance quality and reduce cost. However, ALL changes as specified in the AIAG PPAP manual current revision requiring customer notification (table 3.1) or customer PPAP

submission (table 3.2) require KSS approval prior to implementation at the supplier location. All such changes shall be submitted to KSS via SREA process (see chapter 17) with a minimum of 180 days prior to planned implementation.
SREA's shall include the justification for the change and the proposed validation / PPAP plan. KSS approval of the SREA is approval to proceed with validation of the change as detailed in the SREA; it is not approval of the change. Final change approval occurs once the change has been successfully validated and the PPAP is approved by KSS.

The first step in gaining approval is to contact the KSS Commodity Manager/Buyer and review the proposed change, as well as the proposed PPAP plan for validation and approval of the change. This plan shall include a timing chart detailing phase in/out and associated tasks and timing to prevent supply shortages.
Upon concurrence of the KSS Commodity Manager/Buyer, SREA shall be submitted to the KSS Plant SQA as described above. Approval to proceed with the validation process will be given, or additional validation requirements will be discussed and agreed to by the parties.

The next step is to successfully complete the validation process as agreed and submit a PPAP package to KSS Plant SQA. In certain cases, KSS may require product testing and/or be required to gain approval from customer(s). Once this process is completed to KSS's satisfaction, the PPAP will be approved and the supplier may begin production incorporating the change.

See AIAG PPAP manual current revision for specific instruction as to when to submit PPAP for changes.

Important Note: Suppliers must receive written PPAP approval from KSS Plant SQA prior to shipping product produced incorporating a change as defined above. If there is any doubt regarding approval requirements of a change, contact KSS Plant SQA for assistance. Failure to obtain change approval in advance of shipment will result in product rejection and financial liability for all affected KSS raw, work-in-process and finished goods inventory.

17 Supplier Request for Engineering Approval SREA (Standard #1005107)

KSS requires that supplier's ship product which conform 100% to the engineering print requirements and referenced specifications. Additionally, KSS requires that the manufacturing process remain consistent with those utilized to produce the PPAP approved product. These requirements are to be followed without exception.

If, at any time, a supplier desires to ship product which does not conform to KSS's prints and referenced specifications, or is produced from a "changed" process (see chapter 16 for complete definition), KSS approval is required in advance of

shipment (conformance deviations) and in advance of implementation (changes) via the Supplier Request for Engineering Approval (SREA) form (#1017816). Blank forms and completion instructions are located on the KSS internet site. Verbal direction, discussions and/or approvals from KSS are not valid without a fully approved SREA.

Important Note: Failure to obtain SREA approval in advance of shipment will result in product rejection and financial liability for all affected KSS raw, work-in-process and finished goods inventory. In case where a component is common to more than one KSS location, it is the supplier's responsibility to advise and obtain approval from each location, prior to shipping any product.

The supplier shall complete the SREA form (#1017816) and forward it to KSS Plant SQA for processing. Sufficient detail, supporting data, corrective actions, etc. shall be included to facilitate the approval process. The supplier may be requested to submit additional information prior to approval, as determined by KSS. Submission of an SREA is in no way approval to ship deviated product or implement changes. Receipt of a fully signed and numbered SREA is approval.

The lack of SREA approval is not an acceptable excuse for not meeting KSS shipment releases. If SREA approval may affect the supplier's ability to ship product on time per KSS releases, the issue must immediately be brought to the attention of KSS Plant SQA, Logistic and Procurement in each facility affected.

Affected shipments shall be identified with the appropriate SREA tracking number on each carton/container to ensure material is properly identified when received at KSS plants.

18 Corrective Actions

It is required that suppliers maintain a system for corrective action of quality concerns. This system must include a multi-disciplined problem solving methodology and follow-up of corrective action implementation and effectiveness.

Any supplier quality concerns detected at KSS and KSS customer locations will be formally directed to the appropriate supplier contact.

All Supplier Corrective Action Responses are required to be submitted utilizing the KSS Quick Response Quality Control (QRQC) format (form #1037173).
The required supplier response is as follows:

Within **1 Business Day** of Notification: Initial response due to KSS Plant SQA detailing the following:

- Containment actions (at supplier and KSS) (Notes 1 & 2)
- Suspect inventory, lot numbers, etc.

- Return authorization number

Within **5 Business Days** of Notification: Completed corrective action plan due to KSS Plant SQA detailing the following:

- Initial response information
- Root cause
- Permanent corrective action(s) taken with completion dates (Note 3).
- Verification of permanent corrective action(s) taken (Note 3).
- Recurrence prevention plan (Note 3).

Within **30 Business Days** of Notification: final QRQC report with:

- Permanent corrective action(s) taken with completion dates.
- Verification of permanent corrective action(s) taken.
- Recurrence prevention plan.

Notes:

1. Defect containment by the supplier at KSS locations is expected within one (1) day (i.e. on-site sorting) wherever possible. This is to be coordinated with KSS Plant SQA. Supplier quality ratings are computed by returned parts per million shipped ratios. Suppliers who do not support on-site containment will be subjected to the full lot quantity returned, as opposed to the actual number of defects, in the computation of the PPM rating. Any issues that make on site sorting impractical may be discussed with KSS Plant SQA and alternate actions taken. Replacement material requirements are to be coordinated with the KSS Production Control department.
2. All certified material must be identified by an agreed coloured dot or mark on/by each shipping label on each carton. This must continue until permanent corrective action has been implemented and approved by KSS Plant SQA.
3. If it is not possible to implement and verify permanent corrective actions in the five (5) business day window, KSS Plant SQA must receive the supplier's plan to permanently resolve the issue by this date with all associated task completion dates and responsible persons documented. Completed corrective action plans, with actual task completion dates and verification records, must be submitted to KSS Plant SQA as agreed between the supplier and SQA.

KSS Plant SQA will review and approve closure of all Corrective Actions. KSS Plant SQA reserves the right to require additional controls to be implemented and / or additional documentation to be provided to effectively resolve supplier quality issues.

19 Control Shipping and Phase Review (Procedure #1005485)

For suppliers with chronic or repetitive quality issues, KSS Plant SQA reserves the right to impose additional containment measures (at supplier expense) to ensure conforming product is received at KSS plants.

Control Shipping Level 1 (CSL1) containment:
The supplier is required to perform a 100% certification of all products prior to shipment through an additional, off-line inspection process. This measure would be in addition to any existing controls and containment measures previously implemented. This level is imposed on suppliers who have failed to contain or correct quality issues effectively, and immediately.

Control Shipping Level 2 (CSL2) containment:
The supplier is required to subcontract a third party product certification contractor to independently 100% certify all products prior to shipment to KSS. This level is imposed on suppliers who fail to contain or correct quality issues through the Level 1 Containment program.

Suppliers required to implement either Level 1 or 2 Containment will be notified by KSS Plant SQA. These additional containment measures are intended to be interim steps to ensure conforming product is shipped to KSS. Permanent actions to prevent recurrence are expected to be implemented in conjunction with these containment programs. Once permanent actions are implemented and verified effective for 30 days, containment may cease with the approval of KSS Plant SQA. Each container of certified material must be clearly identified with a listing of all conditions for which the material has been certified.

In addition, KSS reserves the right to notify third party Quality System registrars of quality system failure if open quality issues are not resolved by this time. The supplier will be notified prior to this action being taken.

Supplier Phase Review escalation process:
The Supplier Phase Reviews are intended to heighten the awareness of KSS's supply base to quality performance and to focus the quality improvement efforts of KSS's suppliers toward a shared objective with the company.

KSS Plant SQA or Corporate SQE will initiate Phase Review meetings at a specified KSS location for suppliers with significant quality issues, chronic quality issues or negatively trending quality performance. At these meetings, suppliers will be required to present corrective action plans to KSS Plant Management, Supplier Quality, and Procurement, (and others at plant discretion). The program consists of three phases, as detailed below:

Phase Review 1 (PR1) escalation:
Suppliers may be selected for a PR1 escalation based on the following criteria:

- Repetitive Quality or Delivery issues
- Negatively trending supplier metrics (PPM, CPM, OTD, QNs, Process Audit, etc)
- Supplier Scorecard C rated
- Quality or Delivery disruption causing major impact to the KSS Plant and/or KSS customers.

PR1 requires on-site attendance of the Plant and Quality Manager to review corrective action plans in detail.

Phase Review 2 (PR2) escalation:
Suppliers will be selected for a PR2 escalation if issues are not completely resolved as committed during the PR1 process. This requires on-site attendance of Operations and Quality Executives to review corrective actions in detail. “New Business Hold” status may be imposed on the offending supplier location.

Phase Review 3 escalation (PR3):
Suppliers will be selected for a PR3 escalation process if issues are not completely resolved as committed during the PR2 process. Requires on-site attendance of supplier Top Management (CEO/President) to review systemic reasons for corrective action failure and plans to resolve. “New Business Hold” status is required for all supplier locations. Supplier will not be allowed to quote on new business until the initial defined exit criteria is met.

20 Supplier Rating System (SRS)

KSS operates a Supplier Rating System to monitor and measure the performance of all direct material supply base.

The process is an ongoing, comprehensive supplier monitoring and feedback process that allows KSS to communicate with its supply base, ensuring that key performance metrics data collection, data global rollout and performance rating calculation for each supplier production location will timely result in communication of the monthly supplier performance Scorecard (form #1032107)

The following key performance metrics are included in the supplier performance evaluation system and rating system:

- PPM: Defined as number of units rejected at KSS Plants divided by number of parts delivered to KSS locations from the supplier location; metric is under 12 months rolling monitoring system.
- OTD: Defined as number of deliveries received on time at KSS Plants divided by the number of total deliveries from the supplier location; metric is under 12 months rolling monitoring system.

- CPM: Defined as number of QNs opened by KSS Plants against the supplier location divided by the number of parts delivered; metric is under 12 months rolling monitoring system.
- Quality Certificate Status: Valid Quality System certificate is provided by supplier for the production location.
- Process Audit rating: Result of last VDA 6.3 process audit for the supplier location.
- Escalation Process Status (CSLs / Phase Reviews): Number of CSLs and/or Phase Review open by KSS against the supplier location.

The rating calculation is based on a merit point concept: for each key performance metric with status out of target the supplier receive penalty points which are subtracted from initial 100 points, while for each key performance metric at goal can receive merit points provided other conditions are met.

The suppliers are rated in three (3) different levels as follows:

- A Rating – BLUE (Good performer)
- B Rating – GREEN (Satisfactory performer)
- C Rating – RED (Poor performer)

Poor performer suppliers are required to timely address the concerns that have resulted in the “C” rating.

Phase Review process should be opened for a poor performer supplier by KSS SQE in presence of chronic concerns and systematic issues; KSS SQE will lead the review and validate the supplier root cause analysis, the corrective actions and lessons learned implementation. Ineffective Phase Review process results into “New Business Hold” status for the delinquent supplier.

Suppliers are encouraged to review ratings for accuracy and resolve any disputes with the responsible KSS plant. Any disputes which cannot be resolved with the plant must be elevated to KSS Procurement for final arbitration by the supplier. All PPM/CPM disputes must be submitted within 30 days of QN issuance; all agreed PPM reductions shall be documented by the Plant SQA and provided to the supplier and KSS SQE.

21 Access to Facilities and Records

Suppliers shall allow KSS, and KSS customers, access to any facility and quality records associated with the production and supply of products directly to, or on behalf of KSS. This requirement extends to all sub-contractors as well.

22 Notification of Organization Changes and Quality Concerns

Changes to the supplier's organization that may affect quality and/or finance, shall be notified in advance to KSS. These changes may include company ownership, company name, manufacturing location, quality approvals, significant changes to process or inspection techniques, shutdowns, etc...

KSS requires that suppliers formally notify the affected KSS manufacturing plant(s) of any quality concerns within 24 hours of discovery without exception. This applies to all quality concerns identified by suppliers for which product shipped is suspect. If exposure has not been determined within 24 hours of discovery and product shipped to KSS has not been proven to be void of the concern, notification is required. Suppliers should be prepared to present the concern in detail, the exposure of the concern (i.e., what lot number(s) is / are affected), the containment and corrective action plan.

23 Purchase Order Requirements

The supplier shall adhere to all Purchase Order Terms & Conditions plus stated special instructions. The PO is the controlling document and will communicate any deviations to the requirements stated within this manual authorized to the supplier.

24 Sub-contracting

Supplier shall not sub-contract any work awarded by KSS without the prior written approval from KSS.

When sub-contracting approval is granted the supplier shall ensure where applicable that in the first instance KSS customer approved suppliers are utilised, and secondly if a special process is required.

The supplier should ensure that subcontractors are evaluated and selected on their ability to meet specified requirements. A list of approved subcontractors shall be maintained. Purchasing documents shall clearly describe the relevant drawings and specifications including issue status and the quality requirements to be applied.

25 Protection of KSS and their customer proprietary information

Any information the supplier receives from KSS must be kept confidential and never disclosed to any third party without the prior written agreement of KSS. The proprietary information can include, but is not restricted to all versions of electronic data, drawings and documentation, Tooling and materials. Under no circumstance

is the supplier to make a direct approach to KSS's customers in relation to agreed business dealings.

26 Management Responsibility

The supplier shall make known a person to KSS, who will have the necessary authority to assume responsibility for product quality. In addition, escalation contact matrix shall be provided and maintained with current contacts.

27 Resource Management

The supplier shall determine and provide the resources needed to maintain the quality system and continually improve its effectiveness, and enhance customer satisfaction by meeting KSS's requirements.
Personnel performing work affecting product quality shall be competent on the basis of appropriate education, training, skills and experience.
The supplier shall determine, provide and maintain the infrastructure needed to achieve conformity to product requirements.

28 Measurement, Analysis and Improvement

28.1 Monitoring and Measurement of Product

The supplier shall monitor and measure all the characteristics of the product identified on the drawings and specifications, to verify that the product requirements have been met. This shall be carried out at appropriate stages of the product realization process in accordance with the planned arrangements.

28.2 Control of Nonconforming Product

The supplier shall ensure that products which do not conform to product requirement are identified and controlled to prevent its unintended use or delivery. The controls and related responsibilities and authorities for dealing with non-conforming product shall be defined in a documented procedure. Nonconforming products that are received by KSS will be processed and the supplier will be liable for non-conformance administration costs and in the case of Ship to Stock items any costs associated with downstream manufacturing or recall. The supplier accepts the principle of such reasonable administration costs and the processing of debit notes where Nonconforming goods are identified after invoices have been paid.

28.3 Containment of Nonconforming Supply

In the event a non-conforming material, component, system, or service is detected, KSS will determine the best method of securing conforming supply to meet our production requirements:

- KSS to return the entire lot of non-conforming material, component or systems to suppliers
- Suppliers to sort/rework/repair the non-conformance at KSS site
- KSS to identify an external resource (certified by KSS Quality Department) to perform the sort/rework/repair
- KSS personnel to perform sort/rework/repair

29 REACH Requirements

As of June 2007, the European Regulation (EC) 1907/2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) has entered into force. REACH affects all industries - including automotive - that conduct business in the EU or supply parts/materials to companies that supply to the EU.
In order to be compliant with the REACH regulation, we require our suppliers to utilize the on-line “auto-REACH” application (www.auto-reach.com). Late or incomplete registration will raise concerns that our common legal responsibilities under REACH are at risk, and it may affect future business.

The REACH regulation requires companies within the European Union to register chemicals that are manufactured in or imported into the EU. If you are not a chemical manufacturer or importer, you are still responsible to monitor the Substances of Very High Concern (SVHC) lists as they are being published to determine if your products contain them. (A preliminary list has been published and - along with other useful information and links - is available from the “auto-REACH” website.)
The automotive supply chain around the world has developed an “Automotive Industry Guideline on REACH” which can be used as a quick overview on REACH, its requirements and the recommended actions. This guideline may be found at www.acea.be/reach.

The European Chemicals Agency (ECHA) website is http://echa.europa.eu/. Guidance Documents on the ECHA site may be found at http://reach.jrc.it/guidance_en.htm.

30 Conflict Minerals Policy Requirements

Key Safety Systems is committed to manufacturing products whose sourced components are in compliance with all applicable laws. To that end, Key Safety Systems’ suppliers are expected to comply with all applicable local, country, and

international laws regarding material content for the materials supplied to Key Safety Systems. At Key Safety Systems' request, suppliers must provide to Key Safety Systems reports on the occurrence of substances in any materials supplied to Key Safety Systems that may be restricted by, or require disclosure to, governmental bodies, customers and/or recyclers. Regarding conflict minerals specifically, suppliers are expected to supply materials to Key Safety Systems that are DRC conflict-free. DRC conflict-free means any conflict minerals (gold, columbite-tantalite, also known as coltan, cassiterite, wolframite, or their derivatives tin, tantalum or tungsten (collectively the "3TGs")) necessary to the functionality or production of supplied materials, whether original-source, recycled, or scrap, that do not directly or indirectly finance armed groups through mining or mineral trading in the Democratic Republic of Congo or an adjoining country. Suppliers are expected to adopt policies and management systems with respect to conflict minerals and to require their suppliers to adopt similar policies and systems.

31 Corporate Social Responsibility (CSR) / Sustainability

Corporate Social Responsibility (CSR) / Sustainability is a process for companies to integrate social, governance, environmental and supply chain sustainability into operations and corporate strategy.
KSS expects to do business with suppliers that meet our standards and legal regulations regarding Human Rights, Business Integrity, Health & Safety and Environmental; Suppliers must conform to all applicable labor laws.

Utilization of forced labour or child labour by suppliers is strictly prohibited.
Suppliers will not engage, directly or indirectly, in human trafficking.
Suppliers found to be in violation of these requirements will be immediately placed on "Desource" status and potential new suppliers will automatically be disqualified from the supplier selection and approval process.

Key Safety Systems Health, Safety, and Environmental Policy is to provide products and services in a manner which safeguards employees, customers, the public, and the environment from unacceptable risk.

http://www.keysafetyinc.com/wp-content/uploads/2015/10/HSE-Policy.pdf

32 References (Related Documents)

"Quality First Supplier Requirements Manual" (Standard # 82000030), as well all referenced procedures and forms can be found on the Key Safety Systems internet site (www.keysafetyinc.com) by following the "Supplier Info" link; other reference documents are as follows:

- Technical Specification IATF 16949 (current revision)

- Technical Specification ISO 9001 (current revision)
- Advanced Product Quality Planning & Control Plan (APQP), AIAG (current revision)
- Measurement Systems Analysis Manual (MSA), AIAG (current revision)
- Statistical Process Control Manual (SPC), AIAG (current revision)
- Potential Failure Mode and Effects Analysis (FMEA), AIAG (current revision)
- Production Part Approval Process (PPAP), AIAG (current revision)

33 Appendices

None