

**NSK AMERICAS**

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**SUPPLIER QUALITY ASSURANCE MANUAL**

POLICY NUMBER: AQM-005  
ORIGINAL ISSUE DATE 6/26/2009  
REVISION DATE: 7/15/2016  
WRITTEN BY: Jeff Loomis & Adam Coolich  
APPROVED BY: Darcy Cooper  
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Supplier Quality Assurance Manual

**NSK** Corporation

**NSK**-AKS

**NSK** NSSA

**NSK** NBMX

**NSK AMERICAS**

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**1. Scope**

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This manual applies to external Suppliers of materials, products, processes and services providing to NSK Corporation, NSSA, NBMX and NSK-AKS, (collectively, "NSK").

#### 2. Purpose

The purpose of this manual is to inform NSK Suppliers of the core expectations that are required to do business with NSK. The requirements in this manual shall be considered the base "Customer Specific Requirements" and may be audited for conformance by NSK. Additional requirements may be implemented as required.

#### 3. References

- The Supplier shall maintain the latest revision level of each document; ISO 9001, ISO/TS 16949, AIAG Core Tools Manuals (APQP, MSA, SPC, PPAP, FMEA) and CQI Standards [www.AIAG.org](http://www.AIAG.org)
- MAQMSR Minimum Automotive Quality Management System Requirements available at [www.iatfglobaloversight.org](http://www.iatfglobaloversight.org)
- Supplier Exchange <http://sa.us.nsk.com/supplyWeb/account/login>

#### **NSK Policies and Forms available at the NSK Supplier Exchange Web Portal:**

- AQM-005 Supplier Audit Workbook
- AQM-005 Supplier Quality Assurance Manual
- AQM-007 Process Change Request form C
- AQM-007 Deviation Request form D
- AQM-008 Supplier Nonconformance Chargeback Policy
- AQM-005 Supplier Acknowledgement form (Exhibit 1)
- AQM-013 Supplier Key Process Control Policy
- AQM-015 Special Product Labeling Attach Labels
- AEE-015 Supplier Environmental, Health and Safety Manual
- NSSA-PUR-FRM012 NSSA Supplier Change Request form

#### 4. Definitions

- **Automotive Industry Action Group (AIAG)** - a North American association that develops and publishes standards for manufacturing with the automotive industry

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- **International Automotive Task Force (IATF)** - a group of automotive manufactures which aims at providing improved quality products to automotive customers
- **International Material Data System (IMDS)** - a global data repository that contains information on materials used by the automotive industry
- **NBMX** - NSK Bearing Manufacturer Mexico S.A. DE C.V., a subsidiary of NSK Americas, Inc.
- **NSK-AKS** - NSK-AKS Precision Ball Company
- **NSK Corporation** - a subsidiary of NSK Americas, Inc.
- **NSK Corporation Supplier** - provides product or services to NSK Clarinda IA plant, NSK Liberty IN plant, NSK Franklin IN plant, NBMX plant or NSK-AKS plant
- **NSSA** - NSK Steering Systems America, Inc., a subsidiary of NSK Americas, Inc.
- **NSSA Supplier** - provides product or services to NSK Bennington VT plant or NSK Dyersburg TN plant
- **Safe Launch** - a method beyond PPAP implemented for initial production of new product to ensure customer requirements are met
- **Safety Data Sheet (SDS)** - a 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
- **Supplier** - a party that supplies goods or services to NSK
- **Supplier Exchange** – NSK web portal for Suppliers, used for primary Electronic Data Interface (EDI) for production scheduling, Advanced Shipping Notices (ASN), Defective Material Notification (DMN), links to NSK documents and additional items. The Supplier must contact NSK to be set up for the use of this portal.  
<http://sa.us.nsk.com/supplyWeb/account/login>

#### 5. Acknowledgement

The Supplier shall be familiar with and conforming to the requirements contained in this manual and all other documents referenced herein. The Supplier **Δshould** return a completed and signed Supplier Acknowledgement form AQM-005 provided by NSK or available on Supplier Exchange demonstrating that the Supplier has received and agrees to the requirements of this manual.

#### 6. General

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#### **6.1. Requirements**

This manual is a requirement for all Suppliers in conjunction with ISO 9001, MAQMSR, AIAG Core Tools Manuals, Supplier Environmental, Health and Safety Manual and referenced NSK policies. Any additional requirements noted specifically on a contract, purchase order, drawing or specification must be complied with.

#### **6.2. Changes**

NSK reserves the right to make changes to this manual. The Supplier will be notified of any changes and required to adhere to those changes.

#### **6.3. Application**

This manual shall apply to any current or future purchase order.

#### **6.4. Certification**

NSK requires all Suppliers to be at a minimum Third Party certified to ISO 9001. The Certification Body must be on the IATF approved list. A list of IATF approved Certification Bodies can be found at [www.iatfglobaloversight.org](http://www.iatfglobaloversight.org). The Supplier should also strive to meet the requirements of ISO/TS 16949 and work towards certification. NSK preference is to have Suppliers with ISO/TS 16949 certification.

If the Supplier is not ISO 9001 or ISO/TS 16949 third party certified, they must be exempted by NSK Procurement and NSK Americas Quality Director and meet the customer specific requirements for second party audits.

A current copy of the Supplier's ISO or TS Certificate shall be submitted to NSK upon expiry. NSK Procurement must be notified of any changes to the certification status, including initial certification, recertification, or transfer of certification to a new Certification Body, certificate withdrawal, and certificate cancellation without replacement.

#### **6.5. Communication - Language**

The Supplier shall have the ability to communicate necessary information in the NSK specified language and format (e.g. computer-aided design data, electronic data, advanced shipping notices (ASN's), etc.). NSK's official business language is English.

#### **6.6. State of Order- Cleanliness**

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The Supplier shall maintain its premises in a state of order, cleanliness and repair to ensure there is no negative impact on the product and manufacturing process needs. The implementation of a defined method is required to maintain this state of order.

#### 7. Record Retention

- Life of Part Through Service Requirements +1 yr.: PPAP, Tooling **ΔDesign**, Purchase Orders
- 3 Year: Audits
- 5 Year: Corrective Actions, Test Plans and Results, Process Capability Studies, Process Control Data
- 15 Year: Receiving Inspection, Analysis Reports, Inspection Results, Calibration, Training, Safe Launch
- 20 Year: Regulatory Compliance, Change Points, Change Point Inspection Data

#### 8. Terms and Conditions

NSK Americas Terms and Conditions shall be adhered to and can be found at the following location.

[http://www.nskamericas.com/cps/rde/xchg/na\\_en/hs.xsl/6397.html](http://www.nskamericas.com/cps/rde/xchg/na_en/hs.xsl/6397.html)

#### 9. Management

##### 9.1. Responsibility

It is the responsibility of the Suppliers management team to ensure that all of the requirements established by this manual are met throughout the Supplier's quality management system. Suppliers are expected to support all activities necessary to meet the final Customer requirements. This may include traveling and joint participation in meetings to conduct business.

##### 9.2. Key Personnel

The Supplier shall provide, in writing, to NSK the personnel responsible for Management Representative and Customer Representative and notify NSK of any changes.

#### 10. Resource Management



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#### **10.1. Competency**

Personnel performing assessments of special processes and dedicated special process experts must be competent on the basis of appropriate education, training, skills and experience. The Supplier shall maintain evidence of training for personnel in any current, new or modified job affecting product quality, including contract or agency personnel and show competency verification.

#### **10.2. On-site Work**

The Supplier shall have people, equipment and facilities to support all NSK sample request and production requirements that will ensure no interruption to NSK manufacturing processes. Any work done off-site must be approved by NSK in advance.

#### **10.3. Treatment of Labor**

NSK Suppliers shall abide by the tenets of respectful treatment of all employees. These items include the following of local labor laws as it applies to child labor, forced labor and compensation. Harassment and discrimination of employees shall not be tolerated and employees shall be able to communicate openly with management regarding their work conditions without fear of reprisal.

### **11. Purchasing**

#### **11.1. Approved Sub-tier Suppliers**

It is recommended that the Supplier selection process should follow CQI-19.

#### **11.2. Sub-tier Supplier Special Processes**

Special processes such as those defined by AIAG: CQI-9 Heat Treat, CQI-11 Plating, CQI-12 Coating, CQI-15 Welding, CQI-17 Soldering, CQI-23 Molding and CQI-27 Castings; shall be assessed to confirm the Sub-tier Suppliers are properly performing annual self assessments according to the CQI manuals.

#### **11.3. Sub-tier Supplier Regulatory Conformance**

Upon request, the Supplier shall report to NSK on the conformance to all applicable regulatory requirements of all purchased products or material used in the product delivered to NSK facilities.

#### **11.4. Sub-tier Supplier Quality**

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The Supplier shall monitor the quality of NSK Sub-tier Suppliers and is responsible for the quality of the product received from the Sub-tier Supplier. This applies to both directed and non-directed Sub-tier Suppliers.

#### **12. Planning & Design**

##### **12.1. APQP**

APQP is required, for guidance on product/process planning the AIAG APQP manual shall be used.

##### **12.2. Contract Review - Feasibility**

The Supplier shall investigate, confirm and document the manufacturing feasibility of the proposed products in the contract review process, including risk analysis. Waiving the requirements of a formal review related to the product may only be granted by the NSK Americas Director of Quality **Δor their designee.**

##### **12.3. Cross Functional Teams**

A multidisciplinary approach shall be used to prepare for product realization including:

- Development and review of FMEA including actions to reduce potential risks
- Development/finalization and monitoring of special characteristics
- Development and review of control plans

##### **12.4. Information Format**

The Supplier shall submit product/component development information in the NSK designated format determined at project kick-off **Δif a specific format is requested.**

##### **12.5. PPAP**

Process Flow Charts, Failure Mode and Effects Analysis (FMEA), and Control Plans may be requested for NSK's review and approval prior to PPAP submission.

The applicable control plan (prototype, pre-launch, mass production) shall be available at the appropriate stage during the APQP process. The control plans shall take into account the Design FMEA (if applicable) and manufacturing Process FMEA outputs. The control plan shall be reviewed and updated when any change occurs affecting product, manufacturing process measurement, logistics, supply sources or PFMEA. The control plan shall address every step in the PFMEA. For guidance on Failure Mode and Effects Analysis the AIAG FMEA manual shall be used.

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The PFMEA shall be reviewed if a Customer Quality Concern occurs. The PPAP must be submitted to NSK at the requested submission level on or before the date requested by NSK. All PPAP documentation shall be submitted in English **Δif requested**. Any certification provided as part of the PPAP submission must be accompanied by a laboratory scope. For guidance on PPAP the AIAG manual shall be used.

**12.6. Inspection**

A description of the gauges, testing equipment, and measurement techniques that will be used to evaluate components may be requested by NSK. This includes, but is not limited to, drawings and details of special gauges, holding fixtures, or coordinate measuring machine (CMM) setups. Whenever practical, duplicate gauging or holding fixtures should be produced for use at NSK in order to facilitate the coordination of measurement techniques. Measurement Systems Analyses (MSAs) are required for all gauges used to measure special characteristics and measurement systems referenced in the control plan. For guidance on Measurement System Analyses the AIAG MSA manual shall be used.

**12.7. Special Characteristics****12.7.1. Safety Critical**

**Δ**The following requirements apply to Safety Critical and Safety Regulated components, assemblies or processes:

- Defined process monitoring.
- Increased part monitoring.
- Nonconforming product control with localized disposition.
- Product or Poka Yoke verification in process or directly following processing prior to movement to the next process.
- Downstream product verification to prevent flow out.

Adherence to applicable NSK Special Process standards.

The NSK Safety Critical Self-Assessment shall be completed annually and may be verified by NSK periodically.

**12.7.2. NSSA Suppliers**

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Special characteristics are product characteristics or manufacturing process parameters which can affect safety or compliance with regulations, fit, function, performance or subsequent processing of product.

NSSA labels special characteristics as (S), (SR), (F), (HI), and ■.

(S): Safety Characteristics that could affect safe vehicle operation.

(SR): Safety Regulation Characteristics that could affect compliance with government standards.

(F): Functional Characteristics that could affect performance requirements, fit/function, or ease of assembly either at NSSA or the NSSA customer.

(HI): High Impact Characteristics that severely affect the operation of the process or subsequent operations. Non-conformances in these characteristics are related to improper manufacturing and/or assembly operations that may result in subsequent operations being skipped or performed incorrectly.

■: Black Square. Customer interface or attachment point.



The following table details manufacturing Statistical Process Control (SPC) requirements for NSSA special characteristics. For guidance on Statistical Process Control the AIAG SPC manual shall be used.

Special Characteristic	Label	PPAP Requirement	Production Requirement
(S)	Safety	Ppk > 1.67	In-process SPC Cpk > 1.33 Or 100% in-line inspection
(SR)	Safety Regulated	Ppk > 1.67	In-Process SPC Cpk > 1.33 Or 100% in-line inspection
(F)	Functional / Customer interface	Ppk > 1.67	In-process SPC Cpk > 1.33 Or 100% in-line inspection

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	High Impact	Ppk > 1.67	In-process SPC Cpk > 1.33 Or 100% in-line inspection
	Black Square / Customer interface	Ppk > 1.67	In-process SPC Cpk > 1.33 Or 100% in-line inspection

Conformance to capability requirements shall be satisfied by material certifications with each lot of material for the following properties:

- Mechanical properties of coil steel
- Teflon coating thickness for Teflon-coated steel

NSK reserves the right to request inspection data for any part characteristic at any time.

### **12.7.3. NSK Corporation Suppliers**

NSK requires any special characteristic to have a minimum CpK of 1.67. For any questions concerning special characteristics and their designation, contact the NSK Representative.

For guidance on control of special characteristics the AIAG SPC manual shall be used.

NSK reserves the right to request inspection data for any characteristic at any time.

## **12.8. Pre-Production and Prototypes**

### **12.8.1. Requirements**

For pre-production parts or prototype parts ordered via a discrete purchase order, all characteristics shall conform to drawings, engineering specifications, and any other specified requirements, unless otherwise agreed to in writing. Additional requirements may be communicated by an NSK representative to the Supplier at the time the purchase order is placed.

The Supplier shall maintain control of any outsourced services required to fulfill the purchase order and ensure that all requirements are being met.

### **12.8.2. Inspection**

Part inspection to specified requirements shall be completed prior to shipment of parts. Inspection reports, process flow charts, control plans, and other specified

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documentation shall be emailed to the NSK representative and any other contact specified on the purchase order prior to part shipment.

#### **12.8.3. Non-Conforming**

Any product or service non-conformance shall be immediately communicated to the NSK representative. Non-conforming parts can only be shipped upon receipt of written authorization.

#### **12.8.4. Changes**

Any changes that occur during pre-production builds (prior to the initial PPAP) shall be communicated. This includes changes to materials, tooling, equipment, fixtures, manufacturing location, and secondary operations.

#### **12.8.5. Labeling**

Pre-production and prototype parts shall be labeled in accordance to the Supplier Special Product Labeling procedure (AQM-015).

### **13. Production**

#### **13.1. Safe Launch**

##### **13.1.1. Plan**

All new parts supplied to NSK shall follow a Safe Launch Plan, unless waived by the NSK representative. The Safe Launch plan shall include additional off-line inspection for a predetermined time or quantity of parts after PPAP approval. The Safe Launch Plan shall be documented in a pre-launch control plan, work instruction, or other format agreed to by NSK.

##### **13.1.1.1. Minimum Requirements**

The Safe Launch Plan shall include the following details:

- Minimum duration. (# of parts, # of tool runs, # of production days, etc.)
- Labeling requirements
- Scope (characteristics to be inspected, inspection method, inspection frequency)
- Exit criteria

##### **13.1.2. Data and Corrective Actions**

The Supplier shall collect and maintain internal data documenting non-conformances found during the Safe Launch period. Corrective actions shall be implemented to eliminate non-conformances. Safe Launch data shall be provided to NSK upon request.

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#### **13.2. Special Processes**

##### **13.2.1. CQI Standards**

The Supplier shall determine if any special processes are being performed. This determination shall be based on the application section of the AIAG Standards for CQI-9 Heat Treat, CQI-11 Plating, CQI-12 Coating, CQI-15 Welding, CQI-17 Soldering, CQI-23 Molding and CQI-27 Casting. If applicable, a self-assessment according to the CQI standard shall be done by the Supplier.

##### **13.2.2. Self-Assessment**

Annual self-assessments shall be completed before the anniversary date of the previous year and made available to NSK within 24 hours upon request. The CQI self-assessments may be requested by NSK before the expiry date for review and approval by NSK.

#### **13.3. Work Instructions**

##### **13.3.1. Work Stations**

The Supplier shall prepare documented work instruction(s) for all employees having responsibilities for the operations that impact conformity to product requirements. These instructions shall be accessible for use at the work stations.

##### **13.3.2. Set-up**

Job set-ups shall be verified whenever performed, such as initial run of job, material changeover or job change. Evidence of this verification shall be maintained. Work instructions shall be available for set-up personnel. The Supplier shall use statistical methods of verification when applicable.

#### **13.4. Traceability**

##### **13.4.1. Lot Control**

Suppliers shall establish and maintain documented procedures for unique identification of product lots or batches. Lot numbers shall be traceable from raw material receipt through all stages of production by the Supplier, including **Δcomponents, processes and** shipments to NSK.

Lots cannot contain more than one material batch or heat number. A new lot number should be assigned for all significant process variations. Examples include, but are not



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limited to, material batches, tooling and equipment setups, and operator changes (if the process is highly dependent on operator skill).

Only one lot and part number should be shipped on a pallet **Δunless approved by NSK; however documentation must be provided indicating all lots, part numbers and quantities provided on a given pallet. If mixed pallets are shipped without NSK approval, each pallet Δmay be received as one lot at NSK; If discrepant material is found, the Supplier shall be responsible for any associated liabilities with the larger quantity of product resulting from the mixed pallet Δunless approval can be shown that NSK approved the mixed pallet shipments.**

**ΔMixed pallet shipments for safety critical parts, assemblies or processes should be avoided except for special circumstances and that have NSK approval.**

If parts are bulk packed, mixed lots are not allowed in the bulk package.

#### **13.4.2. Sub-tier Suppliers**

The Sub-tier Suppliers shall have a documented system(s) to trace product to a raw material lot number (heat # if applicable) and date of manufacture or processing.

#### **13.4.3. FIFO**

All product should be shipped on a "first in/ first out" (FIFO) method. FIFO shall also be applied to stock room inventory as product is pulled to be used for production.

#### **13.4.4. Manufacturing Date Labeling**

The label shall include a 6 digit manufacturing date code (month-day-year). For example, product produced on April 9, 2015 will have the date code 040915. This date code must appear on both the label and the packing list.

An alternate labeling method may be used if approved by NSK.

### **13.5. Change Control**

#### **13.5.1. Process**

The Supplier shall have a process to control and react to changes that impact product realization. The process shall include evidence that customer notification was considered. NSK shall be notified prior to any planned changes to part design, manufacturing process, manufacturing location, or manufacturing supply chain.



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#### 13.5.2. Notification

##### 13.5.2.1. Notification and PPAP Required

For production-approved parts, the following changes require NSK notification prior to implementation and PPAP approval. This is a limited list, additional items listed in AIAG PPAP manual also apply.

- **ΔAny changes to a safety critical component, assembly or process shall require notification to NSK prior to change implementation regardless of perceived level of change.**
- Changes to part software updates and modifications
- Change to Manufacturing method, machine or equipment
- Any change affecting a special characteristic on related parts

##### 13.5.2.2. Notification Not Required

For production-approved parts, the following changes DO NOT require NSK notification; however, changed parts must meet standard before, during and after change and must have internal quality verification, tracking, traceability and FIFO.

- Normal machine repair and Preventative Maintenance
- Change of manpower / staff
- Minor day-to-day kaizen activity
- Wear replacement of expendable tools, dies, and molds (not including perishable)

#### 13.5.3. Notification Method

##### 13.5.3.1. NSSA Suppliers

The Supplier shall complete an NSSA Supplier Change Request (NSSA-PUR-FRM012) form and submit it to their assigned NSSA Buyer.

##### 13.5.3.2. NSK Corporation Suppliers

The Supplier shall complete the appropriate form, either NSK Corp. Process Change Request form or NSK Corp. Deviation Request form, and submit to the NSK Corp. Procurement Specialist.

#### 13.5.4. Approval

Written approval from an authorized NSK representative is required prior to implementing any proposed change. PPAP requirements will be communicated to the

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Supplier. The Supplier shall conform to requested PPAP and **Δrequired** Safe Launch activities for any approved change.

#### **13.5.5. Labeling**

The first approved shipment of product after the implemented change shall be labeled in accordance to the Supplier Special Product Labeling procedure (AQM-015).

### **13.6. Production**

#### **13.6.1. Tooling**

Any tooling owned by NSK (this includes: manufacturing, test and inspection) shall be permanently marked so the ownership of each item is visible. The Supplier shall maintain the tooling and equipment in good working order.

#### **13.6.2. Purchase Orders**

The Supplier shall have the capability to accept purchase orders via the Supplier Exchange web portal unless otherwise approved by NSK. The Supplier should contact NSK to get setup for the use of Supplier Exchange.

### **14. Monitoring**

#### **14.1. Quality Management System (QMS)**

##### **14.1.1. QMS Assessments**

NSK reserves the right to conduct quality assessments on all Suppliers using the Supplier Audit Workbook AQM-005 form. The purpose of this document is not to duplicate an ISO/TS 16949 audit (although it may cover some of the same elements), but is intended to identify a good fit between NSK needs and the Supplier's quality system and process controls.

If the Supplier is not ISO/TS 16949 certified, they should complete an annual self-assessment using NSK document Supplier Audit Workbook AQM-005 and may be subject to an annual NSK on-site audit. Supplier self-assessments should be submitted to NSK Procurement or NSK Quality Assurance.

##### **14.1.2. NSK On-site Assessment**

NSK Supplier Quality Assessments will be conducted with all new Suppliers before the award of any contracts. Selection of periodic audits will be based on quality performance, **Δsafety critical nature of the supplied product, part complexity** and previous assessment results at a minimum. Supplier audits may also be required as part

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of a corrective action resulting from poor Supplier Performance Rating or as required by NSK customers.

Typically, NSK will conduct assessments only on Suppliers that supply direct to NSK. However, NSK reserves the right to selectively conduct Supplier Quality Assessments on Sub-tier Suppliers.

#### **14.2. Discrepant Product (DP) and Corrective Action**

##### **14.2.1. DP Found at Supplier**

The Supplier is responsible for supplying product that meets all design record specifications. The Supplier shall not ship any product that does not meet NSK specifications unless a deviation request is granted in writing by the appropriate NSK personnel. NSK shall be informed within two hours in the event that nonconforming product has been shipped without deviation approval.

△When DP or abnormal condition is found for a safety critical product, assembly or process, the following controls shall be utilized.

- Stop the line.
- Contact location management and/or leadership.
- Control part disposition such as a locked scrap bin.
- A controlled process restart.
- Quarantine product to last known Good material.
- Root cause analysis with tools such as Fault Tree Analysis (FTA) or 5 Why.

No good parts/product shall be properly tagged and/or placed in an appropriate container such as a red scrap bin or locked box.

##### **14.2.2. DP Found at NSK**

If non-conforming product is found, NSK will generate a Defective Material Notice (DMN) in the Supplier Exchange web portal. Acknowledgement of the DMN is required within 24 hours. Discrepant product may be returned to the Supplier if on-going production is not affected. Any returned product will affect the Supplier's quality metric.

##### **14.2.3. Containment**

If requested, the Supplier shall initiate containment activities at the NSK location within 24 hours of notification of the problem. Containment activities may include sorting, rework, or replacement. Third party services may be required.

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#### **14.2.4. Sort/Rework**

If NSK is required to sort and/or rework nonconforming product to maintain production requirements, the Supplier will be charged a predetermined hourly rate.

In the event the Supplier uses a third party sort company ("Sort Company(ies)"), the Supplier must obtain NSK approval prior to any work performed by the Sort Company. The Supplier shall ensure that such Sort Company complies with the NSK Terms and Conditions. Further, the Supplier shall be liable for any claims which result from the services provided by the Sort Company, including, but not limited to breaches of the NSK Terms and Conditions.

NSK can provide a list of pre-approved Sort Companies that can be used, if requested.

The instructions for the sort work to be performed must be approved by NSK before any work can be done.

#### **14.2.5. Corrective Actions**

The Supplier shall perform corrective action activities utilizing 8D methodologies and have a determined default time frame for completion of corrective actions within 30 days. The corrective action process shall include a Look Across step. The Supplier shall upload all relevant corrective action reports into Supplier Exchange unless otherwise directed.

#### **14.2.6. Labeling Certified Product**

Certified product shall be labeled per Special Product Labeling (AQM-015) procedure until corrective actions have been approved and verified. This includes sorted product, reworked product, and corrective action clean points.

#### **14.2.7. Cost**

The Supplier shall be liable for all costs associated with the sorting, handling and disposition of discrepant product. This may include, but is not limited to, engineering costs, manufacturing downtime, test lab costs, supervision costs, and administrative costs. The Supplier may also be responsible for the cost of any customer-related activities imposed on NSK if the root cause is found to be discrepant product from the Supplier. This includes, but is not limited to, sorts of finished product at NSK customers, field actions, or recalls.

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#### **14.3. Delivery Performance**

Delivery performance applies to all shipments to NSK including initial samples, prototype and mass production requirements.

Supplier responsibilities include:

- On Time Delivery
- Follow Releases
- Correct Barcode labeling according to NSK Specifications
- ASN (Advanced Shipping Notice) for every shipment as required
- Proper packaging according to NSK Specifications
- Expedites of past due product according to NSK specifications
- Use of Supplier Exchange

#### **14.4. Supplier Performance**

##### **14.4.1. Rating**

Supplier overall performance is evaluated quarterly by combining information from multiple disciplines within the NSK organization. Overall performance is assessed based on performance indicators in quality, delivery, and purchasing.

Suppliers **Δ**may be rated on:

- Sort time and cost associated
- Number of DMNs issued
- Repeat issues, for which corrective actions have previously been implemented
- DMN response time
- DMN (8D) closure time
- Supplier PPM
- Delivery performance

**Δ**On Time Delivery

**Δ**Number of Occurrences of Expedited Freight

**Δ**Advanced Shipping Notice (ASN) accuracy

- Cost reduction
- Environmental survey response time
- **Δ**Financial Risk Assessment

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- NSK on-site audit findings closed on time  
If the product is received into inventory by NSK it will be considered for Supplier rating information.

#### **14.4.2. Request For Information (RFI)**

NSK may make a “Request for Information” (RFI). RFIs will not have a negative impact on the Supplier’s score if the response and closure expectations are met. Upon review of further information, an RFI can be elevated to a DMN.

### **15. Environmental, Health and Safety**

#### **15.1. ISO 14001**

Suppliers must have an environmental system that conforms to the requirements set forth in ISO 14001. NSK encourages Suppliers to certify/register the environmental management system.

#### **15.2. International Material Data System (IMDS)**

Suppliers shall notify NSK when a submission has been made in the International Material Data System (IMDS) and communicate the relevant ID number. Suppliers **Δproviding material** shall submit a copy of the approved IMDS submission noting acceptance status with the PPAP submission and may be required to resubmit based on change of revision level, mass, material or substance content. **ΔSuppliers providing only a process or service that does not add material are not required to submit IMDS.**

NSK IMDS ID number is 5771.

#### **15.3. Waste Control**

Any waste generated as a result of actions performed by Suppliers, Contractors and Supplier Representatives shall be controlled so as not to impact the environment inside the building as well as the natural environment. Appropriate containers shall be utilized and proper labeling attached, consistent with Local, State and Federal regulations.

#### **15.4. Safety**

Suppliers should be aware of NSK’s commitment to have safe work processes and practices in the value streams that support NSK product manufacturing. NSK encourages their Suppliers to conform to the requirements set forth in OSHAS 18001. Additionally suppliers shall provide a safe work environment, compliant to applicable

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regulation. NSK reserves the right to validate compliance through a combination of supplier self-assessments and NSK supplier safe work practice audits.

#### **15.5. Safety Data Sheet (SDS)**

For Suppliers of actual or potential hazardous substances, a Safety Data Sheet (SDS) shall be provided to the NSK Purchasing department prior to shipment of materials to NSK.

#### **15.6. Supplier Environmental Health and Safety Manual**

The Supplier shall meet all of the requirements in the Supplier Environmental, Health and Safety Manual. The manual is available in the Supplier Exchange web portal.

### **16. Business Interruption & Contingency Plans**

Suppliers should be aware of NSK’s commitment to ensuring continuity of supply. Suppliers shall provide geographical location with inherent natural catastrophe risk associated with the location as requested by NSK. Suppliers shall produce business interruption plans, as requested by NSK, to provide evidence of supply resiliency for threats that are appropriate for each Supplier such as, but not limited to; earthquake, tsunami, flood, pandemic and fire.

Contingency plans shall be in place to satisfy NSK requirements in the event of an emergency such as, but not limited to; utility interruptions, labor shortages, key equipment failure and field failures. In the event any of these interruptions occur that would create an unscheduled halt to production, the Supplier shall notify NSK as soon as possible with information concerning the nature of the problem and plans for immediate actions to assure NSK supply of material is not interrupted. If the Supplier has a unionized work force they must notify NSK annually of the union affiliation and contract expiration date.

*(For easier reference between revisions, the portion of the policy that has been revised must have the delta / change symbol  $\Delta$  placed next to it and must be highlighted in yellow.)*  
*(All attachments / exhibits must be listed in the table at the end of the document with the name / number.)*

Name of Attachment / Exhibit
<i>See Section 3 References</i>