



Supplier Requirements Manual

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The HSM Solutions Supplier Requirements Manual

Document History

Section	Rev. Date	Revision Description
All	4/28/2015	New
All	4/27/2016	Committee Draft
All	8/10/2016	Final Draft
All	8/31/2016	Final Committee Changes

1.0 MANAGEMENT MESSAGE:

HSM Solutions recognizes the Global ISO/TS 16949 and ISO14001 Standards and other Customer requirements as they apply to automotive production and relevant service part organizations. Accordingly, all HSM Solutions production suppliers are required to establish documents and implement effective production, quality and management systems compliant with these requirements, including those specified by the customer.

This manual reinforces the HSM Solutions Purchase Order Terms and Conditions and identifies HSM Solutions' customer specific requirements. ISO 9001 (current level) registration, at a minimum, is applicable to all supplier manufacturing sites and includes production parts, service parts and production materials as well as assemblers of production parts that are supplying HSM Solutions plants. Specially designated small suppliers lacking resources to implement TS-16949 or ISO 9001 (current level) fully may have certain elements waived by HSM Solutions facilities. HSM Solutions Supplier Quality Assurance (SQA) or Purchasing may be contacted to obtain the written criteria for granting this waiver. Suppliers are strongly encouraged to become registered to TS-16949 and ISO 14001.

HSM Solutions reserves the right to verify supplier compliance to ISO 9001, TS16949, or ISO 14001 on-site for those suppliers identified as having a high impact to safety, fit, form, function, quality and or customer down-time. Any HSM Solutions personnel or HSM Solutions Customer reserves the right to visit the supplier's manufacturing site to verify quality of purchased products and review supporting documentation.

NOTE: Additional HSM Solutions site(s) or Business Units(s) may mandate additional requirements on their Purchase Order or other written supply agreements.

REGISTRATION REQUIREMENTS:

Raw material/chemical suppliers:

- 3rd party registered to ISO9001 (current revision).

Component/service parts suppliers currently not certified:

- 3rd party registered to ISO9001 (current revision).
- Compliant to ISO/TS16949

Component/service parts suppliers currently certified to ISO9001 current level, VDA6.1 or EAQF or AVSQ:

- Compliant to ISO9001
- Compliant to ISO/TS16949
- 3rd party registered to ISO 9001: current revision (ISO/TS 16949 is preferred)
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CERTIFICATE MAINTENANCE:

- Whenever a supplier receives a quality standard certification for the first time or for renewal, a copy of the certification must be sent to the appropriate HSM Solutions facility quality contact.
- If certification is rescinded, the supplier must notify the Quality Department in writing within five business days. Certificates or notice of rescinded certificates should be e-mailed or faxed to the HSM Solutions plant quality personnel.

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2.0 ADVANCED PRODUCT QUALITY PLANNING (APQP):

All suppliers are required to produce advanced quality plans to support the development of new products and/or services, in accordance with the guidelines in the AIAG *Advanced Product Quality Planning and Control Plan (APQP)* manual.

- All suppliers are required to report the status of plan activities on a regular basis.
- All suppliers are required to utilize the HSM Solutions prescribed APQP format when indicated.
- All suppliers are required to participate in the HSM Solutions APQP process, when asked.
- Suppliers are to provide updated Supplier Team Feasibility Forms within seven days of request.
- Failure to provide the Supplier Team Feasibility Form in a timely basis will result in a CAR with demerit points assigned, and an administrative charge of \$250.00 dollars.

3.0 NEW PRODUCT/PROCESS LAUNCH READINESS MEASURES:

HSM Solutions Corporate Purchasing and HSM Solutions Quality monitor and manage selected suppliers from new product release through the start of production. New product/process launch readiness measures are implemented to ensure that suppliers are able to produce in accordance with the requirements of the Purchase Order. Suppliers are required to stay on GP-12 Launch Containment for as long as HSM Solutions is on launch containment, or for the prescribed interval set forth by HSM Solutions. Suppliers must have written approval to exit launch containment.

3.1 SUPPLIER RISK ASSESSMENT:

HSM Solutions Corporate Purchasing and HSM Solutions Quality and Program Management will conduct Supplier Risk Assessments to determine which supplier's products are to be identified as "selected suppliers" and will be tracked by HSM Solutions Quality.

Criteria include but are not limited to:

- Product / process complexity
- Past product / process concerns
- Impact on final product
- Past warranty concerns
- New product / process for supplier
- Conflict Minerals compliance
- Supplier Mergers, Acquisitions or Affiliations
- New product / complexity for HSM Solutions
- Supplier launch history
- New supplier production location
- New supplier
- Product environmental impact
- Trade Facilitation and Trade Enforcement Act compliance

3.2 COMPONENT REVIEW MEETING:

- Component review meetings are held with selected suppliers to identify key product/process characteristics that must be statistically monitored to ensure stability.
- Component review meetings will determine packaging and labeling requirements. Shipping trials must be conducted to evaluate the ability of the packaging to preserve product quality.

3.3 SUPPLIER DOCUMENT / PROCESS REVIEW:

- The Supplier Document / Process Review documents the progress of the supplier's product quality plan.
- HSM Solutions Quality audits selected supplier's documentation and manufacturing site, and monitors the supplier's progress in closing any open issues.

3.4 PRODUCTION TRIAL RUN:

- All suppliers are required to perform a Production Trial Run (Run at Rate) prior to launch. A Production Trial Run is performed to verify that a supplier's actual production process is able to meet program volumes at an acceptable quality level. This Production Trial Run shall be performed by the supplier and included with the PPAP and/or APQP documentation, if requested by the HSM Solutions using plant and/or HSM Solutions SQA.
- The supplier's process must be able to produce 120% of the quoted volume with production tools and equipment, with normal plant manning, and in the quoted work patterns.

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- The SQA group may perform on site Production Trial Runs when indicated. Circumstances that may lead to SQA Production Trial Runs include: new supplier to HSM Solutions, new process to a current supplier, location shift from one site to another, upgraded tooling, increased production requirements and/or previous history with the supplier or the component. When necessary, Supplier Quality Assurance will schedule the on site Production Trial Run with the supplier's Senior Manager. Purchasing shall be contacted in case they wish to send a representative as well.
- A complete Process Sign-Off (PSO) may be performed in conjunction with the Production Trial Run. A PSO will be performed when required by a Customer, when the program is high risk to HSM Solutions, if the supplier has been deemed high risk on the program or when initial sample parts indicate potential manufacturing issues. In addition, a PSO may be performed when the supplier is new to HSM Solutions, when the process is new to the supplier, if a location shift is made in the production facility or if previous history with the supplier and/or component warrants it.

3.5 LAUNCH SUPPORT:

- During any program launch at a HSM Solutions or HSM Solutions Customer production facility, selected suppliers may be required to provide on-site representation.
- The supplier's launch support representative(s) must be knowledgeable, capable and empowered to make decisions.
- When launch support is requested, the representative must stay in place until released by HSM Solutions.

4.0 PRODUCTION PART APPROVAL PROCESS:

Suppliers are required to submit and obtain full approval from HSM Solutions per the latest requirements of the AIAG *Production Part Approval Process (PPAP) Manual*.

- Sample submissions are to be Level 3 unless otherwise specified.
- PPAP documents are to be submitted to HSM Solutions Quality at the applicable HSM facility in compliance to the HSM Solutions PPAP Checklist for approval. PPAP documentation must be provided in the latest revision of the AIAG PPAP forms.
- Electronic prints utilized for PPAP submission must be sent in .pdf format.
- Six (6) certified samples (per tool/cavity) with the dimensional report are to be submitted to each using facility for fit and function approval.
- Supplier PPAP documentation must be no more than nine months old. PPAPs over nine months old are to be updated upon request by HSM Solutions, regardless of the supplier's business relationship with HSM Solutions' Customer. Material certifications provided with the PPAP package shall be less than six months old, unless specifically waived by HSM Solutions SQA.
- Suppliers must provide evidence of materials, substances, and recyclability data submission (IMDS) with every PPAP submission. PPAP approvals will not be granted for packages that do not contain this information.
- Suppliers are responsible for cascading this requirement and collecting data from their respective sub-suppliers.
- The supplier of an incorrect IMDS shall be responsible for any and all costs related to the inaccurate submission, including any warranty from the end use customer due to the use of prohibited and restricted materials, the cost of any testing or re-validation as needed.
- Annual layouts and material testing are required to verify continuing conformance using certified gages and/or equipment. This data is to be kept on file at the supplier location and made available to HSM Solutions personnel within the same business day.
- HSM Solutions requires the supplier shall furnish a complete submission, on a yearly basis. At minimum, each supplier shall provide a new warrant, new dimensional, and new material certifications as a yearly validation. Additionally if requested from HSM Solutions SQA or the receiving plant due to exceptional condition a submission shall be furnished within 7 days.
- All PPAP documentation, including material certifications and pertinent test data, must be submitted in English. Any translation costs required will be billed back to the supplier, and a CAR issued to cover the translation costs and any pertinent administration fees.
- Upon expiration of the second interim approval, HSM Solutions may issue a CAR to the supplier, with a \$250.00 administration fee for processing the late submission.
- HSM Solutions owned tooling must have an asset tag attached, showing "Property of the HSM Solutions Group". Verification of this tag should be provided with the PPAP package.

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4.1 CHEMICAL SUPPLIERS:

Chemical suppliers are to submit technical information to the HSM Solutions' facility management.

4.2 PRODUCT / PROCESS CHANGES:

- HSM Solutions Corporate Purchasing and HSM Solutions Quality and all receiving facilities must approve all changes to product and/or process in advance. Suppliers, who make changes only with the receiving plant approval, will be liable for all warranty costs, and rejection costs incurred at HSM Solutions and their customers. All changes must have PPAP approval prior to implementation.
- Samples may be required for review and to evaluate potential impact on HSM Solutions' manufacturing processes.
- Level 3 PPAP Submission approval is required unless specifically waived in writing by HSM Solutions Quality Department.
- The supplier requesting the change shall be responsible for all validation costs incurred by HSM Solutions, including PPAP costs should HSM Solutions have to redo their submissions to the final customer.

4.3 PRODUCTION LOCATION CHANGES:

- All production location changes to product and/or process must be requested and approved in writing in advance by HSM Solutions Corporate Purchasing and HSM Solutions Quality.
- HSM Solutions Corporate Purchasing and HSM Solutions Quality will facilitate the development of the tool move plan with input from the receiving HSM Solutions and the Supplier.
- The tool move plan must be submitted to, and approved in writing by, Corporate Purchasing.
- The tool move plan must include the requirements of a production bank if necessary to ensure HSM Solutions' production and service requirements are not affected. HSM Solutions Materials personnel will establish the requirements for this production bank, and on site confirmation of the bank may be required before the move can occur.
- Level 3 PPAP submission and approval is required as defined in the latest AIAG PPAP manual prior to the shipment of production material from the new location.

4.4 EXTERNAL PRODUCTION SUPPLIER EXTENDED SHUTDOWN/START-UP AUDIT:

- HSM Solutions Corporate Purchasing and ALL receiving HSM Solutions facilities must be notified in writing a minimum of 30 business days prior to an extended production shutdown.
- The supplier may be required to submit to Corporate Purchasing a completed Shutdown/Start-Up Audit document located on www.HSM Solutions web page.com.
- Examples of extended shutdown/start-up periods include customer changeover, scheduled preventative maintenance for tooling, machinery or processes or the anticipation of a work stoppage due to Union Contract Negotiations.
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4.5 CQI-9 Heat-Treat System Assessment

For all applicable components, it is a requirement that suppliers use heat-treat sub-suppliers who comply with the CQI-9 Heat-Treat System Assessment, or are in compliance themselves. Suppliers must ensure that they or their sub-supplier complete the survey, meet the minimum requirements of the standard, and maintain their compliance. A copy of the finished survey shall be included in the PPAP package. The Assessment can be found at www.aiag.org.

4.6 CQI-12 Coating System Assessment

For all applicable components, it is a requirement that suppliers use plating sub-suppliers who comply with the CQI-12 Coating System Assessment, or are in compliance themselves. Suppliers must ensure that they, or their sub-supplier, complete the survey, meet the minimum requirements of the standard, and maintain their compliance. Plating processes affected by this requirement include, but are not limited to:

- Zinc
- Zinc Alloy Plating
- Surface conditioning of metals for decorative plating
- Surface conditioning of ABS and PCABS plastics for decorative plating

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- Decorative plating
- Mechanical plating (all copper silver, gold, passivation, and any and all metal plating addition processes)

4.7 CQI-12 Coating System Assessment

For all applicable components, it is a requirement that suppliers use coating sub-suppliers who comply with the CQI-12 Coating System Assessment, or are in compliance themselves. Suppliers must ensure that they, or their sub-supplier, complete the survey, meet the minimum requirements of the standard, and maintain their compliance. Coating processes affected by this requirement include, but are not limited to:

- Aqueous cleaning
- Mechanical cleaning
- Phosphating
- Chemical cleaning / etching
- Powder coating
- E-coat
- Spray
- Dip/spin
- Autophoretic
- Convective cure
- Residual lubricants or processing fluids.

4.8 CQI-15 Welding

- For all applicable components, it is a requirement that suppliers use welding sub-suppliers who comply with the CQI-15 Welding System Assessment, or are in compliance themselves. Suppliers must ensure that they, or their sub-supplier, complete the survey, meet the minimum requirements of the standard, and maintain their compliance annually. Welding processes affected by this requirement include, but are not limited to:
 - Arc Welding (Process Table A)
 - Resistance Welding (Process Table B)
 - Laser Welding (Process Table C)
 - Solid State Welding (Process Table D)

5.0 CHEMICAL CERTIFICATES OF ANALYSIS (COA)

Chemical suppliers are required to supply COA's for each shipment of product.

- The COA must be faxed, or emailed, to the receiving facility to be reviewed prior to offloading of material.
- Upon request, copies of this documentation must be made available for HSM Solutions personnel review.
- All chemical suppliers shall retain samples of both incoming raw materials as well as finished product for a minimum time equal to the shelf life of the lot, or six months after the production of the lot. Where actual samples are not possible, e.g., unstable or volatile chemicals, the supplier must maintain records of analysis.

6.0 CONTAINMENT POLICY:

All suppliers are required to have a containment process to provide additional verification – outside normal processes, prior to shipment. The process must include identifying containment actions, isolating concerns, data collection and implementing corrective actions.

- A “green” dot sticker must be placed near each container label, signed by the Plant Manager or a management designee to indicate the product has been inspected/tested to be 100% defect free.
- Exit criteria will be determined on an individual basis by the HSM Solutions production facility or HSM Solutions Corporate Purchasing and HSM Solutions Quality.

6.1 EARLY PRODUCTION CONTAINMENT (i.e. GP-12) (aka Level 1 Containment):

Containment is required for new production start-up and engineering changes to contain any failure modes due to the learning curve of new start-ups.

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6.2 CONTROLLED SHIPPING 1 (CS1) (aka Level 2 Containment):

Level II containment requires the supplier to implement extraordinary inspection of product to contain a specific failure. Containment actions must verify that requirements are met and be approved by the HSM Solutions production facility. Once assigned, the supplier cannot exit this containment without written authorization from HSM Solutions.

6.3 CONTROLLED SHIPPING 2 (CS2) (aka Level 3 Containment):

Level III containment requires the supplier to use an independent third party approved by HSM Solutions Quality and plant to inspect product prior to release for shipment to the HSM Solutions production facility. CS2 containment is initiated once the supplier fails to contain non-conforming product within his or her own facility. HSM Solutions has the right to require third party inspection to be conducted offsite at the supplier's expense. Once assigned, the supplier cannot exit this containment without written authorization from HSM Solutions.

7.0 SUPPLIER PERFORMANCE AND REPORTING:

HSM Solutions evaluates direct production material suppliers based on the following criteria:

- Rejected Parts per Million (RPPM)
- Product Complaint Notices (CAR)
- Quarterly Kaizens Submitted
- Delivery and shipping discrepancies
- Performance information is used to prioritize opportunities for improvement within the HSM Solutions supply base through the Supplier Performance System (SPS). It is used to communicate performance to our suppliers and is also used to evaluate future HSM Solutions sourcing opportunities. The SPS can be found on www.HSM Solutionsgroup.com. A password can be obtained from the HSM Solutions HSM Solutions Quality Department for current suppliers.
- All changes in a supplier's manufacturing "address/remit to" information, etc. must be communicated in writing to Corporate Purchasing who will notify the HSM Solutions manufacturing site(s) of record changes.
- Each supplier is required to submit one completed Kaizen each calendar quarter, to the HSM SQA group in Hickory, NC. Note: This is not four Kaizens per year, it is one per quarter.
- Failure to complete a scheduled Kaizen due may result in a CAR issued to the supplier, a \$250.00 administration fee assessed for the CAR, and a ten-point penalty for their overall Supplier Performance Report Score for the quarter they missed submitting their Kaizen idea.
- Kaizens events shall be conducted by the supplier at their facilities to increase productivity, reduce waste and/or reduce cost for HSM. In the event that suppliers deem such activities cannot be supported, HSM may consider supplier-driven events at HSM Solutions facilities to achieve these goals.
- Service (including Environmental Reporting)
- Sustainability

7.1 CORRECTIVE ACTION REQUEST (CAR)

- The supplier shall be debited for any/all product failure costs determined to be the responsibility of the supplier, regardless if failure occurred prior to or after shipment to the end/final customer. Product, logistical and service nonconformances/complaints will be reported through the use of a CAR. This form will also be used to inform the supplier of the request for written corrective and preventive action.
- Upon the receipt of a CAR, the supplier will provide authorization for disposition **within 24 hours**. Failure to make disposition within 24 hours, will empower the HSM Solutions site to make disposition at the suppliers' cost. All materials returned, reworked, scrapped will be counted against the suppliers' Rejects Parts/Kilograms Per Million (RPPM)
- If shipment of nonconforming or suspected nonconforming product has been detected by the supplier and is in transit or has been delivered to HSM Solutions, the supplier must immediately notify, by phone, the Quality or Materials Department at each HSM Solutions receiving location.
- Corrective Action must be reported on the form required **within 24 hours** and include at a minimum interim containment actions. Updates must be submitted every five business days until closure.
- There will be no time limit for rejection of production materials. Components and/or raw materials shall remain viable for use throughout the life of a program, regardless of when they were purchased, unless a shelf life period is assigned and agreed to with HSM Solutions Purchasing, prior to a written purchase

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order being given for the materials. Any material that is found to be discrepant at time of use, will be returned to the supplier, through the issuance of a CAR.

7.2 REJECTED MATERIALS:

- The supplier shall adjust cumulative shipped (CUM) shipped downward, upon receipt of a CAR documenting rejected material. The supplier must immediately replace rejected material regardless of total CUM shipped.
- HSM Solutions will determine freight method while minimizing cost to the supplier, but will ensure that the end customer does not suffer material shortages. The supplier will get shipping instructions from HSM Solutions Materials department to replace rejected material. This will be based on customer coverage.

8.0 INCOMING QUALITY MEETINGS:

HSM Solutions conducts QIP (Quality Improvement Process) meetings for top problem suppliers who are required to attend and present containment/corrective actions. Top problem suppliers are identified based on the following:

- Performance History/ Repetition of Issues
- Responsiveness to Concerns
- Warranty Issues
- Issue Severity

9.0 COST RECOVERY POLICY:

Suppliers are liable for all costs incurred by HSM Solutions and end use customers when the cause is the supplier's responsibility and are outlined below:

- **ALL SUPPLIERS** – Charges to suppliers will be based on local rates of the affected HSM Solutions manufacturing location.
- **ADMINISTRATIVE CHARGE** - Each Product Complaint Notice (CAR) has an administrative charge of \$250 (US) covering the collection of data and documentation of the quality incident/spill. This fee may be increased or decreased at the receiving plant discretion, and will include any customer charges issued to HSM Solutions related to the supplier's product. Administration fees will be doubled for each breach of containment on any product during Controlled Shipment 1 (CS1 or Controlled Shipment 2 (CS2) conditions.
- **OTHER CHARGES** - the following types of charges will be calculated on the actual time and costs incurred for the associated action:

EXAMPLES OF COSTS THAT CAN BE CHARGED BACK TO THE SUPPLIER:

- Rework/Repair/Scrap Supplier Fault
- Dispositioning of Supplier Fault Scrap
- Premium Freight Costs including Air Charter if Required
- Overtime to Avoid Production Interruption
- Production Down Time for HSM Solutions and its End Customer
- Sorting of Suspect Material In-House, at Customer Location or Third Party and Contractor Costs
- On-line Containment at HSM Solutions' facilities
- Tear-Down (Minor, Major, and Complete) and Outside Lab Testing
- Customer Returns Including Hourly Charges, Transportation and On-Site Inspection Services
- Meeting Customer Environmental Reporting and Documentation Requirements
- Receiving Inspection, Material Handling and Freight Associated with Scrap and Replacement Material
- Transportation Waiting Charges, trailer storage charges
- In case of length discrepancies, roll length will be determined by flat table and tape measure, not true-meter

10.0 ISO 14001 AND OTHER ENVIRONMENTAL REQUIREMENTS:

All HSM Solutions suppliers must have an effective environmental management program in place. Third party Registration to ISO 14001 may be required.

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10.1 OTHER ENVIRONMENTAL REQUIREMENTS:

- All HSM Solutions suppliers must work proactively with HSM Solutions to reduce the environmental footprint of HSM Solutions' products by complying with the environmental requirements of our customers.
- Materials, substances, recyclability, life cycle assessment (LCA) data, etc. are to be reported according to legal requirements and/or those from HSM Solutions' customers.

11.0 ELECTRONIC DATA INTERCHANGE (EDI):

All suppliers supplying production parts, assemblies, components and production materials to HSM Solutions plants may be required to have EDI capabilities. For additional information on EDI, contact the HSM Solutions IT department in HICKORY NORTH CAROLINA.

If EDI is implemented, suppliers shall be able to receive EDI releases and send ASN with each shipment.

12.0 CONTRACT REVIEW:

Service Parts, Pricing and Support Pricing and delivery of service parts must comply with OEM requirements and authorizations.

12.1 BUILD OUT/OBSOLESCENCE:

- The supplier shall have detailed procedures in place defining the responsibilities and methods to be used in Materials to manage build outs and engineering changes to minimize obsolescence.
- HSM Solutions shall be responsible to purchase raw material and finished goods that the supplier has been authorized to purchase and produce, according to the Material and Fabrication Authorizations. The supplier shall have fifteen days from the end of production to file the obsolescence claim with HSM Solutions, unless otherwise indicated by the OEM terms for the final obsolescence claim. The supplier shall submit their claim a minimum of three days prior to the HSM customer deadline, in order that HSM Solutions have the necessary time to validate the claim and verify the totals prior to submission of the claim to the HSM customer. It is the responsibility of the supplier to verify the obsolescence claim terms with the appropriate person in HSM Solutions Materials, to ensure that their claim is submitted within the appropriate timelines for payment.
- HSM Solutions Materials Group, and/or their appointed representatives, may audit the obsolete material at the supplier, to validate the claim. This material must be put in an area that allows complete access to all containers, so that it can be readily counted. Failure to make the material available for count may negate the supplier's obsolescence claim.
- The supplier shall receive payment for the obsolescence claim, once HSM Solutions has received payment from the end customer.

12.2 SERVICE PARTS, PRICING AND SUPPORT:

Service requirements are as follows:

- Service parts must be supplied at production pricing with no additional set-up charges for a period of 3 years after final production build out. For certain industry-specific items, parts must be supplied at agreed to pricing, for a minimum of fifteen years. The supplier shall be responsible for service for the interval established by the OEM to the Tier One and/or HSM Solutions, should that exceed the fifteen-year time frame. The supplier shall maintain all PPAP data regarding parts, until the service part interval plus one year has passed.
- An updated IMDS submission may be required for service parts, if requested by the end use customer.
- All suppliers to HSM Solutions are required to supply parts for past model service in five (5) weeks or less from receipt of purchase order.
- The production supplier must accept service life responsibility including, but not limited to, maintenance and storage of tooling, process control plans, operator instructions, warranties, etc., for the running of all service parts. The production supplier may be responsible to PPAP service parts if required by the final customer, or if non-production tooling is used to provide the service material.
- Upon completion of the 15-year service term, a request must be made through Corporate Purchasing to obtain authorization to dispose of tooling from the OEM. The supplier will be responsible for all storage costs pending resolution with the OEM. Under no circumstances is tooling to be destroyed or disposed of prior to OEM authorization.

13.0 HANDLING, STORAGE, PACKAGING, PRESERVATION AND DELIVERY:

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13.1 PACKAGING AND LABELING:

- The choice of packaging could have a significant effect on product quality and is to be considered during feasibility evaluation. Shipping trials must be conducted to evaluate the ability of the packaging to preserve product quality. Packaging must be approved and the supplier shall not make changes without prior approval by Corporate Purchasing.
- Containers shall be ergonomically designed to reduce the exposure to injury when handling pallet-sized containers. Containers shall conform to AIAG size standards. For less than pallet-sized containers, total package weight, when full, shall not exceed 35 pounds (15.9 kilograms). Protective wrapping or specified pallets may be required by HSM Solutions.
- All suppliers shall operate under written packaging and labeling procedures in accordance with AIAG standards. Each separate unit of packaged product shall have labels on two adjacent sides. Rolled goods shall have at least one label attached to the core in addition to the label on the outer covering. Rolled goods cannot have different shade codes mixed on pallets. Failure to comply with HSM Solutions' requirements on labeling is cause for REJECTION.
- Parts for service must be packaged according to the end use customer's service part packaging requirements, when specified by HSM Solutions.
- Should HSM Solutions need to generate a shipping label for a container, in order to use it within our manufacturing system, the supplier who failed to follow the appropriate label guidelines shall be charged a minimum five dollar fee per label generated, plus the standard administration fee for the CAR generated to collect the labeling fee.
- Any materials that are controlled or that have a specified shelf life must be clearly identified on the label, and contain a "Do Not Use After This Date" notation.
- Sample materials shall be clearly identified. Each container of sample material shall have a "Sample Material, ATTN (Name of recipient)" label affixed to each side of the shipping container. The label shall be of a different shade of material than the standard shipping label, so that it stands out as sample material. Should sample material be mixed on a pallet with normal production material, the pallet must be clearly labeled as "Mixed pallet, sample material enclosed". The Bill of Lading for a shipment that contains sample material must have the sample material on the shipment clearly identified, and must contain the phrase "Sample Material, ATTN (Name of recipient)", clearly identified on the paperwork alongside the part number.

13.2 RETURNABLE CONTAINERS:

- Expendable packaging will not be accepted unless the supplier obtains written authorization from the HSM Solutions Corporate Purchasing Department prior to initial production shipment.
- HSM Solutions requires packaging, dunnage, and palletizing product to be returnable, reusable, or recyclable. Reasonable care in use and handling of containers shall be exercised.
- Chronic problems with container damage shall be referred to the HSM Solutions Engineer at the applicable HSM facility for equitable disposition.
- If the supplier is not in possession of returnable containers or the containers received are in poor condition, the supplier is to contact the HSM Solutions Materials Manager at locations supplied for direction and resolution.

13.3 LABELING:

- Due to the variety of products purchased and manufactured by HSM Solutions, component suppliers shall use bar code (Code 128 (preferable) or Code 39 (3 of 9)) shipping labels (reference AIAG Shipping/Parts Identification Label Standard, AIAG-B-3). These labels require all of the following information, unless other arrangements have been made with HSM Solutions Corporate Purchasing.
 - Supplier name and shipping location
 - Quantity (net and allowance where applicable)
 - Unit of measure (as specified by HSM Solutions PO)
 - Customer inventory code number
 - Shade code (where applicable)
 - Latest engineering level
 - Serial number (unique for each roll/pkg)
 - pack date
 - supplier code number
 - product description
 - country of origin
 - customer part number
 - lot numbers

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- **CHEMICAL SUPPLIERS** are to label containers smaller than a tanker with the following information unless other arrangements have been made with customer HSM Solutions Corporate Purchasing.
 - Date of manufacture
 - Net weight
 - Compliance to all legislative and regulatory labeling requirements, including proper identification of all hazards and handling requirements.
 - Lot numbers
 - Product identification
- To prevent mislabeling concerns on returnable containers, it is the suppliers' responsibility to remove all old labels, or to place new labels over the old labels in such a manner as to completely cover all the information from the old label. Returnable totes must have the control label applied on the release placard between the identification labels.
- When multiple lot numbers are being shipped, the supplier shall list the lot numbers on the bill of lading.

13.4 INVENTORY CONTROL LABELS:

- All materials must be shipped in date-produced order using a FIFO (first in, first out) inventory management system. To assist in identification and stock rotation, all component suppliers shall use color coded labels or stickers, on every container/roll, with the month of manufacture clearly placed thereon, unless other written arrangements have been made with the HSM Solutions receiving location.
- The preferred minimum size is 3" diameter dots. Nonuse of the inventory control labels may result in product rejection, at the discretion of the HSM Solutions receiving location.
- Color coding for each month is:

January	-	Cranberry	July	-	Dark Green
February	-	Teal	August	-	Brown
March	-	Purple	September	-	Pink
April	-	Lime Green	October	-	Gold
May	-	Powder Blue	November	-	Gray
June	-	Orange	December	-	Royal Blue

- Chemical suppliers are not required to utilize the above inventory control labels. All chemical suppliers must provide a "Use By, date" on each label.
- Chemical suppliers must ensure that a minimum of six months shelf life be available for all products shipped into HSM Solutions sites, unless specific written authorization is received from the Materials and Process Managers from the using site, prior to shipment.
- Shelf life requirements shall be from date of manufacture, not date of shipment.
- The supplier shall be responsible for all costs incurred due to shipment of material outside of the usage window.

13.5 VOLUME ADJUSTMENTS:

- The supplier shall assure, through plant utilization records, that manufacturing can support an increase of 20% within five (5) working days.
- Subassembly suppliers shall be able to support an increase of 15% within documented lead-time as outlined at the time of award.
- If a volume reduction occurs, the supplier should store material on their site, until delivery is called for by HSM Solutions, at no charge to HSM Solutions.

13.6 RELEASES:

- Failure to receive a release does not constitute reason for short shipment. When a supplier does not receive a release on time, the supplier shall notify the HSM Solutions Materials Manager; while using the previous week's release and adhering to the same dates required, unless a "zero quantity" release is received from HSM Solutions. The supplier shall review the new release when received, and notify HSM Solutions if there is any chance that the release cannot be met.
- Suppliers are expected to meet the lead-time CUM required. Reduction in CUM required within the lead time will not be accepted by the customer as a valid reason to short-ship.
- HSM Solutions will not be responsible for any storage charges due to decreased releases from our customer, and may not accept any overshipments. HSM Solutions will continue to work with the customer and supplier to resolve release volatility issues.
- If non-delivery, delayed deliveries or short shipments are anticipated, ALL suppliers must immediately notify HSM Solutions Materials Management at the receiving location. Supplier concerns in regard to

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meeting volume increases must be communicated to the HSM Solutions plant Material Manager **within 24 hours** of receipt of the release.

- The supplier must be able to handle release accounting. Releases will be sent out at specified frequencies by each HSM Solutions facility and will go out as far as our customer releases, and will clearly define Fabrication and Material Authorization. Releases will show cumulative requirements, and must be reconciled jointly between the supplier and customer weekly. The supplier will provide proof of delivery (shipping documents) to reconcile CUM's. The supplier is responsible to inform HSM Solutions of any known CUM discrepancies.

13.7 CUSTOMS:

- All shipments shall be accompanied by the proper customs documentation to ensure border crossing. Shipping documents (packing slip, bill of lading, commercial invoice) will reference HSM Solutions part number and description. If documentation is missing or incomplete, the supplier shall assume all subsequent costs.
- All customs documentation, including commercial invoice, must be emailed or faxed to HSM Solutions' Customs Broker when load leaves supplier's dock.
- If further information is required, the supplier shall contact the HSM Solutions Materials Manager at the receiving location. See the Supplier Customs Information Package located on www.HSMSolutionsgroup.com.
- Every January, supplier will supply NAFTA Certificate of Origin to the HSM Solutions Customs Broker for all materials supplied.

13.8 IN-BOUND FREIGHT:

- The supplier shall have a program in effect with their suppliers, which allows, at any time, for carrier assignment and tracking of in-bound products. The supplier material control activity shall assure raw material and component availability through documented communication between production, manufacturing, and purchasing activities.

13.9 OUT-BOUND FREIGHT:

- Unless otherwise specified, HSM Solutions shall be responsible to coordinate freight carrier and schedule. The supplier is required to use customer-designated carriers; however, suggestions for improvement may be forwarded to the HSM Solutions Corporate Materials Management Department.
- The supplier, when utilizing HSM Solutions freight lines, shall assume all charges associated with truck "wait time" in excess of ½ hour of the appointed arrival time at the supplier facility.
- Suppliers must contact HSM Solutions Materials Management if all the requirements on our load sheet cannot be shipped, before the truck is released.
- Any charges generated by the use of an unauthorized/ unapproved carrier shall be at the suppliers' expense.

13.10 PHYSICAL CONDITION:

- All trailers are expected to be clean and in good useable condition. Any trailer damage shall be reported to the carrier and to HSM Solutions Corporate Purchasing prior to loading of product.
- Damage to the load due to faulty carrier equipment or damage while in transit shall be reported to the supplier by the receiver and addressed through an insurance/damage claim filed by the supplier against the carrier. If HSM Solutions specifies the carrier, HSM Solutions will file the claim.

13.11 UNLOADING AND TRANSFER OF MATERIALS:

- All suppliers shall comply with unloading procedures established at each facility. The supplier shall have appropriate training in the use of the transfer equipment, personal protective equipment (PPE) and chemical hazards.
- The supplier is to provide his or her own PPE in accordance with the facility procedure and hazards of the material being transferred.
- In the event of an emergency, all suppliers shall follow HSM plant emergency procedures. It is the responsibility of the supplier to become familiar with the procedures at each location they supply.

13.12 AUTOMATED MONETARY PENALTY SYSTEM (AMPS):

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- It is a HSM Solutions requirement that all suppliers provide accurate documentation with their shipments to any HSM Solutions, division or subsidiary location.
- A consistent paper trail, consisting of the Proforma Invoice (for US shipments), Commercial Invoice, packing slip and/or bill of lading, and purchase order, shall be maintained in order to avoid AMPS penalties. AMPS penalties currently range from \$250 to 5% of the declared value of the shipment.
- Any discrepancies in quantity, pricing, or other pertinent information, shall be reported to HSM Solutions' Customers Broker, within four days of the shipment. Failure to properly report discrepancies shall result in the supplier being charged any and all AMPS penalties related to the shipment.
- This charge shall be issued to the supplier via a CAR, and will be added to the Supplier Rating system. The charge will be deducted from the next payment to the supplier.
- HSM Solutions receiving sites shall audit all inbound shipments for compliance, and will report any discrepancies directly to HSM Solutions for resolution. Any related charges shall be charged to the supplier via CAR.

13.13 C-TPAT

- All suppliers of imported product must complete the C-TPAT questionnaire when requested by HSM Solutions. This questionnaire must be returned within thirty days of the request.
- Suppliers may receive an on-site visit by HSM customers, to verify C-TPAT issues as needed.

14.0 STATISTICAL TECHNIQUES:

14.1 CONTROL CHARACTERISTICS:

- Characteristics should be mutually agreed upon by HSM Solutions and the supplier and chosen during Advance Product Quality Planning.
- Characteristics should be based on product function, design intent, fit, manufacturing process or other factors, which may contribute to an out-of-control condition.

14.2 UNIDENTIFIED KEY PRODUCT/CONTROL CHARACTERISTICS (KPC/KCC'S):

- If HSM Solutions has not identified key product/control characteristics, the supplier shall choose process and/or product control characteristics, which pertain to product manufacturing.
- HSM Solutions Corporate Purchasing and HSM Solutions Quality and/or Technology Group must approve the chosen key product/control characteristics affecting manufacturing processes.

14.3 KEY PRODUCT/CONTROL CHARACTERISTICS (KPC/KCC'S):

- When key product/control characteristic designation is identified on drawings, specifications, supply agreements, or purchase orders provided by the customer, the supplier is required to maintain statistical data on that characteristic, and be capable of providing it to a requesting plant and/or SQA as requested.
- Should KCC's not be clearly defined, use a similar table for default KCC's for the product types listed:

Component Type	Critical Characteristic for Measurement	Unit of Measurement

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Component Type	Critical Characteristic for Measurement	Unit of Measurement

14.4 COMPONENT SUPPLIER STATISTICAL DATA SUBMISSION:

- Component suppliers are required to maintain summaries of average Cp/Cpk indices for their parts, and should provide this data to each receiving plant in the first week of January, April, July, and October.
- Additional statistical information may be requested for assistance during problem solving or for variation reduction initiatives.
- It is advised, that suppliers submit the data via fax, email or mail and verify receipt of statistical data. It is the supplier's responsibility to ensure that the data reached the appropriate personnel, who requested the information.

14.5 CHEMICAL SUPPLIER STATISTICAL DATA SUBMISSION:

- Suppliers providing base polyol, Co-Polymer Polyol, or Isocyanates must monitor control characteristics as listed below through SPC/SQC methods. All other chemical suppliers must maintain SPC/SQA data on existing COA data, and be prepared to provide it when requested by HSM Solutions Technical Services Group and/or a using plant.
- Additional statistical information may be requested for assistance during problem solving.
- It is advised that suppliers submit the data via fax or email or mail and verify receipt of statistical data. A copy of the data is to be submitted to the HSM Solutions Chemical Applications Department. It is the supplier's responsibility to ensure that the data reached the appropriate personnel, who requested the information.

15.0 INCOMING PRODUCT QUALITY:

- Compliance with the incoming product quality requirements will be established by a combination of the following:
 1. Review of SPC on KPC/KCC's when requested by the using plant and/or SQA. Attribute SPC may be accepted with the concurrence of HSM Solutions SQA and Purchasing.
 2. Inspection at the receiving HSM Solutions coupled with monitoring of the supplier's performance.
 3. Suppliers are required to supply material or services which are compliant to all contractual requirements including, but not limited to, drawings, standards, specifications, mutually agreed boundary samples, and regulatory requirements. Any materials that are not compliant with HSM's stated requirements shall be processed in accordance with the specific HSM plants Non-Conforming Material procedures.
 4. HSM may choose to perform systems compliance audits at the supplier's premises or may choose to utilize 3rd party certifications.
 5. Production Sign Off (PSO) & Factory Acceptance Test (FAT) [applicable to equipment purchase] requirements shall be in accordance with the specific HSM plant's requirements.
 6. Chemical Analysis supplied with PPAP's (initial or annual) shall be performed by an ISO 17025 accredited laboratory at the supplier expense, no other certificates are permitted for PPAP's, If suppliers fail to submit analysis from a suitably accredited facility HSM will, after advising the supplier, send samples to nearest suitably accredited laboratory for analysis the cost shipping, preparation and analysis of samples shall be at the suppliers cost. Mill certificates of analysis may be acceptable for non PPAP submissions dependent upon the requirements of the specific HSM facility.

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The undersigned agrees to all of the requirements specified in this document.

Signature

Title

Printed Name

Date

Company