Keystone Powdered Metal Company
THE LEADING EDGE OF PM TECHNOLOGY

SUPPLIER

QUALITY

MANUAL

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The information contained in this Supplier Quality Manual is for the supplier's reference to conduct business with Keystone Powdered Metal Company. This manual will help a supplier understand the way business and quality matters are to be handled. The Supplier Quality Manual may not be copied or distributed without the expressed written consent of Keystone® Powdered Metal Company.

Keystone Powdered Metal Overview

Keystone Powdered Metal Company (KPMC) is a leader in the Powdered Metal Industry with four manufacturing locations in the eastern United States. They include *St. Marys, PA, Cherryville, NC, Troutman, NC, and Lewis Run, PA*. KPMC employs over 500 people in the three sites, with most of the employees located at the St. Marys facility.

The St. Marys, PA facility is home to most of the engineering, sales, and quality organizations, along with research facilities. Manufacturing capabilities include Powder Blending, Molding, Sintering, Sizing, Hot Forming, and a wide variety of Secondary Processing.

The Cherryville, NC facility is a manufacturer of medium to smaller P/M parts, mostly bearings and smaller structural assemblies.

The Lewis Run, PA facility primary function is to provide KPMC with expanded capacity in the production of low cost larger parts.

The Troutman, NC facility includes products that require multiple machining operations & one-piece flow work cells, completing all operations with automated inspection.

KPMC customers include most major automobile manufacturers and their suppliers.

KPMC's Quality Policy is to "be the leading producer of technically innovative powdered metal components. With a workforce committed to Continual Improvement, all expectations of our customers, external and internal, will be met or exceeded. We will consistently provide defect-free products and services on-time and at competitive prices."

KPMC maintains an open communication policy for all suppliers. KPMC recognizes our suppliers are essential to our existence, and that supplier issues can and do occur. Suppliers shall always identify and report any problem that will affect quality or delivery as soon as it arises.

Supplier Quality Expectations

KPMC's goal is to be compliant to the current release of IATF 16949 technical specification. This aligns our quality system to the format, which the big three automakers have prescribed. KPMC strongly encourages its key suppliers to work towards IATF 16949 certifications. As a first step, key suppliers must be 3rd party registered to the current release of ISO-9001 or be audited annually by KPMC to this standard. ISO 17025 (or national equivalent) certification for suppliers providing gaging and/or calibration services, or be audited annually by KPMC to this standard.

We expect our suppliers to follow our lead in consistently providing defect-free products and services, on time and at competitive prices. Suppliers are expected to continually improve all processes and services, subcontracted or supplied, in an effort to support KPMC's quality policy.

The supplier must be involved in and be able to produce the following items upon request:

1. Quality performance monitoring on an on-going basis and have an active plan to improve quality.
2. Evidence the supplier is following the requirements of, and participate in, the AIAG advanced quality planning process for all new parts or materials, including the team feasibility review, when required.
3. All performance and material testing performed at their facility, or by an ISO 17025 accredited lab (or national equivalent), when required.
4. When required, a Safe Launch Plan (SLP) until Exit Criteria are met for new or significantly modified products/processes. These are additional controls at startup and acceleration, which assure all potential failure modes have been addressed. An additional "SLP" label and management signoff is mandatory.
5. Capacity analysis and run-at-rate process for all new parts/materials and major changes as required by KPMC or its customers.
6. KPMC approval for any change in raw material supply, manufacturing location/equipment, or manufacturing methods (including frequency of inspection or method of inspection) after PPAP approval has been granted.
7. Evidence of production ability and all necessary production and quality work instructions, FMEA, process control plans, etc., for future service/spare parts production after normal production ceases.
8. Proper notification of all hazardous materials associated with any product or material supplied to KPMC.
9. Risk assessment and management process in place to ensure continuity of supply when the organization is required to deviate from normal business operations, including but is not limited to:

    - Assessment process to identify critical operations/supplies that could impede production.
    - Contingency Plan addressing planned (i.e., tooling/equip. maintenance, IT system updates, etc.) and unplanned (i.e., computer/communication failure, transportation or production disruptions, pandemic response, etc.) events.
    - Contact list for all key vendors including 24 hr. / 7-day contacts.

Supplier Development

KPMC will determine the need for supplier development actions based on the results of quarterly scorecards, audit findings, certification status and overall risk analysis. Vendors that meet the following criteria will be included in our supplier development program:

- Consecutive scorecards with PPM > 100
- Consecutive scorecards with On-time Delivery < 80%
- Lack of certification to latest ISO 9001 standard (excludes small business exemptions)
- RPN > 350 on risk to supply analysis

The extent of the development process will be determined based on the existing unsatisfactory conditions and will be communicated to the vendor as part of the initial notification.

In addition, KPMC will assist our suppliers in their pursuit for registration. We are willing to aid our suppliers to become certified to the current release of ISO 9001. This could include help with documentation, training on the individual requirements of the standard, or independent auditing of your Quality System. We feel this will help in developing a partnership and open a line of communication between our companies.

CQI

Suppliers providing products and/or services covered by an AIAG CQI standard must complete a self-assessment to the standard ***at least annually*** and submit the self-assessment to the KPMC representative prior to previous year's audit date and address deficiencies within the prescribed time period. A partial list of CQI standards is listed below:

- CQI-9 Heat Treat
- CQI-11 Plating
- CQI-12 Coating
- CQI-15 Welding
- CQI-17 Soldering
- CQI-23 Molding

Chrysler's "Elements of Manufacturing Basics"

Suppliers that support Keystone on products that are supplied to Chrysler (at any tiered level) are responsible to conduct a self-assessment to Chrysler's "Elements of Manufacturing Basics" at least one time per year. The requirements can be found at http://www.iatfglobaloversight.org.

MMOG/LE

The MMOG/LE self-assessment is a mandatory requirement for KPMC, so in order to fulfill our MMOG/LE obligation to our customers, KPMC strongly encourages all key vendors to complete a MMOG/LE self-assessment on a yearly basis and forward the results to the Director of Purchasing & Supplier Relations. The assessment will be kept on file and can be used as a factor in the vendor selection process.

MMOG/LE is an acronym for Materials Management Operations Guideline/Logistics Evaluation developed by AIAG and Odette as a collection of practices & procedures related to the management of material & logistics, not unlike ISO 9001:2008 for the management of Quality.

MMOG/LE assists in developing supplier MP&L (Material Planning & Logistics) processes as well as determining the current level of performance in 6 areas: Strategy & Improvement, Work Organization, Capacity & Production Planning, Customer Interface, Production & Product Control and Supplier Interface. This is a tool for reducing costs in supplier/customer relationships.

At this time, a minimum score is not required, however vendors should use the evaluation as a tool to identify areas in which they can make positive changes that will be beneficial to their company. A continual improvement in the process, and therefore the assessment score, is expected each year.

Instructions for how to complete the assessment can be found in the "Introduction & Instructions" tab of the evaluation. Although the process is not difficult, it may take significant time to gather information and supporting facts.

New Key Vendor Assessment

A Key Vendor is a company that supplies goods or services that fall into one or more of the following four categories: raw material (ultimately sent to customer), contact tooling, subcontractors, purchased components, and gaging.

The prospective Key Vendor must provide a copy of their quality certification to Keystone personnel and the certification scope must contain all services to be provided to Keystone. An audit at the supplier's facility may be necessary to become an approved Key Vendor.

Key Vendor Risk Based Assessment

Keystone monitors Key Vendor performance continually for cost, quality, on-time delivery, business conditions and financial wellness. On a quarterly basis, Keystone provides objective feedback for quality and on-time delivery metrics. If, at any time, a potential risk to supply is identified, KPMC reserves the right to audit any supplier at any given interval. The audit scope will be risk based, specifically focusing on, but not limited to, the identified risk or concern and will cover any element of the current release of IATF 16949 deemed necessary by KPMC management. Registration to a recognized quality standard does not exempt a supplier from a customer conducted assessment, either business or quality related.

Assessment Process

If a New Key Vendor audit is required, or if a significant risk to supply has been identified for an existing Key Vendor, the supplier will receive an audit notice from a KPMC representative, including the scope and date of the assessment. Representatives from KPMC's Quality Engineering, Purchasing, and/or Engineering functions will complete the audit at the supplier's facility. All audit results will be given to the supplier within one week following an audit, and if feasible, at the closing meeting. If non-conformances are found during the audit, the supplier is required to submit a plan, within 30 days of receipt, for countermeasures and projected completion dates. The vendor must complete, in a timely manner, all countermeasures identified. All corrective actions resulting from an audit must be complete and, depending on severity, corrective actions may require a successful follow-up audit for approval. An audit and successful corrective action do not guarantee that a supplier will be awarded business from KPMC.

Sourcing Process

KPMC's Product Engineers and/or Business Analysts determine if an external supplied material or subcontracted service is needed for the manufacture of any part or process. The Product Engineer and/or Business Analyst, in consultation with the Director of Purchasing & Supplier Relations, choose potential vendors and a "Request for Quote" (RFQ) is sent. Priority is given to existing Key Vendors. The completed quote must be returned to Purchasing.

Responding to an RFQ:

1. The bidder is required to respond to the RFQ by the requested date. Preference will be given to on time responses.
2. The bidder is expected to quote exactly what is specified, including all quality requirements, specifications, and/or print dimensions. ***All exceptions*** must be very clearly defined in writing. If clarification is needed, please contact the appropriate persons listed on the RFQ prior to submitting a quote.
3. The bidder is encouraged to review and comply with all information in the Quote package. ***Exceptions after the award of business will not be tolerated by KPMC.***
4. The bidder is entitled to know the status of a bid. KPMC purchasing will be able to discuss with the bidder if they did or did not get the award. Additional information will be given at the discretion of the KPMC Purchasing Department.
5. If the bidder wishes to decline a quote, they should clearly state in writing 'NO QUOTE'.
6. If the bidder has an alternate proposal to KPMC's request, clearly state in writing 'ALTERNATE PROPOSAL'.

Confidentiality

Any information disclosed to vendor for quotation, or to perform work, constitutes and includes confidential, proprietary, and trade secret information of Keystone and/or its customers. This information is of a unique and extraordinary nature, disclosure of which to unauthorized persons would cause serious damage and harm to Keystone and/or its customers. By accepting and receiving this information, vendor acknowledges the proprietary and sensitive nature of this information and agrees not to, directly or indirectly, use, disclose or disseminate such information except as authorized in writing by a duly authorized representative of Keystone. All specifications, documents, and prototype articles delivered by Keystone in connection with the performance of a quotation or order are the property of Keystone. They shall be returned or disposed of as Keystone may direct. KPMC may require documentation to be defined as "confidential" or "strictly confidential" in accordance with our corporate standard.

PPAP

PPAP is an 18-element submission package that requires a substantial amount of planning, time and coordination. Any process change will require updates to all applicable files. The default submission level for all PPAP's is level 3. A KPMC representative will contact your company if PPAP is required. For more information about PPAP, refer to AIAG Production Part Approval Process - PPAP or contact the KPMC Quality Engineer.

Once a supplier has received PPAP approval, no changes in raw material supply, manufacturing location/equipment, or manufacturing methods (including frequency of checks or method of inspection) can be made without KPMC approval.

The 18 elements normally submitted in the PPAP package are as follows:

1. Part Submission Warrant - Includes background information such as part number, document revision level, supplier information, reason for submission, submission level, submission results, and supplier signature. The signature must be of someone authorized to certify the samples are representative of their parts, which were made by the production intent process that meets all criteria of the AIAG Production Part Approval Process manual. In addition, this person must be authorized to commit that the parts were produced at a rate that supports the production volumes quoted. A completed warrant is always included in PPAP package.
2. Design Records - Any tooling print associated with the production of a new product or service. KPMC does not require you submit this with the PPAP package, but it must be available upon request. These prints are only items that are part/service specific.
3. Authorized Engineering Change Documents - Any change that the supplier has initiated, and has received written approval for. All documents of this type must be included in the PPAP package.
4. Engineering Approval - when required, on the customer's part drawing or specification. All documents of this type must be submitted with the PPAP package.
5. Design Failure Modes and Effects Analysis (DFMEA) – KPMC vendors are not design responsible, therefore this element will not be required in the PPAP package sent to KPMC.
6. Process Flow Diagrams - A mapping of the process from start (raw material) to finish (completed part or material). Each process step, including inspection. Must be submitted with the PPAP Package.
7. PFMEA – Potential Failure Mode and Effects Analysis – Living documents that list ***all*** possible process failures, and evaluate the risk based on the severity of the failure, the frequency of occurrence of the failure, and the inspection system's capability of detecting the failure. For more information on PFMEA, refer to AIAG Potential Failure Mode and Effects Analysis. Must be submitted in the PPAP package.
8. Control Plan - Living documents describing the current methods of control and measurement systems of a process at each stage or station. Key characteristics are inspected at specified intervals with a goal of producing 100% defect free product. Each inspection requires a gaging method, frequency of inspections, and reaction plan. For more information on Control Plans refer to AIAG Advanced Product Quality Planning and Control Plan-APQP. Must be submitted in the PPAP package.
9. Measurement System Analysis – When applicable, the MSA section contains the Gage Repeatability and Reproducibility (R&R) for critical or high impact characteristics. The purpose of the Gage R&R is to identify the amount of measurement error associated with a particular gage, producing a quantitative confidence level which can be evaluated. The R&R value obtained is the basis for deciding whether a gage needs replaced, repaired, or operators need to be trained. Gage R&R studies are to be completed per the current edition of the AIAG Measurement Systems Analysis manual. KPMC requires the gage to be less than 10% error capable. If the gage error is between 10% and 30%, contact the KPMC Quality Engineer for evaluation. Over 30% error is not permissible. Must be submitted in the PPAP package.

10. Dimensional Results - A minimum of 6 pieces must be laid out, unless otherwise defined by KPMC representative, accompanied by a print, with numeric identifiers for each applicable dimension. The results should be listed on a separate document by numeric identifier. All applicable notes are to be included. Results and numbered print must be included in PPAP package.
11. Material/Performance Tests – Test results for chemical composition or physical requirements deemed necessary by KPMC Engineering. Testing may be completed at the supplier's facility, or at a laboratory certified to ISO 17025 (or national equivalent). Requirements of this type must be included in the PPAP package.
12. Capability Studies – Measurement of one specification for a minimum of 125 parts/tests (unless otherwise specified). Rational subgroup sampling plan should be used, and may be required depending on KPMC customer requirement (will be confirmed by Quality Engineer). All measurements are to be recorded and submitted. Standard deviation, mean and Capability indices Pp and Ppk are to be calculated, Ppk must be > 1.67. Mandatory for PPAP.
13. Qualified Laboratory Documentation – Copies of all laboratory certifications (ISO 17025 or national equivalent) for any external laboratory that performed testing reported in section 10 must be included in the PPAP package.
14. The Appearance Approval Report – A measure of colors, textures, and appearance. Generally ***not*** required in a PPAP package submitted to KPMC.
15. Sample Product - The sample purchase order will show the number of samples required for each PPAP order. We suggest that the supplier also keep a sample of the order for themselves as a reference.
16. Master Sample – required only for level 5 PPAP.
17. Checking Aids – Fixtures, models, templates, mylars, etc., used in inspecting or testing the part. All checking aids will be retained by the supplier and made available for KPMC review if requested.
18. Customer Specific Requirements – Miscellaneous information, KPMC will specify if additional requirements are required to be included in the PPAP package.

Safe Launch Plan

For new product development, a Safe Launch Plan (SLP) may be required. The Safe Launch Plan is developed by the supplier and reviewed/approved by the KPMC product launch team during the APQP process prior to production launch.

The SLP is implemented to verify product/process stability in an organized manner. SLP is also a learning period. Collected data will be monitored, analyzed and product/process adjustments will be made when deemed necessary. While primarily employed to minimize the risk of non-conforming product at startup, it also provides documented evidence of process stability and will establish the process reliability baseline.

The SLP requires the creation of an enhanced Pre-Launch Control Plan. The implementation of an elevated, short-term Quality Inspection process is typically required. Unless agreed otherwise, SLP frequency of inspection is 100% until the Exit Criteria are met. SLP material that meets product specification can and will be used for production. All SLP inspections/measurements should be conducted off-line, separate from the production process. Inspection results must be provided for each shipment.

Minimum requirements for a plan are: product name, supplier part number, customer part number, characteristic description, inspection features (dimensions, number of pieces, notes, etc.), inspection method, inspection frequency, and the SLP Exit Criteria. The plan should allow for approval by the product launch team and contain an appendix of detailed revision information. A matrix format is recommended, but not required.

When creating a SLP, the following should be considered: high impact characteristics as identified on DFMEA and/or drawings/specifications; potential areas of concern identified during the APQP/PPAP process; historical problem features for the supplying facility; high risk areas not inspected as part of the normal process; past 8D activity where non-conforming material has been shipped; labeling & packaging requirements.

SLP records must include all sample parts, prototype, production trial runs and SOP of 6 weeks at APW volume and until the Exit Criteria are met. All SLP documentation must be maintained by the supplier as historical process & product validation records

The plan must specify in detail how each container will be identified as “SLP” material.

Suppliers must obtain approval for all changes and/or modifications to the SLP. KPMC product development team must approve the revised SLP and the detailed change must be logged in the appendix of the document.

To exit the SLP, the KPMC product development team must verify and sign off that all Exit Criteria have been met and that the SLP phase has concluded. Exit criteria will include SOP of 6 weeks at production volume with ZERO defects. Any defect discovered during the SLP period restarts the event at “0” pieces shipped.

Discrepancies, non-conformances and concerns identified during the SLP process, shall be addressed using 8D problem solving principles. Upon identifying the root cause and implementing the corrective action, the SLP process shall be restarted.

Questions about SLP development should be referred to the KPMC product development team.

Checking Fixtures, Gages, Test Equipment

KPMC requires suppliers to have sufficient measurement capability to inspect subcontracted/supplied products and services. These gages must be in good working order and calibrated (yearly at a minimum) to a national or international standard. In some instances, KPMC’s customer may have additional or more stringent requirements that will be communicated by Quality Engineer.

Gage Repeatability and Reproducibility must be proven to be under 10% error (See Gage R&R in the AIAG MSA Documentation/Tests Section). All gages for Geometric Dimensioning and Tolerance should be designed per ASME Y14.5M-2009 unless otherwise notified by KPMC Engineering. Operators must be properly trained and documentation of their skill level must be available upon request. Checking fixtures, gages, and test equipment shall not be changed without the written approval by KPMC Quality Engineering.

On occasion, gages will be sent to suppliers for use in inspection. These gages are the property of KPMC and under the control of KPMC's Gaging Department. Specific instructions will be sent with each gage. If any questions or problems arise in the use or function of any received gage, feel free to contact the KPMC's Gage Department Supervisor. Supplier is responsible for any damage to gages in their possession. Any damage by the misuse or improper packaging of any gage will result in the supplier's reimbursement for the gage. Gages are to be returned in working condition and clean. In most cases, calibration will be done at KPMC in St. Marys, PA. If the supplier is responsible for calibration, specific instructions will be provided to accurately calibrate the gage.

Keystone Glove Policy

Handling iron parts with wet or soiled gloves, or gloves manufactured with strong oxidizers can cause rust on iron parts. Keystone requires that our parts be handled with clean, dry gloves that are palm coated or made entirely of nitrile, urethane, or rubber latex that have no chlorine. **PVC (polyvinyl chloride) gloves must not be used.** All gloves must be changed regularly, as sweat from operators can eventually permeate the coatings and corrosives can accumulate on the palms and fingers. Synthetic cloth is preferred for the fabric portion of gloves as harsh chemicals are often used to bleach white or cream-colored cotton gloves. Residues from those chemicals will cause rust on iron parts.

Non-Conforming Material and Corrective Action

Corrective Action is to happen immediately with the following countermeasures:

1 The supplier must take immediate actions for containment of parts or raw material at the supplier's facility. All suspect product must be segregated from other production. An immediate sort of the material (if possible) should occur. The supplier must inform KPMC if any suspect parts are potentially in-transit to KPMC.

2 KPMC Quality Engineering may require certified shipments until permanent corrective actions have been implemented.

3 The supplier is required to assist in sorting inventory at KPMC when requested by KPMC Purchasing. If KPMC is required to rework/sort any non-conforming parts or product at KPMC or KPMC's customer, KPMC may charge the supplier for this rework/ sort activity.

4 If any part is found to be non-conforming, the supplier is responsible for repairing or replacing the part. Rework of such part may be required at KPMC or at the supplier's facility. Before any rework is instituted, KPMC Quality Engineering or Engineering must approve the rework and marking methods.

5 Corrective Actions Reporting:

5.1 The 8D form provided with a vendor complaint is ***optional*** and meant to be a guideline for response.

5.2 Regardless of the report format, the initial response to the failure must be sent to the appropriate KPMC Quality Engineer within 2 business days and ***must include the following***:

- Part Number, Part Name, KPMC Material Number, Supplier Name.
- Initial actions taken at the supplier's facility, including sort/rework results, and certification mark used for certified shipments, sorting/rework completion date (as applicable).
- Supplier's investigation details, including a confirmation of the defect mode and of the detection of the defect before corrective actions have taken place, along with any other steps taken to investigate the problem.

- Temporary corrective actions, and a scheduled date for permanent corrective actions.

5.3 The supplier's ***Quality Assurance Manager must approve the response***. The supplier may decide any other appropriate signatures.

5.4 The supplier must follow up with the appropriate KPMC Quality Engineer and report permanent corrective actions as scheduled.

5.4.1 KPMC may require specific response dates depending on KPMC's customer requirements.

5.5 In order to close the Corrective Action, the final response must include all information in section 5.2 above plus the following:

- Root Cause(s) for the defect and for the non-detection.
- Permanent Corrective Action for the root cause(s) and for the non-detection including the completion date for each corrective action.
- Standardization of process documentation, indicating documentation affected and implementation date; if no standardization, explain reason(s).
- Review of similar parts or processes that may be affected by implementation date(s) for corrective actions or reasons no corrective action(s) are needed.

NOTE: IF THE SUPPLIER FINDS DEFECTIVE PART(s) AT THEIR FACILITY, KPMC QUALITY ENGINEERING MUST BE INFORMED IF THERE IS THE POTENTIAL FOR THIS PROBLEM TO AFFECT KPMC.

Packaging and Traceability

Packaging (this section applies to purchased material only and does not apply to subcontractors)

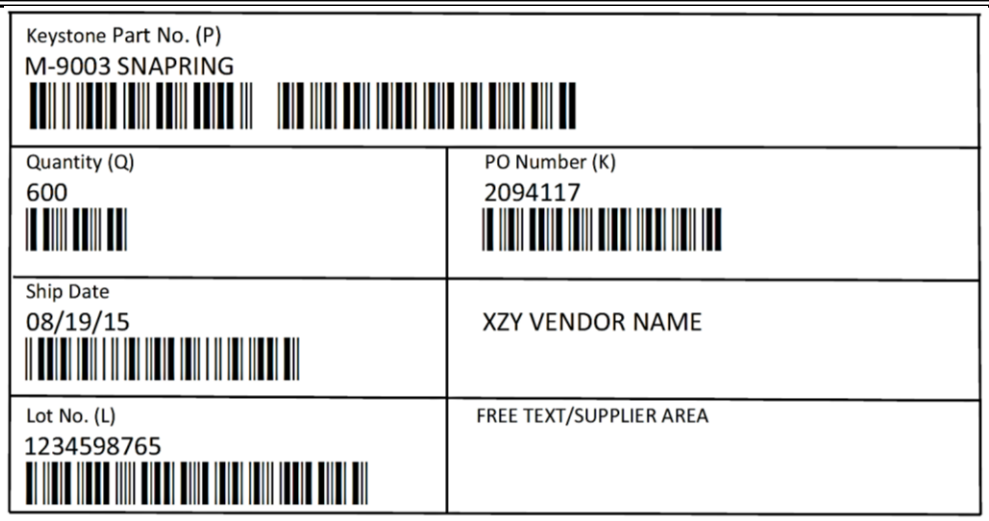
Packaging should be kept to minimal size, yet sufficient enough to guarantee safe arrival to KPMC.

For Powders, each label must provide the following information:

- KPMC Part Number, or Material Number (exceptions may be granted for powders in which case the Powder Test Lab is responsible to add a label clearly designating the KPMC Material Number)
- Purchase Order Number
- Vendor Traceability Number (lot or order number)
- Quantity Shipped (lbs., number of parts, etc.)
- Date Shipped
- If the product is a sample, clearly mark 'SAMPLE' on the package

For all other purchased components, each label must provide the following in accordance with the KPM Supplier Label Specification (available upon request, contact the appropriate KPMC representative):

- Label size should be approximately 4" X 6"
- Barcodes shall be 3 of 9 Type (Code 39)
- Label should be in the format below to reduce the possibility of scanning errors
- Keystone Part No., corresponding barcode and qualifier "P"
- Quantity per unit, corresponding barcode and qualifier "Q"
- KPM PO Number, corresponding barcode and qualifier "K"
- Ship date and corresponding barcode (no qualifier)
- Vendor Name (no barcode)
- Vendor Lot number, corresponding barcode and qualifier "L"
- "Free text" area for any additional necessary information.
- If the product is a sample, clearly mark 'SAMPLE' on the package, independent of the label



Traceability

The supplier must have a system that ensures documentation retention for a specified amount of time. This time is dependent of KPMC's customer requirements and in some cases is for the life of the part/material used plus 1 year. Supplier should confirm requirements with KPMC representative.

The supplier must ensure that documented systems are in place at all sub-suppliers to control traceability of all critical components to raw materials and date of manufacturer.

Supplier Specific Requirements

Oils and Chemical Suppliers

KPMC requires oil and chemical suppliers to supply a Certificate of Analysis with each shipment.

Powders Suppliers

Chemical analysis of each lot shipped to KPMC is required, and certification against the KPMC specification is required with the shipment (or emailed to the appropriate KPMC representative).

Tooling and Equipment Suppliers

Dimensional analysis similar to First Article Layout on all dimensions. MSA/Gage studies may be required. KPMC Engineering will prescribe all necessary checks of capacity and quality for each new machine purchased.

Subcontracted Services

100% Inspection -- SPC requirements such as p, u, np, c charting could be required. Also capability studies and analysis could be required. Inspection equipment per Check Fixtures, Gages, and Test Equipment.

Machining -- PPAP, Quality system certified to ISO-9001.

Finishing (Mechanical, Coatings) -- PPAP, Quality system certified to ISO-9001. Self-assessment to CQI-11 for plating or CQI-12 for coatings is required.

Heat Treatment – PPAP, Quality system certified to ISO-9001. Self-assessment to CQI-9.

Welding – PPAP, Quality system certified to ISO-9001. Self-assessment to CQI-15.

Soldering – PPAP, Quality system certified to ISO-9001. Self-assessment to CQI-17.

Molding – PPAP, Quality system certified to ISO-9001. Self-assessment to CQI-23.

Laboratory – ISO-17025 certification (or national equivalent) is required. If lab work cannot be completed by a certified lab, a waiver must be granted by KPMC Quality.

Key Contacts

Director of Purchasing & Supplier Relations Location: St. Marys	P (814) 781-4249
Production Control Manager Location: St. Marys	P (814) 781-4216
Purchasing Buyer Location: St. Marys	P (814) 781-4361
Gage Department Location: St. Marys	P (814) 781-4487
Quality Manager Location: St. Marys	P (814) 781-4222
Product Engineering Manager Location: St. Marys	P (814) 781-4394
2nd Shift Contact-St. Marys	P (814) 781-1591
3rd Shift Contact-St. Marys	P (814) 781-1591
Regional Quality Manager Location: Cherryville & Troutman	P (704) 630-7244
Quality Manager Location: Lewis Run	P (814) 368-5320 ext. 604

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