

KALYANI MOBILITY DRIVELINES



QUALITY SYSTEM PROCEDURE PROGRAM

KQSPP Revision 10

Quality Policy

"Kalyani Mobility Drivelines is committed to be a preferred partner for our customers by providing reliable innovative solutions. By controlling our quality objectives, we can achieve customer satisfaction. KMD will provide continuous improvement in all aspects of our quality process, while striving for the wellbeing of our employees and the environment.

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TABLE OF CONTENTS

0.0 REVISION HISTORY6

CONTROL OF PRODUCTION KQSPP 7-051 REV B.....6

1.0 QUALITY POLICY7

2.0 QUALITY MANAGEMENT SYSTEM SCOPE7

DOCUMENT CONTROL KQSPP 4-023.....8

1.0 SCOPE AND PURPOSE 8

2.0 RESPONSIBILITY AND AUTHORITY 8

3.0 PROCEDURAL REQUIREMENTS 8

4.0 CONTROL OF EXTERNAL DOCUMENTS..... 9

5.0 SUPPORTING DOCUMENTATION..... 9

CONTROL OF RECORDS KQSPP 4-0249

1.0 SCOPE AND PURPOSE 9

2.0 RESPONSIBILITY AND AUTHORITY 9

3.0 PROCEDURAL REQUIREMENTS 10

4.0 SUPPORTING DOCUMENTATION..... 10

TRAINING PROCEDURE KQSPP 6-022.....10

1.0 SCOPE AND PURPOSE 10

2.0 RESPONSIBILITY AND AUTHORITY 10

3.0 PROCEDURAL REQUIREMENTS11

INITIAL EMPLOYEE ORIENTATION TRAINING..... 11

4.0 ON-THE-JOB (OJT) EMPLOYEE TRAINING11

4.1 SPECIFIC TRAINING 11

4.2 CERTIFICATES OF COMPLETION ARE MAINTAINED AS RECORDS OF TRAINING..... 12

5.0 SUPPORTING DOCUMENTATION / FORMS 12

RISK MANAGEMENT KQSPP 7-012 REV C..... 12

1.0 SCOPE AND PURPOSE 12

2.0 RESPONSIBILITY AND AUTHORITY 12

3.0 PROCEDURAL REQUIREMENTS13

REVIEWED AND APPROVED BY: AARON JAMROG

3.1 RISK IDENTIFICATION.....	13
3.2 RISK ASSESSMENT PROCESS.....	13
3.3 RISK ACTION MANAGEMENT PROCESS.....	14
3.4 THE RISK MANAGEMENT COMMITTEE.....	14
3.5 RISK CONTROLLED PROCESS.....	15
4.0 SUPPORTING DOCUMENTATION.....	15
CONTROL OF WORK TRANSFERS KQSPP 7-014	15
1.0 SCOPE AND PURPOSE	15
2.0 RESPONSIBILITY AND AUTHORITY	15
3.0 PROCEDURAL REQUIREMENTS	15
3.1 WORK TRANSFERS.....	15
3.2 REASONS FOR WORK TRANSFER INCLUDE:.....	16
3.2.1 CANDIDATE FOR OUTSOURCED MACHINING:.....	16
4.0 SUPPORTING DOCUMENTATION.....	17
REVIEW OF REQUIREMENTS KQSPP 7-022	17
1.0 SCOPE AND PURPOSE	17
2.0 RESPONSIBILITY AND AUTHORITY.....	17
THE CUSTOMER SERVICE DEPARTMENT.....	17
ENGINEERING DEPARTMENT.....	17
THE MANUFACTURING REVIEW TEAMS.....	17
THE QUALITY DEPARTMENT	17
THE PROCESSING DEPARTMENT.....	17
THE PURCHASING DEPARTMENT.....	17
THE PRODUCTION CONTROL DEPARTMENT	18
ALL PERSONNEL	18
3.0 PROCEDURAL REQUIREMENTS	18
3.1 JOB ORDER ENTRY REVIEW OF REQUIREMENTS	18
3.2 ENGINEERING DEPARTMENT.....	18
3.3 MANUFACTURING REVIEW TEAM.....	19
3.4 CUSTOMER SERVICE DEPARTMENT	19
3.5 QUALITY DEPARTMENT	19
3.6 PROGRAMMING AND PROCESSING DEPARTMENT	20
3.7 THE PRODUCTION CONTROL DEPARTMENT.....	20
3.8 PURCHASING MANAGER/DEPARTMENT.....	20
4.0 SUPPORTING DOCUMENTATION.....	21
DESIGN & DEVELOPMENT KQSPP 7-003.....	21
1.0 SCOPE AND PURPOSE	21
2.0 RESPONSIBILITY AND AUTHORITY	21

3.0 PROCEDURAL REQUIREMENTS..... 21

CV JOINTS AND DRIVELINE COMPONENTS, FIG. 1.....21

DRIVE LINE DESIGN PROCESS, FIG. 223

4.0 SUPPORTING DOCUMENTATION..... 24

ENGINEERING NOTICES (ECN) PROCEDURE KQSPP 7-0004.....25

1.0 SCOPE AND PURPOSE.....25

2.0 RESPONSIBILITIES AND AUTHORITY25

3.0 SUPPORTING DOCUMENTATION.....25

PURCHASING KQSPP 7-04.....25

1.0 SCOPE AND PURPOSE25

2.0 RESPONSIBILITY AND AUTHORITY 26

3.0 PROCEDURAL REQUIREMENTS 26

3.1 SUPPLIER SELECTION, EVALUATION AND APPROVAL STATUS..... 26

3.2 SUPPLIER RISKS SCALE..... 26

4.0 ISSUANCE OF A REQUEST FOR QUOTE..... 27

5.0 PURCHASING DATA AND DOCUMENTATION 28

6.0 SUPPORTING DOCUMENTATION..... 28

VERIFICATION OF PURCHASED PRODUCT KQSPP 7-043.....28

1.0 SCOPE AND PURPOSE 28

2.0 RESPONSIBILITY AND AUTHORITY..... 28

3.0 PROCEDURAL REQUIREMENTS 29

4.0 REVIEW FOR COUNTERFEIT PART(S) 31

5.0 SUPPORTING DOCUMENTATION / FORMS31

CONTROL OF PRODUCTION KQSPP 7-051 REV B.....31

1.0 SCOPE AND PURPOSE31

2.0 RESPONSIBILITY AND AUTHORITY31

3.0 PROCEDURAL REQUIREMENTS32

3.1 PRODUCTION PLANNING 32

4.0 CONTROL OF THE PRODUCTION PROCESS..... 33

5.0 CONTROL OF PRODUCTION PROCESS CHANGES..... 34

6.0 CONTROL OF PRODUCTION EQUIPMENT 34

7.0 RECORDS OF PRODUCTION..... 35

8.0 SUPPORTING DOCUMENTATION.....35

PRODUCTION FLOOR TRAVELER CONTROL KQSPP 7.05235

1.0 SCOPE AND PURPOSE.....35

2.0 RESPONSIBILITY AND AUTHORITY.....35

3.0 PROCEDURAL REQUIREMENTS35

4.0 TRAVELER FLOW37

5.0 SUPPORTING DOCUMENTATION / FORMS 39

CONTROL OF PRODUCTION EQUIPMENT KQSPP 7-51339

1.0 SCOPE AND PURPOSE 39

2.0 RESPONSIBILITY AND AUTHORITY..... 39

3.0 PROCEDURAL REQUIREMENTS 39

PREVENTIVE MAINTENANCE 39

4.0 REPAIRS 40

3.4 CONTROL OF NUMERICAL CONTROL..... 40

4.0 SUPPORTING DOCUMENTATION..... 40

IDENTIFICATION AND TRACEABILITY KQSPP 7-053.....41

1.0 SCOPE AND PURPOSE 41

2.0 RESPONSIBILITY AND AUTHORITY..... 41

3.0 PROCEDURAL REQUIREMENTS 41

5.0 SUPPORTING DOCUMENTATION / FORMS 42

CUSTOMER PROPERTY KQSPP 7-054.....42

1.0 SCOPE AND PURPOSE 42

2.0 RESPONSIBILITY AND AUTHORITY..... 43

3.0 PROCEDURAL REQUIREMENTS 43

4.0 SUPPORTING DOCUMENTATION / FORMS 44

PRESERVATION OF PRODUCT KQSPP 7.05544

1.0 SCOPE AND PURPOSE 44

2.0 RESPONSIBILITY AND AUTHORITY..... 44

3.0 PROCEDURAL REQUIREMENTS 45

4.0 SUPPORTING DOCUMENTATION, / FORMS 45

CONTROL OF MONITORING & MEASUREMENT EQUIPMENT KQSPP 7-0645

REVIEWED AND APPROVED BY: AARON JAMROG

1.0 SCOPE AND PURPOSE 45

2.0 RESPONSIBILITY AND AUTHORITY 45

3.0 PROCEDURAL REQUIREMENTS 45

4.0 SUPPORTING DOCUMENTATION, I FORMS 47

MEASUREMENT ANALYSIS KQSPP 8-0147

1.0 SCOPE AND PURPOSE 47

2.0 RESPONSIBILITY AND AUTHORITY 47

3.0 PROCEDURAL REQUIREMENTS 48

4.0 SUPPORTING DOCUMENTATION / FORMS 48

INTERNAL AUDITING KQSPP 8-022.....49

1.0 SCOPE AND PURPOSE 49

2.0 RESPONSIBILITY AND AUTHORITY 49

3.0 PROCEDURAL REQUIREMENTS 49

4.0 SUPPORTING DOCUMENTATION..... 50

MONITORING AND MEASUREMENT OF PROCESSES (INSPECTION AND TEST) KQSPP 8-023.....50

1.0 SCOPE AND PURPOSE 50

2.0 RESPONSIBILITY AND AUTHORITY 50

3.0 PROCEDURAL REQUIREMENTS 51

4.0 SUPPORTING DOCUMENTATION / FORMS 51

MONITORING AND MEASUREMENT OF PRODUCT KQSPP 8-02452

1.0 SCOPE AND PURPOSE52

2.0 RESPONSIBILITY AND AUTHORITY52

3.0 PROCEDURAL REQUIREMENTS52

4.0 SUPPORTING DOCUMENTATION.....53

LAYERED AUDITS KQSPP 8-05354

1.0 SCOPE AND PURPOSE 54

2.0 RESPONSIBILITY AND AUTHORITY 54

3.0 PROCEDURAL REQUIREMENTS 54

3.1 CONTROL OF EXTERNAL DOCUMENTS 54

5.0 SUPPORTING DOCUMENTATION.....55

CONTROL OF NONCONFORMING PRODUCT KQSPP 8-0355

KMD QUALITY SYSTEM PROCEDURE PROGRAM

NO: KQSPP REVISION: 10

REVISION ISSUE: 05-1-25

PAGE 6 OF 54

REVIEWED AND APPROVED BY: AARON JAMROG

1.0 SCOPE AND PURPOSE55
2.0 RESPONSIBILITY AND AUTHORITY55
3.0 PROCEDURAL REQUIREMENTS 56
4.0 SUPPORTING DOCUMENTATION..... 56

CORRECTIVE ACTION KQSPP 8-052.....57

1.0 SCOPE AND PURPOSE57
2.0 RESPONSIBILITY AND AUTHORITY57
3.0 PROCEDURAL REQUIREMENTS57
4.0 SUPPORTING DOCUMENTATION / FORMS 58

0.0 REVISION HISTORY

REV	Description of Change	Author	Effective Date
1	Initial Release	A. Jamrog	7/15/22
2	Logo Change	A. Hendon	09-26-22
3	Updated the Table of Contents and added administrator name and contact info on the cover page.	A. Hendon	10-19-22
4	Removed Preventative Action Procedure	A. Hendon	03-09-23
5	Added KQSPP 7-0004 Engineering Notices	A. Hendon	04-17-23
6	Changed Title from Quality Procedure Manual to Quality Procedure Program	A. Hendon	04-18-23
7	Updated Quality Policy Statement	A. Hendon	05-04-23
8	Added contingency plan to Control of Work Transfer & ECN added customer deviation approval. Customer approval of rework on non-comforting product	A.Hendon	09-25--23
8 (section risk KQSpp 7-012)	Added verbiage to include environmental climate change	A.Jamrog	4-21-25
9	CONTROL OF PRODUCTION KQSPP 7-051 REV B	A.Jamrog	6.30.25

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	<p><u>3.1.2 The production floor traveler control KQSPP -052</u> is used for the production flow of all products with the following details includes: ADDING PRODUCTION FLOOR TRAVELER CONTROL KQSPP-052</p>		
REV	Description of Change	Author	Effective Date
10	Changed frequency of Layered Audits performed	J. Slusarski	5/1/25

1.0 QUALITY POLICY

“Kalyani Mobility Drivelines is committed to be a preferred partner for our customers by providing reliable innovative solutions. By controlling our quality objectives, we can achieve customer satisfaction. KMD will provide continuous improvement in all aspects of our quality process, while striving for the wellbeing of our employees and the environment.

2.0 QUALITY MANAGEMENT SYSTEM SCOPE

The scope of the KQMS includes all activities affecting quality occurring at KMD. The KQSPP is reviewed twice annually at Management Review Meetings.

KMD is engaged in the manufacture of machined parts related to vehicle drivelines. We employ approximately 30 people on two shifts.

Applicable SIC are:

- 3599 precision machining, fabricating, and testing components
- 3541 Machine tools, metal cutting types
- 3554 Special dies, tools, jigs, and fixtures

Applicable NAICS are:

- 332710 Machine Shops
- 32721 Precision Turned Product Manufacturing

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KMD Quality Objectives: tracked monthly and results communicated to all employees by paper notices and email

- Decrease Quality Failure Costs (scrap & rework)
- Improve On-Time Delivery

DOCUMENT CONTROL KQSPP 4-023

1.0 SCOPE AND PURPOSE

The quality system described in this section of the KQSPP addresses the requirements stipulated in ISO9001:2015 4.2.3 *Document Control*. The requirements stated herein cover all KMD internal and external documents affecting quality.

2.0 RESPONSIBILITY AND AUTHORITY

The Responsibility and authority for the carrying of quality management system activities related to this procedure are assigned to the QA Department. All employees have the responsibility to complete quality activities in support of the quality policy, quality system documentation and customer requirements.

3.0 PROCEDURAL REQUIREMENTS

All documents within the Key Account Manager are approved by the Quality department for adequacy prior to release.

Requests for changes/updates to existing documents or for new documents are submitted to the Quality Manager, who with input from other personnel as appropriate, reviews the request and approves if appropriate.

New/changed documents are added to the Master List of Documents, which serves as the final authority. Only the Quality Manager/MR and/or designee have the authority to change the Master List.

The document number, revision/issue number and issue date control the Quality and Procedures Program sections and work instructions.

The Amendment Record in Section 0.6 records any changes made to this Quality and Procedures Program. Work Instructions are used as Level III documents to control the processes (i.e., Calibration work instructions). The Quality Manager/MR and/or designee, is responsible for ensuring that all copies of work instructions are controlled by the Master List. New/changed documents are updated and communicated to employees on a continuous basis through either a shared electronic network and/or revised hard copies. All document revisions are updated electronically, where previous versions are automatically archived.

- The QA Department ensures that only the most recent versions of all documents are available at all points of use.
- The QA Department ensures that documents remain legible and readily identifiable and prevents the unintended use of obsolete documents by applying suitable identification to them if they are retained for any purpose.

Note: Documents are not to be removed from use until the revised version is available for employee use.

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4.0 CONTROL OF EXTERNAL DOCUMENTS

The QA Department is responsible for ensuring that any pertinent documents of an external nature is identified by the following means:

- 1) The Quality Manager/MR and/or designee will receive all customer-supplied drawings for initial review, including any change notices.
- 2) Drawings are maintained in Master Print Folders and identified according to part number.
- 3) Customer drawings are controlled by the QA Department who have the responsibility for ensuring that the most current revisions are being implemented.
- 4) The General Manager and/or designee are responsible for distributing drawings to appropriate personnel.
- 5) In the event when customer(s) invoke certain supportive documents and/or drawings (i.e., material/military/processing specifications) as guidance for product conformity, the General Manager and/or designee are responsible for ensuring that the latest *specified* contract revisions are used during production.
- 6) Specified contract revisions may not necessarily represent the latest versions because contracts may call out various revision levels depending on the scope of work.
- 7) Relevant versions of these documents are maintained and distributed on an as-need basis by the General Manager and/or designee.

- 4.1 The General Manager and/or designee are responsible for accessing intranet sites and maintaining the latest updates of government and regulatory agency standards.

5.0 SUPPORTING DOCUMENTATION

- **KQSPP 4-024 Control of Records Procedure**
- [KQF 4.2.4-002 Master Document List](#)
-

CONTROL OF RECORDS KQSPP 4-024

1.0 SCOPE AND PURPOSE

The quality system described in this section of the KQSPP addresses the requirements stipulated in ISO9001:2015 *4.2.4 Control of Records*. The requirements stated herein cover all KMD internal and external records affecting quality.

2.0 RESPONSIBILITY AND AUTHORITY

The Quality Manager is responsible and has the authority to carry out quality management system activities related to this procedure and are assigned to the QA Department. All employees have the responsibility to complete quality activities in support of the quality policy, quality system documentation and customer requirements.

Employees identified on the Master Document List KQF 4.2.4-002 are responsible for identification, storage, protection, retrieval, retention time and disposal of quality records.

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3.0 PROCEDURAL REQUIREMENTS

- 1) Record Requirement: Refers to the quality record that is required to control and the quality clause related.
- 2) Collection: Defines the department responsible for collecting and controlling the records.
- 3) Identification: Records are identified by a descriptive title or document number.
- 4) Protection: The department document list identifies how records are protected from loss or damage.
- 5) Storage: The department document list defines where records are stored.
- 6) Retrieval/Accessing: Records, including supplier records, are available to employees, customers and regulatory authorities through the responsible department or employee.
- 7) Retention: Record retention is identified on the department document list.
- 8) Disposition/Disposal: The department document list defines the disposal method for records.

4.0 SUPPORTING DOCUMENTATION

- Master Document List, KQF 4.2.4-002

TRAINING PROCEDURE KQSPP 6-022

1.0 SCOPE AND PURPOSE

This procedure defines the methods for identifying, conducting, and evaluating the effectiveness of training. The quality system described in this section of the KQSPP addresses the requirements stipulated in ISO9001:2015 6.2.2 *Training*. The requirements stated herein cover all KMD methods for training.

2.0 RESPONSIBILITY AND AUTHORITY

The Human Resource Representative is responsible and authorized to:

Ensure new hires possess qualifications, such as education, experience, and professional credentials, which meet the requirements specified by Position Descriptions.

1. Conduct new employee orientation training, which includes KMD quality system (ISO9001:2015).
2. Identify and document the required education, experience, and professional credentials for Job Descriptions.
3. Provide formal training for personnel as required and maintain employee training records.

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4. Develop training plans based on recommendations of Department Managers and/or Supervisors that address any gaps between current and required knowledge, skills, and competencies needed to perform assigned tasks.

Department Managers and Supervisors are responsible and authorized to:

1. Identify continuing training requirements such as additional formal and on-the-job training (OJT) and provide training recommendation needs to Human Resources.
2. Identify positions needing certification or special process qualification.
3. Ensure only qualified personnel perform work affecting quality or ensure that tasks performed by employees who have not yet received appropriate training are monitored by an appropriately qualified individual.

3.0 PROCEDURAL REQUIREMENTS

INITIAL EMPLOYEE ORIENTATION TRAINING

The Human Resource Department utilizes Job Descriptions to identify and document education, experience, professional requirements of each position and to determine competence levels.

- 1) When a new job position is created, or duties of a position change, job descriptions are updated to reflect these changes.
- 2) The Human Resource Department performs orientation training as defined on the **Orientation Training Information Checklist, KQF 18-3** which includes:
 - Quality System Orientation (KQF 18-3)
 - Quality Policy
 - ISO Briefing

 - Employee Responsibilities (Signed Document)
 - Personal Tool Policy
 - Nonconforming Product Control

4.0 ON-THE-JOB (OJT) EMPLOYEE TRAINING

4.1 SPECIFIC TRAINING

Department Managers and Supervisors determine the training needed for a specific manufacturing area, machine or equipment based on the experience level of the employee. Additional on the job training is provided to employees when internal and/or external issues are identified

- 1) If an employee must operate a machine without any training, the Supervisor closely monitors the employee during the operation to ensure that internal, regulatory, and customer requirements are satisfied.
- 2) Supervisors will ensure that, at a minimum, employees/s adhere to the requirements identified on job descriptions.
- 3) During an employees' 90 day and/or annual review, Department Managers and Supervisors determine the training needs for each employee utilizing the applicable **Qualifications Record Form, KQF-18-10A, B or C** to address the following:

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1. Identify potential training needs.
2. Review scheduled training.
3. Evaluate completed training since last review.
4. Determine adherence to job descriptions.
5. Evaluate the effectiveness of the completed training.

4.2 CERTIFICATES OF COMPLETION ARE MAINTAINED AS RECORDS OF TRAINING.

The [New Hire Forms & Checklists, KQF 6.2.2-013](#) or the [Training Attendance Record, KQF 6.2.2-006](#) are used to document completed internal training. **The Controller retains records of completed training in accordance with the [Control of Records Procedure, KQSPP 4-024](#)**

Training records may also be maintained in areas/departments where work is performed (i.e., Welder-Fabrication records are maintained in the Fab area).

5.0 SUPPORTING DOCUMENTATION / FORMS

- [New Hire forms & Checklists, KQF 6.2.2-013](#)
- [Training Attendance Record, KQF 6.2.2-006](#)
- [Control of Records Procedure, KQSPP 4-024](#)
- [Qualifications Record Form, KQF-18-10A](#)
- [Qualifications Record Form, KQF-18-10B](#)
- [Qualifications Record Form, KQF-18-10C](#)

RISK MANAGEMENT KQSPP 7-012 REV C

1.0 SCOPE AND PURPOSE

The quality system described in this section of the KQSPP addresses the Risk Management requirements stipulated in ISO9001:2015 *7.1 Product Realization; 7.2.2 Contract Review of Requirements Related to the Product; and 8.5.3 Preventive Action*. The requirements stated herein cover KMD methods for managing and mitigating risk.

2.0 RESPONSIBILITY AND AUTHORITY

Engineering, Customer Service, Manufacturing, Quality, Processing, and Purchasing personnel are responsible for identification and subjective assessment of potential risks prior to order acceptance and release.

General Managers have responsibility and authority as the selected Risk Manager's within their respective facilities. The General Manager has responsibility and authority as Risk Manager to integrate risk management actions into the workflow to ensure that risks are properly identified, assigned, mitigated, accepted, and communicated to affected personnel.

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Director of Quality has the responsibility to monitor the organization's risk maturity model, identify impacted stakeholders, define the risk management policy, and for risk reporting, measurement, and monitoring.

All employees have the responsibility to complete activities in support of the risk management policy and procedure.

3.0 PROCEDURAL REQUIREMENTS

3.1 RISK IDENTIFICATION

Process is defined in the [Risk Management Matrix, KQF 7.1-001](#).

- 3.1.1 The identified stakeholders are Engineering, Customer Service, Manufacturing Review Team, Work Transfer Team, Quality Control, Processing, and Purchasing departments.
- 3.1.2 The risk identification strategy is to implement checkpoints at each level of the job order set up progression, and ask questions that impact financial, strategic, compliance, planning, specific requirements, critical items, key characteristics, and safety factors that could have negative consequences. To also include if the organization shall determine whether climate change is a relevant issue.

These are listed as "consequences" on the Risk Assessment Table.

- 3.1.3 The Risk Assessment Matrix is designed to apply a numerical score that adopts the severity and likelihood of the consequence occurring. During the assessment phase, the likelihood or probability score is added to the severity score to define the overall risk score for each consequence.
 - 3.1.3.1 Risks higher than 5 are defined as "High" risk, and scores less than 6 are defined as "acceptable" risks for each individual consequence.
 - 3.1.3.2 Risks higher than 50 (110 for design products) are defined as "High" risk, and scores less than 50 (110 for design products) are defined as "acceptable" risks for each overall job score.

3.2 RISK ASSESSMENT PROCESS.

Risk Assessment occurs during [Review of Requirements KQSPP 07-022](#) and processing of individual job orders or revision based production in accordance with using the appropriate [Job Order Checklist KQF 7.1-003](#)

- 3.2.1 During each department's job review they will answer a series of questions that will outline potential consequences of identified risks. These are in a drop-down list format, and each consequences have a pre-determined risk severity weight assigned to it which populates automatically in the "Consequence" box.
- 3.2.2 Once the risk is selected, a probability or likelihood factor is identified as well. These range from Remote to Virtually Certain. These selections also carry pre-determined weight.
- 3.2.3 The consequence/severity score is added with the probability/likelihood score to generate the overall score of the potential risk.

3.2.4 Specific guidance about the score can be added to the comments section if needed.

3.3 RISK ACTION MANAGEMENT PROCESS

- 3.3.1 Risk Action Management occurs utilizing the appropriate *Job Order Checklist KQF 7.1-003*:
- 3.3.2 Prior to the order being accepted and the job being released to manufacturing, the checklist is reviewed for any "High" risk scores.
- 3.3.2.1 A single item that is scored at 6 or greater or an overall job score of 50 (110 or design) or greater requires that the job not be released and instead presented to the Risk Management Committee

3.4 THE RISK MANAGEMENT COMMITTEE.

- 3.4.1 The General/Facilities Manager along with the Risk Management Committee review the risk scores and determine the risk handling options. Drop down selections next to the scores are selected to identify the option used.
- 3.4.1.1 Reject: Risk cannot be accepted, assumed, nor mitigated. The orders are not accepted and is returned to Customer Service or Quote Department for action.
- 3.4.1.2 Assume: Risk cannot be mitigated nor rejected due to customer obligations, even though the consequence has a high likelihood of occurring. The Customer Service and or Quote Departments are notified so communication with the customer can occur.
- 3.4.1.3 Mitigated: Sometimes, after discussion, it can be determined that the subjective scoring was overly cautious and the consequence either does not exist, or not to the severity or probability as originally assumed, or the risk can be mitigated easily during the committee discussion and the risk does not have any follow up actions required. The individual score is modified to the corrected risk level.
- 3.4.1.4 Register: If the risk mitigation is such that milestones and action plans need to be put into place to ensure the deliverable, then the job is logged into the Risk Register.
- 3.4.2 The risk register is filled in per the instructions on the document.
- 3.4.2.1 A "High" risk" priority is assigned to have a blue folder. Job is documented in the [KQF 7.1-004 a-b Risk Register](#)
- 3.4.2.2 A risk priority is assigned to each open log issue – the priority guidance is found at the top of the register.
- 3.4.2.3 An action plan is discussed to mitigate the potential risk and task assignments are communicated to the appropriate personnel from the facilities manager.
- 3.4.2.3.1 A milestone date is set to review the status of the mitigation action plan to assess if the risk level is now at an acceptable state, or if the segment of the job where the risk was thought to occur passes without incident.
- 3.4.2.3.2 The job checklist is updated with the register Log # and comments

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are added if needed. If the overall job score is considered as a high risk, the General Manager initials the checklist identifying that the risk level has been accepted and the date. If just a single item is mitigated, assumed, or accepted, then a checkmark at the Risk Review Section is required.

3.4.2.3.3 Facilities Managers and/or delegate is responsible to keep the Risk Register up to date with changing priorities and action plan milestone completions.

3.5 RISK CONTROLLED PROCESS

- 3.5.1 The risk controls process is managed and controlled on the Job Order Traveler and/or the ***Risk Management Matrix KQF 7.1-001*** and records are maintained in accordance with the ***Control of Records Procedure KQSPP 4-024.(page 9)***
- 3.5.2 The job routing is updated with the clause "RISK REVIEW REQUIRED, DO NOT PROCEED UNTIL SIGNED OFF BY SUPERVISOR" at the risk checkpoint where the order must be presented to the General manager or delegate for review prior to proceeding.
- 3.5.3 The job is then released with a "High Risk" identifier printed on each page of the traveler document. The identifier is assigned by placing a .1 in the Job Order Master User Defined Field labeled "Currency 1".

4.0 SUPPORTING DOCUMENTATION

- ***Risk Management Matrix, KQF 7.1-001***
- ***Job Order Checklist KQF 7.1-003***
- ***Control of Records Procedure KQSPP 4-024***
- ***Control of Documents Procedure, KQSPP 4-023***
- ***Review of Requirements KQSPP 7-022***
- ***KQF 7.1-004 a-b Risk Register***

CONTROL OF WORK TRANSFERS KQSPP 7-014

1.0 SCOPE AND PURPOSE

The quality system described in this section of the KQSPP addresses the requirements stipulated in ISO9001:2015 *7.1 Control of Work Transfers*. The requirements stated herein cover KMD methods for work transfer control.

2.0 RESPONSIBILITY AND AUTHORITY

The Responsibility and authority for carrying out of quality management system activities related to this procedure are assigned to the General Managers, Processing Department, Purchasing Department, and Quality Department. All employees have the responsibility to complete quality activities in support of the quality policy, quality system documentation and customer requirements.

3.0 PROCEDURAL REQUIREMENTS

3.1 WORK TRANSFERS

- 3.1.1 Work transfers are identified during the Manufacturing Review portion of the

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- appropriate **Job Order Checklist KQF 7.1-003**
- 3.1.2 General Manager's will make the determination if a part is eligible for a Work Transfer based on customer and/or regulatory requirements.
 - 3.1.3 Eligibility reviews include but are not limited to: ITAR or EAR compliance; customer Quality Management System requirements, process change requirements, and part complexity or a catastrophic event.

3.2 REASONS FOR WORK TRANSFER INCLUDE:

- a) capacity constraints
- b) procurement strategy (second source)
- c) cost reductions
- d) performance improvements
- e) modern technology
- f) The pricing was based on a supplementary source performing the manufacture of the part.
- g) Contingency Plan for catastrophic events

3.2.1 CANDIDATE FOR OUTSOURCED MACHINING:

Readiness review is performed and controlled during the Work Transfer portion of the appropriate Job Order Checklist KQF 7.1-003.

- 3.2.2 The desired type of transfer is defined
- 3.2.3 Internal to Purchased – transferring work to a vendor and in accordance with **KQSPP 7-043 Purchasing Procedure**
 - 3.2.3.1 Supplier to New Supplier – transferring currently outsourced work from one supplier to another, and in accordance with
 - 3.2.3.2 Purchased to Internal – transferring previously outsourced work back to internal manufacturing.
 - 3.2.3.3 Transferring work to low-cost country provider, and in accordance with KQSPP 7-043 Purchasing Procedure
 - 3.2.3.4 The amount of work is then defined:
 - 3.2.3.5 Transfer Complete Including Material Procurement
 - 3.2.3.6 Transfer Partial Including Material Procurement
 - 3.2.3.7 Operation Transfer Only
- 3.2.4 If the transfer is only temporary to alleviate capacity constraints, then the standard frozen process is not changed. If the transfer is permanent, the standard frozen process is updated to reflect the same. In both instances, **Control of Production KQSPP 7-051** and **First Article Inspection KQSPP 8-242** is referenced.
- 3.2.5 Once the Work Transfer guidelines are established, the Purchasing Department, if applicable, will submit requests for quotes to qualified vendors in accordance with the Purchasing Procedure KQSPP 7-043. Once the quotes are received, they are submitted to the Manufacturing Review Team for approval and authorization to proceed.
- 3.2.6 If this is the first time the work has been transferred to the supplier, then the "First Time Transfer Only" section of the checklist is completed to determine any additional requirements such as tooling, additional material to offset set up, acceptance inspection requirements, lessons learned, and shipping methods.
 - 3.2.6.1 Inspection Acceptance Criteria will be performed in accordance with **Verification of Purchased Product KQSPP 7-043** if being outsourced.
- 3.2.7 Risk is assessed and mitigated in accordance with **Risk Management KQSPP 7-012**.
- 3.2.8 The job then continues through processing in accordance with **Review of Requirement KQSPP 7-022**. Records of the Job Order Checklist are maintained in

accordance with the [Control of Records Procedure, KQSPP 4-024.](#)

4.0 SUPPORTING DOCUMENTATION

- ***Job Order Checklist KQF 7.1-003.***
- ***Purchasing Procedure KQSPP 7-04***
- ***Control of Production KQSPP 7-051***
- ***First Article Inspection KQSPP 8-242***
- ***Verification of Purchased Product KQSPP 7-043***
- ***Risk Management KQSPP 7-012***
- ***Review of Requirements KQSPP 7-022***
- ***Control of Records Procedure, KQSPP 4-024***

REVIEW OF REQUIREMENTS KQSPP 7-022

1.0 SCOPE AND PURPOSE

This Procedure defines the implementation of the Purchase Order Review system in accordance with ISO9001:2015 - 7.2.2 *Contract and 7.1 Risk Management (Product Realization)*

2.0 RESPONSIBILITY AND AUTHORITY

THE CUSTOMER SERVICE DEPARTMENT

Quote verification, preliminary review and determination of requirements and initiating the Job Order Checklist KQF 7.1-003

ENGINEERING DEPARTMENT

Authorized to initiate the preliminary and critical design review on Job Order Checklist KQF 7.1-003.

THE MANUFACTURING REVIEW TEAMS

Reviewing job history, special tooling, improvements, fixtures, acceptable margins, and work transfer candidacy.

THE QUALITY DEPARTMENT

Reviews, identifying specific requirements or specifications including those for key characteristics.

THE PROCESSING DEPARTMENT

They are responsible and authorized for reviewing specific customer requirements, approved sources, material requirements, and processes, and incorporating them into the standard routing and production floor travelers.

THE PURCHASING DEPARTMENT

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They are responsible for ensuring that all suppliers' appropriate customer requirements are identified and flowed down to the approved suppliers.

THE PRODUCTION CONTROL DEPARTMENT

They are responsible and authorized to review the information for lead times and determine capacity and the ability to meet contract requirements.

ALL PERSONNEL

It is the responsibility of all personnel to contact the Customer Service Department when it is discovered that illegible documentation or unclear information has been received from the customer. Orders shall not continue until the corrected documentation or lucid information has been obtained from the customer.

3.0 PROCEDURAL REQUIREMENTS

3.1 JOB ORDER ENTRY REVIEW OF REQUIREMENTS

The Customer Service Department initiates the Job Order Checklist, KQF 7.1-003 for contract machining, and KMD designs.

Customer Service: verify and identify the part number, contract number quote for pricing, purchase order, print revision level, determine all regulatory, quality, and customer specific clauses from the customer purchase order, Terms and Conditions or Quality Requirements Programs.

New KMD designed products, the [Job Order Checklist KQF 7.1-003](#) is initiated by the Engineering department at the initial design review stage and the last stage of the quote process. Engineering will perform Risk Assessment in accordance with [Risk Management KQSPP 7-012](#).

For these new projects, Customer Service will initiate a new Job Order Checklist.

Customer Service identifies and resolves any questions or differences between the purchase order/contract and the request for quote and ensure they are resolved before the order is acknowledged or accepted. Note: Some customers do not require a formal purchase order acknowledgement.

Customer service shall ensure when product requirements are changed, the relevant documents are amended, and the appropriate personnel are made aware of the changed requirements and perform Risk Assessment in accordance with [Risk Management Procedure KQSPP 7-012](#).

3.2 ENGINEERING DEPARTMENT

The Engineering department utilizes the Job Order Checklist to document critical design review of any KMD designed parts in accordance with [Design and Development KQSPP 7.003](#).

- 1) Assembly Bills of Material are finalized and released.
- 2) Special or custom designed tooling and fixture requirements are recorded for flow down to manufacturing.
- 3) Programming and processing aids are generated if applicable.
- 4) Non-standard purchased items are identified.
- 5) Risk Assessment is performed.

3.3 MANUFACTURING REVIEW TEAM

The Manufacturing Review Team utilizes the Job Order Checklist to further review the customer requirements, identify any improvement plans for repeat parts, and determine any specific manufacturing needs to produce the part.

Job history and routing is reviewed from previous runs to ensure the process is proven and no adjustments need to be made. If changes are needed than Control of Production KQSPP 7-051 is followed.

Specific tooling, fixtures, process drawings, etc. are identified. The General Manager or delegate is responsible for ensuring those requirements are produced or procured.

- 1) Pricing, margin, and lead time are reviewed to ensure customer commitments can be met. If not, the job is sent back to sales for re-quote.
- 2) To improve lead time, pricing, and quality, a review for candidacy of work transfer is performed per Control of Work Transfers KQSPP 7-014.
- 3) The Manufacturing Review Team shall perform Risk Assessment in accordance with Risk Management Procedure KQSPP 7-012.

3.4 CUSTOMER SERVICE DEPARTMENT

The Customer Service Department initiates the [**Job Order Checklist, KQF 7.1-003**](#) for contract machine, and KMD designs.

For the new KMD designed product, the Job Order Checklist KQF 7.1-003 is initiated by the Engineering department at the initial design review stage and the last stage of the quote process. Engineering will perform Risk Assessment in accordance with Risk Management KQSPP 7-012.

For these new projects, Customer Service will use the Job Order Checklist found in the Design Proposals folder of SharePoint instead of initiating a new one.

- 1) determine if there are any customer supplied materials or gages that will be provided
- 2) identify and resolve any questions or differences between the purchase order and the contract
- 3) request for quote and ensure they are resolved before the order is acknowledged or accepted. **Note: Some customers do not require a formal purchase order acknowledgement.**

Customer service shall ensure when product requirements are changed, the relevant documents are amended, and the appropriate personnel are made aware of the changed requirements.

3.5 QUALITY DEPARTMENT

The Quality Department shall review and identify any specific customer quality requirements for significant or key characteristics and statistical requirements utilizing the Job Order Checklist.

- 3.5.1 The Quality Department shall also determine the necessity of gauges and any layout or functional test requirements.

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- 3.5.2 The Quality Department shall review any previous non-conformances specific to the part or like parts or processes and identify them in the Job Order Packet.
- 3.5.3 The Quality Department shall determine if any CMM programming is needed.
- 3.5.4 The Quality Department shall provide in-process inspections sheets, and detailed inspection plans if required.
- 3.5.5 Quality Department shall perform Risk Assessment in accordance with **Risk Management Procedure KQSPP 7-012.**

3.6 PROGRAMMING AND PROCESSING DEPARTMENT

This Department shall utilize the Job Order Checklist, review the customer documentation, and ensure that all applicable customer specifications, customer approvals, requirements, and processes are identified and listed within the standard routing and production floor travelers.

- 3.6.1 The Programming and Processing Department personnel are responsible for reviewing and verifying revision levels of programs and appropriate specifications and requirements.
- 3.6.2 Processing personnel are responsible for reviewing and identifying on hand material acceptability.
- 3.6.3 Processing personnel are responsible for identifying specific labeling, packaging, and shipping requirements and ensuring the information is identified on the traveler.
- 3.6.4 Processing Department shall perform Risk Assessment in accordance with **Risk Management Procedure KQSPP 7-012.**

3.7 THE PRODUCTION CONTROL DEPARTMENT

Production Control shall determine capacity and ensure that the appropriate equipment and personnel are utilized to meet the contract requirements and document the Job Order Checklist.

3.8 PURCHASING MANAGER/DEPARTMENT

Utilizes the Job Order Checklist to review the supplier status before issuing a request for quote and placing a purchase order for material and/or outside processors and ensure all applicable information is flowed down and accessible. Risk shall be taken into consideration that is inherent to the process when using outside suppliers.

- 3.8.1 The Purchasing Manager shall ensure that all requirements are communicated via the purchase order. *It is the responsibility of the Quality Systems Manager to ensure that the Program is available on the company website.*
- 3.8.2 Purchasing Department shall perform Risk Assessment in accordance with **Risk Management Procedure KQSPP 7-012.**
- 3.9 Upon completion of the review, the Customer Service Department reviews to ensure all departments have reviewed and signed off on the Job Order Checklist. Records of the checklists are maintained in accordance with the **Control of Records Procedure, KQSPP 4-024.**

4.0 SUPPORTING DOCUMENTATION

- **Job Order Checklist KQF 7.1-003**
- **Risk Management Procedure KQSPP 7-012**
- **Control of Work Transfers Procedure KQSPP 7-014**
- **Control of Production Procedure KQSPP 7-051**
- **Design and Development Procedure KQSPP 7-003**
- **Control of Records Procedure, KQSPP 4-024.**

DESIGN & DEVELOPMENT KQSPP 7-003

1.0 SCOPE AND PURPOSE

The quality system described in this section of the ISO9001:2015 - 7.3 *Design and Development*. methods for design and development control.



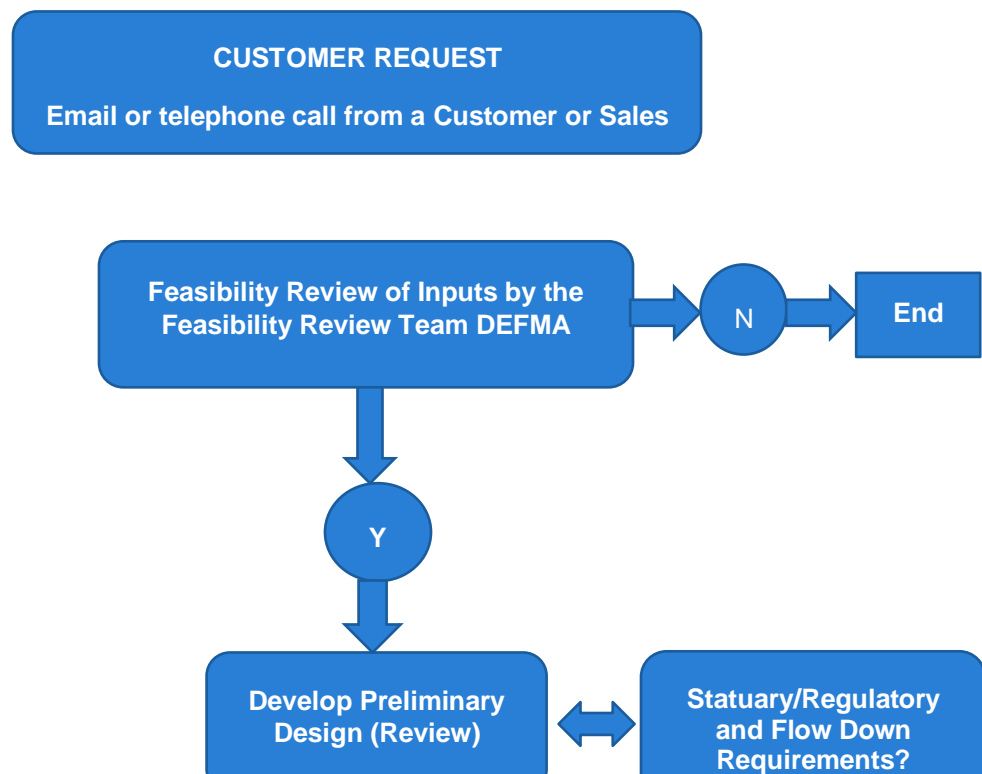
KQSPP addresses the requirements stipulated in The requirements stated herein cover KMD

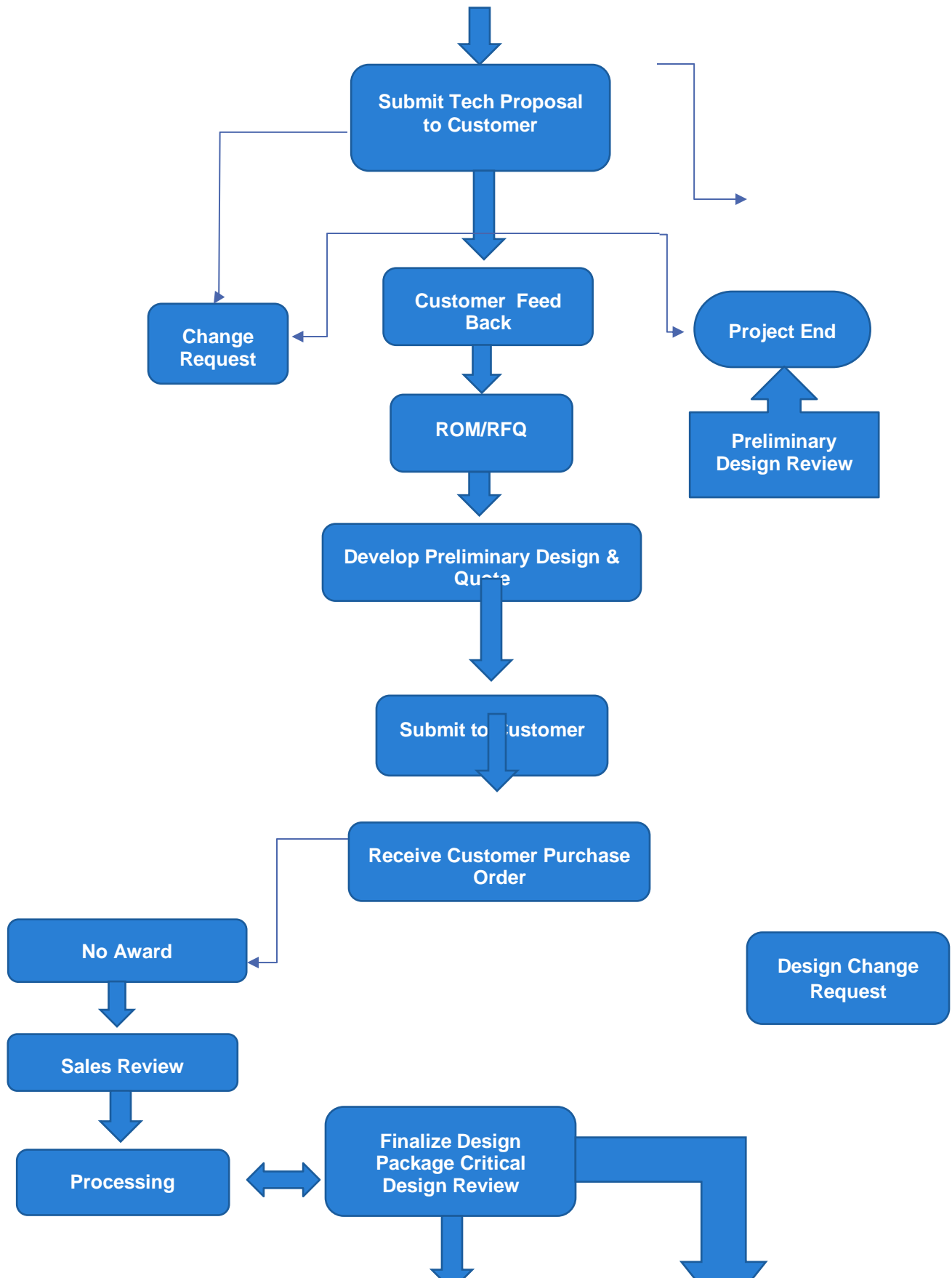
2.0 RESPONSIBILITY AND AUTHORITY

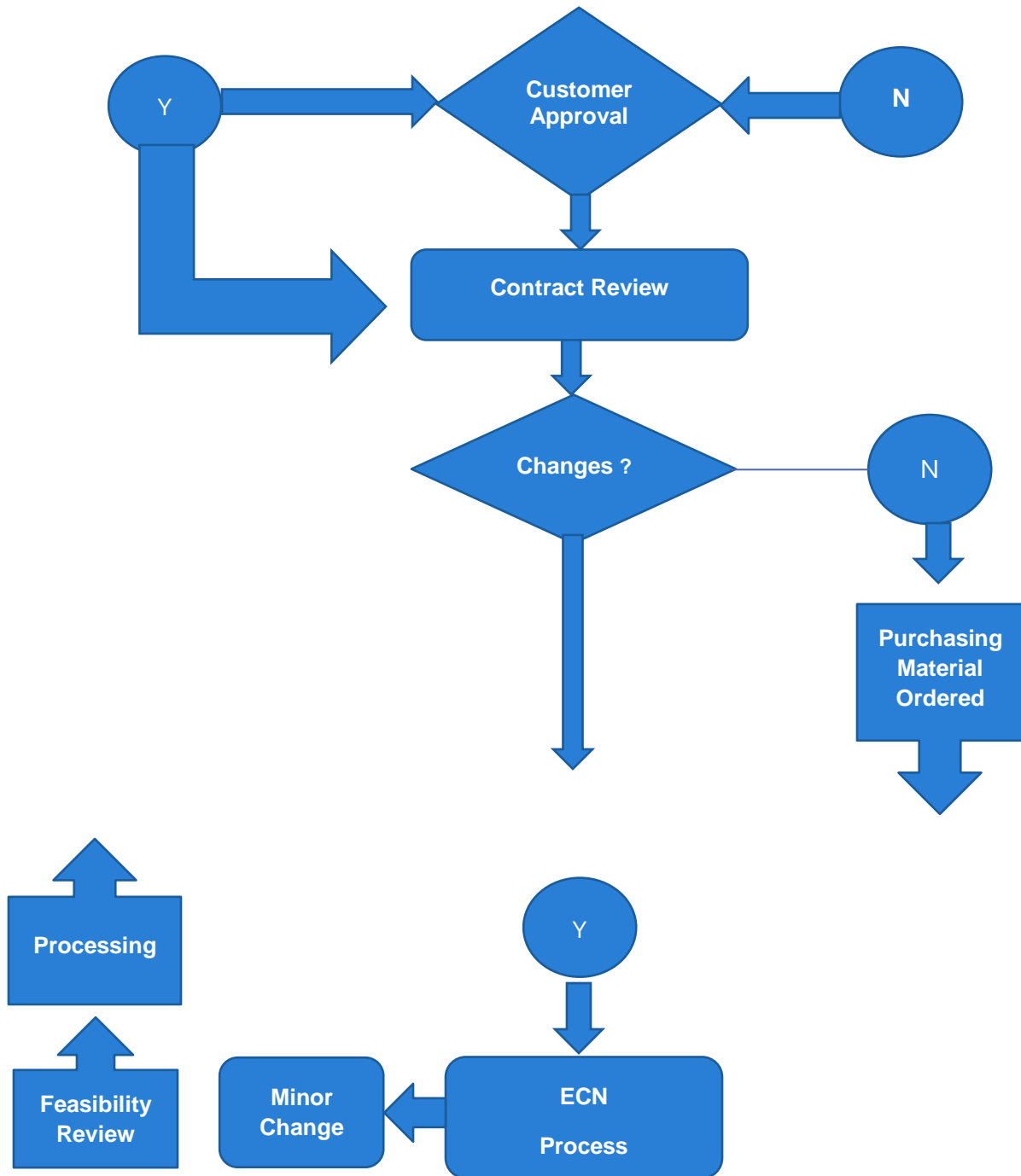
The Responsibility and authority for carrying out of quality management system activities related to this procedure are assigned to the Design & Engineering, Processing, Manufacturing and Sales Department. All employees have the responsibility to complete quality activities in support of the quality policy, quality system documentation and customer requirements.

3.0 PROCEDURAL REQUIREMENTS

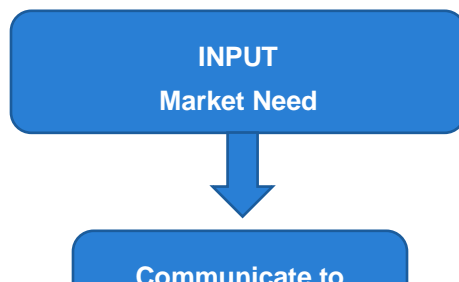
CV JOINTS AND DRIVELINE COMPONENTS, FIG. 1

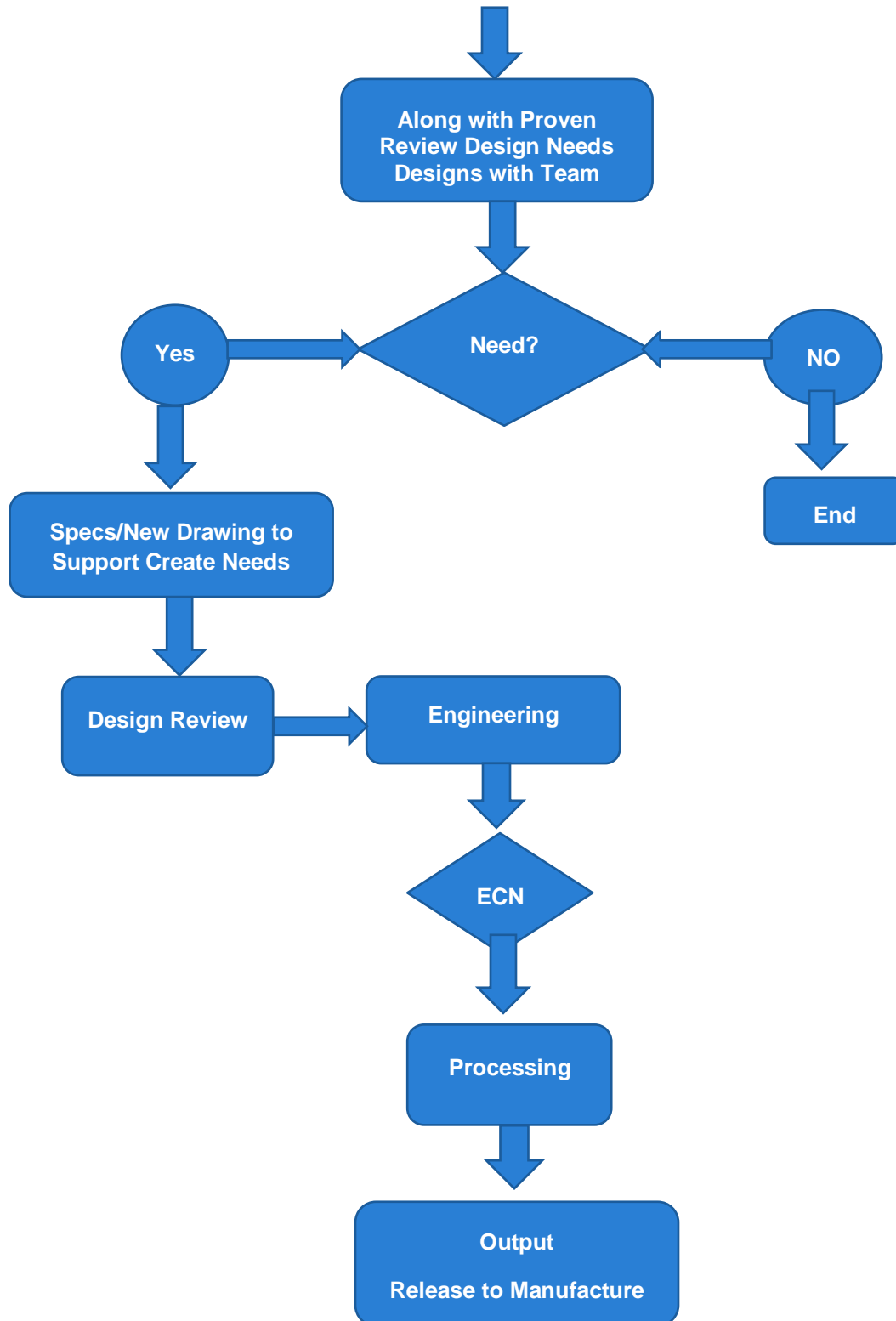






DRIVE LINE DESIGN PROCESS, FIG. 2





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- **Product Engineering Drawing Approval Form KQF 7.3-004**
- **Vehicle Drive Line Application Data Sheet KQF 7.3-001**
- **Engineering Inspection Report KQF 7-003**
- **Review of Requirements, KQSPP 7-022**
- **Internal Auditing Procedure, KQSPP 8-022**
- **Records Control Procedure, KQSPP 4-024**

ENGINEERING NOTICES (ECN) PROCEDURE KQSPP 7-0004

1.0 SCOPE AND PURPOSE

This procedure is in correlation with requirements that are determined and documented according to the [Design and Development Procedure, KQSPP 7-003](#) When KMD and or supplier wishes to make a change to a part, sub-assembly, assembly, or process affecting any component. An engineering notice or “ECN” must be filled out.

2.0 RESPONSIBILITIES AND AUTHORITY

The Engineering Manager is responsible and authorized to follow the following descriptions:

- **The supplier must submit a request for the change.** The request may be made using either a form or e-mail notification. If the request is made using the supplier’s form, it will be attached as a cover sheet and the supplier’s request will be considered background information related to the change request.
- Persons receiving the Engineering Change Request/s have the responsibility to review the requested change, request additional clarification, and formulate an action plan and advise the appropriate personnel.
- **Engineer Manager & Project Manager are responsible to fill out KMD customer deviation form. Submit with supporting documents to the customer.**
- The personnel responsible for the ECN will review all input and make any necessary changes to the print.
- When the manager is satisfied with the changes a copy of the ECN containing all page signatures, or attached e-mails indicating approval, will be sent to the corresponding KMD managers or to the supplier to indicate completion.
- Signatures of ECN indicates an agreement to initiate the change, to implement into production.
- When complete the engineering notice is applied and final revision of print is released.

3.0 SUPPORTING DOCUMENTATION

- [Product Engineering Drawing Approval Form KQF 7.3-004](#)
- [Vehicle Drive Line Application Data Sheet KQF 7.3-001](#)
- [Engineering Inspection Report KQF 7-003](#)
- [Review of Requirements, KQSPP 7-022](#)

PURCHASING KQSPP 7-04

1.0 SCOPE AND PURPOSE

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This procedure defines the implementation of the Purchasing system in accordance with the ISO9001:2015 7.4 *Supplier records*. This procedure defines the method and process for selecting and evaluating suppliers and the process to issue a request for quote. It also defines the purchasing data and documentation requirements.

2.0 RESPONSIBILITY AND AUTHORITY

The Purchasing Manager, General Purchasing Personnel and Quality Department are responsible and authorized for the selection, evaluation, approval, tracking supplier performance, including issuing nonconforming product reports when purchased product does not meet the specified requirements.

The Purchasing Manager, General Purchasing Personnel and/or Quality Department are responsible for considering and managing risks when selecting and using suppliers, original component manufacturers and distributors and communicating any risks to the appropriate department personnel. Purchasing also examines potential source of the supply base to assess the risk of receiving counterfeit parts.

“Counterfeit Part” by Definition: An unauthorized copy or substitute part that has been identified, marked, and/or altered by a source other than the part's legally authorized source and has been misrepresented to be from a legally authorized source, an item misrepresented to be an authorized item of the legally authorized source, or a new, used, outdated, or expired item from a legally authorized source that is misrepresented by any source to the end-user as meeting the performance requirements for the intended use.

The Purchasing Manager and General Purchasing Personnel are also responsible for generating, reviewing, and issuing purchase orders to suppliers, original component manufacturers, to ensure that all requirements are identified on the purchase order including customer flow down requirements.

3.0 PROCEDURAL REQUIREMENTS

3.1 SUPPLIER SELECTION, EVALUATION AND APPROVAL STATUS

- 3.1.1 Suppliers must meet one of the following requirements prior to placement.
- 3.1.2 Any customer directed supplier is automatically approved; however, KMD is still responsible for the quality of the product.
- 3.1.3 Suppliers that are NADCAP, ISO9001:2015 certified will get priority.

3.2 SUPPLIER RISKS SCALE

This risk level is used during job risk assessment and mitigation in accordance with [**KQSPP 7-012 Risk Management**](#). Risk Scores are defined as:

3.2.1 Risk Scores:

- 1 – Low; Supplies COTS items or Low Complexity items.
- 2 – Medium; Supplies products/services that comply with industry and customer standards.
- 3 – High; Supplies overly complex parts/services
- 4 – Probationary; newly added vendor

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5 – Extreme; Poor performer but cannot be removed from ASL as vendor is a customer directed sole source.

- 3.3 Once a supplier has been approved, the Purchasing Department updates information including the scope of the approval and their approval status.
- 3.4 Supplier may be required to accept and sign a non-disclosure agreement before supplier has access to any of KMD or its customer's property, drawings, or any other items deemed proprietary.
- 3.5 Suppliers on probationary status will be reviewed within one month of receipt of initial purchase order. If supplier performance is satisfactory, the Purchasing Manager will update the risk score.
- 3.6 The Purchasing Department and/or Quality Department are responsible for periodically reviewing supplier performance through on-time delivery and quality metrics. Suppliers are re-evaluated at a minimum of every two years in methods which may include as appropriate: website review, changes in management or ownership, status of capabilities, contact information, supplier visits, surveys, quality or delivery trends, pricing, etc. For those suppliers who were added to the ASL due to accreditation, the expiration date of said accreditation shall be monitored quarterly for upcoming expiry dates. Suppliers may be removed from ASL if inactive for a period of 24 months.
- 3.7 Supplier performance is tracked by through [KQF 8.5.2 d Corrective Action Report](#)
- 3.8 The Purchasing Department and/or Quality Department may change the status of suppliers based on their performance or prior history with KMD. Suppliers suspended or disapproved may not be used without authorization from the Purchasing Department and/or Quality Department.
- 3.9 Supplier product is verified prior to release through supplier certifications and/or receiving inspection.
- 3.10 All parts, materials, and assemblies (electrical, mechanical, raw material) included in components supplied to customers shall be procured directly from the Original Component Manufacturer (OCM) / Original Equipment Manufacturer (OEM), or from OEM/OCM authorized distributors. If it is determined in a specific instance that this is not possible, the Quality Manager will be notified to initiate the deviation/concession request to the customer.

Documentation requirements from the supplier should include:

- Positive traceability to the raw material
- Specifications to which the material has been tested and/or inspected to
- Heat/Lot numbers
- When the specification requires Chemical/Mechanical/Physical properties, the test report should contain the actual test values obtained
- Certifications for all required processing (heat treating, plating, etc.)
- Certificate of Compliance to certify material meets the related requirements.

4.0 ISSUANCE OF A REQUEST FOR QUOTE

- 4.1 The Purchasing Department issues a Request for Quote (RFQ) to potential suppliers, including a due date, when required, to meet overall program timing.

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- 4.2 The Purchasing Department shall review any quotations and awards business to source that best meet the expectations of KMD and our customers (cost, timing, quality, adherence to the supplier requirements Program, etc.). Upper Management may also give input into the sourcing decisions, as needed.

5.0 PURCHASING DATA AND DOCUMENTATION

- 5.1 Purchasing personnel ensure that all applicable requirements are documented on the purchase order, in accordance with the customer requirements.
- 5.2 Purchase orders are reviewed by the Purchasing Personnel or designated personnel prior to their release to the suppliers to ensure that all pertinent information is provided.
- 5.3 Purchase Orders, at a minimum, shall indicate supplier name, type of services and the following requirements, where applicable:
- 5.3.1 Requirements for approval of product, procedures, process, and equipment.
 - 5.3.2 Requirements for qualification of personnel.
 - 5.3.3 The identification and revision status of specifications, drawings, process requirements, inspection/verification instructions and other relevant technical data.
 - 5.3.4 Requirements for design, test, inspection, verification (including production process verification), use of statistical techniques for product acceptance by the organization, and as applicable critical items including key characteristics and related instructions for acceptance by KMD.
 - 5.3.5 Requirements for test specimens (e.g., production method, number, storage conditions), for design approval, inspection, investigation, and auditing.
 - 5.3.6 Packaging and delivery requirements.
 - 5.3.7 Purchasing records are maintained in accordance with the **Control of Records Procedure, KQSPP 4-024**.

6.0 SUPPORTING DOCUMENTATION

- **Verification of Purchased Product Procedure, KQSPP 7-043**
- **Control of Records Procedure, KQSPP 4-024**

VERIFICATION OF PURCHASED PRODUCT KQSPP 7-043

1.0 SCOPE AND PURPOSE

The purpose of this document is to establish the requirements, responsibilities and instructions for verification and acceptance of purchased products and/or processes, stipulated in ISO 7.4.3 *Identification and Traceability*

2.0 RESPONSIBILITY AND AUTHORITY

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The Receiving Department is responsible to verify the receipt against purchase order or description of customer-supplied material, and identify the shipment by certification number, job number, part number, and/or other characteristics.

The Quality Department is responsible to review supplier certifications and inspection documentation to ensure that the purchased product and special processes meet the specified purchasing requirements and for leading the activities of the **Control of Nonconforming Product Procedure, KQSPP 8-03** when those requirements are not met.

3.0 PROCEDURAL REQUIREMENTS

- 3.1 Receiving Personnel verify the material Type, Size, and Quantity matches the PO requirements, and that the PO number is traceable to the Material Certification.
 - 3.1.1 Material is identified by receiving personnel with the appropriate identification tag and/or document the material certification number on the material with a permanent marker.
 - 3.1.2 Verify that the Material Certification includes a statement of Conformance to the Specifications required on the PO or print.
 - 3.1.3 Verify that the material is properly packaged in accordance with the purchase order packaging requirements and that there is no shipping damage to the material. If there has been damage or the packaging does not meet the requirements, initiate the **Control of Nonconforming Product Procedure, KQSPP 8-03**.
 - 3.1.4 Verify that the Chemical Analysis and Physical Properties of the material (from the cert) adhere to the specification called-out on the PO or print.
 - 3.1.4.1 Additional chemical analysis and physical property verification is conducted, at a minimum of once per year by a third-party testing service.
 - 3.1.5 If there is a discrepancy found during the verification process, initiate the **Control of Nonconforming Product Procedure, KQSPP 8-03**. If the material is customer supplied product; they will be immediately notified.
 - 3.1.6 If the material meets the criteria, acceptance of the product is given by Stamping and Dating the Material Certification and recording the PO number and the Job number.
 - 3.1.7 Accepted Material Certifications are forwarded to the Material Control Department to enter the material into the inventory. The material certification records are maintained in accordance with the **Control of Records Procedure, KQSPP 4-024**.
- 3.2 Quality Personnel verify sub-contracted services, special process test reports and certifications per the applicable drawing and/or specifications. Sub-contracted services will additionally be inspected per the **Monitoring and Measurement of Product Procedure, KQSPP 8-024**.
 - 3.2.1 Quality Assurance verifies that any critical/significant characteristics identified on the print are dimensionally correct, where required.
 - 3.2.3 Verify that the test reports include a statement of Conformance to the Specifications required on the Purchase order or print.

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- 3.2.4 Verify the quantity listed on the reports match the number of parts submitted on the purchase order for traceability.
- 3.2.5 If the test report/certification meets the applicable specifications, acceptance of the report is given by stamping and dating the certification and recording the job number.

Note: Inspection stamps are controlled through the **Identification and Traceability Procedure, KQSP 7-053.**

- 3.2.6 Special process certification and test report records are maintained in accordance with the **Control of Records Procedure, KQSP 4-024.**
- 3.2.7 When purchased product is released for production use pending completion of all required verification activities, it shall be identified and recorded to allow recall and replacement if it is subsequently found that the product does not meet specified requirements.
- 3.2.8 If a discrepancy is found during the verification process, initiate the **Control of Nonconforming Product Procedure, KQSP 8-03.**
- 3.2.9 When any product does not meet the specified requirements, the supplier is notified utilizing the **Nonconforming Product Report, KQF 8.3-003** by the Quality or Purchasing Departments.

- 3.2.9.1 The NPR is sent to the supplier and the Purchasing Manager by the Quality Department and logged into the **Nonconforming Product Report Log, KQF 8.3-004**

- 3.2.9.2 Disposition of Scrap or Rework will have input from Cost Accounting for debit amount.

- 3.2.9.3 Nonconforming material is contained by the Quality Manager until RMA response from the supplier is received. At that time, a return Purchase Order is generated by the Purchasing Department and material is returned to the supplier. If the supplier does not want the material returned, the **Control of Nonconforming Product Procedure, KQSP 8-03** is referenced.

- 3.2.9.4 The Quality Department monitors the NPR Log for due dates and notifies the appropriate buyer in advance of the NPR expiration. The buyer then follows up with the vendor for completion and advises a non-response could negatively impact the supplier's quality rating. Further non-response will result in contact with the Purchasing Manager and Director of Quality if needed. As a last resort, the NPR CAR can be avoided, and the Purchasing Manager will revisit the supplier's issue to see if the problem has re-occurred.

- 3.2.9.5 Upon receipt of NPR Corrective Action Response, the Quality Manager will review for effectiveness and log the findings into the NPR Log.

- 3.2.9.6 The Purchasing Manager will review the NPR log monthly and re-assess a supplier's Risk score if needed. A negative recurring quality score could result in removal from the ASL.

- 3.2.10 If KMD delegates verification activities to the supplier, the requirements for delegation shall be defined and a register of delegations maintained.

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Also, if KMD or our customer intends to perform verification at the supplier's premises, intended verification arrangements and the method of product release shall be stated in the purchasing information.

4.0 REVIEW FOR COUNTERFEIT PART(S)

- 4.1 Receiving Inspection Personnel must verify the product to ensure all documentation appropriate to the product or other related information is present to detect or identify suspect counterfeit parts. Documentation includes but is not limited to, the drawing, specification, type, class, style, part number, manufacturer, and certificate of conformance. If a discrepancy is found or suspected during the verification process, the parts are segregated and the **Control of Nonconforming Product Procedure, KQSPP 8-03** is initiated.

"Counterfeit Part" by Definition: An unauthorized copy or substitute part that has been identified, marked, and/or altered by a source other than the part's legally authorized source and has been misrepresented to be from a legally authorized source, an item misrepresented to be an authorized item of the legally authorized source, or a new, used, outdated, or expired item from a legally authorized source that is misrepresented by any source to the end-user as meeting the performance requirements for the intended use.

5.0 SUPPORTING DOCUMENTATION / FORMS

- **Control of Nonconforming Product Procedure, KQSPP 8-03**
- **Nonconforming Product Report, KQF 8.3-003**
- **Monitoring and Measurement of Product Procedure, KQSPP 8-024**
- **Control of Records Procedure, KQSPP 4-024**
- **Identification and Traceability Procedure, KQSPP 7-053**
- **Nonconforming Product Log, KQF 8.3-004**

CONTROL OF PRODUCTION KQSPP 7-051 REV B

1.0 SCOPE AND PURPOSE

The quality system described in this section of the KQSPP addresses the requirements stipulated in ISO9001:2015 7.5.1 *Control of Production*. The requirements stated herein cover KMD methods for production control.

2.0 RESPONSIBILITY AND AUTHORITY

Manufacturing personnel are responsible for adhering to this procedure, following the appropriate production work instructions, and completing the **Process Change Request Form, KQF-7.5.2-001**, when required.

Plant floor Supervisors or General Managers are responsible for ensuring that production is carried out under controlled conditions, approving the completion of production operations and processing changes in accordance with this procedure. They are also responsible for ensuring that the information that describes the characteristics of the product and work instructions is available to production personnel.

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Quality Assurance is responsible to verify that the production processes, production documentation and tooling are capable of producing parts and assemblies that meet the requirements in accordance with the **First Piece Approval Process Procedure, KQSPP 8-241** and this procedure, and to obtain customer approval for process changes, when required.

3.0 PROCEDURAL REQUIREMENTS

3.1 PRODUCTION PLANNING

The production process is planned by Manufacturing, Quality, Production Control, Programming and Processing through the development of the part specific job packets (section 3.1), the CNC programs (section 3.2), and tool set up instructions (section 3.3). Note: Job folders identified with a black border are for commercial orders and may not follow the same process based on customer requirements.

The specific job packets which include the following information where appropriate:

3.1.1 A ballooned drawing that is at the current revision.

3.1.2 **The production floor traveler control KQSPP -052** is used for the production flow of all products with the following details includes:

The header section of the production floor traveler identifies the job number, part number, part description, part revision level, quantity to be produced, setup allowance, start date, due date.

3.1.2.2 The production floor traveler is broken down by the sequence of operations and the operation number, quantity, setup time, pieces per hour, the machine name, and the program number (when available) are identified in the operation header information.

3.1.2.3 Operation specific details are documented in the designated area, which may include, but not limited to in-process dimensions, inspection requirements, details on specific features, specifications required, etc.

3.1.2.4 A section where operators can document any issues or suggestions for process and programming changes.

3.1.3 Inspection requirements, which may include when applicable:

- In-process inspection requirements.
- Measurement equipment needed.
- Criteria for workmanship, including acceptance criteria.
- Final inspection requirements.

3.1.4 Internal and External Special Process Requirements, which include, but is not limited to:

- Internal special processes requirements are defined on the production floor traveler.
- External (Outsourced) special process requirements are defined in the purchase order in accordance with the **Purchasing Procedure, KQSPP 7-4.**

3.1.5 Identification and Traceability requirements are identified and documented in accordance with the **Identification and Traceability Procedure, KQSPP 7-053.**

3.1.6 The CNC Program is developed by Programming from the solid model or drawing, which may be received from the customer or developed by Programming from the customer drawing.

- 3.1.7 The tool path is reviewed prior to release to Manufacturing for production.
- 3.1.8 The CNC Programs are validated during **First Piece Approval Process Procedure, KQSPP 8-241.**

4.0 CONTROL OF THE PRODUCTION PROCESS

The production process is initiated when a job packet/file is issued by the Production Control Department.

- 4.1 The first piece produced at each operation is approved by quality assurance in accordance with the **First Piece Approval Process Procedure, KQSPP 8-241** prior to continuing the production of that operation.
 - 4.1.1 After the first piece has been approved, the operator continues to process the product according to the production floor traveler.
 - 4.1.2 If any product is deemed suspect or nonconforming the operator initiates the **Control of Nonconforming Product Procedure, KQSPP 8-03.**
 - 4.1.3 When the quantities have been completed, the operator documents the quantity completed in the designated area on the production floor traveler.
 - 4.1.4 The Operator documents any observations, notes and process or programming change suggestions in the operator notes section of the production floor traveler.
 - 4.1.4.1 These notes are reviewed at the completion of the job to capture any modifications necessary.
 - 4.1.5 The Shift Supervisor or General Manager reviewed the production floor traveler with the operator to ensure the operation was completed and initial and date the production floor traveler in the designated areas to approve the completion of that operation. The material is then moved to the subsequent operation.
 - 4.1.6 When required by the Contract and/or Customer, production process verification is completed in accordance with the **First Article Inspection Procedure, KQSPP 8-242.**
- 4.2 When necessary, a job is split into two or more lots. The following are examples of situations when a job may require to be split:
 - 4.2.1 Customer reduces quantity.
 - 4.2.2 Customer expedites a portion of the order for prompt delivery.
 - 4.2.3 Outside processing can only handle smaller portions of a larger lot.
 - 4.2.4 Size of order, machine processes, and cycle times require the parts to flow through several machine centers to maintain product flow.
 - 4.2.5 A supplier cannot supply the required quantities in one lot.
 - 4.2.6 Manufacturing and/or Production Control may determine that other situations could require a job to be split.
- 4.3 When a job is split a new job is created in Made 2 Manage.

Note: Certain jobs may require that parts be distributed to two or more machines to complete the same operation; when this is necessary, the job is not split but a copy of the job packet is

made for the second and/or third operator to use as the operation instructions. In that situation, each machine will have a first piece approval completed in accordance with the **First Piece Approval Process Procedure, KQSPP 8-241**. Once that operation has been completed the quantities are documented on the original production floor traveler and the copy is destroyed.

5.0 CONTROL OF PRODUCTION PROCESS CHANGES

Personnel authorized to approve changes to production processes are identified on Authorization Record forms maintained for each facility; only authorized personnel are allowed to make changes to the production processes.

- 5.1 If a potential process change is requested, the change is reviewed by the processing department in conjunction with all necessary personnel (i.e., General Manager, Production Supervisor, General Quality Manager, Department Leader, and Operator) before implementation.
- 5.1.1 If approved, authorized personnel modify and initial the production floor traveler with the change and the operator processes the part and submits the first piece to Quality Assurance for validation in accordance with the **First Piece Approval Procedure, KQSPP 8-241**.
- 5.1.2.1 The processing department ensures that all applicable documentation is updated that is affected by the change.
- 5.1.2.1.1 If the change is denied or unwarranted, the Shift Supervisor or General Manager provides feedback to the requester.
- 5.2 When transitioning critical process changes requires customer communication, and/or regulatory authority approval, the **Process Change Request Form, KQF- 7.5.2-001** is utilized. A critical process change may be defined as, but not limited to one of the following:
- Any special process being in-loaded or off-loaded.
 - Part or part family being moved from one source or facility to another.
 - Supplier engineering change notification.
 - Any change to the sequence of operations.
 - Removing or combining any operations.
 - Adding an operation.
 - The General Quality Manager and/or Quality Systems Manager will notify the customer of these changes and obtain their acceptance by way of customer authorization as required.

6.0 CONTROL OF PRODUCTION EQUIPMENT

Production equipment, tools, and numerical control (NC) machine programs are controlled in accordance with the **Control of Production Equipment Procedure, KQSPP 7-513**.

6.1 Post-delivery support is conducted by Quality Assurance, when applicable:

- In service data is collected and analyzed when the customer provides the data.
- When problems are detected after delivery, actions to be taken are conducted in accordance with the **Control of Nonconforming Product Procedure, KQSPP 8-03**.

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- Technical documentation is controlled and updated in accordance with the [Control of Documents Procedure, KQSPP 4-023](#), which includes any repair schemes that are applicable.

7.0 RECORDS OF PRODUCTION

Records of production control and process changes are maintained in accordance with the [Control of Records Procedure, KQSPP 4-024](#).

8.0 SUPPORTING DOCUMENTATION

- [Process Change Request Form, KQF-7.5.2-001](#)
- [First Piece Approval Procedure, KQSPP 8-241](#)
- [First Article Inspection Procedure, KQSPP 8-242](#)
- [Control of Production Equipment Procedure, KQSPP 7-513](#)
- [Control of Nonconforming Product Procedure, KQSPP 8-03](#)
- [Identification and Traceability Procedure, KQSPP 7-053](#)
- [Purchasing Procedure, KQSPP 7-4](#)
- [Control of Records Procedure, KQSPP 4-024](#)
- [Control of Documents Procedure, KQSPP 4-023](#)

PRODUCTION FLOOR TRAVELER CONTROL KQSPP 7.052

1.0 SCOPE AND PURPOSE

To establish a standardized method for the control, use, and retention of production travelers on the manufacturing floor to ensure traceability, process conformity, and compliance with ISO 9001:2015 requirements. This procedure applies to all products manufactured at Kalyani Mobility Drivelines where a traveler or equivalent document is used to route the product through manufacturing, inspection, and test processes.

This also serves a response to NCR 108836 Eagle certification Group Iso 9001:2015 Recertification 5.19.25

2.0 RESPONSIBILITY AND AUTHORITY

- **Production Supervisor/Group leader:** Ensures that travelers are accurate, complete, and available for each job.
- **Operators:** Follow the steps outlined in the traveler and sign off at each stage as required.
- **Quality Control:** Verifies and signs off on designated inspection points.

If the verbiage of traveler does not follow the procedure in process, it is expected that employees will bring omission or addition to supervisor and group leader for change.

3.0 PROCEDURAL REQUIREMENTS

3.1 Issuance of Traveler

1. Travelers are generated by the Planning or ERP system upon release of [Job Order Checklist KQF 7.1-003](#)
2. Travelers must include:
 - Job and part number

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- Revision level of part
- Quantity to produce
- Routing steps
- Special instructions
- Quality checkpoints
- Space for signatures/dates at each step

3.2 Control of Travelers on the Floor

1. Only the most current traveler (matching the latest drawing/spec revision) may be used on the floor.
2. Travelers are always kept with the product.
3. Any discrepancies must be reported to the Production Supervisor and/or Group leader immediately.
4. Any In-process changes require a handwritten note with initials and date from verified personnel or issuance of a new traveler. Processing is made aware of change. If applicable, change standard routing.
5. If operations need to be swapped due to production flow, then a handwritten note or re print will state "run this op before..."
6. If operations are running concurrently a copy of the first piece stamp on the operation that is being run is made. In addition, a copy stamp is to be put on the sheet signifying as such.

3.3 Traveler Sign-Off

1. When the operation is complete each operator is responsible for the operation, signing off completing their designated section of the traveler by approved personnel, including:
 - Date
 - Initials or signature
2. Quality checkpoints must be signed off by Quality personnel or supervisor before proceeding to the next step.

3.4 Non-conformance stamp

1. Once non-conformance is found, the verified personnel will stamp the non-conformance stamp at the designated operation and match the non-conformance log identification number

3.4 Traveler Completion and Retention

1. Once the job is complete, the traveler is submitted to the Quality or process control personnel for review.
2. Completed travelers are forwarded to Quality for Document Control which includes scanning and archiving. Located in the job order folder in the master print folder matching the part number.

4.0 TRAVELER FLOW

TRAVELER CREATED AT PROCESSING RELEASE



Deviation issue: contact supervisor or group leader for adjustment



Processing is made aware of issue release back to floor



QUALITY ENGINEER TO CREATE JOB PACKET THAT INCLUDES TRAVELER AND QUALITY FORMS



Deviation issue: contact supervisor or group leader for adjustment



Processing is made aware of issue release back to floor



PACKET WAITS IN STAGING RACKS



Deviation issue: contact supervisor or group leader for adjustment



Processing is made aware of issue release back to floor



MATERIAL ARRIVES JOB TRAVELER PACKET IS RELEASED TO PRODUCTION FLOOR



Deviation issue: contact supervisor or group leader for adjustment



Processing is made aware of issue release back to floor



↓

THE JOB TRAVELER PACKET FLOWS THROUGH PRODUCTION, INSPECTION, SHIPPING OUTSIDE PROCESSING



Deviation issue: contact supervisor or group leader for adjustment



Processing is made aware of issue release back to floor



↓

WHEN ALL OPERATIONS ARE COMPLETE THE TRAVELER IS GIVEN TO QUALITY ENGINEERING FOR REVIEW OF ALL COMPLETED OPERATIONS AND QUALITY PAPERWORK. PERSONEL SENDS EMAIL COMPLETION FOR FINACE REVIEW.



Deviation issue: contact supervisor or group leader for adjustment



Processing is made aware of issue release back to floor



TRAVELER GIVEN TO PROCESSING FOR FINAL REVIEW OF OPERATION NOTES AND IF APPLICABLE CHANGES STANDARD ROUTING.



Deviation issue: contact supervisor or group leader for adjustment



Processing is made aware of issue release back to floor



↓

QUALITY SCANS ALL PAPERWORK INTO MASTER PRINT FOLDER IN “:J” DRIVE. SHREADS ORIGINAL PAPERWORK.

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5.0 SUPPORTING DOCUMENTATION / FORMS

- [Control of Records Procedure KQSPP 4-024](#)
- [Job Order Checklist KQF 7.1-003](#)
- [Nonconforming Product Procedure KQSPP 8-03](#)
- [CAR-Containment Log KQF 8.5.2-004](#)
- [CONTROL OF PRODUCTIO KQSPP 7-051 REV B.](#)

CONTROL OF PRODUCTION EQUIPMENT KQSPP 7-513

1.0 SCOPE AND PURPOSE

The quality system described in this section of the QPM addresses the requirements stipulated in ISO9001:2015 7.5.1 *Control of Production Equipment, Tools, and Numerical Control (NC) Machine Programs*.

2.0 RESPONSIBILITY AND AUTHORITY

Manufacturing and/or maintenance personnel are responsible for completing the weekly and monthly preventive maintenance in accordance with this procedure.

Maintenance personnel are responsible to complete and/or coordinate yearly preventive maintenance, conduct equipment repairs, and maintain preventive maintenance records in accordance with this procedure.

General Managers are responsible for oversight and approval of maintenance repairs and prioritization of annual preventive maintenance.

Programming and authorized manufacturing personnel are responsible for loading and saving CNC Programs.

3.0 PROCEDURAL REQUIREMENTS

PREVENTIVE MAINTENANCE

3.1 The Preventive Maintenance program is designed to extend the life of equipment, and to eliminate potential equipment failures

3.2 Preventive Maintenance for essential production equipment shall be scheduled based upon, but not limited to, manufacturer recommendations, standard practices, judgment, frequency of use, and historical data. Weekly and monthly preventive maintenance are identified on the [Weekly Preventative Maintenance Log First Half KQF 7.5.1-002a](#) and [Weekly Preventative Maintenance Log Second Half KQF 7.5.1-002b Checks](#), which are located on the applicable machines.

- Maintenance Personnel complete the weekly checks and document the results. A checkmark indicates the machine is within specification for that check; however, the coolant concentration's actual level must be recorded, if the concentration level is applicable to the process being run.
- If a non-conformance is identified, a [Maintenance Request Form, KQF 7.5.1-001](#) is filled out and provided to the Leader/Supervisor for approval and then given to the Maintenance Department.

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- Maintenance personnel are responsible for verifying that machines are in good working order by checking off each machine on the [Weekly Preventative Maintenance Log First Half KQF 7.5.1-002a](#), and [Weekly Preventative Maintenance Log Second Half KQF 7.5.1-002b](#)
- 3.3 Yearly preventive maintenance is planned and controlled by the yearly [Weekly Preventative Maintenance Log First Half KQF 7.5.1-002a](#), and [Weekly Preventative Maintenance Second Half Log KQF 7.5.1-002b](#).
- The General Manager reviews the log monthly and may re-prioritize based on subjective input. Annual preventive maintenance activities are reviewed quarterly at the monthly operations meeting.
 - Annual Preventative Maintenance is outsourced.
 - An outside contractor may be used to conduct preventive maintenance and/or equipment repairs, if this activity is conducted by a contractor, the [Purchasing Procedure, KQSPP 7-4](#) is referenced, and the contractor's checklist will be used. Maintenance personnel maintain records in accordance with the [Control of Records Procedure, KQSPP 4-024](#). If maintenance activities are subcontracted, the maintenance schedule will be provided by the subcontractors.

4.0 REPAIRS

- 4.3.1 The Maintenance Department is responsible for maintaining repair history for all equipment. These records include the date and the reported problem as a minimum. Repair procedures and/or adjustments as well as replacement parts are noted, and this repair information is used as part of the historical data used to establish PM schedules.
- 3.3.2 In the event of a crash or a repair on CNC equipment, Maintenance Personnel will call an outside repair provider.
- 3.3.2.1 Turning Centers will have the Turret, Linear Ways, Ball Screw, and Chuck Alignment verified.
- 3.3.2.2 Milling Centers will have the Turret, Linear Ways, Spindle Alignment, and all axis and indexers, if applicable, verified..
- 3.3.3 Program production equipment, grinding equipment, fixtures, tooling, and any equipment in storage assigned to manufacturing are validated for accuracy during the first piece approval process. Items requiring attention are corrected at the time a problem is determined or before they are returned to storage and re-verified when they are reissued to manufacturing. Records of preventive maintenance are maintained in accordance with the [Control of Records Procedure, KQSPP 4-024](#).

3.4 CONTROL OF NUMERICAL CONTROL

- 3.5 Inspectors perform first piece inspections to validate production equipment, tools, and programs prior to use, in accordance with the [First Piece Approval Procedure, KQSPP 8-241](#).

4.0 SUPPORTING DOCUMENTATION

- [Maintenance Request Form, KQF 7.5.1-001](#)
- [Control of Records Procedure, KQSPP 4-024](#)
- [First Piece Approval Procedure, KQSPP 8-241](#)

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- **Purchasing Procedure, KQSP 7-4**
- **KQF 7.5.1-002a Weekly Preventive Maintenance 1st Half**
- **KQF 7.5.1-00b Weekly Preventative Maintenance 2nd Half**

IDENTIFICATION AND TRACEABILITY KQSP 7-053

1.0 SCOPE AND PURPOSE

The purpose of this document is to establish the requirements, responsibilities and instructions for identification and traceability of product requirements stipulated in *ISO9001:2015 7.5.3. Identification and Traceability*.

2.0 RESPONSIBILITY AND AUTHORITY

The Customer Service Department and/or Production Control Department are responsible for assigning the appropriate numbering for identification and traceability when specified by the customer.

The Process Engineering Department is responsible for defining the identification and traceability requirements on the process traveler in accordance with the specified customer requirements.

The Quality Department is responsible for issuing and controlling quality inspection stamps and maintains records in accordance with the **Control of Records Procedure, KQSP 4-024**.

3.0 PROCEDURAL REQUIREMENTS

- 3.1 When required by the contract, the Customer Service Department and/or the Production Control Department assigns a unique number that provides traceability throughout production and delivery. This number appears on the process traveler and all sub-sequent documents in which traceability is a requirement.

Note: This unique number shall be established numerically as jobs are released through Made 2 Manage.

- 3.2 Various methods of product identification may include, but not limited to, process travelers, tags, amps, stickers, or part etching. The method used for identification may be customer dictated or deemed as an appropriate means of identification by the Process Engineering Department. Process travelers or supporting documents outline specific identification and traceability methods used for inspection purposes.
- 3.3 Operators and all other personnel handling material or parts maintain appropriate levels of identification and traceability at all stages from receipt through shipping by filling out and attaching a Work in Process (WIP) TAG to each container, part, or pallet generated (other tags may be used for this purpose). The use of a WIP TAG indicates acceptable inspection status of parts at a given stage of production.
- 3.4 The process traveler is also a suitable means of identification and/or traceability.
- 3.5 If material identification is lost it is prohibited for use. If any unsuitability, damage, or loss of customer-supplied product/property is identified the customer is notified and in both cases, the product is handled in accordance with the **Control of Nonconforming Product Procedure, KQSP 8-03**.

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- 3.6 According to the level of traceability required by contract, regulatory, or other requirement, identification is maintained throughout the product life and all products manufactured from the same batch of raw material or from the same manufacturing batch, as well as the destination of all products of the same batch.
- 3.7 When product is an assembly, the identity of the components and those of the next higher assembly are maintained.
- 3.8 When serialization is required, parts shall be marked in accordance with the customers' requirements in a sequential manner that shall not allow duplication.
- 3.9 Records of identification and traceability are maintained in accordance with the **Control of Records Procedure KQSPP 4-024.**
- 4.1 The Director of Quality maintains the inspection stamp system and issues the stamps based upon the method for which they have been certified. When applicable, requirements include but not limited to:
- 4.1.1 Inspection and NDT stamps are identifiable to the inspector who affixes the stamp.
- 4.1.2 Non-issued stamp
- 4.1.3 s shall be kept secure to prevent unauthorized use.
- 4.1.4 Stamps are audited as part of an internal audit program, in accordance with the **Internal Audit Procedure, KQSPP 8-022.**
- 4.1.5 When an inspector is re-assigned or leaves the company, the stamp number is inactive and is not reassigned for a minimum of one year.
- 4.1.6 If a stamp is lost or not returned a new number is assigned, the old number inactivated, and a note is made to the **Inspection Stamp Log KQF 7.5.3-001.**
- 4.1.7 Any employee that is found to misuse stamps (unauthorized use, approving product without completing inspection requirements, etc.) the employee is subject to disciplinary action.
- 4.1.8 Records are maintained to identify individuals with specific stamps on the **Inspection Stamp Log KQF 7.5.3-001.**

Note: Authorized personnel may initial and date where a stamp is required if they do not have their stamp available, initials and signatures are checked.

5.0 SUPPORTING DOCUMENTATION / FORMS

- **Nonconforming Product Procedure, KQSPP 8-03**
- **Control of Records Procedure, KQSPP, 4-024**
- **Internal Audit Procedure, KQSPP 8-022**
- **Inspection Stamp Log, KQF-10-4**

CUSTOMER PROPERTY KQSPP 7-054

1.0 SCOPE AND PURPOSE

The purpose of this document is to establish the requirements, responsibilities, and instructions for the control of external property provided for use or incorporated into the product in accordance with ISO9001:2015 7.5.4 *Customer Property Belonging and Property of External Providers.*

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2.0 RESPONSIBILITY AND AUTHORITY

The Quality Department is responsible for ensuring that all externally owned measurement equipment is identified, verified, protected, and safeguarded. The Quality Department is also responsible for contacting the customer if any property is lost, damaged or otherwise unsuitable for use and to maintain the records in accordance with the [**Control of Records Procedure, KQSPP 4-024**](#).

Manufacturing Engineering is responsible to ensure that all returnable customer supplied material, product, and intellectual property is identified on the production floor traveler.

The Purchasing Department is responsible for ensuring that all vendor owned equipment is maintained, logged, and tracked.

3.0 PROCEDURAL REQUIREMENTS

Leased, Rented, or Customer Owned Measurement Equipment

- 3.1 The Quality Department visually inspects all externally owned gages and/or measurement equipment upon receipt to ensure there is no damage.
 - 3.1.1 The Quality Department reviews the shipping documentation to ensure correctness of quantity, condition, and description.
 - 3.1.2 If any deviation exists, or the item is unusable in any manner, the gages will be quarantined in a secure area, and the customer or vendor will be notified of disposition by way of a [**Nonconforming Product Report \(NPR\) KQF 8.53-003**](#).
 - 3.1.3 The Quality Department then reviews the calibration records to ensure that the equipment is within calibration (when provided). Measuring equipment received without calibration records are calibrated or verified prior to use.
 - 3.1.4 Upon acceptance, the measurement equipment information is documented in the [**Customer/ Vendor Owned Property Log KQF 7.5.4.001**](#). Additionally, it is added to Gage Trak, and is maintained in accordance with [**Control of Monitoring and Measurement Equipment, KQSPP 7-054**](#).
 - 3.1.5 Quality Assurance maintains records of externally owned measurement equipment in accordance with the [**Control of Records Procedure, KQSPP 4-024**](#). This includes shipping and receiving documentation, and NPR's.
 - 3.1.7 Upon receipt, the gages will be marked or tagged as externally owned property.
 - 3.1.7 No Customer Owned measurement equipment will be used on any other customer's parts.
 - 3.1.8 Measurement equipment will be stored in designated areas and will be secure and provided with protection from the weather. They will be signed out on the [**Gage Sign Out Log KQF 8.2.4-005**](#)
 - 3.1.9 The Customer or Vendor shall be promptly notified of any loss, theft, damage, or destruction of any externally owned measurement equipment as soon as facts become known.
- 3.2.0 Customer Owned Material/Product

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When customer owned material and/or product is received Receiving Inspection verifies the material to the shipper to the production floor traveler, the drawing and/or the purchase order.

- 3.2.1 Once the material or product is accepted Receiving Inspection stamps the receiving section of the production floor traveler and enters it into Made2Manage System as received.
- 3.2.2 Manufacturing processes the material in accordance with the production floor traveler.
- 3.2.3 Any material and/or product that is damaged or otherwise found to be unsuitable for use, Manufacturing initiates the **Control of Nonconforming Product Procedure, KQSPP 8-03.**
- 3.2.4 Customer property including intellectual, and personnel data is controlled; returnable items are identified on the job traveler.

Note: If any customer property is lost, damaged, or otherwise found to be unsuitable for use as received or during manufacture, the Quality Assurance Department is notified and contacts the customer.

- 3.3 Vendor owned equipment such as copy machines, vending machines, coffee machines, postage meters, etc. Will be managed by the Purchasing Manager.
 - 3.3.1 Equipment will be stored in acceptable points of use that will protect it from the weather and damage.
 - 3.3.2 Equipment will be logged into the **Customer/Vendor Owned Equipment Log KQF 7.5.4-001**
 - 3.3.3 All maintenance and replacement will be coordinated through the Purchasing Manager.
 - 3.3.4 In the event that any vendor owned equipment is lost, damaged, or found to be unsuitable for use, the Purchasing department will be notified to contact the vendor.

4.0 SUPPORTING DOCUMENTATION / FORMS

- **Control of Nonconforming Product Procedure, KQSPP 8-03**
- **Control of Records Procedure, KQSPP 4-024**
- **Control of Monitoring and Measurement Equipment, KQSPP 7-054**
- **Gage Sign Out Log KQF 8.2.4-005**
- **Customer / Vendor Owned Equipment Log KQF 7.5.4-001**

PRESERVATION OF PRODUCT KQSPP 7.055

1.0 SCOPE AND PURPOSE

The purpose of this document is to establish the requirements, responsibilities and instructions for shelf-life control and stock rotation for products with expiration dates purchased by KMD.

2.0 RESPONSIBILITY AND AUTHORITY

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It is the responsibility of the receiving personnel to notify the quality department when incoming products have expiration dates.

It is the responsibility of the quality department to control the product in the calibration system and notify manufacturing when those items are ready to expire and be replaced.

3.0 PROCEDURAL REQUIREMENTS

- Upon receipt of the product, receiving inspection personnel notifies the quality department that items have been purchased with expiration dates.
- The quality department enters the product into the calibration system and labels the item with a unique identification number and expiration date.
- The quality department shall review the calibration system monthly for expiration status.
- Expired items are taken to the appropriate personnel for proper disposal and removed from the calibration system.

4.0 SUPPORTING DOCUMENTATION, / FORMS

- [**KQF 7.5.3-003 Shelf Life & Sign Out Log**](#)

CONTROL OF MONITORING & MEASUREMENT EQUIPMENT KQSP 7-06

1.0 SCOPE AND PURPOSE

The purpose of this document is to establish the requirements, responsibilities, and instructions for the calibration of measurement equipment, prior to use, which is used to monitor, verify, and accept products in accordance with ISO9001:2015 7.6. *Calibration Records*.

2.0 RESPONSIBILITY AND AUTHORITY

All KMD employees are responsible to verify that there is calibration identification available on measurement equipment and that it is in calibration prior to use. Also, to report any damaged or out of calibration equipment to the Quality Assurance Department.

The Quality Assurance Department is responsible for controlling, monitoring, and calibrating measurement equipment in accordance with this procedure and any applicable work instructions

The Purchasing Department is responsible for utilizing calibration suppliers to ensure that they have a quality system that is compliant to or accredited to ISO9001:2015. Calibration requirements must be flowed down for all related equipment.

3.0 PROCEDURAL REQUIREMENTS

- 3.1 Monitoring and measurement devices are entered into a gage tracking software using the following information:
 - a. Given a unique identification number.

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- b. Equipment type.
 - c. Location stored.
 - d. Frequency of checks.
 - e. Method of check.
 - f. Acceptance criteria (documented in the work instructions).
 - g. Historical records of past calibration results.
- 3.2 Established specific calibration work instructions are used to ensure that the calibration of monitoring and measurements are carried out in a manner that is consistent and meet customer requirement of the product.
- a. Measurement equipment is used in the prescribed manner by the manufacturer
 - b. Training in the use of equipment is conducted as required and the records are maintained in accordance with the **Control of Records Procedure, KQSPP 4-024.**
 - c. Internal and external calibration frequencies are established by the manufacturer's recommendations, the amount of use and historical information.
 - d. The auto adjust calibration frequency feature in the Gage Trak software is as the calibration interval analysis methodology to achieve the 95% minimum reliability target to M&TE in-tolerance at the end of the interval schedule.
- 3.3 Environmental conditions are maintained for calibrations, inspections, measurements, and test being carried out on equipment which includes, where applicable:
1. Temperature
 2. Lighting
 3. Humidity
 4. Air pressure
 5. Power condition.
- 3.4 The calibration system provides for the following requirements:
- Calibrated at specified intervals.
 - If calibration falls overdue then personnel has 7days to fulfill the calibration requirements
 - Specific calibration work instructions.
 - Measurement standards traceable to national or international standards. *Where no such standards exist, the basis for calibration is recorded.*
 - Adjusted or re-adjusted by qualified personnel.
 - Calibration status is readily identifiable from the calibration label or tool list for personal equipment.
 - Safeguarded to the extent possible to prevent adjustments that invalidate the measurement results.
 - Protected from damage and deterioration during handling, maintenance, and storage.
 - Generated reports to determine when calibration is required.

Note: Items such as 1/2/3 blocks, v-blocks, scales, tape measures, etc. are not used to verify product conformance and are used for reference only.

Any employee-owned equipment that is used to verify conformance to the requirements is required to be included in the calibration system.

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- 3.5 If any equipment cannot be calibrated in house a third-party supplier may be used under the following requirements:
- Supplier is on the [Approved Supplier List](#).
 - Supplier has a quality system that is compliant to or accredited to ISO9001:2015.
- 3.6 If measurement equipment is identified as nonconforming through calibration activities the following occurs:
- The equipment is identified.
 - The nature of the nonconformance is documented. The [Out of Tolerance Condition Form, KQF 7.6-002](#) is utilized to document the nonconformance and determine if the nonconformance has adversely affected customer product. If necessary, the customer is notified within 24 hours of any escape.
 - The equipment is re-adjusted, repaired or replaced and documented in the gage tracking software.
 - The calibration frequencies may be reduced on equipment found out of tolerance or routinely adjusted to monitor the gage more closely

4.0 SUPPORTING DOCUMENTATION, I FORMS

[Out of Tolerance Condition Form, KQF 7.6-002](#)
[Control of Records Procedure, KQSPP 4-024](#)
[Approved Supplier List](#).

MEASUREMENT ANALYSIS KQSPP 8-01

1.0 SCOPE AND PURPOSE

The purpose of this document is to establish the responsibilities, requirements, and instructions for measurement analysis to ensure that all customer specific requirements are met during production in accordance with ISO9001-2015 *8.1 Measurement, Analysis, and Improvement*.

2.0 RESPONSIBILITY AND AUTHORITY

When required by the customer, the Processing Department is responsible for identifying all customer specific analysis requirements in the Production Floor Traveler (work instruction).

Shift Supervisors or General Managers are responsible for ensuring that the Production Floor Traveler is available to production personnel and production is carried out under controlled conditions.

The Human Resources Department is responsible for ensuring that all personnel conducting the various methods of Measurement Analysis are appropriately instructed in the techniques they are performing.

The Quality Department is responsible for ensuring that all personnel are using the required forms specified by the customer and how to access them.

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The Quality Department and Production Personnel are responsible for performing measurement analysis per specified requirements and ensure the records are maintained in accordance with the [Control of Records Procedure, KQSPP 4-024](#).

Note: Measurement Analysis is performed when required by the customer. Forms, Methods, Frequencies and Values shall be adjusted to meet customer specific requirements.

3.0 PROCEDURAL REQUIREMENTS

- 3.1 The Analysis Requirements are planned by the Customer Service, Processing, Production Control, Quality and Programming Departments through purchase order review. Customer specific requirements shall be clearly stated within the Production Floor Travelers (work instructions).
- 3.2 The Quality Department performs Measurement Analysis of gages and products as specified on the purchase order, print or production floor traveler. Documentation is maintained in accordance with the [Control of Records Procedure, KQSPP 4-024](#).
 - 3.2.1 Quality Department personnel shall develop Control Plans per the format specified by the customer and identify all applicable *Key Product Characteristic* requirements (KPC's). Quality Department personnel shall develop a *Process Failure Mode and Effects Analysis* (PFMEA) as required by the customer. *Failure modes* are any errors or defects in a process, design, or item, especially those that affect the customer, and can be potential or actual. *Effects analysis* refers to studying the consequences of those failures. Quality Department personnel shall perform Gage Capability Studies for any gage used to measure a KPC feature. Gages are required to achieve a result of 20% or less of the total engineering tolerance and a gage resolution of no more than 10% of the total feature tolerance. If a result greater than 20% occurs, an evaluation will be conducted to determine if the cause was the instrument used or the methodical differences between operators. Quality and Production personnel shall perform *Statistical Process Control* (SPC) for each KPC identified by the drawing, customer, or specification. The number of data entry points (subgroups) will be determined by the customer or the Quality Manager, ensuring an accurate *Process Capability index* (CPK). Processes will be considered acceptable for values equal to or greater than 1.33. Quality and Production personnel are required to notify the appropriate manager or supervisor for values less than 1.33 and if any point or subgroup exceeds the upper or lower control limits. The [Control of Nonconforming Product Procedure, KQSPP 8-03](#) is initiated for any dimension or process found out of tolerance during this study.
- 3.3 The Quality Manager may make changes to inspection methods and/or sample size based upon customer requirements and/or previous internal and/or external defects. Any additional requirements shall be included in the applicable inspection operation on the process traveler.
 - 3.3.1 When specified by the customer purchase order/quality requirements or deemed necessary by the Quality Manager for any internal conditions, 100% inspection shall be performed and documented.

4.0 SUPPORTING DOCUMENTATION / FORMS

- [Control of Nonconforming Product Procedure, KQSPP 8-03](#)
- [Control of Records Procedure, KQSPP 4-024](#)

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INTERNAL AUDITING KQSPP 8-022

1.0 SCOPE AND PURPOSE

The quality system described in this section of the KQSPP addresses the requirements stipulated in ISO9001:2015 8.2.2, *Internal Audits*. The requirements stated herein cover KMD methods for internal auditing.

2.0 RESPONSIBILITY AND AUTHORITY

The Responsibility and authority for carrying out of quality management system activities related to this procedure are assigned to the QA Department. All employees have the responsibility to complete quality activities in support of the quality policy, quality system documentation and customer requirements.

3.0 PROCEDURAL REQUIREMENTS

An internal audit is a systematic and independent examination to determine whether quality activities and related results comply with planned arrangements and whether these arrangements are implemented effectively and are suitable to achieve results

- 3.1 The QA Department ensures internal audits are conducted to determine that the KQMS Conforms to the requirements of ISO, KMD's established (documented and undocumented) KQMS, applicable statutory and regulatory requirements, customer requirements, and any other requirements to which KMD subscribes, and is effectively implemented and maintained.
 - 3.1.1 Third party companies may be contracted to conduct internal audits, where appropriate. When this is necessary, a substitute audit report, checklist and corrective action reports may be utilized if it is comparable to the internal documentation that is utilized by KMD.
 - 3.1.2 Layered audit KQPM 8-023 is immediately followed when a job order shows "high risk" according to [Risk Management KQSPP 7-012](#) and using the [Job Order Checklist KQF 7.1-003](#).
 - 3.1.3 Layered audit can be issued at any time and is not solely based on high-risk jobs.
- 3.2 The QA Department is responsible for coordination and scheduling of internal audits.
 - 3.2.1 Scheduling is reflected in the Audit Plan and is based on status and importance. The QA Department uses prior audit results, customer complaints, corrective action from past audits, and management reviews to determine status and importance. At a minimum, the entire KQSPP goes through a complete internal audit once per year.
 - 3.2.2 The QA Department ensures that auditors are independent of the area(s) audited. Auditors are selected, trained, and evaluated according to ISO9001:2015 guidelines.
 - 3.2.3 Auditors may be selected from independent consultation firms. The QA Department selects auditors based on credentials noted in paragraph 3.2.2 above.
- 3.3 Audit planning and methods include the following:
 - 3.3.1 Internal Auditor(s) or the MR notifies the manager of a specific area or department of

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the intent to audit prior to the desired date.

- 3.3 Internal Auditor conducts the audit in line with the [KQF 8.2.2 Audit Plan](#) or 3rd party provided layout.
- 3.3.2 The audit is conducted utilizing an audit working document, including the ISO standard (audit criteria).
- 3.3.3 An observed nonconformity is recorded on an [Audit Corrective Action Report \(ACAR, KQF-8.5.2-001\)](#).
- 3.3.4 Outside consultants/auditors may use their own check-sheets and/or corrective action forms (i.e., NCRs) to document audit results/findings.
- 3.3.5 The manager of a specific area or department, in consultation as necessary with appropriate staff, is responsible for investigating (root) cause and determining corrective actions needed, and determining an implementation date, as described in [KQSPP 8-052 \(Corrective Action Procedure\)](#). Audit observations may initiate other continuous improvement (e.g., preventive actions) activities.
- 3.4 The QA Department completes corrective action follow-ups. Follow-ups verify that the corrective action was implemented and effective as described in [KQSPP 8-052 Corrective Action Procedure](#)

Targeted or special/focused audits may be conducted in a less formal fashion than internal audits. These audits emphasize ISO section(s) or other requirements identified as areas of concern during prior audits, management review meetings and other sources of information.

The QA Department maintains all records of audits and presents them as an integral part of management reviews.

4.0 SUPPORTING DOCUMENTATION

- [KQSPP 8-052 Corrective Action Procedure](#)
- [KQSPP 8-053 Preventive Action Procedure](#)
- [Final Audit Report \(3rd Party\)](#)
- [Internal Audit Plan KQF 8.2.2-002](#)
- [Internal Audit Questionnaire KQF 8.2.2-003](#)
- [ISO9001:2015 Quality Management Systems-Requirements](#)

MONITORING AND MEASUREMENT OF PROCESSES (INSPECTION AND TEST) KQSPP 8-023

1.0 SCOPE AND PURPOSE

The purpose of this document is to establish the requirements, responsibilities and instructions for monitoring and measurement of processes to ensure that all customer specifications and requirements are met during production in accordance with ISO9001-2015 *8.3 Monitoring and Measurement of Processes*.

2.0 RESPONSIBILITY AND AUTHORITY

All KMD personnel are responsible to initiate the [Control of Nonconforming Product Procedure, KQSPP 8-03](#) process when product does not meet the specifications.

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Manufacturing personnel are responsible for performing process inspection of product and document the results on the specific ***In-Process Inspection Report, KQF 8.2.4-001*** as required by the production floor traveler, drawing and documented procedures.

The Quality Department is responsible for verifying that all in process inspections are performed and maintain the records of the results in accordance with the ***Control of Records Procedure, KQSPP 4-02***

3.0 PROCEDURAL REQUIREMENTS

Once the ***First Piece Approval Process KQSPP 8-241*** has been completed and Quality Assurance has given approval, Manufacturing continues production according to the production floor traveler.

- 3.1 The process is verified by Manufacturing Personnel by conducting in process inspections in accordance with the drawing, production floor traveler and the ***In-Process Inspection Report, KQF 8.2.4-001*** for the specific part number being produced.

Note: Statistical process control (SPC) is utilized when required by the customer or when identified by the Quality Department.

- 3.1 The sample size (at a minimum is one piece per shift), unless the machine needed an adjustment or has been down for more than 4 hours this would require another first piece validation. The number of characteristics measured are documented on the production floor traveler and/or the ***In-Process Inspection Report, KQF 8.2.4-001*** which is based on the following:
 - 3.2.1 The contract requirements.
 - 3.2.2 The volume of parts in the order.
 - 3.2.3 The stability of the process.
 - 3.2.3 The complexity of the product.
 - 3.2.5 The historical data of the internal and external issues.
- 3.3 During the production process, the product is inspected, and results documented to all specifications and requirements related to the current process and any previous operations that may affect the current process.
 - 3.3.1 If any feature fails to meet the specifications and/or requirements during the in-process inspection manufacturing initiates the ***Control of Nonconforming Product Procedure, KQSPP 8-03.***
- 3.4 Quality Assurance periodically reviews **and signs** the in-process inspections and maintains the in-process inspection results in accordance with the ***Control of Records Procedure, KQSPP 4-024***
- 3.4 If the facility has moved, or equipment is moved to another facility, it is required that the customer is notified to determine if there is a need for re-qualification.
- 3.5 Once production is completed Quality Assurance verifies the product in accordance with the ***Monitoring and Measurement of Product Procedure, KQSPP 8-024.***

4.0 SUPPORTING DOCUMENTATION / FORMS

- ***Control of Nonconforming Product Procedure, KQSPP 8-03***
- ***Control of Records Procedure, KQSPP 4-024***

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- **Monitoring and Measurement of Product Procedure, KQSPP 8-024**
- **In-Process Inspection Report, KQF 8.2.4-001**
- **First Piece Approval Process, KQSPP 8-241**

MONITORING AND MEASUREMENT OF PRODUCT KQSPP 8-024

1.0 SCOPE AND PURPOSE

The purpose of this document is to establish the requirements, responsibilities and instructions for monitoring and measurement of product to ensure that all customer specifications and requirements are met in accordance with ISO9001:2015 *8.2.4 Inspection and Measurement of Product*.

2.0 RESPONSIBILITY AND AUTHORITY

Process Engineering personnel are responsible for identifying the inspection requirements for each operation.

Manufacturing personnel are responsible for supplying the first piece parts in accordance with the print specifications and unless authorized, to postpone the production run until the first piece inspection has been completed and approved. Also, to not change the process after first piece approval has been granted unless the **Control of Production Procedure, KQSPP 7-051 section 5.0** has been followed.

The Quality Department is responsible to verify all applicable characteristics, document the results in the appropriate format, to communicate the results to manufacturing and maintain the records in accordance with the **Control of Records Procedure, KQSPP 4-024**.

General Supervisors/Managers are authorized to permit the production run to continue while awaiting 1st Piece Approval, or waive the approval, but only under special circumstances outlined in this procedure.

3.0 PROCEDURAL REQUIREMENTS

- 3.1 Process Engineering identifies the first piece approval inspection requirement on the production floor traveler and releases the job to Manufacturing with the **InProcess Inspection Report KQF 10-2**

3.1.1 First time builds will be provided blank In-Process Inspection Report and manufacturing personnel are responsible to fill in the inspection requirements for that operation based on the production floor traveler and any modifications made during development of the program and process.

3.1.2 Repeat builds will be provided a set In-Process Inspection Report based on the frozen approved process. Any changes to the process must follow the **Control of Production Procedure KQSPP 7-51, Section 5.0 Control of Production Process Changes**. In that case, a blank In Process Inspection Report will be utilized if needed.

3.1.3 Note: the form utilized for first piece inspection may vary due to product complexity and/or time constraints, however, all print characteristics must be verified.

- 3.2 First piece inspection is required when there is:

- a. A change of machine center.
- b. An engineering or manufacturing process change.
- c. The tooling or fixtures have changed.
- d. A major nonconformance is identified during production and/or any inspection.
- e. Any specification change that affects the part, machine, or process.

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- 3.3 Manufacturing processes the first part according to the job traveler and the print.
- 3.4 Manufacturing personnel then place the first part, the print, the production floor traveler, and the **In-Process Inspection Report KQF 8.2.4-001** on the first piece inspection rack and stop production pending the results of quality personnel's inspection results and feedback. Based on the complexity of the operation, the ability of the operator, and the backlog in the Inspection Department, General/Shift supervisors are authorized to permit manufacturing personnel to continue processing parts while awaiting First Piece Approval; however, the parts may not move on to the next operation until First Piece has been stamped off. The Supervisor must initial and date the floor traveler and In Process Inspection Report before the operator can continue production.

Once the First Piece is approved, the inspector must still stamp both the traveler and the In-Process Inspection Report prior to the parts being able to move on to the next operation. Additionally, if the 1st Piece does not conform to print and/or job traveler requirements, all parts that were processed while awaiting approval must be 100% inspected and reworked if needed.

If there are multiple lots running consecutively, without any tear down of the set up (fixtures, tooling, etc.), then 1st Piece Approval only needs to be submitted on the first part of the first job order ran, it does not need to be approved for subsequent job orders (lots).

The production traveler and the In-Process Inspection Report for the subsequent job orders will have a reference to the first job orders' lot number in place of a stamp (e.g., See IABCD-0000), along with a supervisor's initials and date.

Personnel that are identified on the **Inspection Stamp Log KQF 7.5.3-001** are authorized to approve product. If the parts meet the specified requirements, quality personnel communicate to manufacturing that they are authorized to continue with production by stamping off on the inspection report **In-Process Inspection Report KQF 8.2.4-001** and the production traveler.

If the part does not conform to the requirements, quality personnel communicates the results to manufacturing and the first piece is modified or re-produced to meet the specifications and re-verified.

- 3.5 Records of the first piece inspection results are maintained in accordance with the **Control of Records Procedure, KQSPP 4-024**.

4.0 SUPPORTING DOCUMENTATION

- **Process Change Request Form, KQF-7.5.2-001**
- **In-Process Inspection Report KQF 8.2.4-001**
- **First Piece Approval Procedure, KQSPP 8-241**
- **First Article Inspection Procedure, KQSPP 8-242**
- **Control of Production Equipment Procedure, KQSPP 7-513**
- **Control of Nonconforming Product Procedure, KQSPP 8-03**
- **Identification and Traceability Procedure, KQSPP 7-053**
- **Purchasing Procedure, KQSPP 7-4.**
- **Control of Records Procedure, KQSPP 4-024**
- **Control of Documents Procedure, KQSPP 4-023**

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LAYERED AUDITS KQSP 8-053

1.0 SCOPE AND PURPOSE

The purpose of this procedure is to define the process for performing and documenting layered audits. The purpose of performing layered audits is to a) verify compliance to the documented manufacturing/assembly process to assure the production system is working optimally, b) involve various levels of management in the audit process, c) remove roadblocks to correcting potential issues which are identified by the audit and d) lead to standardized work practices.

2.0 RESPONSIBILITY AND AUTHORITY

It is the responsibility of the Director of Operations (Manufacturing) to ensure that resources exist to carry out the requirements listed in this procedure. It is recommended that General Quality personnel provide on-the-job training as required to personnel who will be conducting these audits (i.e., walk the process using the audit checklist as a guide).

It is the responsibility of the General Manager to ensure that the audits are conducted as prescribed in the procedure.

3.0 PROCEDURAL REQUIREMENTS

This process is designed to allow for various levels of General leadership to assess adherence to procedures, work instructions, control plans, etc. and correct non-conformances on a real time basis. Layered audits may also be conducted to verify compliance to other specific DBS or Customer/regulatory requirements (e.g., PFMEA audits, control plan audits, production part approval compliance audits, and preventive maintenance audits).

Various layers of management shall conduct the Layered Audit:

Operations Supervisor – The Operations Supervisor shall audit a specific process operation, line, or cell once per month.

Middle Management – Middle management (e.g., General Supervisor) will select at random and audit one line, cell, or department at a minimum of once per quarter. Middle management will also ensure that checklists are being completed by the operations supervisor and that open issues are closed.

The General Manager and/or General Manager's Staff will audit one line, cell, or department at a minimum of once per year. General Manager will also assure that checklists are being completed by the middle management and open items are being close

3.1 CONTROL OF EXTERNAL DOCUMENTS

4.10 The QA Department is responsible for ensuring that any pertinent documents of an external nature is identified by the following means:

4.11 The General Manager and/or designee receive all customer-supplied drawings for initial

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- review, including any change notices.
- 4.12 Drawings are maintained in Master Print Folders and identified according to part number.
- 4.12.1 Customer drawings are controlled by the QA Department who have the responsibility for ensuring that the most current revisions are being implemented. The General Manager and/or a designated person are responsible for distributing drawings to appropriate personnel.
- 4.13 In the event when customer(s) invoke certain supportive documents and/or drawings (i.e., material/military/processing specifications) as guidance for product conformity, the General-Manager and/or designee are responsible for ensuring that the latest *specified* contract revisions are used during production.
- 4.13.1 Specified contract revisions may not necessarily represent the latest versions because contracts may call out various revision levels depending on the scope of work.
- 4.13.2 Relevant versions of these documents are maintained and distributed on an as-need basis by the General Manager and/or designee.
- 4.14 The General Manager and/or designee are responsible for accessing intranet sites and maintaining the latest updates of government and regulatory agency standards.

5.0 SUPPORTING DOCUMENTATION

- **Control of Quality Records Procedure KQSPP 4-024**
- **Master List of Documents KQF 4-002**

CONTROL OF NONCONFORMING PRODUCT KQSPP 8-03

1.0 SCOPE AND PURPOSE

The Quality System described in this section of the KQSPP addresses the requirements stipulated in ISO 9001:2015 - Element 8.3, Control of Nonconforming Product. The requirements stated herein cover KMD methods for controlling nonconforming products.

2.0 RESPONSIBILITY AND AUTHORITY

All employees are responsible and authorized to stop manufacturing, identify, and segregate products when a suspect product is discovered or identified and notify the Quality Department and/or their supervisor. All employees may also initiate the **Corrective Action Procedure, KQSPP 8-052.**

The Manufacturing Shift Leaders and Quality Assurance personnel are responsible for ensuring that nonconforming products are identified and segregated in the suspect material area.

The General Manager and/or Project Manager are responsible for notifying the customer when suspect product is detected.

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The General Manager and Quality department are authorized by customers to rework non-conforming product. Written rework instruction to be approved and signed by the customer

The General Manager and/or Quality Department are responsible and authorized to dispose of suspected product in accordance with this procedure.

3.0 PROCEDURAL REQUIREMENTS

- 3.1 KMD employees identify suspect/nonconforming products and notify authorized leaders for further disposition.
- 3.2 Parts determined to be suspect are identified and moved to designated area and maintained there until further disposition.
- 3.3 Dispositions may include:
 - a) Taking action to eliminate the detected nonconformity (i.e., reworking the product).
 - b) Dispositions of use-as-is or acceptance under concession is not authorized without a deviation that is approved by a relevant authority and/or the customer.
 - c) Taking action to preclude its original intended use or application, which applies to the product only. A **KMD Suspect Tag 8.2.4-012** is affixed to the part/s until they are disposed of, as required.

Note: In the event that the appropriate part tag is not available an alternative tag may be used as long as the required information is noted on the tag.

- 3.4 The Quality Department ensures that product that does not conform to requirements is positively identified to prevent its unintended use or delivery. Methods of identification may include labels, tags, signs, and/or other means.
- 3.5 All nonconforming products are entered into the **KQF 8.3-004 Nonconforming Product Report Log** which is used to track the number of discrepant parts. Disposition of the nonconforming products is completed with the written approval of, at a minimum, one member of the Quality Department and/or the customer.
- 3.6 Parts awaiting disposition are identified, segregated, and placed in designated areas.
- 3.7 Records of any subsequent actions taken are maintained on the Corrective Action Log.
- 3.8 If corrective action is required or deemed necessary, the **Corrective Action Procedure, KQSPP 8-052** is initiated.
- 3.9 The **Corrective Action Report QF 8.5.2d** acts as the record of disposition and include any subsequent actions taken to correct the nonconformance, including concessions obtained.
- 3.10 When nonconformities are corrected, they are re-inspected to ensure conformity to requirements. When required, re-inspection records are maintained in accordance with the **Control of Records Procedure, KQSPP 4-024.**
- 3.11 When a nonconforming product is detected after delivery, the General Manager and/or Project Manager are responsible for notifying the customer.
- 3.12 Records of nonconforming products are maintained in accordance with the **Control of Records Procedure, KQSPP 4-024.**

4.0 SUPPORTING DOCUMENTATION

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- [Corrective Action Procedure, KQSPP 8-052](#)
- [Control of Records Procedure, KQSPP 4-024](#)
- [KMD Suspect Tag KQF 8.2.4-012](#)
- [Nonconforming Product Report Log KQF 8.3-001](#)
- [Corrective Action Report KQF 8.5.2d](#)

CORRECTIVE ACTION KQSPP 8-052

1.0 SCOPE AND PURPOSE

This procedure defines the method for problem resolution and tracking of corrective actions for product, process, and system concerns. The quality system described in this section of the KQSPP addresses the requirements stipulated in ISO 9001:2015 8.5.2 *Corrective Action*. The requirements stated herein cover all KMD methods for corrective action.

2.0 RESPONSIBILITY AND AUTHORITY

All employees are responsible and authorized to initiate corrective action when an internal or external issue is discovered or identified by notifying the Quality Department.

The QA Department and/or Purchasing Department (at HQ) are responsible for communicating with suppliers to ensure that the [Nonconforming Product Report \(NPR\) KQF 8.3-003](#) is completed in a timely manner to track supplier performance.

The General Manager and/or Quality Manager are responsible for receiving customer calls and subsequently forward this information to the appropriate department(s) to initiate corrective action. Personnel are responsible for maintaining the appropriate [CAR-Containment Log KQF 8.5.2-001e](#) and the [Nonconforming Product Report \(NPR\) KQF 8.3-003](#). The QA Department is responsible for leading the corrective action process. This Department is also responsible for reviewing all applicable corrective actions, providing guidance to personnel for any needed improvements, and should target closure within 30 days of the date the concern was identified, whenever feasible. Customer specific requirements may indicate the need for earlier closure. Special circumstances may require closures to be later than 30 days, such as:

- Nonconforming part(s) not available or returned from customer.
- No parts in inventory to evaluate during a stock sweep.
- Engineering changes.
- Tool modifications.
- Late customer approval.
- Supplier reaction timing.

3.0 PROCEDURAL REQUIREMENTS

- 3.1 Internal defects are documented, and the product is identified and segregated in accordance with the [Nonconforming Product Procedure \(KQSPP 8-03\)](#).
- 3.2 When it is a supplier issue, the Quality and/or Purchasing Department flows down a [Nonconforming Product Report – NPR – \(KQF 8.3-003\)](#) immediately to responsible supplier(s).
- 3.3 Internal and external quality system audit finding corrective actions are identified in accordance with the [Internal Audit Procedure \(KQSPP 8-022\)](#).

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- 3.4 Whenever there is a failure to meet product specifications, a failure in executing an established instruction or any other system nonconformity, including customer complaints and supplier issues, and the Quality Department determines that corrective action is required, the corrective action needed to be taken is recorded on the [Corrective Action Report KQF 8.5.2d](#) for recording nonconforming conditions.
- 3.5 CARs are forwarded to the QA Department, who determine, with appropriate input from other personnel, (root) cause of the problem, corrective actions, provide objective evidence and follow up activities. The results of this investigation are recorded on the CAR.
- 3.6 The status of corrective actions is identified and maintained in the appropriate [CAR-Containment Log KQF 8.5.2-001e](#). In order to ensure that corrective action is taken and that it is effective, corrective actions are included for follow-up during internal quality audits, and/or other means, as deemed appropriate by the QA Department.
- 3.6 After the implementation and effectiveness of corrective action has been verified, a representative from the QA Department dates and signs the CAR and/or NPR and closes out the corrective action.
- 3.7 Representative(s) from the QA Department presents relevant information on corrective action at the Management Review Meeting.
- 3.7.1 Corrective Action records are maintained in accordance with the [Control of Records Procedure KQSPP4-024](#)

4.0 SUPPORTING DOCUMENTATION / FORMS

- [Control of Records Procedure KQSPP 4-024](#)
- [Internal Audit Procedure KQSPP 8-022](#)
- [Nonconforming Product Procedure KQSPP 8-03](#)
- [CAR-Containment Log KQF 8.5.2-004](#)
- [Nonconforming Product Report \(NPR\) KQF 8.3-004](#)
- [Corrective Action Report Form \(CAR\) KQF 8.5.2d](#)