

# **KEMET**

a **YAGEO** company

## Quality Manual

KEMET Electronics Corporation is a leading global supplier of electronic components. We offer our customers the broadest selection of capacitor technologies in the industry, along with an expanding range of electromechanical devices, electromagnetic compatibility solutions and supercapacitors. Our vision is to be the preferred supplier of electronic component solutions for customers demanding the highest standards of quality, delivery, and service.

*This English version of the KEMET Quality Manual prevails over other translations.*

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# I. OVERVIEW AND ORGANIZATION

## A. KEMET's Scope and Context

KEMET Electronics Corporation (KEMET) is a leading global supplier of electronic components. We offer our customers the broadest selection of capacitor technologies in the industry, along with an expanding range of electromechanical devices, electromagnetic compatibility solutions and supercapacitors. Our vision is to be the preferred supplier of electronic component solutions for customers demanding the highest standards of quality, delivery, and service.

The Quality Management System (QMS) described in this manual aligns with the requirements of ISO 9001, IATF 16949, and AS9100 international standards. All manufacturing plants are required to meet ISO 9001 requirements. Plants not registered to IATF 16949 or AS9100 may not meet all the requirements specific to those standards as stated in this Quality Manual.



*Évora, Portugal*



*Simpsonville, USA*

## B. Internal and External Issues

Internal Issues	External Issues
Technology (R&D, New Product Development)	Customer Needs and Competitor Analysis
Raw Material Needs	Global Supply Chain
Employee Needs	Government Compliance (DHEC, EPA, OSHA)
Training	
Safe Work Environment	
Employee Empowerment	
Infrastructure (Equipment, Facilities, Computers, Software)	
Revise Internal Systems to Meet Revised Standards	Revised ISO 9001, ISO 14001, IATF 16949, AS9100 Standards
Revenue and Profitability	Global Economy
Internal Communication	External Communication (Media and Marketing)

## C. Interested Parties

Interested Party	Need	Expectation
Customers	Electronic Components	Product Quality, On-Time Delivery, Fair Prices, Conformity to Standards (ISO, IATF, etc.)
Shareholders	Profit	Sustained Profits, Transparency
Employees and Temporary Workers	Employment, Training, Necessary Tools	Safe Work Environment, Ethical Behavior, Recognition
Suppliers	Payment, New Contracts, Necessary Specifications	Mutual Benefits, Fair Price of Supplied Products, Guidelines, Ethics
Community	Protection of the Environment, Good Neighbor	Statutory and Regulatory Compliance, Ethical Behavior
Competitors	Fair Practices	Ethical, Fair Trade

## D. Guiding Principles

KEMET's approach to Total Quality Management is a systematic process of continuous quality improvement, based on the following guiding principles:

### 1. Mission

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*Empowering the Future with Innovative Component Solutions*

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### 2. Values

- **Customer Focused**

***Relentless commitment to our customers and partners.***

Our customers and partners are the reason for our business success. At all times and around the world, we are committed to listening and responding positively to their needs, solving problems proactively and quickly, and not stopping until we provide solutions. We are located where our customers are and have a global view with local expertise. KEMET employees are representatives of YAGEO Group each time they engage with customers.

- **Agility and Speed**

***Individual and organizational responsiveness to achieve extraordinary results.***

We act with urgency to achieve effective, fast, and flexible solutions. We are committed to agility in our decision-making and planning without over-promising or under-delivering. We respond quickly to new opportunities,

remain open to change, and have the courage to change direction when needed.

- **Integrity and Trust**

***Courage to always do the right thing, no matter who is watching.***

Our reputation depends on the highest principles and standards of ethical behavior. All employees, regardless of role, have a responsibility to work with integrity and to follow our Code of Conduct. We do not state opinions as facts or act under pressure to violate established standards. We are consistent in our words and actions, and we trust and respect others. We deliver our commitments on time and with the highest quality to customers, partners, and communities where our facilities are located.

- **Collaboration and Team**

***One global team valuing diversity and inclusion.***

We perform at our best and achieve more as one YAGEO Group when we collaborate across boundaries, have a mutual commitment to support each other, and give others credit when appropriate. We accomplish this when we trust each other, encourage diversity in our workplace, value individual capabilities and contributions, and recognize that work is but one part of a full and rewarding life. We value risk-taking and view failure as an opportunity to learn.

- **Sustained Innovation**

***Leveraging our talents with ethical and sustainable material science to create breakthrough technologies.***

Innovation inspires and drives us, and our success results from our expertise in exploring new methods and ideas beyond conventional boundaries. We cultivate partnerships with ethical suppliers who support sustainable material development as part of our technology mission. We look ahead to future trends, and customer needs with a focus on sustainability.

### **3. Quality Policy and Objectives**

**KEMET's Quality Policy:**

In addition to the Quality Policy established for YAGEO Group below, KEMET commits to exceed customer expectations through operational excellence and continuous improvement.

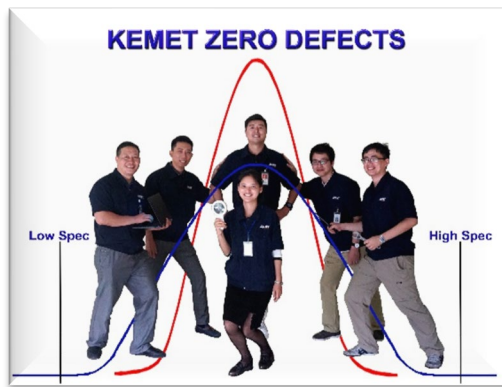
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*Quality is the foundation of the future.*

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KEMET's commitment to the guiding principles and Quality Policy is manifested through these **Quality Objectives:**

Quality Objective	Elaboration	Definition	Sample Metrics
Zero Defects	Every piece matters.	Excellence is a way of life. We strive to create an environment focused on executing standards and doing the things that matter to assure no defects reach our customer.	Complaints Trend Electrical PPM Physical PPM
Customer Satisfaction	A passion for delivering the ultimate positive customer experience.	We strive to meet or exceed all applicable requirements to assure our customers have a unique and delightful experience.	Brand Survey Market Analysis Customer Scorecards On Time Delivery
Prevention and Continuous Improvement	Connected systems and the right tools used in the right way.	To achieve our goal of perfect product, we continually improve our Quality systems, products, and processes. Research, innovation, and risk reduction drive achieving this goal.	Continuous Improvement Project Results Complaints Trend Electrical PPM Physical PPM Problem Solving Results
Quality Culture	Everybody engaged every day.	A culture of Quality means setting the example and making Quality everyone's job. Our global teams are energized by focusing on processes, measurement, and monitoring which encourages openness and innovation.	Management Reviews Quality Month (awards & contests)
People Value	Encouraging the passion, skills, and engagement of our people.	We believe that people who are focused, internally motivated, and energized by what they do spread their enthusiasm to others. We obtain great benefits from individuals who champion their ideas and from leaders who inspire us to higher levels of achievement.	% Training complete Professional Development Annual Performance Reviews
Environmental and Social Responsibility	Compliance to statutory and regulatory requirements.	We are shepherds of our local environments. We adhere to applicable statutory and regulatory requirements and consider the environment in every decision we make affecting our stakeholders and social principles at large.	One or more of the following Certification(s): ISO 14001, ISO 50001, ISO 45001, OHSAS 18001 EHS Incidents Emissions RBA Risk Assessment
Ethics and Integrity	Adherence to a code of conduct and courage to always do the right thing.	We treat each other with mutual respect and trust. Non-adherence to our code of conduct is always addressed.	Ethics Hotline Annual Performance Reviews



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Suzhou, China

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#### 4. KEMET's Facilities, Environmental, Health & Safety Policy

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*KEMET conducts its business in a manner designed to protect the health and safety of our employees, our customers, the public, and the environment.*

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- 🗑️ KEMET is committed to the protection of the environment and people, including prevention of pollution, adverse health effects, occupational hazards and risks and other specific commitment(s) relevant to the context of the organization.
- 🗑️ KEMET is committed to the protection of people and the environment in a sustainable manner to prevent climate change and maintain biodiversity and ecosystems. YAGEO Group is committed to reducing total electricity consumption by 1% year over year. We have committed to achieve net zero scope 1 and scope 2 emissions by 2050 and a decarbonization roadmap has been developed to achieve this goal.
- 🗑️ KEMET will meet or exceed its compliance obligations as well as any other requirement that may be deemed necessary for the protection of humans and the environment.
- 🗑️ KEMET is committed to continual improvement of the environmental and health and safety management systems to enhance environmental, health and safety performance.
- 🗑️ KEMET is committed to design and operate its facilities in such a manner as to eliminate recognized hazards and reduce risk to human health, safety, and the environment.
- 🗑️ KEMET is committed to consult and collaborate with employees and/or their representatives, where they exist and other stakeholders on occupational health and safety matters.



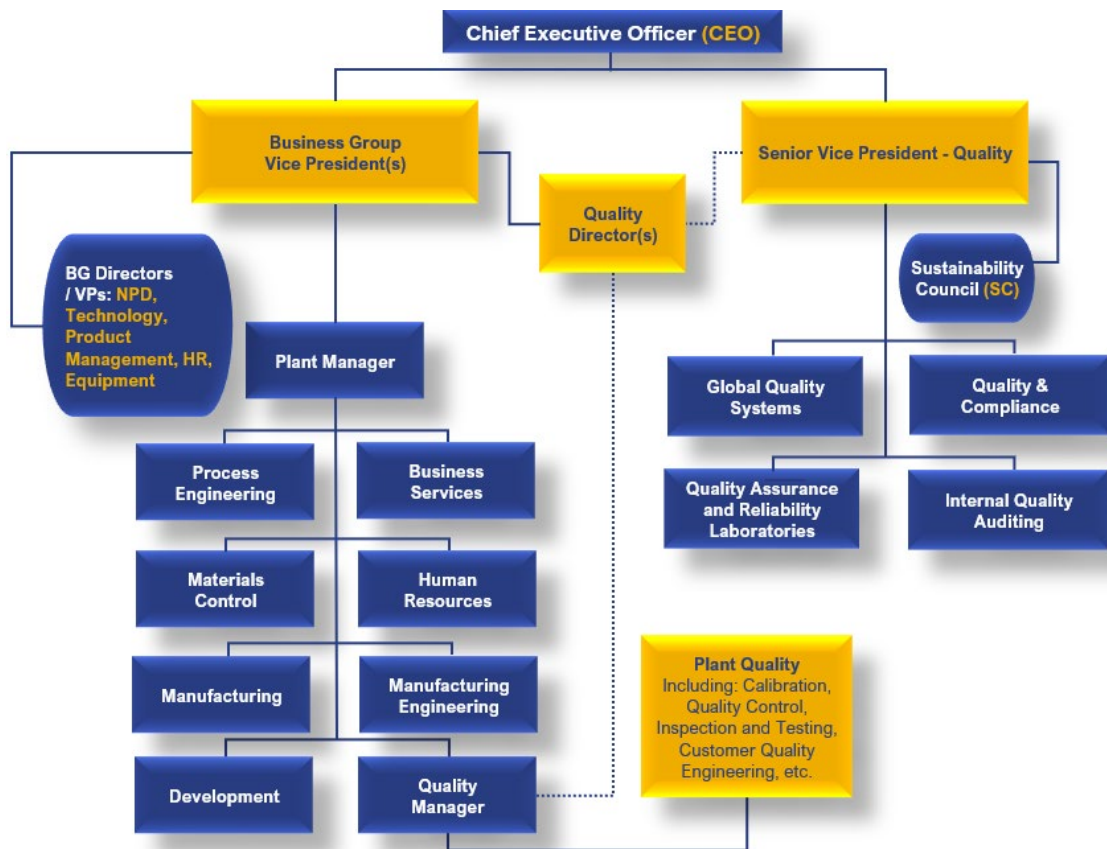
KEMET is committed to compliance with government environmental requirements, conducting its operations in a manner that minimizes environmental impact, participating in the development of regulatory requirements, controlling and preventing pollution, and continuous improvement of environmental performance. Programs are in place throughout KEMET to support these commitments.

*Kyustendil, Bulgaria*



*Guadalupe, Mexico*

### E. Quality Organization Chart



## F. Quality Organization

The overall purpose of the KEMET Quality Organization is to ensure that the quality systems are effective, and the manufacturing and business processes result in customer satisfaction. Specific roles and responsibilities of the resources within the Quality Organization are described below.

### 1. Management Representative

The Senior Vice President - Quality (SVP – Quality) was appointed by the Chief Executive Officer (CEO) as the Quality Management System Representative and has the responsibility and authority that includes:

- Ensuring that the QMS conforms to the requirements of ISO 9001, IATF 16949, and AS9100.
- Ensuring that the processes are delivering their intended outputs.
- Reporting on the performance of the QMS and on opportunities for improvement to top management.
- Ensuring the promotion of customer focus throughout the organization.
- Ensuring that the integrity of the QMS is maintained when changes to the QMS are planned and implemented.
- Ensuring organizational freedom and unrestricted access to top management to resolve quality management issues.

The Quality Management System Representative assigns certain tasks related to the ISO/IATF/AS Program to the Corporate ISO/IATF/AS Coordinator. The specific responsibilities include understanding the ISO/IATF/AS requirements, making sure that they are included as part of the overall KEMET QMS, and serving as liaison with KEMET's ISO/IATF/AS registrars.

The Corporate ISO/IATF/AS Coordinator will notify the registrar(s) of any changes relating to legal, commercial, organization status or ownership and in the event of formal disciplinary action taken by an automotive customer as defined in that customer's requirements. In addition, should a registrar withdraw KEMET's certificate, the Corporate ISO/IATF/AS Coordinator will ensure those customers requiring certification are notified in writing.

Quality Directors for Film and Electrolytic Business Groups (FEBG) interface with the Corporate ISO/IATF/AS Coordinator as needed to ensure these responsibilities are covered.

## 2. Military Liaison

The Military Liaison serves as KEMET's point of contact with the U.S. government on issues concerning the manufacture of Military capacitors. This function coordinates all KEMET correspondence with the Defense Logistics Agency (DLA) related to changes in Military specifications and drawings, new KEMET qualifications, and the maintenance of current KEMET qualifications via the Military Maintenance sampling program. The Military Liaison also represents KEMET at various Military meetings (such as Specification coordination and CE-11 meetings), notifies DLA of any GIDEP alerts/problem advisories on Military product, and ensures that any Distributors handling KEMET Military parts meet all applicable requirements.

## 3. Customer Representative

Corporate Quality Documents describe the key Corporate Business Processes utilized by KEMET to ensure customer satisfaction and financial success of the company. Business Process Owners are identified for each key process. While the customer focused global Sales Business Organization typically interacts directly with customers, the Chief Executive Officer (CEO) designated the Business Process Owners with responsibility and authority to ensure that customer requirements are addressed. This includes but is not limited to the selection of special characteristics, setting quality objectives and related training, corrective and preventive actions, product design and development, capacity analysis, logistics information, customer scorecards, and customer portals.



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*Monterrey, Mexico*

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## 4. Quality Leadership Council

The Quality Leadership Council (QLC) focuses on managing the overall KEMET QMS ensuring that customer expectations are met. QLC members meet periodically to address various quality topics, assign projects to improve quality systems and documentation, and plan deployment of changes to existing systems. Council membership includes the SVP – Quality, representatives from KEMET Corporate Quality, and Business Group Quality Directors.

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*Anting, China*

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## 5. Corporate Quality

Under the direction of the SVP – Quality, the Corporate Quality organization supports all business groups with the following areas of responsibility:

**Customer Specifications Engineering (CSE)** examines customer drawings, specifications, related information, and consults with other KEMET groups to determine the feasibility, practicality, advisability, and costs of manufacturing the product to customer specifications. When appropriate, they also identify production alternatives. CSE also coordinates PPAP (Production Part Approval Process) submissions for customers.

The **Quality & Compliance** group is responsible for quality support activities for all of KEMET, including Corporate QMS development, documentation, and interpretation, as well as regulatory compliance activities described in our Compliance Policies and Procedures.

**Quality & Compliance** also manages the **KEMET Internal Quality Audit Program** and conducts Internal Quality Audits. For FEBG, the Internal Quality Audit Function is managed by their Quality Directors. Under the direction of Corporate Quality management, the **Quality Assurance and Reliability Laboratories** offer product reliability testing, including environmental testing. Responsible personnel review test results and forward the data to requesting organizations for use in product improvement and development projects. Product evaluation and testing for military and industry requirements are performed according to established standards and test protocols.

In addition to managing development and overall maintenance of the global KEY Digital Quality Platform, **Global Quality Systems** promotes and supports global implementation of standardized Quality systems across the YAGEO Group brands.

An **additional link to the business groups** exists in the form of a dotted-line reporting relationship between the plant-level Quality Managers and the Quality Directors to the SVP – Quality.

## 6. Manufacturing Plant Quality

Each KEMET manufacturing facility has a quality function which monitors the quality of products and processes; performs corrective actions; and provides quality engineering services. As defined by plant documents, Manufacturing Plant Quality's responsibilities include implementation, improvement, and verification of quality system activities such as:

-  Raw Material Receipt and Verification (where applicable)
-  Process Control and Improvement
-  In Process-Verification and Final Inspections
-  Calibration
-  Measurement Systems Analysis
-  Customer Communication
-  Change Control
-  Document Control

## 7. Sustainability Council

Led by the SVP - Quality, the Sustainability Council (SC) provides direction and focus in support of KEMET's Facilities, Environmental, Health & Safety Policy, Global Code of Conduct, and commitment to the Responsible Business Alliance (RBA) Code of Conduct. The SC has oversight responsibility to ensure internal awareness of, and compliance to, applicable environmental legislation and regulations, customer-specific sustainability requirements, and the development, maintenance, and continual improvement of the Environmental Management System (EMS).

## G. Quality Focus

KEMET strives to continuously improve quality systems, product quality, delivery, value to customers, internal systems, equipment design and performance, process development, and most importantly, the training and support of employees. KEMET strives to reduce cycle time, eliminate waste, and increase productivity. Every individual, every team, every department, and every facility play a vital role in making a contribution towards meeting the requirements of both internal and external customers.

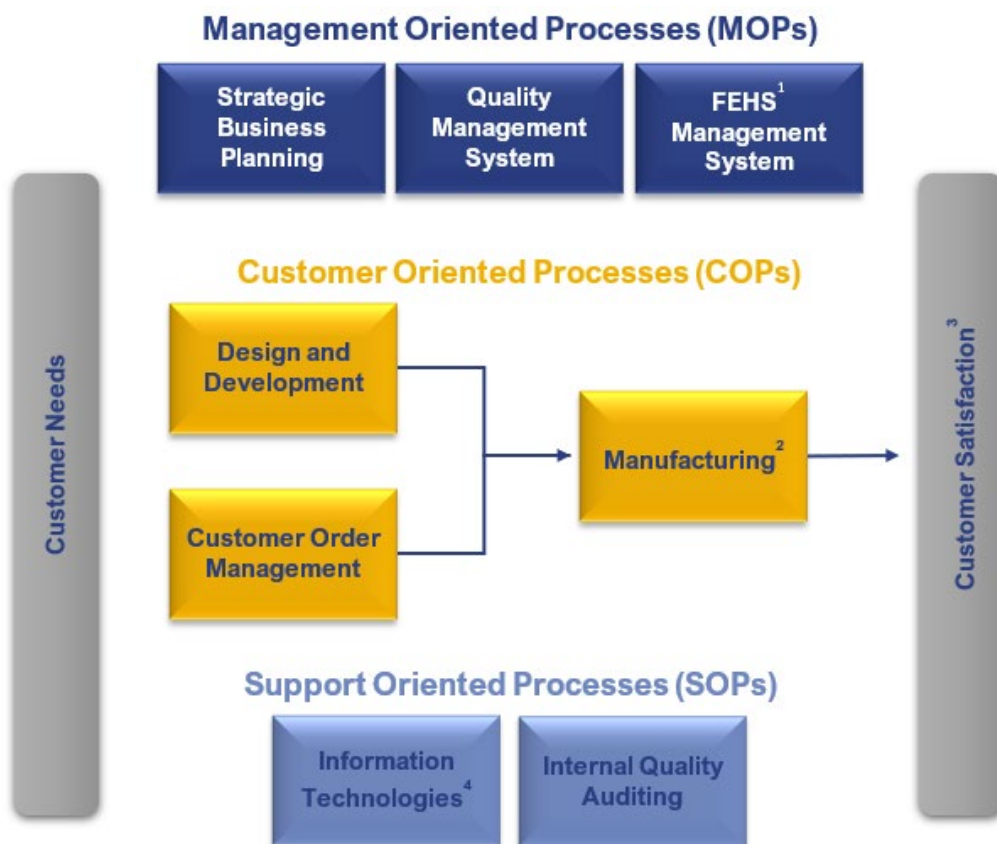
## II. KEMET Quality Management System

### A. Quality Management System and Leadership

KEMET's QMS incorporates the requirements of the ISO 9001, IATF 16949, AS9100, and ISO 14001 standards and integrates customer and military needs, as required. The process for Automotive Customer-Specific Requirements is described in Corporate and plant-level quality documents. In addition, these AIAG reference manuals are used as guidelines for system development: Advanced Product Quality Planning (APQP), Potential Failure Mode and Effects Analysis (FMEA), Measurement Systems Analysis (MSA), Production Part Approval Process PPAP), and Statistical Process Control (SPC).

### B. KEMET Business Processes

The diagram below depicts the interrelation of the KEMET Business Processes. These Corporate Business Processes are described in Corporate Quality Document 002. For each business process, turtle diagrams further define the performance indicators, key related processes, and other essential information for each individual process.



1. Facilities, Environmental, Health, and Safety

2. Process and Interaction maps for each manufacturing location are defined in plant-level documentation.

3. Customer Satisfaction is monitored as part of the Customer Order Management Process via customer scorecards and the Manufacturing Process via plant metrics and customer audits/visits.

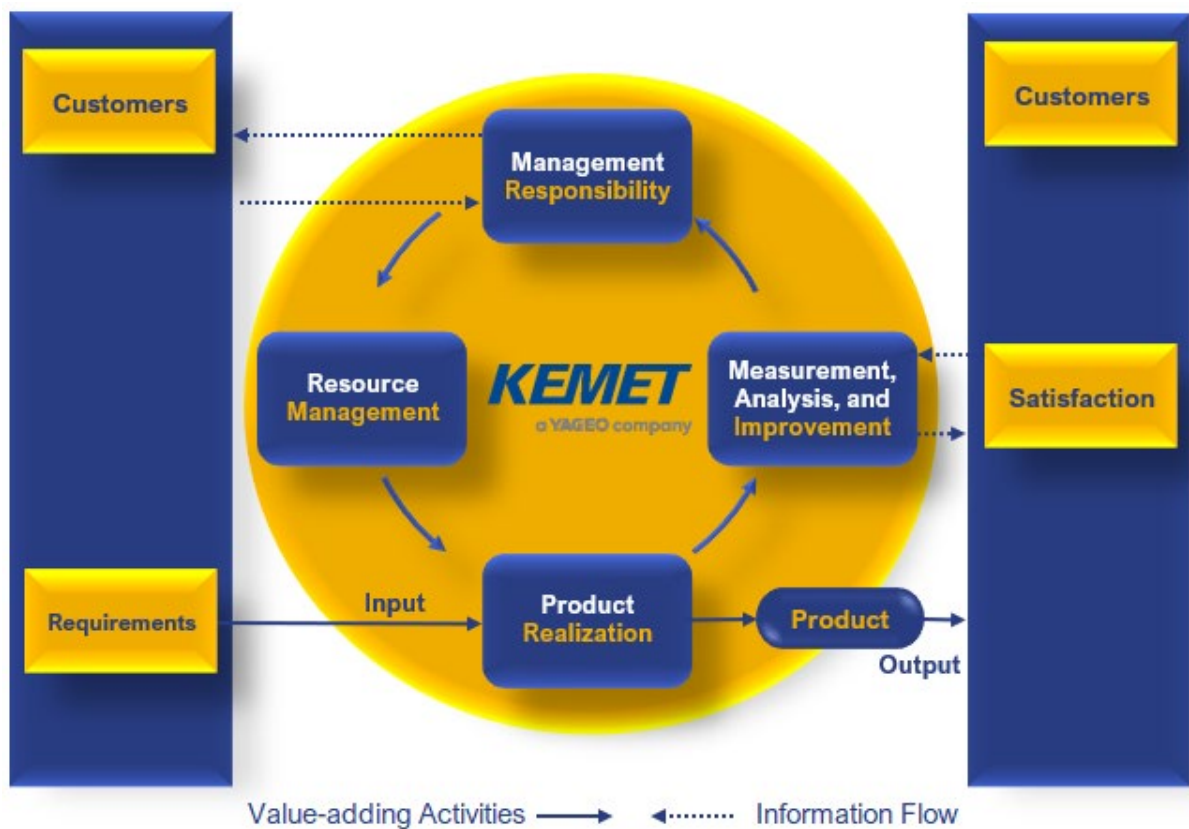
4. Cybersecurity



Suzhou, China

### C. Continuous Improvement of the Quality Management System Diagram

KEMET's process-based QMS enables these processes to work together to meet and exceed customers' expectations. Continuous improvement of products and processes is integral to the QMS as illustrated in the following diagram.



This system is maintained, documented, and evaluated on a regular basis to ensure products and processes conform to requirements and are continuously improved.

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Monterrey, Mexico



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## D. Strategic Business Planning

The primary responsibility of KEMET senior management is strategic planning for KEMET as an overall business and to give guidance as to the expectations for each business group as to how they are expected to contribute towards meeting KEMET's overall business objectives.

The Strategic Business Planning process includes the following:

-  The KEMET Strategic Plan (KSP) defining long-term business strategies.
-  The Annual Business Budget (ABB) defining short-term goals and annual business objectives.

## E. Management Review

Management Review at KEMET is accomplished through:

-  Strategic Business Planning Process
-  Operations / Business Group Review Meetings
-  Plant and Business Group / Business Unit Management Reviews
-  Quality Management System Review

This multilevel process ensures that all aspects of the quality system are evaluated on a regular basis for performance to goal, status of improvement actions, and to identify additional actions to address opportunity or reduce risk.

## F. Quality Management System Review

When a nonconformance, a potential problem, or an opportunity for improvement relating to KEMET's QMS is identified, it is reported to departmental management for validation, correction, or improvement. As appropriate, issues are escalated to Corporate Quality and/or the Quality Leadership Council (QLC).



QMS effectiveness is evaluated on an ongoing basis by the QLC. This group, under the direction of the SVP – Quality, reviews all elements of the quality system and recommends improvements to ensure the system's ongoing suitability and effectiveness. As needed, the SVP – Quality escalates issues from the QLC and Internal Quality Audit Program to senior management at the Operations / Business Group Review meeting.

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*Suzhou, China*

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## **G. Design and Change Control**

KEMET has defined design and change control processes to ensure that KEMET's business needs and the voice of the customer are met. Training is provided to maintain and enhance the skills of personnel involved in these activities. The design and change control processes are executed and documented.





*The design and change control processes defined by KEMET meet the requirements for configuration management to the extent applicable to the products manufactured by KEMET.*

### **1. Design Control**

The KEMET Advanced Quality Planning System (KAQPS) is a disciplined methodology, based on the AIAG Advanced Product Quality Planning (APQP) and Control Plan reference manual for design, development, and implementation of new products and processes. A cross-functional team is used from initial needs analysis through full-scale manufacturing validation. Additionally, customers are involved closely in process, product, and prototype (i.e., samples of capacitors) development, where appropriate, to ensure the customer requirements are understood and are being met. The KAQPS process includes environmental and material evaluations to anticipate risks and verify that proposed solutions are beneficial to the process, employees, and customers. Design project information is available to personnel involved in similar design projects throughout KEMET.

Each development project has phases which require specific deliverables. Project roles and responsibilities, meetings, and phase reviews, and required phases and deliverables are described in QOD-601 and plant-level documents.

The KAQPS process is consistent with the requirements of the other processes in the KEMET QMS. During development projects, the following are determined:

-  Quality objectives and requirements for the product.
-  Processes, documents, and resources specific to the product.
-  Required verification, validation, monitoring, inspection, and test activities specific to the product/process and the criteria for product acceptance.
-  Records needed to provide evidence that the realization processes and resulting product meet requirements.




To ensure that targeted product and process characteristics are met, and customer risks minimized, design verifications and management reviews are held for each phase. A project is closed when its solution has been successfully integrated into the KEMET manufacturing environment.




As applicable, KEMET ensures the confidentiality of customer contracted products under development and related product information.

## 2. Change Control

The KEMET change control process is used to modify an existing technology (product, process, material, equipment, or software) in KEMET's production environment. This disciplined methodology is followed to ensure the impact of a proposed change on the quality, reliability, characteristics, and end use of KEMET product is assessed and understood prior to implementing the change into production. Risk Levels are defined to ensure the product quality is not adversely affected; an acceptable process capability is maintained or improved; cost reduction is implemented as feasible; and to minimize or eliminate any possible impact to internal (downstream and/or upstream) and external customers.

The scope of change control projects includes:

-  Product modification (including semi-finished product).
-  Process modification.
-  Product validation.

-  Introduction and approval of new manufacturing equipment.
-  Change in existing raw material or introduction of new raw material.
-  Change in existing equipment.

As part of the change control process, all prospective changes are identified, documented, reviewed, and approved by a change control team. The KEMET Product Change Notification (PCN) system ensures that customers receive appropriate timely notification and enables the resolution of customer concerns or problems in advance of implementation. Automotive, aerospace/military, and medical customers will typically receive PCNs requiring approval. Commercial customers may receive PCNs for notification only.




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*Victoria, Mexico*

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*Tokyo, Japan*

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### 3. KEMET Production Part Approval Process (PPAP)

KEMET's Production Part Approval Process (PPAP) verifies to automotive customers and other customers by request that all design and specification requirements are properly understood and applied to the production process, and that the process has the potential to produce product that meets those requirements.

The process is designed specifically to meet the requirements of IATF 16949 and the AIAG Production Part Approval Process reference manual.

### 4. Product Safety

All KEMET product is designed and manufactured with careful consideration of the integrity of the product throughout the entire life cycle, including continuous risk management. Highly trained employees manufacture with strict adherence to procedures so that each part performs as intended by specification.

Component validation includes:

- 📦 Quality toll gate validation during the steps of manufacturing
- 📦 100% electrical validation of final product
- 📦 Sample physical dimension validation of final product

For products designed for safety applications, we manufacture to exacting standards and maintain all required safety certifications.

KEMET has a trained Product Safety and Conformity Representative (PSCR) for each product type. One PSCR might be responsible for more than one production location and is not necessarily located in those production plants. PSCR training has also been completed by Corporate Quality representatives who are focused on overall management of KEMET's QMS.

Management is linked to product safety by reviewing actual field failures and their impact on safety or the environment (if known) and escalation, if needed, to top management through KEMET's customer complaint system.

It is understood that our products may be used in a wide variety of products or systems. It is the customer's responsibility to select and test the suitability of product appropriate for their respective application(s).

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*Matamoros, Mexico*

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## H. Process Control and Improvement

The KEMET Process Control and Improvement System is used for control and continuous improvement of manufacturing processes. This system aims to reduce common-cause variation, achieve and maintain process improvements, and encourage process optimization. The methodology is based on the AIAG Statistical Process Control and Failure Mode and Effects Analysis reference manuals.

### 1. Production Scheduling

KEMET's manufacturing scheduling systems, coordinated by Business Group Materials Control/Production Control and Plant Management, are both customer

and capacity driven. Based on immediate customer needs and forecast demands, production is scheduled in such a manner as to ensure the most efficient cycle time so that customer shipment needs are met. Real-time information regarding production and shipment status is available. The Sales Business Group maintains Advanced Shipment Notification system capability, as well as the computerized system for receipt of customer planning information and ship schedules.

## 2. Process Control

KEMET's manufacturing system emphasizes error prevention and ensures control and continuous improvement of critical finished product and process characteristics. Each production process is documented in control plans and flowcharts. Methods, workmanship standards, and setup instructions are documented and are accessible to all appropriate personnel. Process capability studies and statistical methods are used to establish and monitor the performance of each critical process, as defined on the control plan. Suitable equipment, tooling, and production environment are identified during the design and change control processes. Cleanliness requirements are identified. Preventive and predictive maintenance and production tooling management activities are identified, scheduled, and executed to ensure optimized equipment and tooling availability. Additionally, KEMET maintains compliance with all applicable government safety and environmental regulations.

A manufacturing process is initially brought into control during its design and development, where special causes of variation are eliminated. Once the process is fully functioning in manufacturing, personnel analyze inherent sources of variation through process potential and capability studies, and then pinpoint and eliminate root causes of variation. PPM and CPK data are also gathered to measure and monitor the rate and amount of improvement.

To maintain ongoing process control, manufacturing personnel control critical process outputs using techniques appropriate for the process including analysis of Statistical Process Control data, inspection and test results, predictive maintenance techniques, and calibration system data.

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*Toyama, Japan*

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### 3. Product Identification, Traceability, and Status

Throughout all phases of the manufacturing process, material identification and inspection status are clearly identified. In addition, product traceability is maintained through manufacturing records, which are generated and tracked on-line as product moves through the manufacturing process to shipment.

### 4. Handling, Storage, Packaging, Preservation, and Delivery

KEMET has developed systems for handling, storage, packaging, preservation, and delivery of product. Products are handled in such a manner as to prevent damage or deterioration and are stored in designated areas which ensure that product integrity is preserved. First-in, first-out procedures for inventory management and stock rotation are utilized. Product is packaged to ensure integrity and ease of use, in compliance with all customer packaging and labeling requirements. Delivery reliability is monitored. Shipping instructions include customer requirements for delivery including transportation mode, routings, and containers. Delivery performance is tracked as part of Management Review. When on-time delivery goals are not achieved, corrective actions are implemented as appropriate.

### 5. Continuous Improvement

All organizations within KEMET are expected to pursue continuous improvement activities in the areas of quality, productivity, and cost. Plants identify processes for improvement based on process data and customer feedback. Problem-solving methods are applied to projects that require a cross-functional approach to determine root cause and long-range solutions. Mistake-proofing activities are integrated as part of continuous improvement, wherever possible.



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*Batam, Indonesia*

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## **I. Inspection and Measurement Activities**

### **1. Inspection and Testing**

To ensure product quality through every phase of the manufacturing process, KEMET maintains an inspection and testing program for incoming raw materials, in-process products, and finished products prior to shipping. Inspection and testing requirements are documented in raw material specifications, work instructions, and on the control plan for each product line. For finished product critical characteristics using data sampling, final inspection requirement is zero defects. Inspection status and, where applicable, material shelf-life requirements are identified. Completion of all required process steps, inspections, and tests is documented on the manufacturing records accompanying the product through the manufacturing process.

### **2. Calibration**

To ensure the accuracy of inspections and tests being performed, inspection, measuring, and test equipment (IMTE) used for process control or product acceptance testing is maintained through KEMET's calibration system. Each manufacturing plant's calibration system includes all applicable requirements for recall, labeling, environmental conditions, equipment history, record keeping, standard and calibration source selection, and handling of nonconformances. All standards are traceable to international or national measurement standards.

### **3. Measurement System Analysis**

Measurement Systems Analysis (MSA) studies are performed on each type of inspection, measuring, or test equipment listed on the control plans to analyze the variation present. The AIAG Measurement Systems Analysis manual is used for reference.

### **4. Nonconformance Management**

When incoming, in-process, or finished product is identified as either nonconforming or suspect, the product and/or product container are identified and, where possible, physically segregated to ensure they are not inadvertently used or shipped. Nonconformances are dispositioned by the proper authorities, and action taken to reduce and/or prevent recurrence prior to product use.

### **5. Corrective and Preventive Action**

KEMET has defined internal corrective action procedures at the plant level as part of the system for verification of product conformance and responds promptly to external customer requests for corrective action. As appropriate, personnel

with responsibility and authority for corrective action are promptly informed of products or processes that do not conform to requirements.







Problem-solving methods or other customer-prescribed approaches are used to determine the root cause and corrective/preventive measures for nonconformances. Mistake-proofing methods are used to support prevention, as appropriate.

## **J. Quality Assurance and Reliability**

The Quality Assurance and Reliability Laboratories offer product reliability testing, including environmental testing. Responsible personnel review test results and forward the data to requesting organizations for use in product improvement and development projects. Product evaluation and testing for military and industry requirements are performed according to established standards and test protocols.

### **1. Laboratory Quality Systems**

Laboratories which verify product conformance maintain laboratory process control systems to ensure the quality and validity of the tests being performed. This system includes the following:

-  Defined laboratory scopes.
-  Documented procedures and methods for testing or calibration services.
-  Identification and traceability of test samples to relevant process standard.
-  Equipment calibration and maintenance.
-  Defined personnel training requirements.
-  Verification of test results.

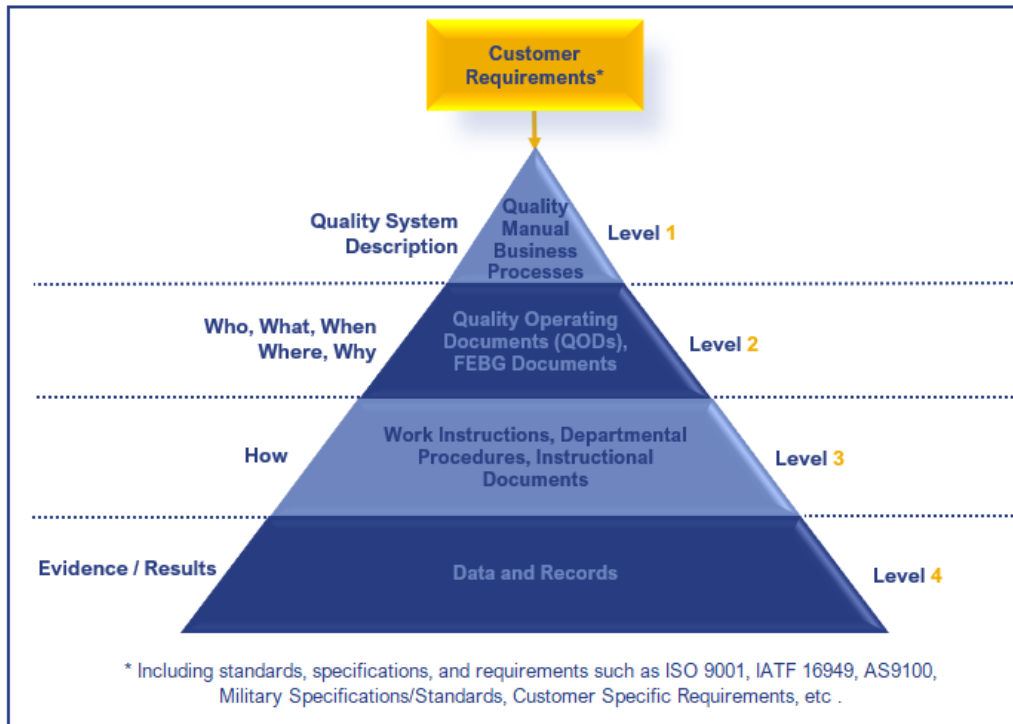
### **2. Internal Quality Audits**

KEMET's Internal Quality Audit Program verifies compliance and effectiveness of the documented QMS. Audit findings are recorded and resolved through corrective actions. Effectiveness of corrective actions is verified through follow-up audits. Audit results are reported to the SVP - Quality and reviewed by appropriate management. Nonconformances as indicated by audit results are escalated for correction.



## K. Document, Data, and Records Control

KEMET's quality system is documented to ensure products and processes comply with the customer requirements, military standards, ISO 9001 Quality Standard, IATF 16949 Automotive Quality Standard, AS9100 Aerospace Quality Standard, and the ISO 14001 Environmental Standard as appropriate. The documented QMS forms a four-tiered hierarchy, as shown below.



- 📖 **Level 1** - The Quality Manual provides an overall QMS description and documents KEMET's guiding principles including the Corporate Quality Policy and Quality Objectives which are implemented and understood throughout all levels of the organization. The processes KEMET uses to ensure customer satisfaction and financial success of the company are described in the Quality Manual and Business Process documentation.
- 📖 **Level 2** - Major quality system components and requirements for their implementation are described in Corporate Quality Operating Documents (QODs) and FEBG plant-level documents.
- 📖 **Level 3** - Level 3 documents include work instructions, departmental procedures, and instructional documents developed and maintained by the individual manufacturing plants, and various support groups.
- 📖 **Level 4** - Data and Records provide evidence that the quality system defined in the three levels of documents above are implemented and being followed, as well as providing results for required tests, inspections, and other quality-related activities.

## 1. Document and Data Control

KEMET's policy and procedure documents are maintained throughout the company. Controls are in place for document access, revision, approval, distribution, and archiving, either electronically or in hard-copy form. This system ensures that employees have access to current information, workmanship standards, forms, and other information essential to the quality of products and processes.

In addition to controlling internal information, KEMET maintains control of software and external customer specifications.



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*Simpsonville, USA*

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## 2. Control of Records

KEMET has identified records which support the documented quality system. Requirements for this system are defined in documents for control of quality records.

## L. Customer Support Systems

### 1. Contract Review

When a customer orders a standard KEMET product, contract review activities ensure agreement to contract conditions between KEMET and the customer prior to order placement. If the customer order is for nonstandard product, or if special requirements are needed to comply with a customer request, CSE Analysts inform manufacturing and other responsible groups of what is necessary for the product being produced to meet the customer's requirements. Amendments to existing customer orders are agreed to by both the customer and by KEMET before adjustments are made to ensure the customer requirements are understood and feasible.

## 2. Customer Satisfaction

Customer satisfaction is the responsibility of every member of the KEMET team and focuses on providing:

- ✦ Products the customers want.
- ✦ Perfect quality.
- ✦ 100% on-time delivery.

Complaints reported by customers receive immediate attention. Initial responses to customers are made promptly, and the corrective action process is completed within a designated time frame. Problem-solving methods or other customer-prescribed tools are used.

On-time delivery and customer complaint trends are tracked and are inputs to Management Review. In addition, information relating to customer perception as to whether KEMET has met customer requirements is monitored.

## 3. Contingency Plans

KEMET will do whatever is reasonable to ensure that the flow of product to customers is not interrupted. KEMET's Disaster Contingency Plan includes three modules: Operational Risk Management, Emergency Disaster Planning and Action, and Business Recovery.

Operational Risk Management includes Business Continuity Planning measures ensuring KEMET's ability to conduct day-to-day operations. KEMET's Business Continuity Plan includes elements that address risk identification and risk mitigation. Emergency Disaster Planning and Action as well as Business Recovery are facilitated by maintaining Headquarters and plant location-specific Business Continuity Plan (BCP) information in the on-line Global EHS and Facilities SharePoint site.

## 4. Distributors

KEMET is supported by a network of distributors who are authorized to stock and distribute KEMET finished product including military Established Reliability capacitors.

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*Products from Pontecchio, Italy*

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## M. Supplier Quality

The KEMET Supplier Quality System ensures the procurement of high-quality materials from approved suppliers. Materials which impact the quality of finished KEMET product or processes are defined, suppliers are evaluated, and an approved supplier list is maintained for each raw material.

KEMET establishes and maintains long-term partnerships with strategic suppliers who share KEMET's commitment to continuous quality improvement and demonstrate an ability to make improvements in their processes, products, and services. KEMET works directly with the supplier to identify opportunities for improvement in products, processes, and quality systems, and to develop strategies to achieve these goals. These partnerships improve material quality and lower cost of ownership.

KEMET recognizes suppliers who achieve high quality and delivery levels and attain their targeted performance objectives. Material suppliers are required to be registered to ISO 9001 and encouraged to pursue compliance and registration to IATF 16949 and other industry quality standards. KEMET also encourages them to benchmark other companies and investigate new production methods and quality systems.

All purchased materials used in the KEMET manufacturing process are handled and processed in a manner consistent with governmental safety and environmental requirements.



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*Quality Assurance Laboratory,  
Monterrey*

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## N. Human Resources

KEMET employees have the skills, knowledge, and experience necessary to support KEMET's guiding principles, achieve quality objectives, and make continual improvements. Human Resources policies and procedures ensure that necessary pre-hire education and competencies for personnel, including those performing work affecting product quality, are determined. In addition, employees' post-hire competency

needs are assessed, and training programs are provided (or other actions are taken) so that employees have the appropriate skills and knowledge to support short- and long-term business objectives and to produce quality products. In addition, KEMET's Human Resources programs and the QMS promote innovation and motivate and empower employees to achieve quality objectives and make continual improvements.

## 1. Training and Development

KEMET's Training and Development Program ensures that all employees are competent to provide products and services that exceed customer expectations and demonstrate continuous improvement. Post-hire training needs are identified periodically through formal needs assessments and employee evaluations. Throughout the organization, training plans which support business and customer needs are established and training is provided.

Each KEMET location's training program ensures that personnel at all levels are competent to perform their jobs, with attention to the satisfaction of customer requirements. Training is provided for new or modified jobs affecting product quality and retraining is provided when performance is not acceptable.

During new-hire orientation and on-the-job training, employees are made aware of the relevance and importance of their activities and how they contribute to the achievement of the quality objectives. Personnel whose work can affect quality are also informed about the consequences to the customer of nonconformity to quality requirements.

Progress to training goals is monitored. Training effectiveness is measured through training evaluations, job-skill training certifications, re-certifications and audits, and job performance evaluations.



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*Thailand*

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## 2. Motivation and Empowerment

KEMET's process to motivate and empower employees to achieve quality objectives and make continual improvements is incorporated throughout the

Business Processes. Three fundamental components of the motivation and empowerment process are the company's:

- Training and Development Program for employees
- Process-based Quality Management System
- Human Resources programs and systems

The Training Program described in the section above is the main component of the motivation and empowerment process. Effective training enables employee competence, motivates personnel to achieve objectives, and empowers them to make continual improvements.

The process-based Quality Management System's emphasis on cross-functional teamwork and the requirement for use of quality tools and methodologies provides an innovative environment. Through active participation in KEMET's Lean Six Sigma Program, Yield Meetings, Product Line Reviews, Management Reviews, and numerous project teams, employees are empowered to continuously improve products and processes.

Human Resources programs such as Employee Benefits and Rewards, Job Performance Evaluations, and Succession Planning are essential for motivation and empowerment. In addition, Management's commitment to share business information is manifested through its communication systems and provides a foundation for informing employees about quality objectives and business and customer needs.

The extent to which KEMET employees are aware of the relevance and importance of their activities and how they contribute to the achievement of the quality objectives is apparent during daily work activity and is periodically measured through skill certification and recertification, job audits, employee performance evaluations, and/or the Internal Quality Audit Program.

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*Skopje, Macedonia*

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### III. MATRICES AND CROSS-REFERENCES

#### A. Scope of ISO 9001, IATF 16949, and AS9100 Registrations

Descriptor / Group	Specific Locations	ISO 9001	IATF 16949	AS 9100*
Headquarters / Simpsonville Plant	Simpsonville, SC, USA	X	X	X
Information Technologies (Cybersecurity)	Fort Lauderdale, FL, USA	X	X	X
Quality Assurance Laboratory	Monterrey Plants 1 and 2, Guadalupe, N.L., Mexico	X	X	X
Ceramic	Monterrey Plants 1 and 2, Guadalupe, N.L., Mexico	X	X	
	Monterrey Plant 3, San Nicolas de los Garza, N.L., Mexico	X	X	
Tantalum	KEMET Blue Metal (KBMT), H. Matamoros, Tamps., Mexico	X		
	Matamoros Plant, H. Matamoros, Tamps., Mexico	X	X	X
	Simpsonville Ta Plant, Simpsonville, SC, USA	X	X	
	Suzhou Plant, Suzhou, Jiangsu, China	X	X	
	TOKIN Plant, Toyama, Japan	X	X	
	TOKIN Plant, Chachoengsao, Thailand	X	X	
	Victoria Plant, Cd., Victoria, Tamps., Mexico	X	X	
Film and Electrolytics	Anting-Shanghai Plant, Shanghai, China	X	X	
	Batam Plant, Batam, Indonesia	X	X	
	Évora Plant, Évora, Portugal	X	X	
	Kyustendil Plant, Kyustendil, Bulgaria	X	X	
	Pontecchio Plant, Sasso Marconi, Pontecchio, Italy	X	X	
	Skopje Plant, Skopje, Macedonia	X	X	
	Suomussalmi Plant, Suomussalmi, Finland	X	X	

\* Scope of KEMET's AS9100 Certification:

- HQ and Simpsonville Plant: The design and manufacture of tantalum capacitors. The design of ceramic capacitors.
- Fort Lauderdale: Cybersecurity
- Monterrey (Guadalupe) Plant: Quality Assurance Laboratory.
- Matamoros Plant: Supplier Management

**Note:** Locations that are only registered to ISO 9001 do not currently supply automotive-grade products to customers.

## Quality Registrations Cross-Reference Tables

The following tables are applicable for KEMET manufacturing locations and related support group functions.

References: ISO 9001:2015, IATF 16949:2016, AS9100:2016.

### Code Key for Clause Number Columns

X = Clause is the same as ISO 9001:2015  
None = Clause is not referenced in the standard.

Requirements / Section	ISO 9001	IATF 16949	AS 9100	Corporate Quality, Quality Operating, and Other Documents
<b>CONTEXT OF THE ORGANIZATION</b>	<b>4</b>	<b>X</b>	<b>X</b>	
Understanding the Organization and Its Context	4.1	X	X	Quality Manual
Understanding the Needs and Expectations of Interested Parties	4.2	X	X	Quality Manual
Determining the Scope of the Quality Management System	4.3	X	X	Quality Manual
Determining the Scope of the Quality Management System - Supplemental	None	4.3.1	None	Quality Manual
Customer-Specific Requirements	None	4.3.2	None	502, 502A
Quality Management System and Its Processes	4.4	X	X	All
The organization shall establish, implement, maintain, and continually improve a quality management system....	4.4.1	X	X	All
Conformance of Products and Processes	None	4.4.1.1	None	Corporate Procurement Policies and Procedures, 100, 500, SQPs
Product Safety	None	4.4.1.2	None	Quality Manual
To the extent necessary, the organization shall: a. maintain documented information to support the operation of its processes...	4.4.2	X	X	002, 005, 300
<b>LEADERSHIP</b>	<b>5</b>	<b>X</b>	<b>X</b>	
Leadership and Commitment	5.1	X	X	002: Quality Management System, Strategic Business Planning, 400
General	5.1.1	X	X	002: Quality Management System, Strategic Business Planning, 400
Corporate Responsibility	None	5.1.1.1	None	002: Quality Management System, Strategic Business Planning, 400
Process Effectiveness and Efficiency	None	5.1.1.2	None	400



Requirements / Section	ISO 9001	IATF 16949	AS 9100	Corporate Quality, Quality Operating, and Other Documents
Process Owners	None	5.1.1.3	None	002
Customer Focus	5.1.2	X	X	002: Quality Management System, Customer Order Management, Customer Satisfaction, 400, 504
Policy	5.2	X	X	002: Quality Management System, 400
Establishing the Quality Policy	5.2.1	X	X	002: Quality Management System, 400
Communicating the Quality Policy	5.2.2	X	X	002: Quality Management System, 400
Organizational Roles, Responsibilities, and Authorities	5.3	X	X	002, Corporate/Plant HR Policies and Procedures
Organizational Roles, Responsibilities, and Authorities - Supplemental	None	5.3.1	None	002
Responsibility and Authority for Product Requirements and Corrective Actions	None	5.3.2	None	002: Strategic Business Planning, Quality Management System, 300, 307, MBOs, Plant Documents
<b>PLANNING</b>	<b>6</b>	<b>X</b>	<b>X</b>	
Actions to Address Risks and Opportunities	6.1	X	X	002: Quality Management System
When planning for the quality management system, the organization shall consider the issues referred to in 4.1 and the requirements referred to in 4.2....	6.1.1	X	X	002: Quality Management System, 400
The organization shall plan: a. actions to address these risks and opportunities...	6.1.2	X	X	002: Quality Management System, 400
Risk Analysis	None	6.1.2.1	None	002: Design and Development, 206, 502, 502A, 601 Series
Preventive Action	None	6.1.2.2	None	002: Manufacturing, 200L, 500, 503, 206
Contingency Plans	None	6.1.2.3	None	002: Manufacturing, 400C, 503, Plant Documents
Quality Objectives and Planning to Achieve Them	6.2	X	X	002: Quality Management System, 400
The organization shall establish quality objectives at relevant functions, levels, and processes needed for the quality management system...	6.2.1	X	X	002: Quality Management System, 400
When planning how to achieve its quality objectives, the organization shall determine ...	6.2.2	X	X	002: Quality Management System, 400
Quality Objectives and Planning to Achieve Them - Supplemental	None	6.2.2.1	None	002: Strategic Business Planning, 400
Planning of Changes	6.3	X	X	002: Quality Management System, 400

Requirements / Section	ISO 9001	IATF 16949	AS 9100	Corporate Quality, Quality Operating, and Other Documents
<b>SUPPORT</b>	<b>7</b>	<b>X</b>	<b>X</b>	
Resources	7.1	X	X	002
General	7.1.1	X	X	002
People	7.1.2	X	X	002
Infrastructure	7.1.3	X	X	002, Plant Documents
Plant, Facility, and Equipment Planning	None	7.1.3.1	None	002: Design and Development, 601 Series, 200, 200A
Environment for the Operation of Processes	7.1.4	X	X	200, 601 Series, Plant Documents
Environment for the Operation of Processes - Supplemental	None	7.1.4.1	None	002: Manufacturing, 200
Monitoring and Measuring Resources	7.1.5	X	X	002: Manufacturing, 301, 005
General	7.1.5.1	X	X	002: Manufacturing, 301, 005
Measurement System Analysis	None	7.1.5.1.1	None	200, 303
Measurement Traceability	7.1.5.2	X	X	002: Manufacturing, 301, 005
Calibration/Verification Records	None	7.1.5.2.1	None	002: Manufacturing, 301, 005
Laboratory Requirements	None	7.1.5.3	None	002: Manufacturing, 800
Internal Laboratory	None	7.1.5.3.1	None	002: Manufacturing, 301, 800
External Laboratory	None	7.1.5.3.2	None	002: Manufacturing, 301, 800
Organizational Knowledge	7.1.6	X	X	601 Series
Competence	7.2	X	X	604, HR Policies and Procedures, Plant Documents
Competence - Supplemental	None	7.2.1	None	604, Plant Documents
Competence - On-the-Job Training	None	7.2.2	None	206, 604, Plant Documents
Internal Auditor Competency	None	7.2.3	None	008 Series
Second-Party Auditor Competency	None	7.2.4	None	008 Series

Requirements / Section	ISO 9001	IATF 16949	AS 9100	Corporate Quality, Quality Operating, and Other Documents
Awareness	7.3	X	X	002: Quality Management System, 400
Awareness - Supplemental	None	7.3.1	None	206, 604, Plant Documents
Employee Motivation and Empowerment	None	7.3.2	None	400, 601 Series, 604, HR Policies and Procedures, Plant Documents
Communication	7.4	X	X	400
Documented Information	7.5	X	X	002, 300, 005
General	7.5.1	X	X	002, 300, 005
Quality Management System Documentation	None	7.5.1.1	None	002, 300, 005, 502, 502A
Creating and Updating	7.5.2	X	X	002: Quality Management System, 300
Control of Documented Information	7.5.3	X	X	002: Quality Management System, 300
Documented information required by the quality management system and by this International Standard shall be controlled...	7.5.3.1	X	X	002: Quality Management System, 300
For the control of documented information, the organization shall address the following activities, as applicable...	7.5.3.2	X	X	002: Quality Management System, 005
Record Retention	None	7.5.3.2.1	None	002: Customer Order Management, 005
Engineering Specifications	None	7.5.3.2.2	None	002: Customer Order Management, 502
<b>OPERATION</b>	<b>8</b>	<b>X</b>	<b>X</b>	
Operational Planning and Control	8.1	X	X	002: Design and Development, 601 Series
Operational Planning and Control - Supplemental	None	8.1.1	None	002: Design and Development, 601 Series, 502, 502A
Operational Risk Management	None	None	8.1.1	002: Design and Development, 206, 400C, 502
Confidentially	None	8.1.2	None	LEG-001
Configuration Management	None	None	8.1.2	002: Design and Development, 206, 502
Product Safety	None	None	8.1.3	Quality Manual
Prevention of Counterfeit Parts	None	None	8.1.4	202

Requirements / Section	ISO 9001	IATF 16949	AS 9100	Corporate Quality, Quality Operating, and Other Documents
Requirements for Products and Services	8.2	X	X	002: Customer Order Management, Sales Business Group Procedures, website, 502, 502A, 503/KCIS
Customer Communication	8.2.1	X	X	002: Customer Order Management, Sales Business Group Procedures, website, 502, 502A, 503/KCIS
Customer Communication - Supplemental	None	8.2.1.1	None	002: Design and Development, 601 Series
Determining the Requirements for Products and Services	8.2.2	X	X	002: Customer Order Management, 601 Series, 502, 502A, Sales Business Group Procedures
Determining the Requirements for Products and Services - Supplemental	None	8.2.2.1	None	002: Customer Order Management, 601 Series, 502, 502A, Sales Business Group Procedures
Review of Requirements for Products and Services	8.2.3	X	X	002: Customer Order Management, 502, 502A, Sales Business Group Procedures
The organization shall ensure that it has the ability to meet the requirements for products and services to be offered to customers...	8.2.3.1	X	X	002: Customer Order Management, 502, 502A, Sales Business Group Procedures
Review of the Requirements for Products and Services - Supplemental	None	8.2.3.1.1	None	002: Customer Order Management, 502, 502A, Sales Business Group Procedures
Customer-Designated Special Characteristics	None	8.2.3.1.2	None	200: Process Control System, 200 Series
Organization Manufacturing Feasibility	None	8.2.3.1.3	None	002: Customer Order Management, 502, 601 Series
The organization shall retain documented information, as applicable...	8.2.3.2	X	X	002: Customer Order Management, 502, 502A, Sales Business Group Procedures
Changes to Requirements for Products and Services	8.2.4	X	X	002: Customer Order Management, 502, 502A, Sales Business Group Procedures
Design and Development of Products and Services	8.3	X	X	002: Design and Development, 601 Series
General	8.3.1	X	X	002: Design and Development, 601 Series
Design and Development of Products and Services - Supplemental	None	8.3.1.1	None	002: Design and Development, 601 Series
Design and Development Planning	8.3.2	X	X	002: Design and Development, 601 Series
Design and Development Planning - Supplemental	None	8.3.2.1	None	002: Design and Development, 601 Series
Product Design Skills	None	8.3.2.2	None	HR Policies and Procedures, 601 Series, 604
Development of Products with Embedded Software	None	8.3.2.3	None	N/A (see Cross-Reference Notes Table)
Design and Development Inputs	8.3.3	X	X	002: Design and Development, 601 Series

Requirements / Section	ISO 9001	IATF 16949	AS 9100	Corporate Quality, Quality Operating, and Other Documents
Product Design Input	None	8.3.3.1	None	002: Customer Order Management, Design and Development, 502, 502A, 601 Series
Manufacturing Process Design Input	None	8.3.3.2	None	002: Design and Development, 601 Series
Special Characteristics	None	8.3.3.3	None	002: Design and Development, 601 Series, 200, 200A
Design and Development Controls	8.3.4	X	X	002: Design and Development, 601 Series, 005
Monitoring	None	8.3.4.1	None	002: Design and Development, 601 Series
When tests are necessary for verification and validation, ...	None	None	8.3.4.1	002: Design and Development, 601 Series, 506
Design and Development Validation	None	8.3.4.2	None	002: Design and Development, 601 Series
Prototype Program	None	8.3.4.3	None	002: Design and Development, 601 Series
Product Approval Process	None	8.3.4.4	None	002: Design and Development, 601 Series, 506
Design and Development Outputs	8.3.5	X	X	002: Design and Development, 601 Series
Design and Development Outputs - Supplemental	None	8.3.5.1	None	002: Design and Development, 200, 601 Series
Manufacturing Process Design Output	None	8.3.5.2	None	002: Design and Development, 200, 601 Series
Design and Development Changes	8.3.6	X	X	002: Design and Development, Manufacturing, 206, 200, 601 Series, 506, 510
Design and Development Changes - Supplemental	None	8.3.6.1	None	002: Design and Development, 601 Series
Control of Externally Provided Processes, Products, and Services	8.4	X	X	Corporate Procurement Policies and Procedures, 100, 500, SQPs
General	8.4.1	X	X	Corporate Procurement Policies and Procedures, 100, 500, SQPs
General - Supplemental	None	8.4.1.1	None	Corporate Procurement Policies and Procedures, 100, 500, SQPs
The organization shall: define the process, responsibilities, and authority...	None	None	8.4.1.1	Corporate Procurement Policies and Procedures, 100, 500, SQPs
Supplier Selection Process	None	8.4.1.2	None	Corporate Procurement Policies and Procedures, 100, 500, SQPs
Customer-Directed Sources (also known as "Directed-Buy")	None	8.4.1.3	None	N/A (see Cross-Reference Notes Table)
Type and Extent of Control	8.4.2	X	X	Corporate Procurement Policies and Procedures, 100, 500, SQPs
Type and Extent of Control - Supplemental	None	8.4.2.1	None	Corporate Procurement Policies and Procedures, 100, SQPs

Requirements / Section	ISO 9001	IATF 16949	AS 9100	Corporate Quality, Quality Operating, and Other Documents
Statutory and Regulatory Requirements	None	8.4.2.2	None	Corporate Procurement Policies and Procedures, 100, SQPs
Supplier Quality Management System Development	None	8.4.2.3	None	Corporate Procurement Policies and Procedures, 100, SQPs
Automotive Product-Related Software or Automotive Products with Embedded Software	None	8.4.2.3.1	None	N/A (see Cross-Reference Notes Table)
Supplier Monitoring	None	8.4.2.4	None	Corporate Procurement Policies and Procedures, 100, SQPs
Second-Party Audits	None	8.4.2.4.1	None	SQPs
Supplier Development	None	8.4.2.5	None	Corporate Procurement Policies and Procedures, 100, SQPs
Information for External Providers	8.4.3	X	X	Corporate Procurement Policies and Procedures, 100, SQPs
Information for External Providers - Supplemental	None	8.4.3.1	None	Corporate Procurement Policies and Procedures, 100, SQPs
Production and Service Provision	8.5	X	X	002: Manufacturing, 206, 200, 300, 301, 303, 601 Series
Control of Production and Service Provision	8.5.1	X	X	002: Manufacturing, 206, 200, 300, 301, 303, 307, 601 Series
Control Plan	None	8.5.1.1	None	002: Design and Development, Manufacturing, 200, 200A, 601 Series
Control of Equipment, Tools, and Software Programs	None	None	8.5.1.1	002: Manufacturing, 200, Plant Documents
Standardized Work - Operator Instructions and Visual Standards	None	8.5.1.2	None	002: Design and Development, Manufacturing, 200, 300, Corporate Procurement Policies and Procedures
Validation and Control of Special Processes	None	None	8.5.1.2	(see Cross-Reference Notes Table)
Verification of Job Set-Ups	None	8.5.1.3	None	002: Manufacturing, 200, Plant Documents
Production Process Verification	None	None	8.5.1.3	308, 206, 601 Series
Verification After Shutdown	None	8.5.1.4	None	Plant Documents
Total Productive Maintenance	None	8.5.1.5	None	002: Manufacturing, 200, 900, Plant Documents
Management of Production Tooling and Manufacturing, Test, and Inspection Tooling and Equipment	None	8.5.1.6	None	206, 200, 601 Series, Plant Documents
Production Scheduling	None	8.5.1.7	None	002: Customer Order Management, Central Planning Documents, and Sales Business Group Procedures
Identification and Traceability	8.5.2	X	X	002: Design and Development, Manufacturing, 202, 005, Corporate Procurement Policies and Procedures

Requirements / Section	ISO 9001	IATF 16949	AS 9100	Corporate Quality, Quality Operating, and Other Documents
Identification and Traceability - Supplemental	None	8.5.2.1	None	002: Design and Development, Manufacturing, 202, 005, Corporate Procurement Policies and Procedures,
Property Belonging to Customers or External Providers	8.5.3	X	X	N/A (see Cross-Reference Notes Table)
Preservation	8.5.4	X	X	002: Manufacturing, Plant Documents, Corporate Procurement Policies and Procedures
Preservation - Supplemental	None	8.5.4.1	None	002: Manufacturing, Plant Documents, Corporate Procurement Policies and Procedures
Post-Delivery Activities	8.5.5	X	X	002: Customer Order Management, 502, 502A, Sales Business Group Procedures
Feedback of Information from Service	None	8.5.5.1	None	N/A (see Cross-Reference Notes Table)
Service Agreement with Customer	None	8.5.5.2	None	N/A (see Cross-Reference Notes Table)
Control of Changes	8.5.6	X	X	206
Control of Changes - Supplemental	None	8.5.6.1	None	002: Manufacturing, 206, 506, 510
Temporary Change of Process Controls	None	8.5.6.1.1	None	300
Release of Products and Services	8.6	X	X	002: Manufacturing, 307
Release of Products and Services - Supplemental	None	8.6.1	None	002: Manufacturing, 601 Series
Layout Inspection and Functional Testing	None	8.6.2	None	002: Manufacturing, 307, Plant Documents
Appearance Items	None	8.6.3	None	N/A (see Cross-Reference Notes Table)
Verification and Acceptance of Conformity of Externally Provided Products and Services	None	8.6.4	None	Corporate Procurement Policies and Procedures, 100, 307 SQPs, Plant Documents
Statutory and Regulatory Conformity	None	8.6.5	None	Corporate Procurement Policies and Procedures, 100, SQPs and Procedures
Acceptance Criteria	None	8.6.6	None	002: Design and Development, 307, 601 Series
Nonconformance Management - Control of nonconforming outputs	8.7	X	X	002: Manufacturing, 307, 005
The organization shall ensure that outputs that do not conform to their requirements are identified and controlled ...	8.7.1	X	X	002: Manufacturing, 307, 005
Customer Authorization for Concession	None	8.7.1.1	None	002: Customer Order Management, 502, 502A
Control of Nonconforming Material - Customer-Specified Process	None	8.7.1.2	None	002: Manufacturing, 307, 005

Requirements / Section	ISO 9001	IATF 16949	AS 9100	Corporate Quality, Quality Operating, and Other Documents
Control of Suspect Product	None	8.7.1.3	None	Plant Documents
Control of Reworked Product	None	8.7.1.4	None	002: Manufacturing, 307, 005
Control of Repaired Product	None	8.7.1.5	None	002: Manufacturing, 307, 005
Customer Notification	None	8.7.1.6	None	002: Manufacturing, Quality Management System, 307
Nonconformance Management - Nonconforming product disposition	None	8.7.1.7	None	307
The organization shall retain documented information that...	8.7.2	X	X	002: Manufacturing, 307, 005
<b>PERFORMANCE EVALUATION</b>	<b>9</b>	<b>X</b>	<b>X</b>	
Monitoring, Measurement, Analysis, and Evaluation	9.1	X	X	002, 200 Series, 206, 200, 400, 500, 610
General	9.1.1	X	X	002, 200 Series, 206, 200, 400, 500, 610
Monitoring and Measurement of Manufacturing Processes	None	9.1.1.1	None	002: Manufacturing, 200, 200D, 200A
Identification of Statistical Tools	None	9.1.1.2	None	002: Design and Development, manufacturing, 601 Series, 200A
Application of Statistical Concepts	None	9.1.1.3	None	200, 604, Plant Documents
Customer Satisfaction	9.1.2	X	X	002, 400, 503, 504
Customer Satisfaction - Supplemental	None	9.1.2.1	None	002, 400, 503, 504
Analysis and Evaluation	9.1.3	X	X	002, 100, 210
Prioritization	None	9.1.3.1	None	002, 400, 503, 504
Internal Audit	9.2	X	X	002: Internal Quality Auditing, 008 Series
The organization shall conduct internal audits at planned intervals...	9.2.1	X	X	002: Internal Quality Auditing, 008 Series
The organization shall: a. plan, establish, implement, and maintain an audit program(s)...	9.2.2	X	X	002: Internal Quality Auditing, 008 Series
Internal Audit Program	None	9.2.2.1	None	002: Internal Quality Auditing, 008 Series
Quality Management System Audit	None	9.2.2.2	None	002: Internal Quality Auditing, 008 Series
Manufacturing Process Audit	None	9.2.2.3	None	002: Internal Quality Auditing, 008 Series



Requirements / Section	ISO 9001	IATF 16949	AS 9100	Corporate Quality, Quality Operating, and Other Documents
Product Audit	None	9.2.2.4	None	002: Manufacturing, 307
Management Review	9.3	X	X	400
General	9.3.1	X	X	400
Management Review - Supplemental	None	9.3.1.1	None	400
Management Review Inputs	9.3.2	X	X	002: Quality Management System, 200, 400, 500, 503
Management Review Inputs - Supplemental	None	9.3.2.1	None	002: Strategic Business Planning, Quality Management System, 400
Management Review Outputs	9.3.3	X	X	400
Management Review Outputs - Supplemental	None	9.3.3.1	None	400
<b>IMPROVEMENT</b>	<b>10</b>	<b>X</b>	<b>X</b>	
General	10.1	X	X	002, 100, 200
Nonconformity and Corrective Action	10.2	X	X	002: Manufacturing, 307, 005
When a nonconformity occurs, including any arising from complaints, the organization shall...	10.2.1	X	X	002: Manufacturing, 307, 005
The organization shall retain documented information as evidence of nonconformities...	10.2.2	X	X	002: Manufacturing, 307, 005
Problem Solving	None	10.2.3	None	002: Manufacturing, 200L, 500, 503, 206
Error-Proofing	None	10.2.4	None	002: Manufacturing, 200L, 500, 206
Warranty Management Systems	None	10.2.5	None	503, 400, 400A
Customer Complaints and Field Failure Analysis	None	10.2.6	None	002: Manufacturing, 500, 503, 206, Plant Documents
Continual Improvement	10.3	X	X	002, 500, 206
Continual Improvement – Supplemental	None	10.3.1	None	002, 500, 206, 200B

## Cross-Reference Notes Table

Requirements / Section	ISO 9001	IATF 16949	AS 9100	Notes
Development of Products with Embedded Software	None	8.3.2.3	None	KEMET products do not use embedded software.
Customer-Directed Sources (also known as "Directed-Buy")	None	8.4.1.3	None	KEMET has no customer directed sources.
Automotive Product-Related Software or Automotive Products with Embedded Software	None	8.4.2.3.1	None	KEMET products do not use embedded software.
Validation and Control of Special Processes	None	None	8.5.1.2	KEMET has no designated AIAG "special processes." Processes where the resulting output cannot be verified by subsequent monitoring or measurement have arrangements per the requirements in the AS9100 standard. Relevant arrangements are defined in plant-level documents.
Property Belonging to Customers or External Providers	8.5.3	X	X	KEMET has no properties belonging to customers.
Feedback of Information from Service	None	8.5.5.1	None	Servicing is not applicable to KEMET's current products. However, should servicing be applicable to future products, these clauses will be addressed at that time.
Service Agreement with Customer	None	8.5.5.2	None	
Appearance Items	None	8.6.3	None	KEMET products are not designated as "appearance items" and an Appearance Approval Report (AAR) is not required as a part of PPAP for KEMET. Should KEMET's future products be designated as "appearance items", this clause will be addressed at that time.

## B. Military Standard Cross-Reference Table

Reference: [MIL-STD-790G](#) (Revision: 28 March 2018)

MIL-STD-790	Quality Manual Section	Corporate Quality, Quality Operating, and Other Documents
5.1.1	I.C	Quality Manual, Plant Documents
5.1.2	II.C	800
5.1.5	II.E	508
5.2.1	II.G	604, Plant Documents
5.2.2	III.A	301
5.2.4	III.A	307, 503, 700 Series
5.2.4.1	III.A	503
5.2.4.2	III.A	503
5.2.5	II.E, III.A	503
5.2.5.1	II.B	206, 601 Series
5.2.6	III.A	200, Plant Documents
5.2.7	II.B, III.A	200, 202, 206, 301, 307, 510, Plant Documents
5.2.8	II.D, II.F	100, 300, Corporate Procurement Policies and Procedures
5.2.9	II.B, III.A	200, 601 Series
5.2.10	II.F, III.A	100, 202, 200A, Plant Documents
5.2.11	III.A	Plant Documents
5.2.12.1	II.F, III.A	100, 202, 307
5.2.12.2	II.F, III.A	100, 202
5.2.12.3	III.A	307
5.2.12.4	III.A	202
5.2.13	III.A	202
5.2.14	III.A	307
5.2.15	III.A	200A, 307, 005, Plant Documents
5.2.16	II.C	008

## C. Scope of Environmental Registrations

Business	Location	Registered To
Headquarters	Simpsonville, SC, USA	ISO 14001
Ceramic	Monterrey Plants 1 and 2, Guadalupe, N.L., Mexico	ISO 14001
	Monterrey Plant 3, San Nicolás de los Garza, N.L., Mexico	ISO 14001
Tantalum	Matamoros Plant, H. Matamoros, Tamps., Mexico	ISO 14001
	Simpsonville Plant, Simpsonville, SC, USA	ISO 14001
	Suzhou Plant, Suzhou, Jiangsu, China	ISO 14001
	TOKIN Plant, Toyama, Japan	ISO 14001
	TOKIN Plant, Chachoengsao, Thailand	ISO 14001
	Victoria Plant, Ciudad Victoria, Tamps., Mexico	ISO 14001
Film and Electrolytics	Anting-Shanghai Plant, Shanghai, China	ISO 14001
	Batam Plant, Batam, Indonesia	ISO 14001
	Évora Plant, Évora, Portugal	ISO 14001
	Kyustendil Plant, Kyustendil, Bulgaria	ISO 14001
	Pontecchio Plant, Sasso Marconi, Italy	ISO 14001
	Skopje Plant, Skopje, Macedonia	ISO 14001
	Suomussalmi Plant, Suomussalmi, Finland	ISO 14001




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*Suomussalmi, Finland*

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