

Universal Instruments Supplier Manual

About Universal: We are the creators of the technology that drives the electronics manufacturing industry. We build the World's best advanced automation and assembly equipment; enabling some of today's high-tech electronic products.



Capitalized terms used herein and not otherwise defined shall have the meanings set forth in Buyer's Purchasing Terms and Conditions.

Customer Support Center T: +1 (800) 842-9732 or T: +1 (607) 779-5000 **AMERICAS** T: +1 (800) 432-2607 or T: +1 (607) 779-7522 CHINA, SHENZHEN T: +86-755-2685-9108

CHINA, SHANGHAI T: +86-21-6495-2100 EUROPE T: +421-2-4930-96-60 www.uic.com
email: universal@uic.com

Universal Instruments Corporation Corporate Headquarters • 33 Broome Corporate Parkway • Conklin, NY 13748

Table of Contents

1. Universal's Core Beliefs	3
2. Quality Policy Principles	3
3. Goals & Scope	3
4. Supplier Code of Conduct & Sustainability	4
5. Commercial Expectations	6
6. Tooling and Gauging Policy	7
7. Prototypes	7
8. Quality Requirements	8
9. Supplier Change Management	11
10. Materials/Delivery Expectations	12
11. Supplier Performance Metrics	13
12. Process Audits	13
13. Supplier Conferences / Summits	14
14. Record Retention	14
15. Obligations, Exceptions, Revisions	14

1. Universal's Core Beliefs

- 1.1 **Respect for Each Other.** Universal Instruments Corporation (Universal) must operate in a climate of openness, trust and cooperation, in which each of us freely grants others the same respect and decency we seek for ourselves. We expect open, honest, and timely communication. As a global company, we invite and embrace the diversity of all our people and partners
- 1.2 **Power of Collaboration.** Universal and our partners are both a community of entrepreneurial businesses and a single enterprise. Our goal is to preserve the freedom each of us needs to find personal satisfaction while building a strong business that comes from unity of purpose. True unity is more than a melding of self-interests: it results when goals and values are shared
- 1.3 **Passion for Excellence.** Universal chooses to be a leader—in serving our customers, advancing our technologies, and rewarding all who invest in us. To sustain our leadership, we relentlessly seek to improve our performance. We bring urgency to every business challenge and opportunity. We anticipate change and shape it to our purpose. We encourage new ideas that challenge the status quo, and we seek to involve every mind in the growth of our business
- 1.4 **Personal Integrity.** We at Universal demand uncompromising ethical standards in all we do and say. We are committed to doing what is right—in good times and in bad. We are accountable for the commitments we make. We are, above all, an honorable company of honorable people
- 1.5 **Responsibility to Our Communities**. Universal is committed to good corporate citizenship. We strive to supply goods and services of superior value to our customers; to create jobs that provide meaning for those who do them; and to contribute generously of our talents and our wealth in the communities in which we do business.

2. Quality Policy Principles

- 2.1 Quality driven management and employee dedication are keys to success and customer satisfaction. Universal is committed to building products that are sound and dependable. We will improve our business continuously in quality, cost, and reliability. We will consistently provide products and services which meet or exceed customer expectations, and satisfy customers by anticipating their requirements.
- 2.2 Universal seeks to achieve and maintain a reputation of excellence throughout the communities it serves. To achieve this, dedication to quality in everything Universal does will be a top priority of all of our employees and Suppliers. We believe that success will come only through continuous renewal. Quality is at the very core of our product leadership culture. All Universal employees are therefore, committed to CQC –

Customer Success

Quality Product

Continuous Improvement

3. Goals & Scope

3.1 We need Suppliers who are capable of providing best-in-class quality and services. Before presenting the following guidelines, we want to provide the general principles that drive this program to make sure that each Supplier's decision to participate is made with a complete knowledge of our objectives, of the procedures used, and what is expected of all Supplier companies.

3.2 **Goal**

- 3.2.1 The purpose of this manual is to provide Universal Suppliers guidance as to our commercial, quality, delivery, technology and business requirements.
- 3.2.2 The demand for improved product quality and reduced cost is widely recognized as the primary challenge facing our industry and directly driven by our customers. Universal has historically been committed to producing the highest quality product possible. Our policy is to meet and strive to exceed customer requirements with the standard of measurement being zero defects. This manual details the procedures and systems of this quality approach, the basis of which is defect prevention and continuous improvement. Universal is committed to this approach, and we expect the same commitment from our Suppliers. It is important that Universal's supply base develops our same enthusiasm for excellence and displays the willingness to work toward the common goals outlined in this manual. With this in mind, Universal has created this common Supplier Manual applicable for all Universal locations supporting the

following points:

- Communicate to the Supplier Universal's expectations, goals and minimum requirements to assure quality of supplied parts.
- Encourage open and free communication of ideas, information and notification of problems among Suppliers,
 Universal and its customers in the spirit of teamwork and cooperation.
- Develop an overall plan to ensure smooth production start-up and ramp-up both at Universal and the Supplier, based on effective planning and communication.
- Define the quality assurance procedures and documents Suppliers must follow to assure application of an effective quality management system based on ISO 9001:2015.

3.3 **Scope**

This Supplier Manual applies to all production material Suppliers and service part Suppliers that supply product to any of the production facilities or distribution warehouses of Universal. These procedures may be applied to other parts, materials, and services (such as consumable tools and supplies, indirect material, capital equipment, non-production services and suppliers of temporary workforce employment).

3.4 Responsibilities

- 3.4.1 All production material and service part Suppliers must maintain a comprehensive Quality Management System to ensure compliance with the requirements of the contract and this document. This manual explains Universal's minimum expectations as well as the processes Universal follows to assess the capability and performance of each Supplier. Universal seeks Suppliers who have a minimum of compliance to ISO 9001:2015 and who are preferably registered.
- 3.4.2 All production material and service part Suppliers must inform Universal if another customer places Supplier on a special status regarding quality and/or delivery, including but not limited to, controlled shipping, customer shutdown due to a supply issue, or a field action.

4. Supplier Code of Conduct & Sustainability

4.1 Code of Conduct

- 4.1.1 **Supplier Code of Conduct.** The Universal Core Beliefs serve as a guide on the way we conduct our business—with our customers, our employees, our Suppliers and our communities. These beliefs, which are deeply rooted in our culture, also serve as a framework for the standards of business conduct we expect from our Suppliers. Compliance with these standards will be a mandatory component of our purchase contracts worldwide and must be flowed down to Supplier's subcontractors.
- 4.1.2 **Respect for Each Other.** Universal operates in a climate of respect, courtesy and impartiality. We expect open, honest and timely communication. Universal Suppliers should encourage a positive and diverse workplace by not tolerating harassment or discrimination, including that involving race, color, religion, gender, age or disability.
- 4.1.3 **Power of Collaboration.** Successful business relationships are the result of mutual goals and values. We encourage differentiating technologies that challenge the status quo and help support Universal's product leadership model. We view every Supplier relationship as an opportunity to extend our enterprise and grow our business. Information given to us must be accurate, and when requested, we will treat as confidential, information so designated. Universal respects the intellectual property rights of others, including but not limited to patents, trademarks, copyrights, manufacturing methods, fixturing, product designs, and safeguards third party confidential and proprietary information and expects its Suppliers to do the same. Any transfer or sharing of technology or know-how must be done in a manner that protects a party's intellectual property rights and is in compliance with local and international laws concerning data privacy and security. Universal will view violations of such rights very seriously.
- 4.1.4 **Passion for Excellence.** Universal seeks to be a leader—in serving our customers, advancing our technologies, and rewarding all who invest in us. To extend our competitive position, we expect our Suppliers to relentlessly improve their own performance and to bring urgency to every business challenge and opportunity.
- 4.1.5 **Personal Integrity.** We at Universal demand uncompromising ethical standards in all we do and say—we expect our Suppliers to do the same. Our policies prohibit the acceptance of gifts, services or anything of such value that the good judgment of the recipient might be influenced, or that a third party might reasonably perceive as influencing that judgment. Payments of money, property, or services for the purpose of obtaining business or special consideration are prohibited. If a Universal employee solicits a gift or entertainment opportunity from a Supplier for their personal use, the request is to be declined.
 - Universal recognizes that in some cultures, business gifts and business entertainment are considered an important part of the development of business relationships. Any gift or entertainment must be evaluated to ensure it is in the best interest of Universal, consistent with Universal policies and the law, and in accordance with local custom.
 - No listing of ethical guidelines can be considered complete. It is incumbent upon those affected by this policy to

- avoid the misconception that if it is legal, it is ethical. Appropriate conduct must reflect good judgment, fairness and high standards.
- 4.1.6 Responsibility to Our Communities. We are committed to good corporate citizenship. We expect our Suppliers to abide by all applicable employment, environmental, health and safety laws and regulations. We will not allow the use of any forced, involuntary or child labor by Suppliers who provide goods or services to us and expect all our Suppliers to conduct appropriate due diligence on their own upstream sub-suppliers to ensure their supply chains are free from forced labor. We also believe that Suppliers should provide wage and benefit levels to their employees that address the basic needs of people in light of local conditions.
- 4.1.7 **Adherence.** We expect your cooperation in ensuring adherence to our Supplier Code of Conduct. If you or anyone in your company believes that a Universal employee or other Supplier has violated this policy, please contact the Universal Instruments Corp. Compliance Office by e-mail to universal.compliance.office@uic.com.

4.2 Sustainability

- 4.2.1 **Shared Principle of Sustainability.** Universal is committed to environmental responsibility that leads to sustainability a practice or process that meets today's needs without compromising the ability of future generations to meet their own needs. We believe that this focus will benefit society, future generations and each of us as individuals, as well as contribute to our competitive advantage in the global marketplace. We expect our Suppliers and sub-suppliers to share these beliefs. Suppliers and sub-suppliers are required to be compliant with ISO-14001.
- 4.2.2 **Environmentally Responsible Products and Process.** To assure that our products and processes will provide the maximum benefit and least damage to the environment, we expect Universal Suppliers to:
 - Develop and offer products that help contribute to improved energy efficiency.
 - Evaluate and minimize the complete-life cycle environmental impact of your products and processes.
 - Minimize waste generation.
 - Lead in the conversion to environmentally friendly materials including the use of recycled and recyclable materials.
 - Maximize the efficient use of resources such as water.
 - Obtain energy from renewable sources and/or lower impact resources wherever practical to reduce greenhouse gasses.
 - Strive for environmental leadership in regions in which you operate.

4.3 Basic Working Conditions General Principles

- 4.3.1 Basic Working Conditions Guiding Principles. Universal expects its Suppliers and sub-Suppliers to develop policies and practices for all of its facilities worldwide, to provide working conditions that are appropriate under applicable law and that support and uphold the Universal Core Beliefs.
- 4.3.2 **Use of Child Labor is prohibited.** Prohibits suppliers from employing any person below the age of 15 except as part of a government sponsored training or apprenticeship program.
- 4.3.3 **Forced Labor is prohibited.** Prohibits suppliers from using forced labor in any form and further prohibits physically abusive practices.
- 4.3.4 **Freedom of association.** Encourages open communication between management and employees regarding working conditions without fear of retaliation, intimidation, or harassment.
- 4.3.5 **Compensation.** Expects that suppliers' employees will receive compensation and benefits that are competitive and consistent with applicable laws regarding minimum wages, overtime hours and legally mandated benefits.
- 4.3.6 Working Hours. Expects suppliers to comply with applicable laws regulating hours of work.
- 4.3.7 **Equal Opportunity Employment.** Expects suppliers to have written policies promoting equal employment opportunities and formal, independent practices for responding to any complaints.
- 4.3.8 **Health and Safety.** Expects suppliers to promote safe and healthy work environments for all employees and expects commitment to continually improving the same.
- 4.3.9 **Adherence.** We encourage suppliers throughout our entire supply chain to adopt and enforce policies similar to those stated above. Universal seeks to identify and do business with organizations that conduct their business to standards that are consistent with those stated in in this Section 4.3. Universal personnel are expected to report any known or reported violations to Section 4.3 to their respective Vice President or Compliance Officer without fear of retaliation.

4.4 Anti-Bribery

- 4.4.1 Universal expects all Suppliers to comply with all laws and regulations applicable to its business, at all governmental levels worldwide.
- 4.4.2 The use of corporate funds, property or other resources for any unlawful or improper purpose is prohibited. Anticorruption laws require that companies meet prescribed accounting and internal control standards and impose severe penalties on both companies and individuals for certain types of payments and practices. Universal Employees and our

Suppliers may not give, promise or authorize any payments, either directly or indirectly to government officials in any country.

4.5 Responsible Business Alliance Code of Conduct

Suppliers to Universal Instruments are required to be in full compliance with the RBA Code of Conduct. You can view and download a copy of the RBA Code of Conduct at http://www.responsiblebusiness.org/code-of-conduct/.

5. Commercial Expectations

5.1 Purchasing Process

- 5.1.1 **Supplier Agreement.** When requested, Suppliers must sign and return all other agreements.
- 5.1.2 **Request For Quotation.** Potential Suppliers will be invited to participate in the quoting process. Suppliers are required to provide detailed cost breakdowns. Failure to provide the detailed cost breakdown may result in the quote not being accepted. (Contact your local Universal Supply Chain Management ("SCM") representative for further instructions.)
- 5.1.3 Supplier Selection Criteria. The following criteria may be used to award new business:
 - Supplier's demonstrated performance in quality, delivery, and cost reduction
 - Supplier Consolidated Risk Assessment
 - Supplier's total cost competitiveness and commitment to continuous improvement
 - Supplier's demonstrated technical capabilities, Engineering support of Universal programs, and Program Management of new product launches
 - Supplier's overall financial condition
 - Supplier's acknowledgement and acceptance of Universal's Purchase Order Terms and Conditions.
 - Other elements, such as customer-directed spend, regional requirements, etc.
 - Supplier's commitment to meet requirements mentioned in 9.1 of this supplier manual.
- 5.1.4 **Cost Breakdown Analysis.** As requested, Suppliers will supply detailed and accurate cost information in a format agreed upon.
- 5.1.5 **Purchasing Authorizations.** Only employees from Universal's SCM organization are authorized to commit monies to a Supplier and shall be in the form of an authorized Purchase Order or Supplier Agreement.

5.2 Continuous Improvement

5.2.1 **General.** Continuous Improvement is an essential element of long-term business success for Universal and for its Suppliers and is driven by Universal's customers. In order to remain competitive, Universal and its Suppliers must recognize the requirement to find effective ways to eliminate waste and reduce the cost of our products.

5.2.2 Expectation—Annual Improvement Factor

- Universal expects all Suppliers to demonstrate a year-over-year cost reduction. We expect this to be directly reflected in the form of an Annual Improvement Factor (AIF) on all business. Cost reduction targets will be communicated to Suppliers from Universal Supply Chain Management.
- All Suppliers are expected to constantly examine and optimize the entire cost structure of their business and the products supplied to Universal. This includes process improvements, cycle-time reduction, scrap reduction, die/tooling set-up reduction, design improvements, Sales, General and Administration (SG&A) reduction, fixed and variable overhead reduction, transportation, etc. In order to ensure proper review and validation of Suppliers' design and process improvement ideas, Suppliers must strictly comply with Universal's change management requirements for all design and process change proposals (See Supplier Change Management section).

5.3 Invoicing

- 5.3.1 **General.** The Supplier will contact the Universal plant that will be receiving the product or service (Universal receiving plant) for invoicing requirements.
- 5.3.2 **Standard Invoicing Instructions.** The following information must be included on all production part invoices submitted to Universal:
 - Original should be on original copy of invoice
 - Duplicate should be on any additional copies submitted
 - Each invoice must contain a unique invoice number (not repeated)
 - Universal part number
 - Universal purchase order number
 - Quantity
 - Unit and total price

For International Shipments:

- Country of origin "Manufacture"
- Schedule B number
- Export Control Classification Number (ECCN)
- Complete and detailed description of the merchandise
- Supplier will ensure that all information provided on all invoices and shipping/business documents and/or electronic data accurately reflects the physical goods in the shipment.
- 5.3.3 **Invoicing Consigned Inventory.** Consigned inventory may or may not require an invoice depending on the Universal purchase order and requirements from the Universal receiving plant. If an invoice is required, the Standard Invoicing Instructions (above) are required. If an invoice is not required, follow the information from the invoice-less Instructions (below) or specific instructions from the Universal receiving plant.
- 5.3.4 **Invoice-less Instructions.** If a Universal plant and purchase order indicate payment from evaluated receipts settlement, the Supplier may not be required to submit an invoice with the shipment (unless required by local Customs authorities with respect to shipments of goods across international frontiers or borders or government regulations). Contact the Universal receiving plant for verification.
- 5.4 **Advertising and Public Communication.** Suppliers shall not, without prior written consent of the Universal Marketing department, in any manner advertise or publish its relationship with Universal Instruments or Universal's customers, make any reference to the award of business or use any trademarks or trade names of Universal or any of its associated companies in any press release, advertising or promotional materials.
- 5.5 **Contingency plans.** The Supplier must prepare and maintain operations contingency plans to satisfy Universal and ISO 9001:2015 requirements in the event of an emergency such as utility interruptions, labor shortages, pandemic, key equipment failure, field returns, customs enforcement actions, supply chain disruption, etc.

6. Tooling and Gauging Policy

6.1 Quotation

- 6.1.1 Tooling quotation must include expense breakdown, including fixtures, dies, gauging and other costs as well as tooling design (i.e., number of cavities, material, etc.).
- 6.1.2 Capacity of the Tooling must be clearly defined on the quotation and be calculated on a 5-day 2-shift basis unless otherwise directed by Universal.
- 6.1.3 Tooling life must be clearly defined on the quotation.
- 6.1.4 Cavity replacement must be clearly defined on the quotation. This should be provided as a per part cost or as a cavity replacement cost.
- 6.1.5 The quotation must specify lead-time breakdowns including design, build, testing and sample submission & approval.

6.2 Measurement System

- 6.2.1 Universal's expectation is that all Measurement System devices must be validated in accordance with agreed upon industry standards unless otherwise specified by Universal.
- 6.2.2 Gauge tolerances must be defined by SAE/DIN/ISO standards.
- 6.2.3 The Supplier is expected to maintain the integrity of the Measurement System and provide Gauge Repeatability & Reproducibility (R&R) reports at required intervals when requested by UIC.

6.3 Invoicing for Tooling

- 6.3.1 Invoice Amount. Supplier invoices should document expenditures for Universal-owned Tooling (including a full cost breakdown). In addition, invoices must show the exact physical location by city, town, state or province, and country where the Tooling will be used in production. Supplier invoices for Tooling should reflect the Tooling order amount or the actual costs incurred, whichever is less. Any discrepancies should be brought to the attention of the Universal SCM Representative. The Measurement System Equipment invoice must include complete descriptions of each device. Note: Supplier must provide photographs of Tooling with all Tooling invoices.
- 6.3.2 **Payment Authorization.** Universal will authorize payment for Tooling and Measurement System devices when the Tooling is validated by First Article Inspection, Tooling inspection, and all other applicable requirements as defined by Universal (regarding Tooling audit) are met, statistical studies are approved, and all photographs received, or as otherwise agreed upon with Universal.

7. Prototypes

7.1 **General.** In most programs prototypes are required to verify the design concepts. The requirements listed below apply to all Suppliers who have been issued a prototype purchase order.

8. Quality Requirements

8.1 General

- 8.1.1 Quality Management System. All Suppliers must comply with the Universal quality expectations defined in this section. Suppliers are fully responsible for the quality of their products. In order to ensure zero defects, an effective Quality Management System must be in place. Suppliers are expected to work in accordance with the requirements described in ISO 9001:2015. Latest certification(s) must be on file with Universal. These requirements are mandatory unless otherwise agreed to in writing by Universal. Suppliers are also responsible for assuring that their subcontractor's FAI submissions are approved and are under a controlled system of evaluation and review. These records must be made available for Universal examination when requested.
- 8.1.2 **Plant-Specific Requirements.** In addition to complying with the quality expectations defined in this section, Suppliers must also comply with the additional quality expectations, where applicable, of specific Universal locations.

8.1.3 Universal-Specific Requirements.

It is the responsibility for the Supplier to pass down all applicable statutory and regulatory requirements as well as special product and process characteristics to their suppliers and require that their suppliers cascade all applicable requirements throughout the supply chain to the point of manufacture.

8.2 Supplier Assessments

- 8.2.1 **New Suppliers.** A Universal Supplier SCM representative may request completion of the Universal Supplier Risk & Quality Systems self-assessment. Universal may also complete an on-site Supplier Risk & Quality Systems Assessment. Once completed and submitted, Universal will determine whether the candidate Supplier has the required quality systems, technical core competencies, program management and financial stability to be awarded new business. Regional or specific requirements may apply. In these cases, Universal reserves the right to conduct additional investigations prior to business award.
- 8.2.2 **Existing Suppliers.** Depending on a risk analysis, which includes safety and regulatory requirements, the Supplier Scorecard rating and the Quality Management System certification level, Universal may (i) request the Supplier to conduct a Quality Management System self-audit or (ii) conduct an on-site assessment. Once completed, Universal will determine whether the existing Supplier currently has the required quality systems, technical core competencies and financial stability to be awarded additional business.

8.3 First Article Inspection ("FAI")

8.3.1 **General.** At a minimum Suppliers must comply with the intent of the latest edition of ISO 9001with the goal that Supplier become ISO 9001 certified. In addition, certain specific requirements could apply.

8.3.2 FAI Submission Requirements

- Unless specifically waived in writing by Universal, all Supplier FAI submissions must include all dimensions stated on the drawing(s) per the drawing's units, to the accuracy as stated in the drawings, materials certifications, Certificates of Assurance (where required) or Certificates of Conformance.
- The FAI and Part should be clearly marked so the parts Serial Number (or unique identifier) matches the FAI datasheet.
- Prior to a Supplier submitting an FAI to Universal, all of their sub-Supplier FAI's must have been approved by the Supplier. Unless specifically waived in writing by Universal.
- Suppliers must conform the UIC Paint and Finish Specifications, MAKE028 and MAKE383 where required.
- Certificates of Assurance are more rigorous than a Certificate of Conformance as they include data from the
 physical measurements. This means that each shipment includes data of the Critical To Function ("CTF") as
 measured and recorded by the manufacturer. In addition to the information included in the Certificate of
 Conformance, the Certificates of Assurance must include the following:
 - o Supplier name
 - o Supplier manufacturing address
 - o Date of the Certificates of Assurance
 - o UIC part number
 - o Supplier lot ID
 - o Date of manufacture
 - o CTF parameter and data
 - o Authorized signature
- Certificate of Conformance is a document from the Supplier certifying the supplied goods or service meets the required specifications.

8.3.3 **Submission Disposition and Notification**

• There are three possible outcomes of a Supplier FAI Submission:

- o **Full Approval** Parts are fully approved for series production. The Universal SCM Representative will specify proper delivery and release requirements.
- o Interim Approval Parts are conditionally approved for a limited time or limited quantity. Note: In this case, a Supplier Corrective Action Request (SCAR) may be issued to the Supplier.
- o **Rejected** Parts may not be used for series production, and tooling purchase orders cannot be paid. Note: In this case, a SCAR may be issued against the Supplier.
- The Universal Supplier Quality Engineer (SQE) will notify the Supplier in writing when their FAI submission has been approved or rejected.
- In some cases, FAI approval requires validation testing and signatory approvals from Universal's customer prior to notifying the Supplier.

8.3.4 Interim Approval

- Suppliers can request a deviation via the Supplier Change Request Form (SCM-F008) in cases where full FAI approval cannot be obtained. The reasons for this request may include, but are not limited to:
 - Out of tolerance condition(s)
 - o Incomplete FAI submission requirements.
 - o If an Interim Approval is granted, updates must be re-submitted with appropriate FAI documentation before the Interim FAI expiration date. If an SCR is submitted with **an Interim FAI, both must expire on the same date.**
- 8.3.5 **FAI Requirements Waiver.** Suppliers must gain written approval from the appropriate Universal SQE when requesting any variation from the above stated requirements.

8.3.6 Regular Re-Qualification

- To maintain validation that FAI documentation matches current process practices and capability, Suppliers will agree to an nth article submissions as deemed necessary by Universal Supplier Quality Assurance for all Universal production parts / models or production raw materials. Suppliers are required to have the appropriate requalification documentation available for submittal or review upon Universal's request.
- Suppliers are required to obtain requalification documentation from Supplier's sub-suppliers for submittal or review upon Universal's request.
- 8.3.7 **Shipping and Labeling Instructions.** Unless otherwise directed by the appropriate Universal representative, Suppliers must affix "FAI SAMPLE PARTS" label below the shipping label as well as the other three sides of the container and ship separate from production parts shipments. Reference Universal site-specific requirements for further details.

8.4 Process Capability and Monitoring

8.4.1 Defined Part/Process Characteristics

- In addition to certain specific requirements, certain characteristics may be deemed as important, and will require increased monitoring to ensure the quality of the parts. Those characteristics may be designated as special, significant, critical-to-function, high impact, major, or other based on specific Universal site requirements.
- When appropriate the Universal Supplier Quality Engineer will identify these specific requirements, or characteristics either by direct communication, specification, or product drawing.

8.4.2 Control of Above Defined Part/Process Characteristics

- When requested the Supplier is expected to use and preserve statistical techniques to maintain a state of control and to improve the process capability on defined part/process characteristics.
- Unless otherwise specified by Universal, if the process does not meet the required capability target, the Supplier must supply a containment plan describing the 100% inspection method that prevents out of specification parts from being shipped to Universal, and a corrective action plan for capability improvement.
- When requested, lot traceability will be maintained by the Supplier per Universal requirements.
- 8.4.3 **Special Process Requirements.** Universal may require Suppliers with special processes to provide and maintain documentation for Universal evidencing continuous improvement, defect prevention and reduction of variation and waste in their supply chain.

8.5 Quality Notification and Supplier Corrective Action Request

8.5.1 **General**

- Universal will immediately notify the Supplier if non-conforming material is found. Upon verification that Universal has received non-conforming product from a Supplier, Universal will issue a Quality Notification ("QN") to the Supplier.
- Evidence of defect such as digital photos will be provided when possible. A sample of the defect will be sent to the Supplier upon request.
- Universal will issue a Supplier Corrective Action Request ("SCAR") in cases of, but not limited to, repeating defects,

large batch failures, safety issues, failures at Universal or Universal's customer's location, Supplier's delivery issues. The Supplier will respond to the SCAR with an 8D report (See 8-D Corrective and Preventive Action Reports section).

- 8.5.2 **Containment Actions.** Upon receiving a SCAR from Universal, Suppliers are required to immediately sort 100% of their product, including product at the Universal plant(s), in transit, in warehouses, at the Supplier's production facility, etc., and to ensure that Universal's locations are supplied with enough certified stock to assure no disruptions to production. Unless otherwise directed by Universal, material must be labeled as certified for the specific defect or defects for the next three shipments.
 - Depending on the continuity of supply situation, the following may occur:
 - o High inventory at Universal—Supplier may choose to have product returned or Supplier may sort at Universal.
 - o Low inventory at Universal—Supplier must come on-site to Universal to sort for defective product.
 - o Extremely urgent (possible line down)—Universal will take the appropriate action, and the Supplier will be responsible for all costs incurred.
 - Universal will contact the Supplier for authorization to return the material at Supplier's expense.
 - Universal will not manage Supplier sorting using a third-party outside source. Suppliers are responsible for third-party outside sources and must make all arrangements to ship parts between Universal and third-party outside source. Supplier will also be responsible for inspecting and monitoring the quality of sorted parts.
 - Reworked parts must meet specifications. The repairing of parts is not permissible without prior written authorization from Universal.
 - Supplier is responsible to report accurate sorting results and to request adjusted defective quantities when appropriate.

8.5.3 8-D Corrective and Preventive Action Reports

- The Supplier will respond to SCARs by using the Universal 8-D Problem Solving Form or other form approved by Universal SQE personnel. The 8-D documentation will be submitted in response to each SCAR, unless otherwise agreed to by the Universal SQE representative. E-mail is the preferred method of response.
- Initial Submission. Universal must receive the initial 8-D response with containment actions within 24 hours of notification.
- Final Submission. Suppliers must submit the final 8-D Problem Solving Form to the appropriate Universal SQE for approval and closure as soon as practical, but no later than 30 days from the SCAR issuance date. The Supplier may request approval for an extension of the 30-day deadline, but must do so prior to the original deadline. Requests should be made to the appropriate Universal SQE.
- Approval and Closure
 - o The appropriate Universal SQE, prior to closure of a SCAR, must approve a Supplier's final 8-D Report.
 - o If the 8-D identifies a change to the process or part, the Universal Change Management requirements MUST be followed. (See **Supplier Change Management** section.)
- Supplier may be requested to present their corrective actions on-site at the Universal Facility.
- Universal reserve the right to verify product conformance to the requirements at the Supplier's and their subcontractor's plants.
- Verification of the implemented corrective action on-site at the Supplier may be accomplished during subsequent visits
- If corrective actions take more than two (2) weeks to implement, progress reports may be required.
- When the corrective action is completed and verified to be effective, the appropriate Universal SQE is responsible for approving the 8-D closure and notifying the Supplier contact of the closure.

8.5.4 Controlled Shipping

- Universal may determine that special measures are required to ensure adequate quality and delivery performance. The costs related to these measures, including but not limited to controlled shipping, will be at the Supplier's expense.
- Controlled shipping is a requirement by Universal for a Supplier to add a redundant inspection process for sorting of a specific non-conformance, while implementing a root cause problem-solving process. The redundant inspection is in addition to normal controls and should be completed in a controlled area. Submission of the inspection results is required. The data obtained from the redundant inspection process is critical as both a measure of the effectiveness of the secondary inspection process and the corrective actions taken to eliminate the initial nonconformance.
- The Universal SQE will notify the Supplier they have been placed on controlled shipping.
- Additional control measures may be required if the initially agreed upon controls are not effective.
- Criteria for application for controlled shipping:
 - o Universal will make the determination whether the Supplier can effectively correct the non-conforming

material situation through the normal SCAR / 8-D process and isolate Universal or Universal's customer from the problem. One or several of the following issues may be cause for Supplier to be considered for implementation of controlled shipping:

- Repeat SCARs
- Supplier's current controls are not sufficient to ensure conformance to requirements
- Duration, quantity, and/or severity of the problem
- Internal/external Supplier data
- Major disruptions
- Quality problem in the field (i.e., warranty).
- o A 3rd party or a Universal representative may perform audits. The data obtained from the third-party redundant inspection process as well as any audits are critical as both a measure of the effectiveness of the secondary inspection process and the corrective actions taken to eliminate the initial non-conformance.
- o In special cases, the controlled shipping inspection may be required to be performed outside the Supplier's facilities at a facility deemed appropriate by Universal.
- Exit criteria controlled shipping

The default exit criteria will be used when no other exit criteria are defined. The default criteria in the 8-D must be provided to and approved by the Universal SQE when requesting removal from controlled shipping

- 8.6 **Embedded Software Requirements.** This requirement is in accordance with IATF16949:2016 requirements which outlines the following:
 - 8.6.1 Organizations must use a process for quality assurance of products with internally developed embedded software, and have an appropriate assessment methodology to assess their software development process.
 - 8.6.2 The software development process must also be included within the scope of the internal audit program; the internal auditor should be able to understand and assess the effectiveness of the software development assessment methodology chosen by the organization.

8.7 Product Safety Requirements

- 8.7.1 Product safety is critical, and Suppliers must have documented processes for management of product-safety related products and manufacturing processes. New requirements related to product safety include, where applicable:
 - Special approval of control plans and FMEAs
 - Training identified by organization or Universal for personnel involved in product-safety related products and associated manufacturing processes
 - Transfer of requirements with regards to product safety throughout the supply chain, including Universal designated sources.
- 8.7.2 This clause highlights the fact that a product should perform to its designed or intended purpose without causing unacceptable harm or damage. Suppliers must have processes in place to ensure product safety throughout the entire product lifecycle.

8.8 Cleanliness Requirements

- 8.8.1 Contamination control will improve part cleanliness over time with measurement, process control and handling improvements. It utilizes a standardized systematic and a structured approach to monitor and control contamination sources, and applies a disciplined approach when responding to issues. Contamination control
 - Provides a systematic approach for control and communication of contamination issues
 - Supports and establishes defined areas of continual improvement
 - Identifies areas of contamination risk
 - Improves quality metrics: reduces PPM and warranty

9. Supplier Change Management

9.1 General. Recognizing that managing change is of critical importance, Universal has implemented a corporate-wide change management system designed to ensure the quality and integrity of Universal products. Suppliers are expected to take a proactive approach to issues of non-conforming product or any changes to design, performance, materials, or processes. Suppliers should never ship such product before obtaining written Universal approval through one of the methods outlined below. In cases where a Supplier has implemented an unauthorized change and Universal and/or its customers have been negatively impacted, the Supplier will be responsible for compensating Universal for all associated costs.

9.2 Temporary Changes

9.2.1 When seeking permission to temporarily ship product that is out of specification or product that is produced with a temporary process change not reflected in the Supplier's current process control plan, the Supplier is responsible for

obtaining approval prior to shipping via an approved UIC deviation. Such situations might include minor dimensional errors or a processing operation outsourced while a machine is down. Note that any changes to Supplier-specified product characteristics also fall under this requirement even if they are not shown on the Universal drawing.

- 9.2.2 To facilitate the creation of a deviation, Supplier Change Request Form (SCM-F008) can be completed.
- 9.2.3 The Supplier must obtain written permission, in the form of an approved UIC deviation, prior to shipping product that is out of specification.

9.3 Permanent Changes

- 9.3.1 Suppliers seeking permanent changes to product design, performance, or processing must follow UIC's current engineering change control process. To initiate this, a Supplier Change Request Form (SCM-F008) can be completed and routed to the appropriate Universal SMC representative for review.
 - o The form must include all relevant information.
 - O Universal may approve, reject, or apply conditions of approval to the SCR (e.g., FAI and validation testing required after change is implemented). The disposition is determined by the nature of the change and impact on manufacturing and customer requirements.
- 9.3.2 Approval of the SCR does not authorize the Supplier to ship—it is only the authorization to proceed with coordination of FAI submission.
 - Suppliers must **NOT**:
 - o Implement changes before receiving full FAI approval in writing
 - o Ship until satisfying all FAI requirements
 - o Ship prior to the implementation date established with the Universal SCM Representative.
 - In cases where a Supplier has implemented an unauthorized change and Universal and/or its customers have been negatively impacted, the Supplier will be responsible for compensating Universal for all associated costs incurred by Universal and its customers.

9.4 Review Process

Universal will review the Supplier Change Request Form (SCM-F008), any relevant advanced product quality planning forms, and any requested statistical performance or process data for approval and implementation of the SCR. The nature of the change (Supplier process or design change) will determine if it can be implemented quickly or if Universal will require validation testing and approvals from our customers.

10. Materials/Delivery Expectations

10.1 Delivery Expectations

- 10.1.1 **Program-Specific Requirements.** Universal will specify expectations for materials during the Advanced Product Quality Planning process, RFQs, purchase orders and other forms of communication. The requirements include at least:
 - Labeling
 - Capacity
 - Delivery terms according to INCOTERMS 2020 (i.e. EXW, FCA, CIF, DAP, DDP)
 - Containers, trays and other packaging
 - Warehousing
 - Consignment
 - Product identification
 - Hazardous material restrictions (including but not limited to IMDS/MSDS, REACH, ROHS, GADSL requirements)
 - Preservation of product
 - o Rust preventative Process must ensure parts are rust free for a minimum of 30 days after receipt at the using Universal facility. Rust preventative films, oils, greases, and/or material must be approved by UIC.
 - o Contamination Reasonable care must be taken to ensure parts are contamination free upon receipt at the Universal receiving facility. Additionally, part-specific contamination standards may be required as noted on the part print.
 - Material release and pull systems
 - Transportation mode and carrier route
 - Returnable Packaging (avoid waste wherever possible!).

10.2 Packaging

Supplier shall follow the latest revision of Universal Instruments Packaging Specification, Part Number 43233602.

11. Supplier Performance Metrics

11.1 **General.** The Supplier Performance Rating System covers Supplier's quality, delivery, and pricing performance that will be used by Universal to rate targeted production material Suppliers.

11.2 Quality Performance

11.2.1 Supplier Corrective Action Requests (SCARs)

- The expectation is "0" SCAR's.
- Suppliers are evaluated on repeat quality issues, including:
 - o Defect occurs more than once
 - Defect after initial 8D is closed
 - Defect with confirmed identical root cause
 - o Defect occurs on a similar part, different machine

A repeat quality issue is not:

- o A repeat defect occurring before initial 8D is solved
- o A similar failure mode with a different root cause
- o Same supplier having a different failure

Unauthorized change and unapproved SCR:

o Unauthorized changes are any changes to production components or subcontractors without written approval by Universal.

11.2.2 Responsiveness to SCARs/8-D Closure

• The expectation is that the Supplier will submit a response to Universal with 8D closure within 30-days. Suppliers will not be penalized if granted a Long-Term Action Pending to the 30-day period for 8-D submission, provided that the request is made within the 30-day period.

11.2.3 PPM Defect Rate

• The expectation is 0 PPM.

11.3 Delivery Performance

11.3.1 On Time Delivery Score

• The expectation is delivery of product 100% on time and the accurate quantity on time.

11.3.2 Premium Freight Score

• The expectation is that there are no instances of expedited freight.

11.4 Cost Reduction Performance

11.4.1 Cost Reduction Score

• The expectation is that the Purchase Order (PO) piece prices for all production parts supplied to Universal are reduced by 5% year-over-year.

11.5 Supplier Rating System

11.5.1 Issuing Scorecards.

- Scorecards will be sent to suppliers via e-mail and will include supporting data.
- Suppliers that have not shipped product within the previous six months may not be issued a scorecard.

11.5.2 Review of Performance Scores.

Suppliers are expected to review their scorecards. In the event that the Supplier believes that the scorecard
contains inaccurate data, the Supplier should immediately notify the appropriate Universal SCM representative
for discussion, review and resolution.

12. Process Audits

12.1 Verification of Conformance

Universal and its customers reserve the right to verify product and process conformance according to the requirements at the Supplier's and subcontractor's premises on a scheduled or unscheduled (event-orientated) basis or frequency.

12.2 Auditor Access

Suppliers are to ensure the auditors have full access to all Universal product related processes and documents—e.g., FMEA, Process Control Plan, inspection results records, etc. These audits will be based on using the Universal SUPPLIER RISK & QUALITY SYSTEMS ASSESSMENT.

13. Supplier Conferences / Summits

From time-to-time Suppliers may be requested to attend Universal sponsored conferences or summits. These conferences/summits will be either regional in nature or business unit focused. Supplier participation and support of these conferences/summits is highly encouraged.

14. Record Retention

The control of records will satisfy all regulatory, Universal, and customer requirements. These records must be available for review by Universal upon request and retained for periods of time specified by Universal.

15. Obligations, Exceptions, Revisions

- 15.1 Supplier shall use the current released version of the Supplier Manual posted at www.uic.com/terms-policies-certifications.
- 15.2 Supplier shall provide training to their personnel regarding the location of the controlled version of the Supplier Manual.
- 15.3 Any exceptions to this Supplier Manual must be mutually agreed to in writing.
- 15.4 In the event Buyer revises, updates, supersedes or replaces the Supplier Manual, Supplier shall have sixty (60) calendar days to implement such changes into Supplier's Quality Management System, processes and procedures. In the event Supplier determines such changes materially affects its cost or ability to perform to this Supplier Manual, Supplier may request exceptions to such changes in writing to Buyer's Authorized Representative within twenty (20) business days. Supplier shall be notified of acceptance or rejections of its exception request within twenty (20) business days.