1 Scope and Purpose

The document is intended to outline the expectations for all suppliers providing production goods and services and is supplemental to the Terms and Conditions of Procurement and the Non-Disclosure Agreement. There are elements that may not be applicable to electronic component suppliers that can be addressed directly as needed.

2 References

AS9100	Aerospace Quality Management System
AS9102	Aerospace First Article Inspection Requirement
AS9146	Foreign Object Damage (FOD) Prevention Program - Requirements For Aviation, Space, And Defense Organizations
ISO 9001	Quality management systems - Requirements
ISO 14001	Environmental management systems - Requirements with guidance for use
RBA Code of Conduct	Responsible Business Alliance Code of Conduct
BE-24014 ATT 1	Quality (Restriction) Codes
BE-43002	Supplier Barcode Labelling Requirements

Supplier Resources Link https://www.bench.com/supplier-information
Terms and Conditions of Procurement

3 Definitions

Per Global Record, Benchmark Glossary

4 Supplier Partnership Statement

Benchmark recognizes that suppliers and supplier performance are critical to Benchmark's success. As such, Benchmark regards our suppliers as partners in our business model and open to mutual continuous improvement opportunities.

Suppliers are expected to review this Supplier Assurance Manual (SAM).
One element of Preferred Supplier consideration is to complete the Supplier Acknowledgement and Confirmation (Appendix 1).
The SAM is not intended to replace any specific industry or regulatory requirements that are specified on the purchase order or other agreement with the supplier.

Benchmark documents referenced throughout SAM can be found on the Supplier Resources Link (https://www.bench.com/supplier-information).

5 Benchmark Communication and Expectations

5.1 Package Labeling

All package labeling shall be in accordance with Benchmark document Supplier Barcode Labeling Requirements (BE-43002) found on the Supplier Resources Link.

5.2 Material Regulations

Suppliers shall monitor changes within all applicable regulations for any hazardous or restricted substances and inform Benchmark accordingly of any adverse impact. Any changes needed because of changes to restricted substances must consider the change communication requirements noted in Section 7 Process or Product Change Disclosures.

5.3 Quality (Restriction) Codes Requirements

Benchmark uses Quality (Restriction) Codes internally and on purchase orders to communicate component-level needs and awareness. Any Quality (Restriction) Codes on purchase orders will directly apply to the goods or services being procured and may be verified at Benchmark Incoming Inspection. The supplier is to seek clarification as needed in the Quality (Restriction) Codes (BE-24014 ATT 1) found on the Supplier Resources Link or contact the Benchmark purchasing agent.

5.4 Nonconformances

Suppliers shall notify Benchmark of identified product, process, material, or performed service nonconformances that may impact the deliverable requirements defined and obtain pre-approval for any variations or deviations proposed prior to the disposition and subsequent delivery.

Benchmark may require formal corrective action and limit accommodation of any requests for variance or deviation.

6 Quality Management

6.1 Management Systems

Supplier shall establish and maintain a quality management system, such as ISO9001 or other accredited third-party registration. Benchmark may grant exceptions to this requirement pending specific circumstances and evaluation.

6.2 Quality Plan

A quality plan is to be established for each product supplied to Benchmark. This quality plan shall include all requirements for controlling the quality of the product to meet print/specification. The plan is to include all elements of the process from material receiving through validation and shipping.

Suppliers shall seek to maintain a one hundred percent (100%) lot acceptance rating at Benchmark, preferably with an internal zero-defect plan in place. If performing below these expectations, Benchmark may issue a corrective action request. If corrective action is requested, Benchmark requires formal root cause analysis, corrective action, and actions to prevent recurrence in order to resolve and reduce the risk of future issues. Additional requirements are noted in Section 6.10.

6.3 Quality Records

All records retention will be managed in accordance with the supplier's Quality Management System and industry standards unless otherwise communicated to the supplier. Minimum requirements:

AS9100 programs	15 years
FDA\Medical programs	Production Life + 15 years
All other programs	10 years

6.4 Process control

Supplier should emphasize process control rather than relying on product quality inspections. This may include one or more of the following tools or techniques: process flow charts, Process Failure Mode and Effects Analysis (PFMEA) and similar tools, control plans which identify all critical part features and key characteristics, Gage Repeatability and Reproducibility (GR&R) on all measurement equipment (with GR&R <20%), Statistical Process Control (SPC) on critical processes (with minimum Cpk=1.33), and clearly defined procedures to deal with out of control conditions.

6.5 ESD Control

If the supplier provides electronic parts, assemblies and equipment, they will establish and maintain an ESD Control Program that includes ESD safe packaging as required.

6.6 Foreign Object Debris/Damage (FOD) Control

Benchmark expects suppliers to have a formal damage prevention program for controlling Foreign Object Debris/Damage (FOD), including educating the employees and measuring and addressing the associated risks. Where applicable, the program must comply with SAE AS9146.

6.7 Product or Process Qualification

Benchmark and an end customer may require on-site product or process qualification protocols. This requirement will be communicated as appropriate. Submission of the Quality Plan and Process Controls are expected.

6.8 First Article Inspection Report (FAIR)

A First Article Inspection Report (FAIR) is required on all custom parts. Unless directed otherwise, the FAIR is required to be provided with the first delivery and any revision to the product print. A FAIR may also be required after a period of two years without change or revision to assure ongoing compliance.

Any specific requirements including FAIR format or template (e.g., AS9102), or other will be communicated accordingly.

6.9 Certificate of Conformance (CoC)

A Certificate of Compliance (CoC) is required with each product delivery. A CoC must include these elements at a minimum:

- Identification of purchase order to be delivered against
- Part number and revision that aligns with the purchase order
- Lot or Date code of the delivered material being certified
- The title, and unless legally protected, the name, of the supplier's employee who is authorizing the release

6.10 Supplier Corrective Action Process

Upon receiving a documented corrective action request, Benchmark requires the supplier to provide containment details within 48 hours. A documented plan to address the identified root cause must then be submitted to Benchmark within 10 working days or as agreed. Corrective Action and plans to Prevent Recurrence shall include the committed dates for completing the actions, be specific to the changes or corrections made (e.g., processes, equipment, staffing, etc.) and training solutions must include employee attendees, subject matter used, trainer name, and date of the training. The response may be provided on the supplier's form; however, all elements of Benchmark's request must be included.

6.11 Lean Manufacturing, Six Sigma, and Continuous Improvement

Benchmark encourages our suppliers to pursue 6S, continuous improvement models, and other Lean Manufacturing and Six Sigma tools to drive down cost and improve product quality. Suppliers are encouraged to seek training and certifications in these practices and Benchmark will provide our Preferred suppliers with training and guidance as resources permit.

At a minimum, suppliers must have continuous improvement programs in place and their employees trained to emphasize root cause analysis and preventive based processes.

Suppliers are encouraged to communicate any continuous improvement ideas with Benchmark and seek our support when needed to work through viable and impactful projects.

Suppliers should proactively submit their plan to Benchmark as part of Preferred Supplier Status considerations.

6.12 Business Continuity and Disaster Recovery

Supplier should maintain documented procedures to assess and mitigate risks that could result in disruption to their normal business operations. The procedures should cover the following aspects of business continuity and disaster recovery planning:

- Vulnerability Risk Assessments for infrastructure disruption such as utilities, communications, transportation, etc., natural disasters (flood, earthquake, severe weather, etc.), fire, labor unrest or strike, government stability, pandemic, cyber attacks, or disasters affecting suppliers.
- Recovery Planning Needs - management succession, disaster team, teams tasks and procedures, emergency contact information, recovery planning and crisis communication, and critical IT applications (operations and data backups).

Suppliers are to proactively submit their plan to Benchmark as part of Preferred Supplier Status considerations.

7 Process or Product Change Disclosures

Supplier shall inform Benchmark of every change regardless of scale or magnitude.

Specific considerations include:

- Intent to close a facility and/or business at least six months prior to the change.
- Change of production location a minimum of six months prior to the change. This includes change of production line within a facility if the existing process had been submitted to Benchmark for validation.
- Changes in process, product, or material as soon as the need is recognized.
- Sub-tier changes in process, product, or material as soon as they are recognized by the supplier.
- Any changes requested by Benchmark's customers directly to the supplier must be communicated immediately.

Full details on all changes should be emailed to Benchmark at *pcn@bench.com* or to the purchasing agent at Benchmark directly.

8 Environment

Benchmark encourages its suppliers to implement an environmental management system compliant with ISO 14001. Benchmark suppliers must also comply with all applicable environmental laws and regulations.

9 Social Accountability

Benchmark suppliers are expected to conduct their business in accordance with the Responsible Business Alliance (RBA) Code of Conduct, and pursue a management system approach to labor, ethics, the environment and occupational health and safety. This includes having documented procedures that meet all applicable labor, ethics, environmental, and occupational health and safety laws and regulations.

10 Technology Roadmap

Benchmark expects suppliers to maintain a technology roadmap outlining their plans for advancement of capabilities, including necessary technologies, and strategic objectives.

Suppliers are to proactively submit their roadmap to Benchmark as part of Preferred Supplier Status considerations.

11 Supplier Sub-Tier Management

Benchmark expects our suppliers to flow down the applicable requirements of this manual to their supply chain. In addition, we expect due diligence when selecting sub-tier suppliers to minimize risk to product and business continuity.

12 Supplier Reviews and Right of Access

Benchmark may periodically conduct supplier reviews. These reviews will cover performance measures and business elements. Supplier performance scorecards may be shared with the supplier at any time, but specifically during a review or when performance requires action.

Benchmark may also schedule on-site quality system audits, product or process validations, source inspection, or corrective action review as deemed necessary. Therefore, in accordance with applicable requirements, the right of access for Benchmark, our customer, and regulatory authorities to applicable areas of the relative facilities and to applicable documented information of the supplier and their sub-tiers may be required.

Appendix 1: *Supplier Acknowledgement and Confirmation*

The *Benchmark Supplier Assurance Manual* is intended to define professional business expectations Benchmark has for its suppliers.

Benchmark requires that an authorized supplier representative sign and date this page and send a copy to Benchmark.

Suppliers should contact their Benchmark Supply Chain representative should they have any concerns about complying with the Supplier Assurance Manual.

By signing this document, the supplier acknowledges they have received, read, and understand the information contained in the Supplier Assurance Manual. The supplier confirms they are aware of the expectations as set forth in the document and will make every reasonable effort to meet them.

Suppliers shall return this completed page per below within 30 days after receiving this document. Supplier retains the original signed copy for their records.

Email to your Local Benchmark materials contact or corp_materials@bench.com

Thank You *for taking the time to review and understand the elements of this manual necessary for us to be successful partners in customer satisfaction.*

As a Benchmark Supplier, we recognize the importance the *Supplier Assurance Manual* expectations and diligently pursue them accordingly.

Representative Signature	Title	Date
Please Print Name	Supplier Address	
Supplier Company Name		

Revision History

Date	Rev	Reason for Change:	ECO Number:
03/15/2024	P	Added specific quality record retention requirements for Medical and AS9100 programs, minimum requirements for any others. Clarified Section 6.1 Management Systems to remove “preferably” and imply ISO9001 as the baseline expectation pending approved exceptions.	DCO0000177
11/21/2023	N	Added Section 5.4 Nonconformances. Added/Clarified details to Section 12 regarding Right of Access.	DCO0000127
06/06/2023	M	Complete re-write and organization of the document, including format. The Product Life Cycle Management, Responsibility of Nonconforming, Intellectual Property, and Additional costs sections were removed given the application in the Non-Disclosure Agreement or Purchase Order Terms and Conditions. Other material and sections were consolidated where applicable.	DCO 0000019
1/7/2020	L	Added Program\Platform Requirements – Supply Chain form reference and section, added emphasis on the Supplier Acknowledgement, increased cost change notifications from 90 to 180 days, updated Material Regulations, clarified Restriction\Quality Codes, introduced 100% lot acceptance expectation (zero defect plan), added notification of defects found in-process, expanded expectations of Quality Records, emphasized notification of process\product variances prior to implementation, added FOD control expectations, added Counterfeit Mitigation, and clarified audits and business reviews. Removed and obsolete the BEF-42006 and BEF-42007 forms. Both were incorporated in to the document as Appendix 1 and Appendix 2.	CORP004255
6/9/2018	K	PCB Spec added as a reference, communication of price and last time buy changes, production\process qualification information, quality\restriction codes clarification and title update. Update document template.	CORP003892
7/14/2016	J	Overhaul of structure to improve description flow. Significant reduction in text to remain more “on point” and reduce overall number of pages. Added Restriction Code information.	CORP003657
7/10/2015	H	Updated section on ESD control plus several other modifications. Update document template.	CORP003310