HI-TEK MANUFACTURING, INC.

EXTERNAL PROVIDER'S (SUPPLIER'S) QUALITY REQUIREMENTS

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SUPPLIER QUALITY REQUIREMENTS

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1. PURPOSE

1.1 The objective of this procedure is to set forth the general quality requirements that must be followed by external providers of direct material or services to Hi-Tek Mfg.

1.2 The intent of this procedure is to ensure that all purchased materials or services meets or exceeds the quality requirements of Hi-Tek Mfg. and it's customers.

1.3 The intent of this procedure is to ensure that the quality systems requirements imposed by Hi-Tek Mfg. on its external providers is communicated in a logical and easily understood format.

2. APPLICATION

2.1 This procedure applies in total to external providers of direct materials, parts, and services to Hi-Tek Mfg., as applied by Purchasing and Quality.

3. REFERENCES AND DEFINITIONS

Deviation	A deviation addresses material that has not been produced to print, or has a known material substitution.
Documentation	Defined as all written correspondence and records related and pertaining to the manufacture of a product.
Nonconforming	Any component containing one or more defective characteristics is considered to be nonconforming.
Purchaser	Hi-Tek Manufactuing, Inc.
Waiver	A waiver addresses nonconforming material that has already been produced.
MRB	Material Review Board
P.O.	Purchase Order
ISO9001:2015 & AS9100D	Purchasing Element of the ISO and Aerospace Quality System Standards

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4. PROCEDURES

4.1 Surveillance – The External provider's Quality System is subject to initial and periodic audits/surveys and acceptance by Hi-Tek Mfg., it's customers, and government regulatory agencies (e.g. The Department of Defense and Federal Aviation Administration functions), to the extent required to assure external provider conformance to this procedure. The intent of these audits/surveys is to evaluate the external providers quality system to the degree necessary to ensure conformance to External provider Category requirements, and to detect any changes that could affect the quality of the product.

NOTE: Verification by the customer shall not be used as evidence of effective external provider quality control. Customer surveillance activities shall not absolve the external provider of the responsibility to provide acceptable product, nor shall it preclude subsequent rejection by the customer.

4.2 Audit Schedule – While the primary survey tool is the self-assessment questionnaire, additional surveys and on-site audits may be scheduled for all category external providers if the quality history or changes to the external provider quality system warrants.

4.2.1 The purchaser reserves the right to conduct source inspection and the right to witness manufacturing operation inspections and tests as necessary to verify conformance of the product or services. The external provider will provide reasonable facilities, equipment, records, and assistance as required to satisfy this requirement. This right of access by the purchaser includes the customer and regulatory authorities to the applicable areas of facilities and to applicable documented information at any level of the supply chain.

4.2.2 The Purchaser shall assign a quality rating to each external provider. The rating will be based on delivered quality, on-time delivery and conformance to this procedure. This rating will be provided to external providers annually.

4.3 General External provider Responsibilities

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4.3.1 The external provider will implement and maintain a Quality Assurance system that assures material and services submitted to the purchaser, meet the requirements of the P.O. This requirement applies to material and services manufactured, provided or sub-contracted by the external provider.

4.3.2 The external provider will ensure that qualified personnel are in place to perform the functions necessary to satisfy the purchase order. It is also a requirement of AS9100D for suppliers to ensure that personnel are aware of their contribution to product or service conformity, of their contribution to product safety and to the importance of ethical behavior.

4.3.3 The supplier will use customer-designated or approved external providers, including process sources, such as special processes if required.

4.3.4 The external provider will flow down to their external providers applicable requirements including customer requirements.

4.3.5 The external provider will perform, or have performed, the verification activities and/or tests required to ensure product conformance to drawing, specifications, and P.O. requirements.

4.3.6 The external provider's inspection system will be documented, and available for review by the purchaser, prior to the initiation of production and during the life of the P.O.

4.3.8 The external provider will provide test specimens for design approval, inspection/verification, investigation or auditing if required.

4.3.9 The external provider will retain documented information, including retention periods and disposition requirements.

4.3.10 The external provider will notify the purchaser, in writing, of any change to the external provider's inspection system. The inspection system will be subject to disapproval if changes thereto could result in nonconforming product.

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4.4 Change Control – The external provider will notify the company of changes to processes, products or services including changes of their external providers or location of manufacture and obtain the company's approval.

Inspection and Testing Documentation – Inspection and testing for approval or release will be prescribed by clear, complete, and current instructions. The instructions will assure inspection and test of material, work in process, and completed articles as required by specification and the P.O. in addition, criteria for acceptance and rejection will be included.

4.5 Documented Information – The external provider will maintain adequate documented information of all inspections and tests. Records will indicate the nature and number of observations made, the number and type of defects found, the quantities accepted and/or rejected, and the nature of corrective action taken as appropriate. The End User Record retention periods are required and defined in Appendix A of this document.

4.6 Corrective Action

4.6.1 The external provider will take prompt action to correct assignable conditions, which have resulted or could result in the submission of nonconforming material or services to the purchaser.

4.6.2 The external provider will respond, in the time frame alloted, to any External provider Corrective Action Request from the purchaser. If the allotted time is not adequate, the external provider may request an extension prior to the expiration of the assigned due date.

4.7 Drawings and Changes – The external provider's systems will provide controls, which will assure that the latest applicable drawings, specifications, and instructions required by the P.O.; as well as, authorized changes thereto, are used for manufacture, inspection, and testing.

4.8 Measuring and Test Equipment

4.8.1 The external provider will provide and maintain gages and other measuring and test devices necessary to assure all delivered product is conforming.

4.8.2 In order to assure continued accuracy all inspection, measurement, and test devices will be calibrated at established intervals against certified masters, which are traceable to national standards. The calibration system will be in accordance with ISO10012-1, ISO17025 or equivalent. This requirement also applies to any production tooling, such as jigs, fixtures, templates, and patterns which are used as a media for product acceptance.

4.9 Special Process controls, will be an integral part of the inspection system when such processes are part of the purchase order. As such, special process procedures will not be modified without prior approval of the purchaser.

4.10 Indication of Inspection Status – The external provider will maintain a positive system for identifying the inspection status of all product. Identification may be accomplished by use of stamps, tags, routers, move tickets, tote box cards, or other control devices.

4.11 Purchaser Furnished Material

4.11.1 When material is furnished by the purchaser, the external provider's procedures will include, as a minimum, the following:

4.11.1.1 Examination upon receipt, consistent with practicability, to detect damage in transit.

4.11.1.2 Inspection for completeness and proper type.

4.11.1.3 Periodic inspection and precautions to assure adequate storage conditions and to guard against damage from handling and/or deterioration during storage.

4.11.1.4 Identification and protection from improper use and disposition.

4.11.1.5 Verification of quantity.

4.11.2 The external provider will report to the purchaser any purchaser furnished material found damaged or otherwise

unsuitable for use. In the event of damage or malfunctioning during or after receipt, the external provider will determine and record probable cause and necessity for withholding the material from use.

4.12 Nonconforming Material

4.12.1 The external provider will maintain an effective and positive system for controlling nonconforming material and FOD as well as the prevention and use of counterfeit parts.

4.12.2 Nonconforming material will not be shipped to the purchaser without prior written authorization. The external provider will submit a complete written report describing the nonconformance, cause of the nonconformance, and corrective action which will permanently resolve the cause. Unless otherwise instructed by the purchaser, the external provider will hold such material until the purchaser dispositions the material.

4.12.3 Nonconformances which can be reworked by repeating part or all of the initial process (other than special processes) will be considered as rework and can be accomplished without purchaser approval.

4.12.4 Nonconformances which are produced by a special process or do not meet the requirements of Paragraph 4.12.3, will be considered repair items and will require purchaser approval prior to performing the repair. These items will be reported in accordance with Paragraph 4.12.2 with the addition of a formal repair procedure.

4.12.5 If during gage calibration, rejection analysis, etc., it is determined that nonconforming material may have inadvertently been shipped, the purchaser will be notified immediately.

4.13 Sampling Inspection – Dimensional or visual sampling may be used where the process capability is acceptable and stable. Sampling plans may be employed in accordance with military specifications or handbooks, providing they are zero defect and their use assures fulfillment of

purchaser's requirements. When other than military sampling plans are used, they require prior purchaser's approval. NDT sampling will not be allowed without prior purchaser's approval.

4.14 Subtier Control – Subcontracted or purchased material and services will be subjected to receiving inspection and any other controls, as required, to ensure compliance to the purchase order and this procedure.

Appendix A
'End User' Quality Record Retention Requirements

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Customer and Spec	Quality Record	Disposition	Retention Period
ALSTOM Power HTCT605463	Work Order Paperwork, Product Nonconformance Records, Travelers, Drawings, MO&QI's, Inspection and Test Records (including NDT Records), and Shipping and Receiving Records, Certificate of Compliance, Differential Report	Destroy	10 years
GE Aviation S1000 Appendix C	Work Order Paperwork, Product Nonconformance Records, Travelers, Drawings, MO&QI's, Inspection and Test Records (including NDT Records), Shipping and Receiving Records, and Source Substantiation Records	"	Life limited parts: i.e.Rotating Parts Retain for 10 Years
"	"	"	Static Component Parts (i.e.Blades, Vanes) Retain for 5 Years
"	Internal Quality Audits, Corrective Actions, Training, Calibration, NDT Maintenance, MRB and Inspection Stamp Control Records	"	5 years
GE Power Systems P28A-AL-0002 Para. 4.2.3	All Quality Records	"	10 years
Howmet SCM 501 Para. 4.11	Work Order Paperwork, Travelers, Drawings, MO&QI's, Shipping and Receiving Records, related Tooling Records, and Purchase Orders and Amendments	"	Maintained as Long as Contract is Active Plus 1 Year
"	Product Nonconformance Records, Inspection and Test Records (including NDT Records)	"	Maintained 1 calendar year after year in which created
"	Internal Quality Audit Records	"	3 years
Pratt & Whitney ASQR-01 Para. 4.2.4	Work Order Paperwork, Product Nonconformance Records, Travelers, Drawings, MO&QI's, Inspection and Test Records (including NDT Records), Shipping and Receiving Records, and ESA Product Audit Records	"	40 Years (heat code suffix)
"	"	"	All others 10 years
Siemens QA/SA00001 Para. 18.0	All Quality Records	"	10 years
Solar Turbines ES 9-76 Para. 3.3.1	Work Order Paperwork, Product Nonconformance Records, Travelers, Drawings, MO&QI's, Inspection and Test Records (including NDT Records), and Shipping and Receiving Records	"	30 Years for rotating parts or 10 years after public notice of discontinuance of product line
"	"	"	All other parts 10 years

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Customer and Spec	Quality Record	Disposition	Retention Period
Mitsubishi Power Systems MPS 100 Para. 5.9.2	Work Order Paperwork, Product Nonconformance Records, Travelers, Drawings, MO&QI's, Inspection and Test Records (including NDT Records), and Shipping and Receiving Records	Destroy	2 years beyond final delivery
Pratt & Whitney Power Systems ASQR-01	"	"	10 years all parts