



# SUPPLIER QUALITY MANUAL



**Rev.14  
HCD562**

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## REVISION HISTORY

<u>Revision</u>	<u>Date</u>
Initial Release	04/01/99
Rev. A	04/04/08
Rev. B	10/22/09
Rev. C	03/19/10
Rev. D	02/08/12
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Rev. 10	02/01/2019
Rev. 11	02/01/2019
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## Company Overview

Founded in 1940, Hudson Technologies (formerly Hudson Tool & Die) is a leading manufacturer of precision, deep-drawn metal enclosures, or cases, and stampings, including metal diaphragms. Located in Ormond Beach, FL, Hudson Technologies uses a variety of high-performance metals including stainless steel and titanium. Design engineers turn to Hudson Technologies to produce seamless, metal enclosures for technology whether they need a prototype or high-volume production. Companies worldwide use Hudson-manufactured enclosures for aviation, aerospace, electronics, medical, semi-conductor, industrial, automotive, commercial battery, flow control, irrigation and other industrial applications. No chlorinated lubricants or solvents are used in the manufacturing process. Hudson Technologies is a business of JSJ ([www.jsjcorp.com](http://www.jsjcorp.com)), a privately held U.S. corporation based in Grand Haven, MI, which actively designs, develops, markets and brands a group of durable goods and services throughout the world.

**ISO Compliance:** 13485:2003 and 14001:2004

**Compliant:** REACH and RoHS compliant; ITAR registered

**Certified:** AS9100:2016/ISO9001:2015

## Quality Policy

Create and maintain Constituents'\* satisfaction through teamwork, continual improvement and compliance with the Hudson Technologies quality system, customer, statutory and regulatory requirements. This is realized through the establishment of quality objectives and a management philosophy and commitment consistent with these goals.

## Purpose

This Supplier Quality Manual provides the standards and requirements for Hudson Technologies' Suppliers regarding product quality.

*\* Constituents' – customers, team members, suppliers, community owners and the statutory and regulatory agencies.*

# 1 Quality Management System

The Supplier is required to maintain an effective quality management system, preferably one that conforms to the current AS/ISO 9001 Quality Management System Requirements or a similar standard and / or NADCAP certified. In addition, the Supplier must meet all other requirements of this manual.

## 2 Quality Planning

### 2.1 Purchase Order Review

The Supplier shall provide a procedure for the review of requirements prior to acceptance of the purchase order to assure the requirements can be satisfactorily met. Prior to initiation of work, provisions shall be made for all necessary processes, fixtures, equipment, facilities, skills and controls required to assure purchase order compliance.

### 2.2 Notification of Change

The Supplier must formally present written notification to Hudson Technologies Purchasing Department of all changes to the manufacturing process or design prior to implementation.

Hudson Technologies in conjunction with the Supplier; shall determine the effect on form, fit, function and reliability before the change can be approved in writing by Hudson Technologies and implemented at the Supplier.

The Supplier must formally present written notification to Hudson Technologies of any nonconformance in existence on a supplied part not conforming to specifications on purchase order and or print.

The Supplier shall take prompt corrective action when a discrepancy has been detected on a part or process.

The supplier shall notify Hudson Technologies of changes to processes, products, or services, including changes of their external providers or location of manufacture, and obtain the organizations approval.

Hudson Technologies will flow down to external providers applicable requirements including customer requirements.

### 2.3 Work Instruction

The Supplier shall develop and maintain work instructions for use by properly trained personnel when performing inspection and processing functions. Supplier Acceptance criteria must be included in these instructions. The Supplier shall provide a procedure for the control and maintenance of changes to these instructions.

### **3 Supplier Qualification Process**

Suppliers are evaluated on-site by a Quality Assurance and Purchasing Representative, when applicable, or by completing the Supplier Quality System On-Site Audit / Desk Top Survey. The Supplier shall supply Hudson Technologies with current copy of ISO, NADCAP or other accreditation to keep Supplier on vendor approved source list.

### **4 Periodic Evaluation**

Hudson Technologies periodically evaluates current Suppliers using quality performance data and / or on-site assessments.

### **5 Control of Purchases**

The Supplier shall assure only those materials, supplies or services that conform to purchase order requirements are procured from their sub-tier Suppliers.

A list of Suppliers procurement sources shall be maintained and made available to Hudson Technologies for review upon request. The supplier shall provide a system for the approval and periodic review of sub-tier Suppliers.

When required by the purchase order, the Supplier shall assure those process sources being used are approved by Hudson Technologies or Hudson customer.

### **6 Material Certification / Test Report**

The Supplier shall provide a procedure that assures the following:

Material Test Reports, Process Certifications (for example, material certifications, chemical, physical mill reports, lab certifications, plating / heat treating / brazing certifications, etc.).

The material / service received is the material / service represented by the applicable test report and properly identified per the certification.

All in-process materials / services shall remain identified throughout all stages of sub-vendor processing.

Unused process materials shall be identified before returning to storage.

## **7 Traceability**

### **7.1 Drawings and Specifications Control**

The Supplier shall assure that drawings, specifications and applicable changes thereto, required by the purchase order, are used for manufacturing, inspection and test.

### **7.2 Measuring and Test Equipment**

The Supplier shall ensure that all inspection gauges and other measuring and test equipment that are used to verify product conformance to purchase order requirements are maintained and calibrated to standards traceable to NIST. This requirement also applies to Hudson Technologies furnished equipment and all personal tools used for product acceptance.

The Supplier shall provide a procedure for the periodic examination and calibration of all inspection and test equipment. This procedure should provide detailed instructions for calibration methodology provide a recall system and conform to the requirements of ISO 17025.

## **8 Sampling Plan**

The Supplier shall maintain a procedure for the use of sampling inspection which conforms to the requirements of C=0. The use of Statistical Methods for controlling processes is encouraged. Results of Statistical Process Control shall be furnished upon request.

## **9 Inspection Requirements**

The Supplier shall perform, or have performed all inspections necessary to verify that the material, product, process or service offered for acceptance conform with all respects to purchase order requirements.

The Supplier will provide a Process Flow Chart (PFC) and Control Plan for all new quotes or by request on existing orders from Hudson Technologies, Inc. Purchase Orders will not be processed without these documents.

The Supplier shall complete a first article inspection report on each first shipment or as instructed on the purchase order.

The Supplier shall establish a system, which provides for lot identification and direct traceability to applicable material / test certifications.



## **10 Material Inspection Status**

The Supplier shall maintain a positive system for identifying the inspection status of all materials and products. Identification shall be accomplished by means of stamps, tags, work routers, move tickets or other acceptable control methods.

## **11 Final Inspection and Test**

The Supplier shall assure that all deliverable items are subject to final inspection and / or test. A documented inspection procedure must be in place that provides detailed acceptance / rejection criteria.

First Article Inspection Report (FAIR) shall be generated, which includes the recording of the actual dimensions and / or results based on the manufacturing and / or processing as measured on one piece. All dimensions including applicable drawing notes and legend requirements shall be inspected and documented. The report shall be forwarded with each product first shipment, or supplied with product where original FAIR is over two years old. Records must also be kept on file and are subject to review.

## **12 Records**

The Supplier shall maintain records of all inspection activities and make these records available to Hudson Technologies upon request. Records of all material and test certifications must also be maintained for at least 10 years unless otherwise specified. Due to the nature of our business, customers, such as Aerospace and Medical, will require a longer retention period and in some cases, for the life of the part.

## **13 Handling, Storage and Delivery**

The Supplier shall provide a procedure for the cleaning and preservation of materials, which are prone to corrosion or deterioration during manufacturing or interim storage.

The Supplier shall assure that all deliverable products are properly packaged, identified and labeled to prevent transit damage.

The Supplier shall assure that all shipments are prepared and transported in accordance with purchase order requirements.

## **14 Nonconforming Product**

The Supplier shall provide a system for the identification, segregation and disposition of nonconforming product. The system shall provide for objective, verifiable corrective action to preclude recurrence. Hudson Purchasing department should be contacted for disposition of nonconforming product. All nonconforming product must be kept separate from conforming product and well identified. Hudson Purchasing department must be notified of all known nonconforming product (or processing rejects) for disposition and segregation instructions. All nonconforming product must be removed from drop shipments and Hudson Purchasing notified for disposition.

## **15 Supplier Corrective Action**

The Supplier shall take prompt and effective action to correct adverse conditions, which have resulted or could result in the release of nonconforming material to Hudson Technologies.

The Supplier shall review Hudson Technologies complaint of nonconformance and determine the cause of nonconformities.

The Supplier shall submit written corrective action to Hudson Technologies Quality Department within *30 days* and must include a description of the problem, root cause, interim action, permanent action and verification plan that nonconformance has been removed.

## **16 Supplier Audits**

Supplier's quality system may be subject to initial and periodic audits by Hudson Technologies. Either an AS/ISO 9001 or NADCAP certificate is accepted by Hudson in lieu of an audit. Supplier not holding accreditation will be requested to complete a Hudson Technologies desk top survey. Third Party Certification (customer approved source) is accepted by Hudson in lieu of audit but the Supplier's quality system may still be subject to a desk top survey by Hudson.

Hudson Technologies reserves the right to perform a Source Inspection at the Supplier's facility. The Supplier shall provide Hudson with reasonable facilities, equipment, records and assistance as required to determine product conformance to purchase order requirements.

Hudson Technologies shall assign a Quality Report Card to each Key Supplier. The rating is based upon the quality and delivery from each Key Supplier. The Quality Report Card, which will be issued monthly to our active Key Suppliers, will be one of the factors in determining Supplier selection for future business.

## **17 Supplier Monitoring**

A Supplier quality report card, based on Quality and Delivery, will be compiled and issued monthly to active Hudson Suppliers.

A Supplier whose quality falls below <95% for three consecutive months will be placed on a *60-day probation*.

A Supplier whose delivery falls below <95% for six consecutive months will be placed on a *60-day probation*.

Supplier report card will reflect probationary period. If the Supplier is unable to bring their quality or delivery up to an acceptable level after the *60-day probation* period; Hudson will notify the Supplier of exit plan.

## **18 Exit Plan**

An exit plan will be initiated when Supplier is unable to achieve an acceptable level during the probationary period. Hudson will formally contact Supplier of underperformance and failure to meet acceptable level of quality. At this time, Hudson will immediately remove Supplier from “Key Supplier List”, preventing any new orders.

## **19 Foreign Object Debris/Damage (FOD)**

The Suppliers shall maintain a FOD free environment during processing, inspection, storage, packaging and shipping. Suppliers shall ensure that FOD is removed from all parts prior to shipment.

## **20 The International Traffic in Arms Regulations (ITAR)**

The International Traffic in Arms Regulations (ITAR) may control these articles or technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et seq. and which may not be exported, released or disclosed to non-U.S. persons (i.e. persons who are not U.S. citizens or lawful permanent residents ["green card" holders]) inside or outside the United States, without first obtaining an export license. Violations of these export laws are subject to severe civil, criminal and administrative penalties.

## **21 Restriction of Hazardous Substances (RoHS)**

Compliance to RoHS requirements will be specified on the purchase order.

## **22 Conflict Minerals**

The use of “conflict minerals” as defined in Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act from the Democratic Republic of the Congo or any adjoining countries (“DRC Countries”) is prohibited for use in the manufacture of product.

## **23 Contractor Counterfeit Electronic Part Detection and Avoidance System (252.246.7007)**

The Supplier shall ensure that the material purchased conforms to the purchase order requirements. All materials identified including commodities on the purchase order are required to be authentic, as manufactured by the Original Equipment Manufacturer (OEM).

## **24 Defense Federal Acquisition Regulations Supplement (DFARS)**

Compliance to DFARS regulations will be specified on the purchase order.

## **25 REACH**

Compliance to REACH requirements will be specified on the purchase order.

## **26 Right of Entry (Surveillance)**

Hudson Technologies and its customers (including regulatory authorities) reserve the Right-Of-Entry into the supplier facility to determine and verify the quality of work and material at all production stages. This includes applicable areas of the facilities and applicable documented information at all levels of the supply chain. On-site access by Hudson Technologies and its customers shall be conducted with prior knowledge of, and jointly with Hudson Technologies and its suppliers.

## **27 Product or Service Conformity**

The supplier shall ensure its employees are aware of their contribution to product or service conformity.

## **28 Product Safety**

The supplier shall ensure its employees are aware of their contribution to product safety.

## **29 Ethical Behavior**

The supplier shall ensure to its employees the importance of ethical behavior.

## **HUDSON TECHNOLOGIES TERMS AND CONDITIONS:**

**DELIVERY:** Is expected by the time promised. If delivery promise is not met the buyer reserves the right to cancel.

**PRICES:** All goods or services must be billed to purchase order pricing. All pricing adjustments must be authorized by the buyer and amended purchase order in place with updated pricing prior to goods being shipped or services being performed.

**INSPECTION:** All goods or services furnished on this order shall be subject to Hudson Technologies quality inspection and acceptance within a reasonable time.

**REJECTS:** All rejected goods will be held at seller's risk and expense, subject to seller's prompt advice as to disposition.

**PATENTS:** The seller will hereby guarantee that the sale or use of seller's products will not infringe any United States patents and to indemnify Hudson Technologies against all costs and expenses resulting from such alleged infringements.

**COMPLIANCE:** The seller agrees that the goods furnished on this order will be produced in accordance with all Federal, State, and other laws.

**ACCEPTANCE:** Acceptance of Hudson's order constitutes an acceptance of all its terms and specifications. Kindly acknowledge.



**Acknowledgement of  
Receipt Supplier Quality  
Manual**

Dear Valued Supplier:

Quality at Hudson is defined as a continual improvement process to clarify requirements, reduce variability and improve the reliability of products. The focus of quality is the reduction and elimination of defects through advanced planning, prevention, training and continuous improvement with our Suppliers.

I acknowledge that I have received a copy of the Hudson Technologies Supplier Quality Manual Latest Revision . I acknowledge that I am expected to know and be familiar with the contents and that I have read the manual.

I understand, that this manual will be updated from time to time and that I will be responsible for reading the updates.

Thank you,  
Purchasing  
Department Hudson  
Technologies

Company: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Please email signed copy as receipt of this handbook to [fowlerj@hudsontool.com](mailto:fowlerj@hudsontool.com)**

