Program Handbook

Quality Assurance System Registration Requirements for Facilities Under Provisions of the Fastener Quality Act

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Office of Standards Services
Technology Services
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1.0 INTRODUCTION

On November 16, 1990, the United States Congress enacted the Fastener Quality Act (FQA), P.L. 101-592 (the Act). The Act was amended in 1996 by Section 11 of P.L. 104-113. The Act protects the public safety by: (1) requiring that certain fasteners which are sold in commerce conform to the specifications to which they are represented to be manufactured; (2) providing for accreditation of laboratories and registration of manufacturing facilities engaged in fastener testing; and (3) requiring inspection, testing and certification, in accordance with standardized methods, of fasteners covered by the Act.

This handbook describes the NIST requirements for registration of a fastener manufacturing facility (a Facility) employing a fastener quality assurance system (QAS), as defined in the regulations (the Regulations) and this handbook, by a Quality System Registrar1 (a Registrar) that in turn has been accredited by a NIST-recognized Accreditor. It provides specific guidance on the implementing regulations published at 15 CFR Part 280 “Procedures for Implementation of the Fastener Quality Act”, Sec. 280.104 and Subparts I through L.2 Registration applies only to facilities that manufacture fasteners; raw material manufacturers must test the chemistry of metals in a laboratory listed on the Accredited Laboratory List.3

Manufacturers are required by regulation to comply with the requirements in the fastener specification and standards, including sampling plans for final inspection and testing. However, the Regulations also provide in Sec. 280.104 for an alternative to lot-by-lot final inspection and testing recognizing current industry practices which rely on defect prevention employing quality assurance systems. Fastener Facilities which have registered quality systems may reduce the number of tests performed in an accredited laboratory, provided the fastener specification or standard recognizes the use of quality assurance systems. Some end-user fastener specifications require registered QAS Facilities to use control plans to assure production of fasteners meeting specification requirements. Under such circumstances, Facilities may be able to reduce their reliance on final inspection and testing by controlling the process of production to limit and control process variations which adversely affect the fastener produced. As confidence in the process is obtained, the control plan may allow reduction of the number of verifications or the number of fasteners from each lot required to be tested and inspected. Therefore, an advantage of the QAS Facility is to take account of such improvements in production by reducing the testing requirements.

1Note: In some countries, the bodies which verify conformity of quality systems to specified standards are called “certification bodies,” in others “registration bodies,” in others “assessment and registration bodies” or “certification/registration bodies,” and in still others “registrars.” Reference to such bodies as “Registrars” should not be understood to be limiting.

2Section numbers denoted by “Sec.” or “Sec. 280.xxx” in this document reference the Regulations at 15 CFR Part 280.

3Facilities are advised to examine the requirements of Sections 3.0, Accreditation of Certain Manufacturing Facilities as Laboratories, and 6.0, Sampling, in this handbook to determine when fastener testing must be conducted by laboratories on the Accredited Laboratory List.
While in-process inspection may occur within registered Facilities, in most instances control plans require verification of fastener characteristics by laboratory testing, such as: tensile, hardness, fatigue, metallographic analysis of grain, corrosion resistance, dimensional conformance, etc. Such verifications must be performed by accredited laboratories.

Furthermore, specifications requiring final inspection and testing on finished fasteners must also be performed in accredited laboratories. A Facility’s in-house laboratory which conducts laboratory tests on fasteners required by the fastener specifications or standards or by control plans used in conjunction with production of the fasteners must be accredited by a NIST-recognized laboratory accreditation body. The laboratory accreditation is separate from the Facility registration and may only be conducted by an Accredited Registrar if the Registrar’s organization has also been recognized by NIST as a laboratory accreditation body.

To ensure the proper regulation of Facilities, NIST recognizes Accreditors that meet the requirements of Subpart K of the Regulations (see NISTIR 6261), which is based upon ISO/IEC Guide 61; the NIST-recognized Accreditors may in turn accredit Registrars that meet the requirements of Subpart L of the Regulations (see NISTIR 6262), which is based upon ISO/IEC Guide 62. The Registrars, in turn, may register Facilities that satisfy the elements of a Fastener Quality Assurance System (QAS), as defined in the Regulations and this handbook.

Selected text from the Regulations is presented in italics in some sections of this handbook. For full understanding of all requirements, interested parties are advised to read the Regulations in their entirety. In addition to the quality system registration requirements, many other important issues are contained in that document. The Act and Regulations are accessible on the NIST FQA Home Page (http://www.nist.gov/fqa).

NIST invites users to provide comments or suggestions for modifications, clarification or improvement of this document. Comments should be addressed to Accreditation Body Evaluation Program (ABEP) Program Manager, NIST, 100 Bureau Drive, Stop 2100, Gaithersburg, MD 20899-2100.

1.1 Definitions

For the purposes of this handbook the following definitions are used. Those definitions taken from the Act or Regulations are shown in italics.

1.1.1 Accreditation: A procedure by which a body recognized by NIST confirms that a testing laboratory or a quality system registrar of fastener manufacturing facilities that employ a Fastener Quality Assurance System is competent to carry out specific tasks required by the implementing regulations for the Fastener Quality Act.

1.1.2 Accreditation Body Evaluation Program (ABEP): The program established by NIST to receive applications and to evaluate Accreditors (of testing laboratories or of quality system registrars) to determine if applicants meet applicable requirements of the Act and regulations at 15 CFR Part 280. Based on the evaluation results,
ABEP makes recommendations to NIST regarding recognition of Accreditors.

1.1.3 Accredited Laboratory List: A list compiled and maintained by NIST of all testing laboratories which have been accredited either by NIST or by any NIST-recognized Accreditation Body in accordance with the requirements of The Act and the Regulations.

1.1.4 Accredited Registrar: A quality systems registration body which is accredited by a NIST recognized Accreditor and appears on the Registrars List.

1.1.5 Accreditor: A Registrar accreditation body or testing laboratory accreditation body that is recognized by NIST, and appears on the Accreditors List.

1.1.6 Accreditors List: A list of all Accreditors that have been evaluated and recognized by NIST in accordance with the requirements of the Act. Two Accreditors Lists are maintained, one for testing laboratory accreditors and one for Registrar accreditors.


1.1.8 Advanced Product Quality Planning: A structured process for developing and implementing the methods of measurement and testing that will be used in production of a specific product or family of products to meet requirements. Quality planning incorporates both defect prevention and continuous improvement, rather than defect detection. Proper implementation requires use of interdisciplinary teams and systems to assure management of appropriate activities (e.g., product design and development; development/finalization of special characteristics; product and process validation; development and review of Control Plans; mistake proofing; feedback, assessment and corrective action - continuous improvement) during concept development through production. (See, for example, Advanced Product Quality Planning and Control Plan QS-9000 reference manual.)

1.1.9 Approved Signatory: An individual employed by a facility registered under the Act and these regulations who is recognized by a registrar as competent to sign test reports.

1.1.10 Authorized Representative: An employee of an organization with the authority to make binding commitments on behalf of the organization. The authorized representative is the person responsible for all communications between the Facility and the Registrar or NIST and who will ensure that the Facility complies with all Registrar and NIST program requirements.

1.1.11 Certificate of Registration: A document issued by a Registrar to a Facility that has met the criteria and conditions of registration. The certificate, together with the assigned code number and scope of registration issued by the Registrar, may be used as proof of registration status.
1.1.12 **Control Plans:** Plans that describe the system controlling fastener products and processes. They are written documents used by facilities to address the important characteristics and engineering requirements of the fastener product. Each fastener product shall have a Control Plan, but in many cases, "family" Control Plans can cover a number of fastener products produced using a common process. The control plan must be maintained throughout the fastener life cycle. Initially, it is primarily used to document and communicate the plan for process control. Later, it guides manufacturing in how to control the process and ensure fastener quality. Finally, the control plan is continually updated as measurement systems and control methods are evaluated and improved to reflect the current methods of control and measurement systems used in production. (See, for example, Advanced Product Quality Planning and Control Plan QS-9000 reference manual.)

1.1.13 **Facilities List:** A list compiled and maintained by NIST of all Facilities which have been registered by accredited Registrars.

1.1.14 **Facility:** A fastener manufacturing facility or a facility performing subcontracted processes for a manufacturing facility, that has been registered by an accredited Registrar and that appears on the Facilities List.

1.1.15 **Fastener:** Fastener means any screw, nut, bolt or stud, washer or other item included within the definition for fastener contained in section 3(5) of the Fastener Quality Act. The term "fastener" does not include a screw, nut, bolt or stud: (1) that is produced and marked as ASTM A307 Grade A, (2) that is produced in accordance with ASTM F432: or (3) that is held out as being produced to other than the provisions of standards and specifications published by a consensus standards organization, or a government agency.

A screw, nut, bolt, stud or washer held out as being produced according to requirements of a document other than a document published by a consensus standards organization is a fastener within the meaning of the Act and this part if that document incorporates or references (directly or indirectly) standards and specifications published by a consensus standards organization or government agency for purposes of delineating performance or materials characteristics of the fastener.

1.1.16 **Fastener Quality Assurance System (QAS):** (1) Fastener Quality Assurance System (QAS) means a fastener manufacturing system that has as a stated goal the prevention of defects through continuous improvement, and which seeks to attain that goal by incorporating: (i) Advanced product quality planning; (ii) Monitoring and control of the manufacturing process; (iii) Product verification activities embodied in a comprehensive and written control plan to address critical or significant product/process characteristics, documented process controls (including statistical process control), tests, and measurement systems to be used in
production; and (iv) The creation, maintenance, and retention of electronic, photographic, or paper records, available for inspection during the periods required by section 10 of the Act and Sec. 280.809 of the regulations, regarding the inspections, tests, and measurements required by or performed pursuant to the control plan or other quality system documentation, e.g., work instructions. See Section 4.0, Fastener Quality Assurance System Criteria, for amplification of requirements.

1.1.17 **Lot**: A quantity of fasteners of one part number fabricated by the same production process from the same coil or heat number of metal as provided by the metal manufacturer and submitted for inspection and testing at one time.

1.1.18 **Lot Number**: A number assigned by a manufacturer to the lot.

1.1.19 **Lot Traceability**: The recording and maintenance of lot-specific identification information sufficient to trace fasteners from a single lot throughout:
(1) The manufacturer's fabrication or alteration process,
(2) All inspection and testing operations, and
(3) The subsequent chain of distribution in commerce.

1.1.20 **Original Laboratory Testing Reports**: (1) In general, a laboratory testing report which is originally signed by an approved signatory or is a copy thereof, certified by the laboratory that conducted the test; or (2) For purposes of the alternative procedures for chemical characteristics described in section 5 (d) of the Act and Sec. 280.15 of the regulations only, a laboratory testing report which is originally signed by an approved signatory or is a copy thereof, certified by the laboratory that conducted the test or by the metal manufacturer.

1.1.21 **Recognized Accreditor**: An accreditor that is recognized by NIST and appears on the Accreditors List.

1.1.22 **Registered Facility**: A facility that is registered by an accredited registrar and appears on the Facilities List.

1.1.23 **Registrars List**: A list compiled and maintained by NIST of all registrars which have been accredited by NIST-recognized Accreditors.

1.1.24 **Registration**: Procedure by which a body accredited by a NIST recognized Accreditor gives written assurance that a manufacturing facility conforms to the applicable requirements of a Fastener Quality Assurance System.

1.1.25 **Tamper-resistant system**: The use of special paper or embossing stamps or other controls which discourage, prevent or minimize alteration of test reports subsequent to manufacturing, inspection and testing.
1.1.26 **Traceability of Measurements**: A documented chain of comparisons connecting the accuracy of a measuring instrument to other measuring instruments of higher accuracy and, ultimately, to a primary standard.

2.0 REQUESTING EVALUATION

2.1 Who May Apply

Fastener manufacturing facilities that desire to comply with the requirements of the Act and regulation may apply to an accredited Registrar for registration as a QAS Facility under the FQA. NIST will provide a list of accredited Registrars on the NIST FQA Home Page (http://www.nist.gov/fqa.)

2.2 Listing Fee

A listing fee is paid by the Facility and forwarded to NIST by the accredited Registrar.

3.0 ACCREDITATION OF CERTAIN MANUFACTURING FACILITIES AS LABORATORIES (Sec 280.104)

3.1 Subject to the limitations contained in paragraphs (3.3), (3.4), and (3.5), registration of a fastener manufacturing facility employing a fastener quality assurance system shall be deemed to meet the requirements as an accredited laboratory for purposes of the Act. The independent third-party Registrar registering such facility under this section shall comply with all procedures set forth in Subparts I through L of the Regulation.

3.2 Records documenting the inspection and testing of a lot of fasteners performed by the Facility shall be maintained in accordance with the requirements of sections 280.6, 280.808, and 280.809 of the regulation (see 5.0, Test Report and Record Requirements for QAS Registered Facilities).

3.3 If a Facility accomplishes any in-process inspection and testing by performing laboratory tests on a sample of fasteners at any stage in the manufacturing process, those tests must be conducted by a laboratory on the Accredited Laboratory List. Such a laboratory may be located on the same premises as the fastener manufacturing facility if the laboratory is separately accredited under the laboratory accreditation provisions of the regulation.

3.4 Any laboratory tests performed outside the Facility’s in-process inspection and testing must be conducted by a laboratory on the Accredited Laboratory List.

3.5 Chemical and raw material testing must be performed by a laboratory on the Accredited Laboratory List.
4.0 FASTENER QUALITY ASSURANCE SYSTEM CRITERIA

The Registrar’s audit team shall assess the quality assurance system employed at the fastener manufacturing Facility against all applicable registration requirements\(^1\). The QAS shall include, but is not limited to, the following elements in accordance with Sec. 280.2, Fastener Quality Assurance System (QAS).

4.1 Quality Management System

The fastener manufacturing Facility shall have a documented QAS that satisfies the requirements of ISO 9001 or ISO 9002, or other quality system standards that incorporate ISO 9001 and ISO 9002 (e.g., QS-9000 series, AS9000, etc.). The quality assurance system must have as a stated goal the prevention of defects through continuous improvement, and seek to attain that goal by incorporating:

(i) advanced product quality planning;
(ii) monitoring and control of the manufacturing process;
(iii) product verification activities embodied in a comprehensive and written control plan: which addresses critical or significant product/process characteristics; documents process controls (including statistical process control), tests, and measurement systems to be used in production; and
(iv) the creation, maintenance, and retention of electronic, photographic, or paper records, available for inspection during the periods required by section 10 of the Act and Sec. 280.809 of the regulations (See 5.0, of this handbook), regarding the inspections, tests, and measurements required by or performed pursuant to the control plan or other quality system documentation, e.g., work instructions.

4.2 Raw Material Traceability

The raw material certification supplied to the fastener manufacturer shall be traceable to that of a mill heat of material that has been tested by a laboratory on the Accredited Laboratory List.

4.3 Subcontractor Traceability

Any subcontracted processes, including plating and heat treating, shall be controlled by the fastener manufacturer to avoid product lot contamination.

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\(^1\)NIST has determined that a fastener Facility registered for QS-9000 by a listed Registrar and meeting the additional requirements in the regulations, as detailed in this handbook and verified by a Registrar through on-site audit and registration, is eligible for listing as a Fastener Quality Assurance System Facility. QS-9000 Element 4.10.6, Supplier Laboratory Requirements, states that accreditation of a facility’s laboratory is not required by QS-9000. However, the FQA requires use of accredited laboratories for both in-house testing as well as contracted testing with commercial/independent laboratories. A Facility requesting registration to a standard, which is equivalent to QS-9000, should contact a Registrar and make a formal request to initiate procedures for a determination of equivalence by NIST.
4.3.1 These subcontracted processes shall be:

(i) performed by a Facility on the Facilities List described in Sec. 280.810, or
(ii) tested by a laboratory on the Accredited Laboratory List described in Sec. 280.101.

4.3.2 The finished lots of fasteners shall be traceable to subcontracted processes.

4.4 Quality Assurance Plan

4.4.1 The fastener manufacturer shall have a documented comprehensive control plan which shall include:

(i) a fully documented fastener sampling plan which includes sampling frequency and sample size, and identification of inspection points in the manufacturing process;
(ii) an emphasis on defect prevention;
(iii) corrective action for nonconforming characteristics,
(iv) identification of the standards and specifications upon which the plan is based.

4.4.2 The fastener manufacturer shall make the control plan available to the customer upon request.

4.4.3 In the event that the standards or specifications to which a manufacturer represents the fasteners in a particular sample to have been manufactured do not provide for frequency and levels of inspection, and size and selection of the sample to be inspected and tested, inspections and tests shall be carried out as noted in Sec. 280.10. (See 6.0, Sampling, of this handbook.)

4.4.4 The emphasis in the quality assurance plan shall be in-process controls or defect prevention and continuous improvement, rather than defect detection at the end of the production.

4.5 Quality Assurance Standards

4.5.1 The control plan shall include fastener characteristics:

(i) specified by the sampling standard (e.g., ANSI/ASME B18.18.5M, 6M, and 7M),
(ii) specifically indicated by the applicable fastener standards and specifications, and
(iii) designated by the end user for evaluating product functionality.
5.0 TEST REPORT AND RECORD REQUIREMENTS FOR QAS REGISTERED FACILITIES

5.1 Reports

Registered Facilities shall comply with requirements of Sec. 280.808 of the regulations, the text of which follows:

Sec. 280.808 Reports.

Reports and records shall be maintained in such a manner to preserve original data, and be collected as required into a final form, sufficient to satisfy customer and legal requirements. Such reports shall be provided upon request to the Bureau of Export Administration, to the National Institute of Standards and Technology, or to any other agency of the federal government authorized to obtain such records under this part.

5.2 Recordkeeping Requirements

Registered Facilities shall comply with requirements of Sec. 280.809 and Sec. 280.7 of the regulations. The relevant sections are reprinted here for the convenience of the reader.

Sec. 280.809 Recordkeeping.

Each ... fastener manufacturer whose Facility has been registered shall retain all applicable records required under the Act and this part for 5 years. All records are subject to the requirements in Sec. 280.7 of this part.

Sec. 280.7 Recordkeeping Requirement

(a) Each laboratory accredited under Subparts C, D, or E or Facility registered under Sec. 280.104 of this part shall retain for 5 years after the performance of a test all records pertaining to that test concerning the inspection and testing, and certification, of fasteners under the Act and this part. The final test report or the test records maintained by the laboratory shall contain sufficient information to permit the test to be repeated at a later time if a retest is necessary. The laboratory shall maintain the test report and a record of all original observations, calculations, and derived data. The records shall include the identity of personnel performing the testing. Procedures for storage and retrieval of records must be documented and maintained in the laboratory's quality manual.

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1 Use of the term "part" in the regulations refers to 15 CFR Part 280, "Procedures for Implementation of the Fastener Quality Act."
(b) Manufacturers, importers, private label distributors, and persons1 who significantly alter fasteners shall retain for 5 years after the performance of a test all records pertaining to that test concerning the inspection and testing, and certification, of fasteners under the Act and these regulations.

(c) Original records required. Persons required to keep records under this part must maintain the original records in the form in which that person receives or creates them unless that person meets all of the conditions of paragraph (d) of this section relating to reproduction of records. Original laboratory test reports described in sections 280.5, 280.6, 280.13, and 280.15(b) of this part must be kept.

(d) Reproduction of original records. A person required to keep records under this part may maintain reproductions of documents other than laboratory test reports instead of the original records using any photographic, photostatic, miniature photographic, micrographic, automated archival storage, or other process that completely, accurately, legibly and durably reproduces the original records (whether on paper, microfilm, or through electronic digital storage techniques). The process must meet all of the requirements of paragraphs (d)(1) through (d)(9) of this section.

(1) The system must be capable of reproducing all records on paper.

(2) The system must record and be able to reproduce all marks, information, and other characteristics of the original record, including both obverse and reverse sides of paper documents in legible form.

(3) When displayed on a viewer, monitor, or reproduced on paper, the records must exhibit a high degree of legibility and readability. (For purposes of this section, legible and legibility mean the quality of a letter or numeral that enable the observer to identify it positively and quickly to the exclusion of all other letters or numerals. Readable and readability mean the quality of a group of letters or numerals being recognized as complete words or numbers.)

(4) The system must preserve the initial image (including both obverse and reverse sides of paper documents) and record all changes, who made them and when they were made. This information must be stored in such a manner that none of it may be altered once it is initially recorded.

(5) The regulated person must establish written procedures to identify the individuals who are responsible for the operation, use and maintenance of the system.

(6) The regulated person must establish written procedures for inspection and quality assurance of records in the system and document the implementation of those procedures.

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1 The Regulations define Persons as any individual, partnership, limited partnership or corporate entity and/or a representative, agent or designee.
(7) The system must be complete and contain all records required to be kept by this part or the regulated person must provide a method for correlating, identifying and locating records relating to the same transaction(s) that are kept in other record keeping systems.

(8) The regulated person must keep a record of where, when, by whom, and on what equipment the records and other information were entered into the system.

(9) Upon request by the Bureau of Export Administration or NIST, the regulated person must furnish, at the examination site, the records, the equipment and, if necessary, knowledgeable personnel for locating, reading, and reproducing any record in the system.

(e) Destruction or disposal of records. If the Bureau of Export Administration, NIST or any other government agency makes a formal or informal request for any record or records, such record or records may not be destroyed or disposed of without the written authorization of the agency concerned. This prohibition applies even if such records have been retained for a period of time exceeding that required by paragraph (a) or (b) of this section.

(f) All persons required to keep records by this part must furnish those records when requested to do so by an employee of the Bureau of Export Administration or NIST.

5.3 Test Reports (Sec. 280.6(b))

When performing tests for which they are registered under this part, each facility registered under Subpart I or J of this Part and currently listed in the Facilities List shall issue test reports of its work which accurately, clearly, and unambiguously present test results, and all information required by this section. In addition, the facilities shall attach reports of chemical characteristics and any report of the tests conducted in a laboratory under the accredited laboratories list. All reports must be in English or be translated into English, must be signed by an approved signatory, must be protected by a tamper resistant system, and contain the following information:

(1) Name and address of the facility;

(2) Unique identification of the test report, including date of issue and serial number, or other appropriate means including references to control plan identification;

(3) Name and address of client, if applicable;

(4) Fastener description, including:
   (i) Manufacturer (name and address);
   (ii) Product family (screw, nut, bolt, washer, or stud), drive and/or head configurations as applicable;
   (iii) Date of manufacture;
(iv) Head markings (describe or draw manufacturer's recorded insignia and grade identification or property class symbols);
(v) Nominal dimensions (diameter; length of bolt, screw or stud; thickness of load bearing washer); thread form and class of fit;
(vi) Product standards and specifications related to the facility in writing by the manufacturer, importer or distributor;
(vii) Lot number;
(viii) Specification and grade of material;
(ix) Coating material and standard and specification as applicable;

(5) Sampling information:
(i) Standards and specifications or reference for sampling scheme;
(ii) Final manufacturing lot size;
(iii) Identification of control plan governing production of the lot to which the test report is applicable;

(6) Test Results:
(i) Test results of actual tests required by applicable fastener standards and specifications, and characteristics designated by the end user;
(ii) All deviations from the test method;
(iii) All other items required on test reports according to the applicable fastener standards and specifications, and characteristics designated by the end user;
(iv) Where the report contains results of tests performed by sub-contractors, these results shall be clearly identified along with the name of the laboratory/facility and accreditation/registration information listed in paragraph (b)(9) of this section.
(v) Where all processes under the applicable QAS were found to be in accordance with the inspections, tests and measurements required by the standards and specifications and the QAS and characteristics designated by the end user, a statement that the samples tested conform to the applicable fastener standards and specifications;
(vi) Where any process under the applicable QAS was found not to be in accordance with the inspections, tests, or measurements required by such QAS, a statement that the samples tested do not conform to the applicable fastener standards and specifications and identification of any nonconformance;

(7) A statement that the report must not be reproduced except in full;

(8) Name, title and signature of approved signatory accepting technical responsibility for the tests and test report;

(9) The name of the registrar which registered the facility, and code number assigned to the facility by the registrar, and the expiration of registration (if applicable).
6.0 **SAMPLING (Sec. 280.10)**

(a) For tests conducted either in a Registered or non-Registered Facility, if a manufacturer represents that the fasteners in a particular sample have been manufactured to a standard or specification which provides for the size, selection or integrity of the sample to be inspected and tested, the sample shall be determined in accordance with that standard or specification.

(b) For tests conducted by a non-Registered Facility in a laboratory on the Accredited Laboratory List, if a manufacturer represents that the fasteners in a particular sample have been manufactured to a standard or specification which does not provide for the size, selection or integrity of the sample to be inspected and tested, the sample shall be determined in accordance with the sampling plan provided by ASME/ANSI B18.18.2M, Inspection and Quality Assurance for High-Volume Machine Assembly Fasteners; ASME/ANSI B18.18.3M, Inspection and Quality Assurance for Special Purpose Fasteners; or ASME/ANSI B18.18.4M, Inspection and Quality Assurance for Highly Specialized Engineering Applications–Fasteners.

(c) For tests conducted in a Registered Facility, if a manufacturer represents that the fasteners in a particular sample have been manufactured to a standard or specification which does not provide for the size, selection or integrity of the sample to be inspected and tested, the sample for inspections and tests by the Facility shall be determined by the sampling plan provided by its Fastener Quality Assurance System or by standards and specifications intended for use with a Fastener Quality Assurance System, as appropriate. Or, a manufacturer operating a Registered Facility may elect to conduct inspections and tests upon all of the fasteners within a specified lot, provided that this election is documented in the control plan of its Fastener Quality Assurance System.

7.0 **SUBCONTRACTING (Sec. 280.807)**

*If a ... registered Facility subcontracts any of its functions to another entity it must place the work with another ... registered Facility; inform the client, before the fact, that subcontracting will be necessary, and clearly indicate in all appropriate records, and reports to the client, specifically what functions were subcontracted. Quality documentation shall include procedures for subcontracting even if subcontracting is not a normal practice.*

8.0 **MAINTAINING RECOGNIZED STATUS (Sec. 280.804)**

8.1 **NIST Surveillance/Observer Status**

NIST has the right to participate as an observer during any on-site visit to a Facility being audited by an Accredited Registrar, or it may perform its own surveillance visit of a Facility at its discretion.
8.2 Proper Use of Registration Status and Claims

A Facility registered under the Act and regulations shall take no action which states or implies the approval, or endorsement by NIST or any other agency of the U.S. Federal Government of any product or report pertaining to a product associated with any activities carried out under the registration. No Facility may take any action which states or implies that it is registered or authorized by NIST to act or perform in any area(s) beyond that which was specified in the registration documents.
BIBLIOGRAPHY


ISO 9001:1994, Quality systems—Model for quality assurance in design, development, production, installation, and servicing.


