Fan Equipment Co., Inc.

Quality Control Manual

Revision (14): 5/31/23

Contents

General Quality Policy Statement

Fan Equipment Co., Inc. is sincerely committed to providing our customers with the highest quality products that meet or exceed their requirements. Our position in the air handling equipment industry has been established for over fifty-five years and is attributed to our adherence to high quality standards. Management fully supports this commitment and will use and delegate authority to ensure compliance with applicable quality standards and the quality program described in this manual.

Our corporation is also committed to providing our employees with a desirable work environment, offering competitive remuneration, satisfying personal challenges and long-term employment stability.

To achieve these goals, we must have a high level of dedication from every employee. We must resolve to perform our individual tasks as completely and accurately as we know how, while seeking to improve all aspects of the organization for everyone's benefit.

The President extends full and unqualified support to the Quality Control manager to ensure complete and effective implementation of this Quality Program. Our manageable size lends itself to a ***total quality management*** approach to manufacturing. All department managers are delegated with the responsibility and authority to ensure compliance with applicable quality requirements. With this assignment comes the authorization to halt production or stop shipment of any product when applicable quality requirements have not been met. They cannot be overridden by other department supervisors without the express consent of the President.

Kenyon Spevak - QC Manager

Michael J. Harris - President

Tommy Didier - Assembly Manager

1.0 Organization

1.1. The quality program outlined in this manual is applicable to all the products manufactured by Fan Equipment Co., Inc.

1.2. The organization chart (Appendix "A") shows the positions of those responsible for Fan Equipment's actions. Specific authority and responsibility are assigned to each management position within the organization. Ultimate authority and responsibility reside with the president of the corporation and are delegated downward through the organization as set forth in Appendix A.

President - The President of the corporation has ultimate authority and responsibility for directing all corporate activities and for accomplishment of goals and commitments. He establishes policy, delegate's authority, and responsibility as necessary to ensure that all job requirements are satisfied. This includes purchasing of essential materials for fabrication such as raw steel products, and other materials not controlled by the Assembly Manager, Fabrication Manager, and the Purchasing Manager.

Quality Control Manager - The Quality Control Manager reports to the President. He is responsible for the implementation of this Quality Program and the company's Standard Procedures Manual. The Quality Control Manager has full authority to: initiate QC procedures and program improvements; review all documents that specify quality related requirements; freely inspect all work performed by the Company's departments, either in-process or completed; inspect or test all material(s) as received or in any stage of fabrication; stop any non-conforming process or practice immediately; prevent the use of any non-conforming process, practice, or material; and conduct quality audits of any Fan Equipment Co.'s vendors or subcontractors. He is responsible for final inspection and acceptance of purchased goods and services and maintains control and authority for all instrument calibration. He has the authority to stop production of an item at any time because of quality related concerns. He participates in the review and acceptance of sub-vendors and suppliers; and participates in the review and evaluation of the Company's Approved Vendors.

Engineering - The engineering personnel are responsible for research and development so that the corporation remains abreast of technological developments in the air moving industry.

This group is also responsible for incorporating customer design requirements into the Fan Equipment Co. submittal and fabrication drawings and standard procedures. They process design changes and establish priorities for preparation of submittal, fabrication, and construction drawings based upon approved production schedules. They are responsible for the timely completion of all submittal and fabrication drawings and data.

Plasma & Parts Department Manager - The Plasma & Parts Department Manager reports to the President. He oversees his department's personnel and is responsible for completion of his department's work on schedule and in accordance with applicable quality requirements. He requisitions manufacturing materials and services and maintains control of the plasma cutting and machine cutting processes for all fan components. He assigns personnel within the Plasma & Parts Department and sees that people are qualified to perform the work assigned. He assists in the preparation and review of standard procedures for his department. He is also responsible for compliance with the Quality Control and Standard Procedures Manuals, and initiates changes in manufacturing documents as required.

Fabrication Manager - The Fabrication Manager reports to the President. He oversees the Blower Department and the Wheel Department personnel and is responsible for completion of his department's work on schedule and in accordance with applicable quality requirements. He requisitions manufacturing materials and services and maintains control of the manufacturing processes for fan housing, pedestals, damper components, and rotors (wheels). He makes personnel assignments within his department and sees that people are qualified to perform the work assigned. He assists in the preparation and review of standard procedures for his department. He is also responsible for compliance with the Quality Control and Standard Procedures Manuals, and initiates changes in manufacturing documents as required.

Assembly Manager - The Assembly Manager reports to the President. He oversees his departments' personnel and is responsible for completion of his department's work on schedule and in accordance with applicable quality requirements. He requisitions manufacturing materials and services, and maintains control of the machining, rotor balancing, painting, and final assembly processes for all fan components. He assigns personnel within the Machine and Assembly Departments and sees that personnel are qualified to perform the work assigned. He assists in the preparation and review of standard procedures for his departments. He is also responsible for compliance with the Quality Control and Standard Procedures Manuals, and initiates changes in manufacturing documents as required.

Office Manager - The Office Manager reports to the President. He/She is responsible for the Company's accounting duties, directing the activities of the clerical and office personnel, producing monthly financial statements, overseeing the payroll, and generating purchase orders and related documents for the procurement of office supplies and equipment.

Purchasing Manager - The Purchasing Manager reports to the President. He is responsible for generating purchase orders and related documents for the procurement of all supplies, services, and equipment required by the company. He is responsible for preliminary receiving, inspection, and acceptance of purchased goods, as well as the assignment of these items to their specific shop orders. The Purchasing Manager participates in the review and acceptance of sub-vendors and suppliers; and participates in the review and evaluation of the Company's Approved Vendor List.

2.0 Quality Program

2.1 The Quality Program places emphasis on early detection, evaluation and resolution of quality problems and continuous quality improvement. Information received from employees and customers is systematically reviewed by the President and Quality Control manager to ensure timely resolution of quality problems and to determine standard procedures to preclude problem recurrence.

2.2 The President believes that everyone is responsible for quality work. Anyone discovering conditions that would compromise the quality of Fan Equipment Co. products is to notify his or her supervisor for evaluation and resolution.

2.3 The Quality Control Manager is responsible for implementation of the Company's Quality Program. Persons performing quality-related activities shall be qualified to perform the work to which they have been assigned. Qualifications shall be determined by such factors as: Education, formal certifications, and on-the-job training. Sub-vendors certified to national standards or codes may be employed to satisfy contract requirements when necessary.

2.4 The Quality Program applies to all portions of a contract, including design, procurement, manufacturing, packaging, and shipment. These activities shall be accomplished in accordance with Fan Equipment Co.'s Quality Control Manual, Standard Procedures Manual, and applicable instructions from our customers.

3.0 Design Review

3.1 Air handling equipment manufactured by Fan Equipment Co. shall be fabricated in accordance with the customer's design specifications and requirements, as translated into Fan Equipment Co. drawings and submittal data per our acknowledgment, for customer approval, prior to fabrication.

3.2 Manufacturing processes shall be accomplished in accordance with approved drawings and written instructions. Manufacturing and engineering are jointly responsible for development and approval of these drawings and written instructions.

4.0 Instructions and Procedures

4.1 Activities affecting quality shall be accomplished in accordance with approved instructions, procedures, and drawings.

4.2 Instructions for accomplishing prescribed manufacturing processes and related inspections and tests are incorporated into Standard Procedures. The department managers are responsible for preparation, review, and distribution of Standard Procedures for accomplishing manufacturing, inspection, and test activities.

4.3 Detailed dimensional characteristics, material requirements and special processes requirements are specified in the fabrication drawings prepared for each order. The fabrication drawings are prepared by qualified personnel in the engineering department and reviewed for accuracy by the President and/or department managers.

4.4 Changes to Standard Procedures and fabrication drawings require the same review and approval as that required for the original document.

4.5 Copies of applicable fabrication drawings shall be distributed to the location where the prescribed work is to be performed.

5.0 Procurement

5.1 Procurement of fan equipment accessories and services shall be controlled to ensure compliance with applicable quality requirements. Design bases and other requirements necessary to ensure adequate quality shall be conveyed to the vendor in the purchase order and/or contract document.

5.2 Procurement control may include any or all of the following quality verification activities:
a. Vendor evaluation and placement on the Approved Vendor List.
b. Source inspection.
c. Vendor audits and surveillance.
d. Receipt inspection.

5.3 Vendor quality and quantity verification shall be accomplished by qualified persons assigned to check, inspect, audit, witness, or otherwise verify quality.

- The Purchasing Manager has authority to verify the quality of commercial items purchased by name brand.
- The Project Engineer has authority to verify quality for items such as instrumentation and calibration.
- The Plasma & Parts, and Fabrication Managers have authority to verify quality for items used in the manufacture of our products, such as raw materials, welding, and shop supplies.
- The Assembly Department Manager has authority to verify quality of items such as: sub-contracted machined parts, sandblasting profiles, and paint supplies.
- The Quality Control Manager shall oversee all of the above activities and have responsibility for compliance.
- The President has final authority to verify quality for the above functions.

5.4 Any non-conforming items shall not be released for manufacturing and/or shipment until applicable quality requirements have been satisfied.

6.0 Identification

6.1 Factory mounted nameplates showing: rating, type, serial number and/or other information required by the customer shall be provided for all equipment.

7.0 Manufacturing

7.1 Manufacturing processes shall be performed in accordance with approved written instructions so as to limit product defects and/or variations. Fabrication drawings and written instructions shall be present in the work area during performance of the required work.

7.2 Persons performing manufacturing functions shall be proficient in performing the work assigned and shall be knowledgeable of the applicable quality requirements. Good workmanship standards shall prevail at all times.

8.0 Handling

8.1 All handling, packaging, and shipping activities shall be accomplished in a manner that will prevent damage, deterioration, or loss. The requirements for handling, packaging, and shipping shall be specified in approved written instructions.

9.0 Control of Measuring and Test Equipment

9.1 Validity of measurements and tests shall be ensured through the use of suitable measuring and test equipment of the type, range, and accuracy necessary to determine conformance to applicable quality requirements. Instructions for calibration and control of measuring and test equipment shall be incorporated into approved Standard Procedures.

9.2 Measuring and testing equipment shall be serviced and calibrated at periodic intervals to ensure continued validity. A schedule shall be established based upon the type of equipment, amount of use, and the required accuracy. Calibration standards used to verify the accuracy of measuring and test equipment shall be traceable to national standards.

9.3 The Quality Control Manager is responsible for overseeing these activities.

10.0 Product Inspection and Tests

10.1 Inspections to verify conformance to applicable quality requirements shall be planned and performed in a manner that will ensure continuous control of quality.

10.2 The characteristics to be inspected, the methods to be employed and the detailed instructions for performance shall be specified in the inspections checklist as required by the customer's purchase order or specification.

10.3 The Quality Control Manager is responsible for overseeing these activities.

11.0 Control of Non-conforming Items

11.1 Air handling equipment that does not conform to applicable quality requirements shall be promptly removed from the work area and identified as non-conforming using a "non-conforming marking". Non-conformance items shall be reported to affected departments and organizations.

11.2 All non-conforming items shall be reworked and/or repaired in accordance with approved written instructions provided by the engineering department.

11.3 The affected department manager(s) shall ensure that all rework and repair operations have been satisfactorily accomplished and that applicable quality requirements have been met prior to further processing and/or shipment of the item(s).

11.4 The Quality Control Manager is responsible for overseeing these activities.

12.0 Quality Records

12.1 All quality records shall be legible and identifiable. Quality records required by the customer’s purchase order and agreed to by Fan Equipment Co. will be submitted to the customer through normal channels. Internal quality records required by Fan Equipment Co. shall be available to the customer at the discretion of the Company.

13.1 The Quality Control Manager is responsible for overseeing these activities.

13.0 CE Certification Requirements

13.1 All equipment furnished for CE projects shall be in accordance with the latest "directives".

13.2 Management shall review each product eligible for CE projects on a job-by-job basis to identify the applicable directives. This will be accomplished by FE personnel consulting with a notified body to ensure the most recent version of all such directives is satisfied.

13.3 Management shall ensure that all "Essential Requirements" of all applicable directives shall be incorporated into the product design. This shall include all physical equipment modifications and engineering, fabrication, inspection, and QC document requirements and confirmations.

13.4 Fan Equipment Co. shall maintain a technical file for all CE eligible products. This file shall be maintained for a period of ten (10) years.

13.5 The technical file shall be maintained in a specific file proof cabinet by the appropriate Engineering, Quality Control, or management personnel.

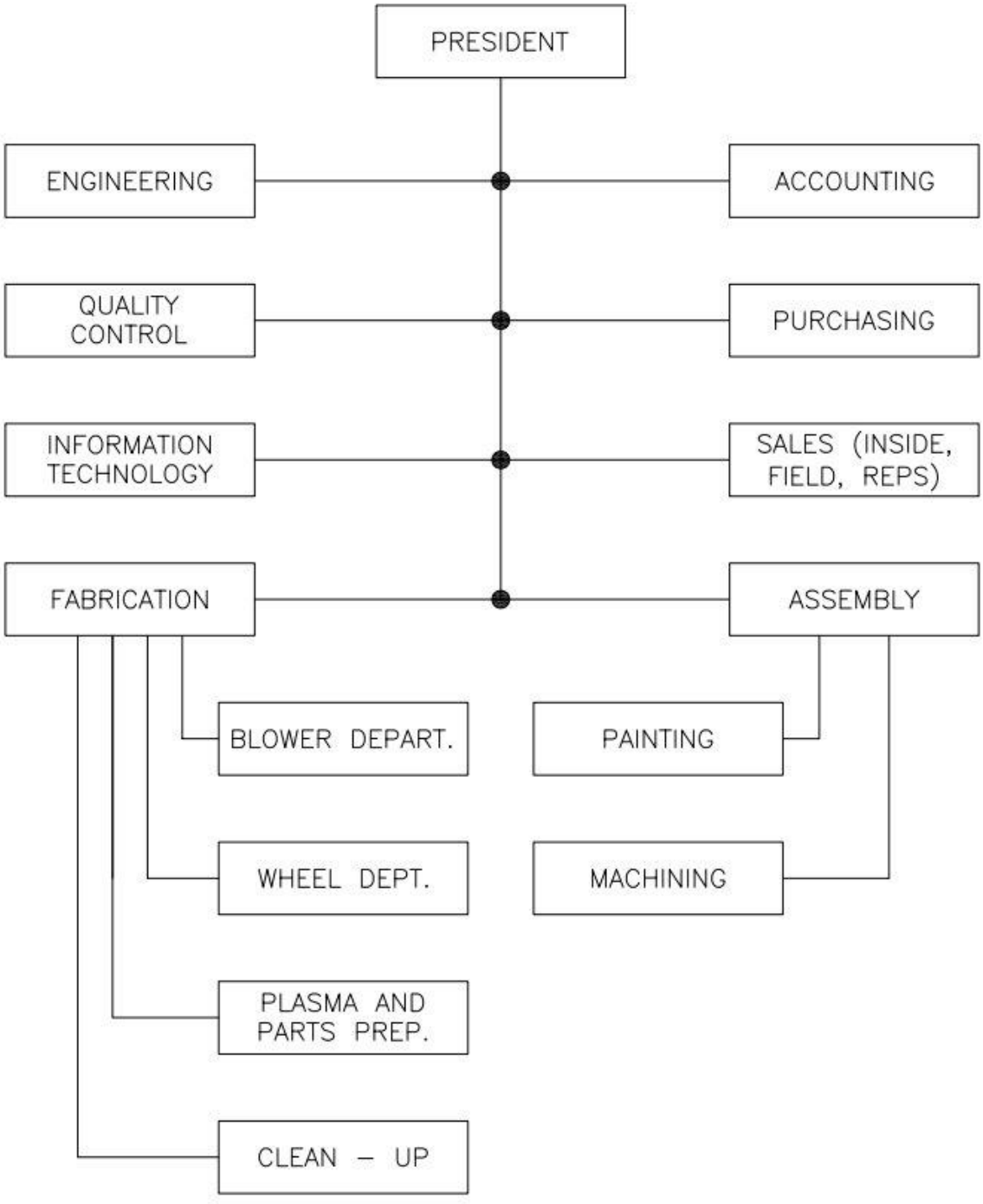
13.6 Evaluation of the technical file shall include a completed GE Conformity Assessment Module form.

13.7 A CE *Certificate of Conformance* shall be submitted for all qualifying equipment for purchase orders requiring CE compliance.

13.8 A CE *Certificate of Incorporation* shall be submitted for all purchase orders requiring CE compliance.

13.9 CE mark stickers shall be applied to all equipment eligible for a CE C*ertificate of Conformity*. Products governed by *Certification of Incorporation* are NOT to be fit with a CE mark.

Appendix A


PRESIDENT
ENGINEERING
ACCOUNTING
QUALITY CONTROL
PURCHASING
INFORMATION TECHNOLOGY
SALES (INSIDE, FIELD, REPS)
FABRICATION
ASSEMBLY
BLOWER DEPART.
PAINTING
WHEEL DEPT.
MACHINING
PLASMA AND PARTS PREP.
CLEAN – UP

Appendix B

The purpose of this appendix is to detail Fan Equipment Co.'s system for compliance with 10 CFR 50 Appendix B.

1.0 Organization

Primary responsibility for quality is achieved and maintained during fabrication by the department managers and the personnel they have assigned to perform each work task. Verification of quality achievement at all stages of manufacture is the responsibility of the Quality Control Manager and President, as these management people are not responsible for performing the work.

Management may delegate any or all of the work required to execute the QCM to others. Management, however, will always retain total responsibility for quality achievement.

Refer to the organization chart in Appendix A. All individuals assigned the responsibility for assuring effective execution of any portion of the quality control program have direct access to the levels of management necessary to perform this function.

2.0 Quality Control Program

The quality control program in accordance with this standard shall be based on the general practices set forth in the main section of this manual.

Provisions shall be made to provide appropriate controls, processes, test equipment, tools, and skilled personnel to establish timely control over activities affecting quality. These provisions shall be consistent with the importance of each topic as determined by Fan Equipment Company's standards and/or the customer's purchase order requirements.

The President shall regularly assess the adequacy of the company's provisions for quality control and be responsible for the effective implementation of the program.

3.0 Design Control

Primary responsibility for design input rests with management, as the President will administer quality compliance. At time of order entry, all applicable design inputs such as: Performance requirements, fabrication instructions, and code or standards requirements shall be identified and documented. Input for approval of all design requirements shall be obtained from the engineering/design personnel. All changes from approved design inputs, including the reason for the changes, shall be identified, approved, documented, and controlled by management.

The engineering/design personnel shall be responsible for establishing measures to identify and control the design interfaces and activities required to permit the design process to be conducted in a correct manner. Interface control is the responsibility of management. Assignments of responsibility, procedures for review, approval, release, distribution, and revision of documents shall be determined based on the requirements of each project. Approval and control of all considerations rest with management. Input from engineering/design and the fabrication and assembly managers shall be a part of all decisions. All purchased commercial grade items that become part of the assembled fan unit shall be identified and documented on all applicable drawings and documents. Commercial grade items that, prior to installation, have been modified, selected, or requisitioned to detailed specifications, shall be identified as such, and shall be traceable to a documented definition of the differences.

Design analyses shall be performed in a planned, controlled, and documented manner by the engineering/design personnel. They shall consist of computer calculations and manual computations sufficiently detailed so that a person technically qualified in the subject can review and understand the analyses and verify the adequacy of the results. All calculations shall be identifiable by subject or component to which the calculation applies and shall be retrievable.

Computer programs utilized are subject to the following controls:

1.) The computer program has been verified to show that it produces correct solutions.

2.) All changes to computer programs are verified by the engineering/design personnel.

Performance of initial design verification shall be performed by the senior most member of the engineering/design department not having performed the original design or influencing the design by specifying a singular design approach. Ultimate design verification is the responsibility of management. Verification will be accomplished primarily by performance of design reviews and qualification tests.

The extent of design verification is determined by the importance of safety. For fan equipment, this function is often limited to verification of the rotating assembly's

design. Previous qualification tests and proven designs are used extensively as the similarity nature of this equipment is well established. A combination of design review and qualification testing will be the preferred method of design verification.

Design reviews shall consider, where applicable:

- Were the design inputs correctly selected?
- Are the assumptions necessary to perform the design activity adequately described and reasonable?
- Was an appropriate design method used?
- Were the design inputs correctly incorporated into the design?
- Is the design output reasonable compared to the design input?
- Are all necessary design documents and procedures in place for verification by interfacing organizations?

Qualification tests shall be performed to verify aerodynamic performance when called for in the customer's purchase order, or if required for design verification. These performance test procedures are dictated by Air Movement and Control Association, Inc. (AMCA), with specific documentation provided by Fan Equipment Co. for each project requirement. Other qualification testing may be performed to verify mechanical compliance with design requirements.

Control of changes is the responsibility of management. All change dispositions shall be justified and documented. All changes, including field changes, shall be governed by control measures commensurate with those applied to the original design, and incorporated into the project drawings and data, and designs verified after the change if necessary.

Design documentation and records shall be stored with the job file.

4.0 Procurement Document Control

Applicable design bases and other requirements or specifications necessary to ensure adequate quality shall be included or referenced in procurement documents (purchase orders) issued to obtain accessory items or services.

All purchase orders shall clearly state the scope of the work to be supplied.

Purchase orders shall clearly identify all technical requirements by referencing: Drawings, specifications, codes, standards, regulations, procedures, or instructions, including all applicable revisions that describe the items or services requisitioned. Purchase orders shall clearly identify all tests, inspection results, and acceptance criteria necessary for evaluating the supplier's conformance to the purchase order requirements.

Purchase orders shall assume commercial quality control considerations are adequate for the sub vendor quality control program requirements. These requirements shall also extend to all appropriate sub-tier suppliers.

At each tier of procurement, purchase orders shall provide access to the supplier's plant facilities and records to allow for inspection or audit by Fan Equipment Co, and/or any designated representative or authorized party.

Purchase orders at all tiers shall identify the documentation required for submittal for information, review, or approval. The time of submittal shall be established along with any requirements for retention times and disposition requirements of specific quality control records required.

Changes to purchase order documents shall be subject to the same degree of control as utilized in the preparation of the original documents.

5.0 Instructions, Procedures, and Drawings

Activities affecting quality shall be directed by written instructions, procedures, or drawings appropriate to the circumstances. These documents shall include acceptance criteria.

6.0 Document Control

All documents, instructions, procedures, and drawings shall be identified with a specific numbering system unique to each piece of equipment. Preliminary review of documents for adequacy may be delegated to the engineering/design personnel. Ultimate responsibility for adequacy, approval for release for fabrication, and distribution to the proper workstation rests with management.

Identification of documents to be controlled and their distribution is the responsibility of management. The distribution path for all fabrication related documents and drawings, prior to the beginning of work, shall be (in series): Engineering/Design ➔ President➔ Quality Control Manager ➔Assembly Manager ➔ Plasma & Parts ➔ Fabrication Manager ➔ workstation. All work performed shall be managed and documented in this manner.

Responsibility for preparing and reviewing documents is delegated to the engineering/design personnel. Approval and issuance of documents are the responsibility of management.

Review of documents for adequacy, completeness, and correctness prior to approval and issuance is delegated to the engineering/design personnel, with ultimate responsibility by management.

All changes to documents, NCR's (Non-conformance Reports), and instructions for additional work will be reviewed, approved by management, and distributed as called out in paragraph 6.2.0, page 2-5.

Authority to review and approve minor changes shall be discussed on a case-by-case basis with management. Management accepts responsibility for all changes, minor and major.

7.0 Control of Purchased Items and Services

The general guidelines for procurement and control of purchased items are addressed in section 5.0 in the body of this Quality Control Manual.

Management or other qualified delegates shall accomplish verification activities.

All activities performed to verify conformance to purchase order requirements shall be documented. These may include source surveillance and inspections, audits, receiving inspections, non-conformances, dispositions, waivers, and corrective action reports. Supplier's documentation performance shall be considered when evaluating quality control program accomplishment.

All changes to purchase order documents shall be in accordance with the applicable sections of this Quality Control Manual and invoked appendices.

Suppliers shall offer written proof that the item(s) or service(s) are complying with the purchase order requirements.

Acceptable proof of supplier's performance shall take the form of: Certificate of Conformance, source verification, receiving inspection, or post-installation test results, or a combination thereof.

Receiving inspections shall consider source verification and audit activities, as well as historical quality performance of the supplier to verify conformance to purchase order requirements. Verification by objective evidence shall confirm: Proper configuration; identification; dimensional, physical, and other characteristics; freedom from shipping damage; and cleanliness. Submittal status of required supplier documentation shall also be considered for acceptance of items.

Acceptance of purchased services, such as third party NDE inspections or engineering and consulting services shall be based on any or all of the following:

a.) Technical verification of data

b.) Surveillance and/or audit of the activity

c.) Review of objective evidence of conformance to the purchase order requirements, such as certifications or stress reports

Generally, items purchased by Fan Equipment Co. will be commercial grade items. The provisions below and the requirements of section 4 of this appendix shall be enforced as an alternate to the other requirements of this section:
a) Fan Equipment Co. identifies the commercial grade item in an approved design output document. Alternate commercial grade items may be applied, if verified by Fan Equipment Co. that the alternate commercial grade item will perform the intended function and will satisfy all design requirements applicable to the original item.

Commercial grade items shall be identified in the purchase order by the supplier's/manufacturer's published product description (e.g., catalog number).

Upon receipt of a commercial grade item, Fan Equipment Co. shall determine that:

a.) Damage has not occurred during shipment;

b.) The item received was the item ordered by comparison to the FE purchase order.

c.) Applicable documentation for each item is received and accepted.

8.0 Identification and Control of Materials, Parts, and Components

Measures for the identification and control of materials, parts, and components, including sub-assemblies shall be provided by the engineering/design personnel.

Raw material, sub-assemblies and purchased items shall be physically marked with the specific FE job number and material identifications. Records traceable to the item may also be used to identify and control materials.

9.0 Control of Processes

Control of processes is addressed in the body of this Quality Control Manual.

Processes requiring supplemental control shall be amended by written instructions, procedures, drawings, or other appropriate means.

Special processes, whether in-house or subcontracted, will be controlled by written instructions that include our reference procedure, personnel, and equipment qualification requirements.

The organization or group performing the work shall be responsible for adherence to the approved procedures and processes.

Personnel, procedures, and equipment shall be qualified for the specific task.

Acceptance criteria shall be referenced in all applicable procedures and instructions.

Appropriate records shall be kept for currently qualified personnel, processes, and equipment of each required special process.

10.0 Inspection

The Plasma & Parts Department Manager and the Fabrication Manager shall perform preliminary inspections. These are dimensional measurements to confirm compliance with the fabrication drawings. Visual inspection of welded seams is performed by the Quality Control Manager after completion of each sub-assembly. The Quality Control Manager shall perform the final inspection, with ultimate responsibility for acceptance resting with management.

The Quality Control Manager will perform or oversee all inspection tasks.

Inspection hold-points, when required by the customer's purchase order, shall be noted on the fabrication drawings. Work shall not proceed beyond the required hold point unless authorized by management. Consent to waive specified hold points shall be received in writing from the client prior to continuation of work beyond the designated hold point. Work may proceed beyond witness points when the client is not present.

Inspection activities shall be documented for each job based on the purchase order requirements. The method of measurement and acceptance criteria shall be documented, and the results recorded.

"Sample" inspections of randomly selected items are not used as the nature of our product does not lend itself to sampling verification.

"In process" inspections are limited to verification of dimensional conformance to drawings for parts, weld quality of the completed sub-assembly, and dimensional conformance of the completed assembly.

"Final" inspections shall include a review of all inspection verifications and non-conformance resolutions. Final inspections and acceptance are the responsibility of management.

The completed assemblies will be inspected to ensure compliance with the purchase order requirements. Items shall be inspected for completeness, markings, calibration, mechanical alignment, in-house damage, and preparation for shipment.

Final acceptance of all items is the responsibility of management.

Modifications, repairs, or replacement of items performed subsequent to final inspection shall be re-inspected to verify acceptability.

"In service" inspections shall be the owner's responsibility.

Inspection records shall identify the following:

- Item inspected.
- Date of inspection.
- Inspector.
- Type of observation.
- Results of acceptability.
- Reference to non-conformance action (if applicable).
- Acceptance criteria.

11.0 Test Control

Testing is commonly limited to mechanical running verification, and fan housing "gas tight" construction verification. Other tests required by purchase order, such as aerodynamic performance verification, will be addressed, as necessary.

Aerodynamic performance verification test acceptance criteria are established by AMCA. Mechanical running verification test acceptance criteria are dictated by ASME and fan industry standards. Fan housing "gas tight" leak testing verification and acceptance criteria will be established on a case-by-case basis, based on the purchase order requirements.

Written test procedures will be prepared for each required test function.

Procedures shall include reference to:

- Objectives.
- Instrumentation required.
- Environmental conditions.
- Provision for data acquisition.

All test results will be reviewed and accepted by management.

Test records shall identify:

- Item tested.
- Date of test.
- Test personnel.
- Type of observation.
- Results or acceptability.
- Corrective action for noted deviations.
- Person evaluating test results.
- Acceptance criteria.

12.0 Control of Measuring and Test Equipment

Test equipment is selected to satisfy the purchase order requirements based on: type required, range, accuracy, and tolerance.

Test instruments requiring calibration are calibrated at regular intervals or before a specific test are performed. Calibration is to nationally recognized standards. If no nationally recognized standard exists, the basis for calibration shall be documented and approved by the Quality Control Manager.

Rulers, tape measures, levels, and other similar devices are not calibrated.

Measuring and testing equipment is properly stored and maintained by either the engineering/design personnel, or the Quality Control Manager as determined by the nature of the device.

Calibration status is recorded and maintained for all applicable instruments.

13.0 Handling, Storage, and Shipping

The size and nature of our equipment limits the handling, storage, and shipping considerations to compliance with the common carrier trucking industry standards.

Special instructions as called out in the customer's purchase order are addressed on a case-by-case basis.

As a minimum, the following considerations shall be satisfied:

- Lifting eyes and provisions for handling will be furnished for all equipment.
- Equipment shall be protected from dirt, soil, and moisture.
- Equipment shall be supported in a manner to prevent damage during shipment.

Special markings and labels are provided as required by the customer's purchase order.

14.0 Inspection, Test, and Operating Status

The status of inspection and test activities shall be documented and recorded in the job file. Where applicable, markings on the work piece will be used to show disposition. Items that are not in compliance with inspection acceptance criteria, have the work piece marked and removed from the work floor until disposition is determined. The authority for application and removal of marks rests with management.

15.0 Non-conforming Materials, Parts, or Components

The Quality Control Manager shall control non-conforming items. Items that do not conform to the specified requirements shall be identified, marked, and removed from the work floor until disposition is determined. Disposition shall be administered by the Quality Control Manager with ultimate responsibility and authority resting with management. Action on non-conforming items will be:

- **Use as is** - non-conformance does not affect performance or quality. Return the work piece to the production floor.
- **Repair and correct non-conformance -** return the work piece to the production floor.
- **Scrap item -** remove the work piece from the production floor. Fabricate a new piece from new raw materials.

Documentation shall be recorded for all non-conformance findings and dispositions. Non-conformance items shall be reported to all affected departments and to the customer if so, dictated by the contract or purchase order documents.

16.0 Corrective Action

The root cause of conditions adverse to quality, such as but not limited to: Failure, malfunctions, deficiencies, deviations, and defective materials shall be identified and analyzed. Corrective actions shall be implemented as necessary to prevent reoccurrence of the non-conformance.

17.0 Quality Control Records

A records system shall be established at the start of each 10 CFR 50 type project. The records system shall be defined, implemented, and enforced in accordance with written procedures and instructions in agreement with the customer's purchase order requirements.

Records shall be maintained to confirm compliance with or evidence of review results, inspections, tests, and audits, work performance reviews, material analysis.

Records of personnel qualifications, procedures and equipment shall be maintained.

Retention of records shall be in accordance with the above paragraphs as called out in the customer's purchase order.

Responsibility for records kept by Fan Equipment Co. rests with management.

All quality control records shall be kept in a locked, fireproof filing cabinet, located in the President's office. (b) All records shall be segregated according to job number and title. (c & d) Records are verified as to applicable item and legibility by personal receipt and review by management. (e & f) Management will only have access to the records.

Records kept by Fan Equipment Co. shall be stored in a locked, fireproof filing cabinet, inside the President's office, free from moisture, temperature, and pressure. (b) Records shall be attached in binders or folders. (c) Special records such as: radiographs, photographs, negatives, microfilm, and magnetic media shall be stored in the same fireproof file cabinet which protects the contents from excessive light, stacking, electromagnetic fields, temperature, and humidity.

Temporary storage of records shall be kept in a one (1) hour fire rated container.

All records shall be kept and maintained as discussed above until final disposition is determined by the owner or his agent.

18.0 Audits

Because of our small size, audit functions to verify compliance with all aspects of the quality control program are an ongoing process. Management holds daily meetings with the company's department managers and Quality Control manager to discuss and evaluate quality concerns.

Record of Revisions

Revision Number	Effective Date	Affected Sections
0	8/1/1989	All
1	2/1/1990	Added to Standard Procedures
2	3/14/1991	Added to Standard Procedures, Weld Control
3	11/12/1992	Added Appendix "B"
4	3/12/1993	Section 5.0; paragraph 5.3 -Identified "qualified persons." Standard Procedure for Control of Fan Housing and Support Base construction, Rev. 1. - Added date & Rev. No. - Added to paragraph 3.4 - Added paragraph 4.4 Standard Procedure for Control of damper construction; Rev. 1. - Added date & Rev. No. - Added to paragraph 3.4 Standard Procedure for Control of Unit Assembly; Rev. 1. - Added date & Rev. No. - Added to paragraph 3.3 Standard Procedure for Control of Painting Operation; Rev. 1. - Added date & Rev. No. Standard Procedure for Control of Packaging & Shipping; Rev. 1. - Added date & Rev. No. Standard Procedure for Control of Shear Operation; Rev. 1. - Added date & Rev. No. - Added to paragraph 4.1 Standard Procedure for Control of Welding Process; Rev. 1. - Added date & Rev. No. - Added to paragraph 3.1 FEWRC-1 Procedure for Weld Rod Control - Added date & Rev. No. Visual Weld Acceptance Criteria #1.01-INSP - Revised item #4 of "correction of non-conforming welds" - Deleted item #5 of "correction of non-conforming welds" Appendix B; Rev. 1 - 3/16/93 - Revised Section 10, par. 3.0 & 8.0

Revision Number	Effective Date	Affected Sections
		- Revised Section 11, par. 5.0 - Revised Section 12, par. 3.1 - Revised Section 13, par. 2.0
5	11/22/93	All - Updated Appendix "A" - Revised document format & page layout - Moved contents of sections: 3.6, 3.7, 3.12 & 5.3 of Standard Procedure for Control of Fan Housing & Support Base Construction Standard Procedure for Control of Unit Assembly. Visual Weld Acceptance Criteria Procedure #1.01-INSP. - Added date & Rev. No. - Revised document format & page layout
6	5/31/94	Added to Sect. 5.0; pg. 1-4 Added to Sect. 11.0; pg. 1-6 Appendix B; Sect. 15.0; pg. 2-14 Added Sect's 2, 4 & 7 Added to Sect. 3; pg. 2-3 Added aluminum welding procedure: AL-4.01. Added Supplier Approval Procedure: SAP-001 Added welding procedure NI-5.01 Updated Appendix "A"
7	8/1/95	Removed Standard Procedure from Quality Assurance Manual, creating two (2) separate documents. Revised General Policy Statement Revised Sections: 1.2, 2.3, 2.4, 5.3, 11.3, & 12.1. Added Sections: 9.3, 10.3, 11.4, & 12.2. Revised Appendix "A" Revised Appendix "B" Sections: First paragraph, 1. 2.1, 1.3.1 & 1.3.2, 2.1.0, 6.2.0, 10.2.1, 10.2.2, 12.3.1, 12.4.0, 15.0 Added Section 18 to Appendix "B"
8	9/3/98	Updated to show change of company name (7/1/97) & Quality Assurance Manager (7/21/97).
9	7/8/02	Added Section 13 for CE compliance.

Revision Number	Effective Date	Affected Sections
10	10/30/07	Replace Appendix B NQA-1 with 10 CFR 50.
11	1/8/15	Revised entire Quality Assurance Manual format. Various general changes.
12	4/19/17	Various general changes.
13	7/2/19	Updated Personnel and general changes.
14	5/31/23	Changed manual name to “Quality” Control (was “Assurance”). General revisions, Organization positions and description revised, Appendix A revised, revised general grammar.