



QUALITY CONTROL MANUAL

REVISION 1.00

**GreeneTech Mfg.
470 Crile Road
Washington, Pa. 15301**

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GENERAL PURPOSE AND PARAMETERS

GreeneTech Mfg. Co., Inc. Quality Control personnel shall monitor and enact all aspects of the Quality Control system herein described to ensure a quality manufacturing process and product.

Contracts between the customer and GreeneTech Mfg. Co., Inc., either expressed or implied, shall set the ultimate specifications with which the Quality Control system shall comply.

DOCUMENTATION

DRAWING AND SPECIFICATION CHANGE CONTROL

1. All work performed by GreeneTech Manufacturing Co., Inc. shall conform to customer specified drawings, including drawings revised under oral agreements pursuant to contract. Any deviations will be authorized by customer.
2. The sales department receives engineering changes, drawings and specification changes from GreeneTech Manufacturing Co., Inc. customers and is responsible to immediately forward customer changes to the Operations Manager.
3. Operations Manager is responsible for issuing the latest engineering changes, drawings and specifications to the appropriate departments which in turn void all outdated material.

RECORDS OF TESTS AND INSPECTIONS

1. Final inspection and test reports are maintained by the GreeneTech Manufacturing Co., Inc. office.
2. Copies of inspections and test reports are filed in the job number folder and are available for review upon request of the customer.
3. Rejected material that is subjected to repair is resubmitted to final inspection for verification of the quality of the rework.

COORDINATION WITH CUSTOMERS

QUALITY CONTROL RECORDS

1. Quality Control records pertaining to the customer are available upon request.

CUSTOMER FURNISHED MATERIALS

1. GreeneTech Manufacturing Co., Inc. will inspect customer-furnished materials. Accepted lots are identified and sent to stock. Rejected lots are identified and are segregated in receiving until disposition is made by the customer.

CUSTOMER INSPECTION AT SUBCONTRACTOR'S OR VENDOR'S SITE

1. Customer may inspect services and supplies outside the prime contractor's facility.
2. Source inspections by customers shall not constitute acceptance nor relieve the contractor of the responsibility to furnish an acceptable product.

GENERAL QUALITY CONTROL PROCEDURES

PURCHASING

1. GreeneTech Manufacturing Co., Inc. will assure that all supplies and services procured from suppliers, vendors and subcontractors conform to contract requirements.
1. GreeneTech Manufacturing Co., Inc. purchase orders shall specify all applicable requirements to insure that purchased items conform to the contract requirements.
2. Quality Control will perform specified inspections on all procured items when required of the contract to assure that quality requirements are met. Vendors failing to conform will be removed from the list of qualified vendors.

A. RECEIVING INSPECTION

1. All parts and materials received by GreeneTech Manufacturing Co., Inc. will be logged in by receiving personnel and will be placed in suitable areas.
2. Receiver will inspect and compare the materials and completed forms received with those specified within the purchase order. Quality Control or purchasing department will be notified of discrepancies.
3. Corrective action to prevent recurrence of discrepancies discovered by receiving inspections is the responsibility of the purchasing department.

CORRECTIVE ACTION/NONCONFORMING MATERIAL

1. If an item is marked for "rework", a preliminary review will be held by the Quality Control Supervisor and the Shop Supervisor to determine the rework procedure. If necessary, the part could be scrapped at this time.
2. After the part has been reworked, it will be resubmitted to Quality Control for inspection.
3. Quality Control will trace the part to determine what action caused the non-conformance and will discuss this operation with the responsible supervisor. Necessary action will be taken to correct the situation.

PRODUCTION IDENTIFICATION

1. A Job Number and a Shop Number identify all parts while they are in GreeneTech Manufacturing Co., Inc. shop. These numbers can remain or be removed. These numbers may also be painted over and replaced with the appropriate customer number as required by the contract.
2. The numbers may be applied to the parts themselves or to the packaging.
3. Quality Control personnel may apply serial numbers to individual parts in order to track them throughout the shop.

CONTROL OF MEASURING AND TESTING EQUIPMENT

1. The measuring and testing devices shall be periodically calibrated against certified measurement standards which are traceable to the National Bureau of Standards.
2. The standards used for calibrating GreeneTech Manufacturing Co., Inc. hand-held measuring equipment are the micrometer standards included with the micrometers. These shall be calibrated each year.
3. Pressure gauges shall be calibrated on a yearly basis.
4. Employees are required to check micrometers each time they are removed from storage.

WELDING PROCEDURES AND QUALIFICATION OF WELDERS

1. All welding will be performed in accordance with ANSI/AWS D1.1-90 unless otherwise required by the customer.
2. Quality Control will review Weld Procedures prior to issuance to assure conformance to the specified standards.
3. Individual procedures are on file in GreeneTech Manufacturing Co., Inc. office for review by our customers or their authorized representatives.
4. A certification regarding the qualifications of a certified welder is a part of his Personnel record. A copy is on file in the GreeneTech Manufacturing Co., Inc. office for review by customers or their authorized representatives.

INSPECTIONS OF WELDS

A. VISUAL INSPECTION SHALL INCLUDE THE FOLLOWING:

1. A visual inspection shall be performed to ensure excess slag, spatter, and dross will be kept to a minimum on all fabrications.
2. Grinding shall be held to a minimum except to clean up rough edges and to meet specifications.
3. All tack-welds or fit-up lugs will be removed and ground flush.
4. All sharp corners and rough edges shall be rounded off by grinding unless otherwise requested by customer.

B. RESULTS OF ALL INSPECTIONS SHALL BE DOCUMENTED

C. THE FOLLOWING WILL BE VERIFIED FOR RE-INSPECTION OF WELD REPAIRS:

1. Isolation of the defective area.
2. Grind out the defective area until it has been eliminated.
3. Re-weld using the original weld procedure for guidance.
4. Re-inspect per drawing.

FINAL INSPECTION

1. Upon the completion of all manufacturing operations, the blueprint is delivered by production to Quality Control along with any pertinent documentation.
2. Item/items are inspected/tested per customer's specifications. Quantities of repetitive items may be subject to percentage spot-checking in order to maintain efficiency, work flow, and timely delivery of items unless otherwise requested by customer and agreed to by GreeneTech Manufacturing Co., Inc.
3. Final inspection is performed by Quality Control personnel and the results documented and filed.
3. For conforming items, the inspector marks, initials, and dates the item before going to assembly, painting, or into stock.
4. Parts to be reworked are marked and Production Department notified, who, after reworking re-submits the parts to Quality Control for re-inspection.
5. Inspection records will include the number of pieces, date of inspection and identification of the inspector. Numbers of scrapped or rejected pieces will only be furnished if requested by customer.

FINAL ASSEMBLY AND TEST

1. GreeneTech Manufacturing Co., Inc. Quality Control personnel will inspect the final assembly and document the results.
2. Testing procedures will be as set forth in the contract. If testing is required and the contract does not specify procedures, customer's engineering shall write procedures and submit them to our Quality Control for review of quality requirements prior to implementation.
3. Customers will be notified as soon as their parts are ready for inspection and/or testing. They will be asked to respond as soon as possible so that the production flow is not obstructed.

PACKAGING AND SHIPPING

3. No order will be shipped to a customer until parts have been marked as accepted by inspector's initials and date of acceptance.
2. No material will be shipped until all required certification, test reports, special samples, etc. have been received with the material in accordance with the customers requirements.
4. All items shall be packaged in a manner designed to reduce the chance of damage, deterioration or substitution.
4. Adequate marking shall appear on packaging and parts or as otherwise necessary to provide positive identification to the applicable customer.
5. Any required special packaging will be controlled and will be as specified by the customer.

