



**Flow Sensor  
Quality Control Manual  
October 10 2018**

*4204 Russell Rd., Mukilteo, WA 98275*

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**SECTION 0**

**Introduction**

**Statement of Authority and Responsibility**

FloScan Inc.. recognizes its responsibility as a provider of quality products. To this end, FloScan Inc.. has developed and documented a quality management system. This manual provides comprehensive evidence to all customers, suppliers, and employees of what specific controls are implemented to ensure product quality.

This manual also governs the creation of quality related documents. It will be revised, as necessary, to reflect the quality system currently in use.

FloScan Inc.. accepts responsibility for the complete satisfaction of its customer. We exercise this responsibility through adherence to proven procedures, and total commitment to meeting and exceeding customer requirements, and to maintaining an organizational culture that fosters continuous improvement.

**Revisions**

<b>RE V</b>	<b>Description</b>	<b>Date</b>	<b>Approval</b>
NC	Initial Release	10-10-2018	JFP

**Signed:** \_\_\_\_\_  
**Joe Polizzotto, President**

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

## **SECTION 1.0                    Management**

### **1.1     Scope**

This section of the Quality Control Manual identifies and describes the management responsibilities and relationships in the performance of activities that affect quality.

### **1.2     Management Responsibilities**

1.2.1    The President is responsible for the setting of policy.

1.2.2    The Quality Inspector is responsible for maintaining the quality control records of the flow sensor production.

1.2.3    The General Manager is responsible for the purchasing functions including liaison between FloScan Inc., and its vendors.

1.2.4    The General Manager is responsible for administration of all functions and coordination of related functions set forth in this document and the quality effort of production personnel in assuring that the manufacturing processes and procedures are consistent with the design.

1.2.5    All personnel, whose activities affect the quality of our product, have the responsibility to bring problems to the attention of the General Manager .

## **SECTION 2.0**

### **Quality Control System**

#### **2.1 Scope**

This section of the Quality Control manual describes the Quality Control System and denotes the responsibility for their implementation.

#### **2.2 Quality Inspector**

**2.2.1** The Quality Inspector is responsible for assuring proper implementation of procedures of the Quality Control program.

**2.2.2** The Quality Inspector reports to the General Manager .

#### **2.3 Stop Work Authority**

**2.3.1** Authority to stop work is assigned to the General Manager or designee. This authority includes the right to stop processing of unsatisfactory work or material. This authority is delegated down through all Quality Control personnel. Inherent in this is the authority to order resumption of work when the cause of the work suspension has been brought under control. Customer requests to suspend operations performed by FloScan Inc., personnel or by FloScan Inc.. vendors for lack of compliance to quality requirements shall be referred to the General Manager .

#### **2.4 Quality Control Records and Reports**

**2.4.1** Measures for the control and storage of Quality Control records and reports are outlined in Section 8.0, Record Retention, of this manual.

#### **2.5 Quality Control Manual**

**2.5.1** The Quality Control manual requires as a minimum, approval signatures from the President of FloScan Inc.. and the General Manager .

**2.5.2** The responsibility for maintenance of the Quality Control manual is assigned to the General Manager . Maintenance of the Quality Control manual includes the following:

**2.5.2.1** Editing drafts of sections of the Quality Control manual to achieve uniformity of format and clear understanding of content.

**2.5.2.2** Coordinating and resolving comments received prior to release.

**2.5.2.3** Distributing the manual and changes to personnel responsible for the control of quality-related activities outlined in this manual. The Quality Inspector shall maintain the distribution Log.

**2.6 Quality Control Manual Issuance**

**2.6.1** Each controlled copy of the Quality Control manual is serialized, and a record of the issue is maintained by the Quality Inspector by use of the Quality Control Manual Distribution Log, illustrated on page 5. The Distribution Log identifies the recipient’s name, their department, revision, date of issue, and the controlled copy number. Each copy of the Quality Control manual released shall be complete and up-to-date on the date of issue. FloScan Inc., personnel shall only be issued controlled copies of the manual.

**2.6 Quality Control Manual Issuance (continued)**

**2.6.2** Uncontrolled copies of the Quality Control manual may be distributed, as appropriate, to customers for information purposes without copy number assignments or updating distribution. Uncontrolled copies of the Quality Control manual shall be current at date of issue and shall have the following statement inserted in front of each non-serialized manual: “CAUTION: This manual is an uncontrolled copy to be used for information purposes only.

**2.7 Manual Revisions**

**2.7.1** Revisions to this manual will be made when required by changes in company policy. It shall be the responsibility of the Quality Inspector to incorporate all required changes, to update within six months of addenda issue, and to submit such revisions to the Quality Inspector for acceptance prior to implementation of the revisions.

**QUALITY CONTROL MANUAL DISTRIBUTION LOG**

<u>NAME</u>	<u>DEPARTMENT</u>	<u>REVISION DATE</u>	<u>MANUALCOPY #</u>
Joe Polizzotto	President.....	10/10/18.....	1
Gary Walters	General Manager .....	10/10/18.....	2
Hoa Lai	Quality Inspector .....	10/10/18.....	3

## **SECTION 3.0                      Drawing Control**

### **3.1     Scope**

This section of the Quality Control manual describes the procedure for the control release of drawings.

### **3.2     Drawings**

3.2.1    The Drawing Coordinator is responsible for the routing of all drawings.

### **3.3     History File**

3.3.1    The Drawing coordinator shall be responsible for control of the drawings in the history file.

### **3.4     Distribution of Drawings**

3.4.1    The Drawing Coordinator shall distribute all drawings.

### **3.5     Revised Drawings**

3.5.1    The Drawing Coordinator shall transmit drawing revisions and recall obsolete documents.

3.5.2    Prior to the release of drawing revisions, the Drawing Coordinator shall review the Drawing Status Log and the master file noting the assigned personnel who have copies assigned.

3.5.3    The Drawing Coordinator shall release drawing revisions to persons who have possession of active drawings.

## SECTION 4.0 Procurement Control

### 4.1 Scope

This section of the Quality Control Manual describes the procedure for assuring that requirements, which are necessary to assure adequate quality, are suitably included or referenced on the documents for procurement of material and services.

### 4.2 General Requirements

4.2.1 The following are utilized in the procurement process.

4.2.2 Purchase Order. The contractual relationship with vendors shall be established on the Purchase Order. When a contractual relationship is established on a contract agreement, such agreement documents shall be processed the same as the Purchase Order for purposes of the Quality Control requirements.

4.2.3 Quality Control provisions will be incorporated in applicable procurement documents in accordance with the requirements established by FloScan Inc..

4.2.4 Copies of Purchase Orders for items, material, and services are to be retained for receiving and receiving inspection purposes.

### 4.3 Material and Vendor Services Requisitions

4.3.1 The Stockroom personnel are responsible for initiation of Material and Vendor Services Requisitions as specified on the design drawing.

4.3.2 Inspection and test criteria shall be stated in the Material Requisitions.

4.3.3 The **General Manager** or designee prior to release to the Purchasing shall review Material and Vendor Services Requisitions.

4.3.4 All test reports and certifications shall be routed to the Quality Control.

### 4.5 Purchase Order

4.61. The technical requirements for the item or service to be procured shall be transcribed from the Material Requisitions to the Purchase Order under the direction of the General Manager .

4.62. Prior to the placement of the order for products and related services, the General Manager shall verify that the appropriate quality requirements are specified or referenced on the purchase order.

4.63. Copies of the Purchase Orders for items or services shall be forwarded to the originator of the PO

### 4.5 Material Receiving

4.61. All incoming parts are routed to receiving where they are matched up with their purchase orders.



- 4.62. Receiving personnel inspect incoming parts for damage before accepting the shipment. Obvious damage is noted on the bill of lading or the packing list.

**4.6 Material Receiving (continued)**

- 4.63. The parts are recorded on the daily receiving report and logged into the computer.
- 4.64. The parts requiring inspection shall have a receiving tag placed on the outer packaging of parts.
- 4.65. This tag will denote Part #, Date Rec., Quantity, Invoice #, P.O.#, and Q.C. Log #.
- 4.66. Depending on how the parts are coded they are either routed to the Q.C. Workbench for inspection or they are added to inventory and put in their appropriate stockroom location.
- 4.67. If the wrong material was sent then it is placed on the General Manager's Workbench where it will stay until a Return Material Authorization (RMA) is obtained.
- 4.68. If the Purchase Order indicates that a material certification report or SPC data is required and was not received, then the General Manager is notified to procure the documents.
- 4.69. Receiving personnel shall note on the purchase order, date and quantity received. When all parts are received the completed purchase order is then routed to quality control for filing.
- 4.610. All test reports and certifications shall be routed to Quality Control.

## **SECTION 5.0**

### **Receiving/Inspection/Stockroom**

#### **5.1 Scope**

This section of the Quality Control manual describes the methods for receiving inspection.

- 5.1.1 Parts to be inspected are taken from the Q.C. Workbench. Using the part number, the file is pulled along with the sample parts.
- 5.1.2 Some critical items receive a 100 percent inspection. For all other items, inspection is to the C=0-sampling plan with the AQL equal to 1%.
- 5.1.3 Approved parts are logged into the computer and labeled with a sequential Log number, purchase order number, part number, and quantity. . A green circle sticker is then affixed to the inspection tag to designate that the parts have been approved and have passed inspection. All approved parts are then brought back to receiving to be added to inventory.
- 5.1.4 Stockroom personnel shall remove approved parts daily, and put parts in appropriate areas in the stockroom.
- 5.1.5 Any nonconformance outside the C=0 sampling plan shall require a 100 percent inspection or the return of the entire batch for replacement. Nonconforming parts are tagged "Nonconformance - DO NOT USE" and placed on the General Manager's Workbench to be returned for replacement. Nonconformance/Scrap reports are sent to the General Manager . For most problems the General Manager will contact the manufacturer and explain the reason for rejection and discuss corrective actions. If there is a major design or engineering discrepancy then the General Manager .
- 5.1.6 The inspection files shall not be destroyed without Management approval. Old and outdated files shall be put in files marked history. History files shall be kept forever.

#### **5.2 Stockroom**

- 5.2.1 All parts entering the stockroom must have a QC sticker showing the Floscan Part number, quantity, date and PO number and a green approval sticker (Note: Parts not requiring inspection and general supplies do no require a sticker.)
- 5.2.2 All parts picked for work orders will be done using a FIFO system.

- 5.2.3. Parts pulled for a work order will have their QC sticker information logged onto the work order for lot traceability.
- 5.2.4. All subassemblies, assemblies and products will retain the lot traceability information when returned to the stockroom.

## **SECTION 6.0                      Fabrication Control**

### **6.1      Scope**

This section of the Quality Control manual describes the responsibility and control of fabrication and assembly.

- 6.1.1    The fabrication and assembly operations are determined from drawings, documents, and specific requirements of FloScan Inc..
- 6.1.2    All parts for individual Work in Progress Data Sheet (WPDS) orders will be kept separate.
- 6.1.3    The supervisor shall review all WPDS under their control on a regular basis to determine where the parts actually are and how much work has been done on each of them. The supervisor shall have a firm idea of the priority of each WPDS.
- 6.1.4    WPDSs received from the stockroom shall be compared to the pick list to be sure that all parts were picked.

## **SECTION 7.0                      Calibration of Measuring and Test Equipment**

### **7.1      Scope**

This section of the Quality Control manual describes the methods for calibration of measuring and testing equipment used in fabrication and inspection.

### **7.2      Responsibility**

7.2.1    The Quality Inspector shall maintain a Master Calibration List, of measuring and test equipment calibrated under this program. The list shall show the Mfg. Name, Serial number, Description, Frequency of Calibration, Calibration date, Calibration due date, and the Calibration status.

### **7.3      Calibration**

7.3.1    Measurement and test equipment shall reflect evidence of current calibration.

7.3.2    Frequency of a calibration shall be based upon past history of the individual instrument and the instrument type. A new instrument will be assigned a calibration cycle identical to that employed for other instruments of the same type. If an instrument of the same type is not in current use, the manufacturer's recommendation shall be followed in the establishment of the initial calibration cycle. Equipment shall be periodically calibrated and controlled. Periodic calibration shall be performed at established intervals (not to exceed one year) commensurate with the accuracy and reliability of the instrument.

7.3.3    All calibration standards shall be traceable to the National Institute of Standards and Technology.

7.3.4    Measurement and test equipment shall have a sticker applied. Stickers applied

shall as a minimum denote date, by, due, and inst. I.D.

- 7.3.5 Personnel responsible for using, transporting, storing, or handling calibration standards or equipment shall exercise appropriate care to prevent damage to the equipment or compromise its integrity.
- 7.3.6 Test equipment out of calibration shall be removed from service.
- 7.3.7 Calibration and control measures are not required for rulers, tape measures, levels, and other commercial equipment.

## SECTION 8.0                      Correction of Nonconformance

### 8.1      Scope

This section of the Quality Control manual describes the requirements, responsibilities, and procedures for the identification, segregation, review, and disposition of nonconforming items.

### 8.2      Identification of Nonconformance

8.2.1    Nonconformance is any condition of material or assembly that does not meet the requirements of FloScan Inc..

8.2.2    It is the duty of all employees to report any nonconformance to Quality Control immediately after a nonconformance is found. Quality Control shall verify the condition and identify the nonconforming material or assembly by tagging the item with a Hold Tag.

8.2.3    The nonconforming product is identified, controlled, and prevented from unintended use or installation.

### 8.3      Correction of Nonconformance

8.3.1    **Use-As-Is:** When the recommended disposition by Quality Control is Use-As-Is, the **General Manager will approve**. After the approval the Quality Control Nonconformance Record will be signed and dated by the Chief Inspector and the Hold Tag shall be removed for further fabrication.

8.3.2    **Repair/Rework:** All dispositions requiring repair or rework shall be approved by the General Manager . The Hold Tag will be removed and the Quality Inspector will attach a Rework Tag.

8.3.3    **Reject/Scrap/Return to Supplier:** This disposition requires Quality Control verification on the Quality Control Nonconformance Record that the item has been tagged with the Reject Tag, and removed from the receiving area or the work area.

8.3.4    The Quality Inspector will re-inspect the items dispositioned in 8.3.1 and 8.3.2. When the required action has been completed and the item meets FloScan Inc.. requirements, the Quality Inspector will sign and date the Quality Control Nonconformance Record. The Quality Inspector will remove the Rework Tag, and return the item for further assembly.

## **SECTION 9.0                      Record Retention**

### **9.1      Scope**

This section of the Quality Control manual describes the requirements of FloScan Inc..  
Record Retention.

### **9.2      Records**

9.1.1 All records used shall be routed to Quality Control at the completion of each  
WPDS. The Quality Inspector will review for completeness and correctness.

9.2.2 A copy of the Manufacturer's Data Report, if applicable, shall be kept on file in  
accordance with terms of customer requirements or as required by law.

9.2.3 Record distribution shall include the original and one legible copy of all  
Manufacturer's Data reports to the customer as requested.

9.2.4 The inspection files shall not be destroyed without Management approval. Old  
and outdated files shall be put in files marked history. History files shall be kept  
forever.