
QUALITY ASSURANCE PROGRAM

- Boshart Industries Inc. develops and continually upgrades their Quality Control Inspection guidelines which are tailor made for each individual supplier. Wherever possible, we work with manufacturers who adhere to stringent Q.C. programs such as ISO (The International Organization for Standardization). Many of these manufacturers have earned a place on our approved vendors list and require little or no inspection upon receipt of goods. Some vendors, who do not have as advanced Q.C. programs are closely monitored by Boshart Industries. The following is a list of several institutions Boshart rely on to develop our internal inspection programs.

- ANSI (American National Standards Institute)
- ASME (American Society of Mechanical Engineers)
- ASTM (American Society for Testing & Materials)
- NSF (National Sanitation Foundation)
- EPA (Environmental Protection Agency)
- CSA (Canadian Standards Association)
- UL (Underwriters Laboratories)

Approved Vendor Status

- All New Vendors must earn their status by performance.
- New vendors are thoroughly inspected regardless of any claims they may make **regarding** their Q.C. program such as ISO. After several trouble - free shipments have been received a collective agreement is made at a Q.C. meeting as to when or if the vendor should be granted this status.

QUALITY ASSURANCE (cont'd)

A QUICK LOOK AT THE BOSHART Q.C. SYSTEM

- Computer programming has been developed which tracks the number of returns on all products. We have the ability to print out reports on any product, or manufacturer, to identify any problems and implement a corrective action plan to resolve the problem.
- Copies of applicable manufacturing standards are purchased as required. We are continually updating our library of manufacturing standards, (i.e.) ANSI, ASME, ASTM etc., as well as industry standards; CSA, NSF, UL, etc. We also have provincial and state regulations.
- The purchase of a NITON alloy analyzer allows in house analyzing of copper and stainless steel alloys. This allows us to monitor each shipment and ensure alloy compositions are in line with what we are expecting. Manufacturers are made aware that we have this technology and we feel acts as an added inducement to them to ensure alloy compositions are correct. Independent laboratories are used for such things as tensile testing.
- Quality Control meetings are held on a regular basis to discuss quality control issues such as inspection guidelines, and product testing procedures. Senior management, purchasing, product development and quality control are all represented at the meetings.

QUALITY ASSURANCE (cont'd)

- New products and suppliers are always put on a stringent Q.C. inspection program until they earn approved vendor status.
- Minutes from quality control meetings are posted on line for all staff to review.

Q.C. Implementation

- Receiving is informed of items that require quality control inspection by means of product notes that print on the receiving reports.
- There are three situations that trigger these notes.
 - (A) By vendor number - This is used to identify the vendor until they earn approved status. Also used in the case that a vendor may lose their approved status through non-conformities.
 - (B) By vendor/product group - This is used to identify a particular product group that requires Q.C. inspection. For example we want to ensure that gas valves have the appropriate approval identification markings. While all other items from this vendor can go directly to picking shelves.
 - (C) By part number - We use this method when we wish to make a Q.C. inspection on an individual item. We have some items where there is greater potential for problems, that are flagged on a permanent basis to ensure we do random testing on each and every shipment. For example, pitless adapters and union tank tees are always checked.

QUALITY ASSURANCE (cont'd)

- Products that are flagged for inspection are physically moved to the Q.C. area in the warehouse. We also have a separate computer file that these items are moved to. This ensures that no product is released until it has passed Q.C. inspections. Any non-conforming product is either sent back to the manufacturer, repaired by Boshart Industries if possible or discarded.
- Boshart Industries' Q.C. guidelines are based on industry standards whenever possible. Some of the most common standards include ANSI, ASME, ASTM, NSF and EPA.
- On products which have no written standards by the above associations, as is the case with most water well speciality items, Boshart Industries sets their own product standards. These standards include such things as pressure/burst tests, wall thickness requirements, dimensional data and checking overall product function (i.e. hands on action).
- Sales are kept aware of any QC issues by means of emails.

QUALITY ASSURANCE (cont'd)

- Q.C. memos can be triggered by:
 - 1) Findings from routine Q.C. inspections.
 - 2) Monitoring warranty returns.
 - 3) Recall from manufacturers.
 - 4) Customer concerns.
- Inventory is then flagged for Q.C. inspection and not released for shipment until product conforms with Q.C. guidelines.
- In the case that a serious defect is found a recall notification is sent out to customers who have purchased this product in the effected time frame.
- Sales staff are requested to complete an online QC INQUIRY form for any QC issues from customers. This form, when completed, is forwarded to the Quality Control Manager who then uses the form as a record of the problem as well as subsequent action. Because the form is online the complaint can be filed on the computer making retrieval much easier than sorting through a binder of papers.

QUALITY ASSURANCE (cont'd)



Manufactured by Boshart Industries Inc.

NYLON, POLYPROPYLENE & POLY VINYL CHLORIDE INSERT FITTINGS

- Manufactured to NSF 14 (performance standard) and 61 (health standard).
- NSF (National Sanitation Foundation) is an organization which is recognized worldwide.
- NSF approvals cover these main areas:
 - 1) Dimensional information.
 - 2) Material Specifications.
 - 3) Strength testing.
 - 4) Health standards.
- NSF requires extensive record keeping on dimensional, and burst testing results.
- NSF conducts several surprise audits throughout the year, in which records and inventory are thoroughly checked. Fittings are randomly selected and taken for off site testing.