



Navigating Safely through the Vision of Technology

Azonix Supplier Manual

SC-4-0244 Rev 0

Table of Contents

1.0 Introduction:

- 1.1. Overview
- 1.2. Scope
- 1.3. Azonix Commitments

2.0 Supplier Quality Expectations:

- 2.1. Quality System Requirement
- 2.2. Incoming Validation
- 2.3. Corrective Action Process
- 2.4. Request for Deviation
- 2.5. First Article Inspection Requirements/Process

3.0 Purchasing Expectations:

- 3.1. Supplier Selection/Qualification
- 3.2. Supplier Responsibility
- 3.3 Recovery
- 3.4 ITAR Requirements

4.0 Labeling and Packaging Requirements:

- 4.1. Packaging Specifications

5.0 Supplier Performance and Evaluation:

- 5.1. Supplier Measurable

6.0 Certified Product Supplier Requirements

1.0 Introduction

Crane - Azonix Mission Statement

Our mission is to be the leader of Extreme Environment Command and Control Human Machine Interface (HMI) and Intrinsically Safe (IS) Electronic Solutions through technological innovation and strong customer relationships.

Crane - Azonix Quality Policy

The Crane - Azonix Corporation Quality Policy is to meet or exceed our customer expectations by continuously improving our processes, products and services. We do this by focusing on:

- Customer Satisfaction: Quality Products, On-time delivery, meeting commitments.
- Communication: Being responsive to customers, suppliers and employees.
- People: Hiring the best and providing on going training.
- Operational Excellence: Utilizing Lean and Six Sigma to constantly improve.
- Technical Excellence: Providing superior technical solutions to our customers through innovation.

1.1 Overview

Azonix is committed to our customers to meet their quality needs and expectations. You as a supplier play a vital role in helping us to achieve customer satisfaction.

Azonix suppliers are viewed as being fully responsible for the quality of their products. Therefore, suppliers must ensure materials are produced in conformance to the required standards. It is Azonix expectation we will receive defect-free product. It is the supplier's responsibility to request an authorization to deviate from the purchase orders or the supplier manual before shipping product. Failure to do so will result in a formal request for corrective and preventive action from the supplier and/or debit cost incurred.

The Supplier Manual is the property of Azonix and is issued for reference to our suppliers. This document is maintained electronically by Azonix. Printed copies of this manual are considered uncontrolled.

1.2 Scope

These standards apply to suppliers of Azonix. Acceptance of any and all purchase orders constitutes acceptance and commitment on behalf of the recipient to comply with this manual's content. This manual establishes minimum requirements, is supplemental to, and does not replace or alter any purchase agreement.

1.3 Azonix Commitments

Azonix is working to develop a strong alliance with our supplier base. We are aggressively upgrading our performance in key areas:

- Setting clear requirements
- Providing timely and accurate feedback on supply base performance (monthly scorecard)
- Acting as a resource to improve supplier performance
- Actively seeking supplier involvement with emphasis on continuous improvement.

2.0 Supplier Quality Expectations:

2.1 Quality System Requirements

Azonix is committed to continuous improvement to reduce waste, defects, and variability through lean manufacturing practices and quality systems management while striving to meet/exceed our customer's expectations. In support of this commitment, Azonix quality system is based on the ISO 9001:2000 & AS 9100 quality system requirements.

In as much as the quality of our end product is highly dependent on the quality of purchased product, Azonix believes that the implementation of a formal quality system equivalent to ISO 9001/9002 or AS9100 within our suppliers operation is as important as it is within our internal operations.

Although encouraged, Azonix will not require our suppliers to seek certification / registration for ISO 9000 or AS9100, unless contractually required. Suppliers not certified to ISO 9001:2000/2008 and/or AS 9100 will be subject to a quality system assessment by Azonix. We believe this model represents a core management control system that brings structure, coordination, and consistency of business processes required to fulfill our quality policy.

2.2 Incoming validation

Suppliers are responsible for providing defect-free product by implementing quality processes and driving continuous improvement toward attaining zero defects.

Azonix requires a Certificate of Compliance/Conformance for all incoming shipments along with the inspection/test data for all incoming shipments for made to print parts. The Certificate of Compliance shall comply with **ISO/IEC 17050:2004** (Conformity Assessment - Supplier's Declaration of Conformity). If specified on the purchase order, supplier shall be required to provide a Material Certificate of Analysis for raw material (e.g. steel, aluminum, etc). Reference section 3.2.2 Raw Material Verification Program.

If a shipment is delivered without inspection/test data, a Certificate of Compliance and/or Material Certificate of Analysis as required, it will not be received until the required documentation is received and a corrective action to the supplier will be initiated. This will be reflected in the supplier's scorecard rating.

2.3 Corrective Action Process

If defective product is encountered, the supplier will be contacted and a corrective action will be issued. Corrective actions may also be issued but are not limited to the following reasons:

- Non-Conforming product
- Missing Certificate of Compliance/ Material Certificate of Analysis
- Missing inspection/test Data
- Improper packaging or labeling
- Late shipment
- Poor scorecard rating
- Non Responsiveness to Supplier Corrective Action Requests

The supplier is expected to provide an initial respond to the finding within 5 business days of receiving notice of a non-conformance.

The supplier is responsible to provide Root Cause Analysis and irreversible Preventive Action to eliminate reoccurrences. A completed corrective action is required within 7-10 business days after the defective parts are received by the supplier. If a timely response is not received, the supplier's quality rating may be negatively impacted.

2.4 Requests for Deviation:

Suppliers shall not make any repairs, changes in product or manufacturing processes without prior Azonix approval. A supplier product deviation request is to be submitted by a supplier when product being shipped is not in compliance with the specified drawing, purchase order or specifications. A deviation request must be approved before the product can be shipped. Suppliers shall label the outer pack with the deviation number and place a copy of the approved deviation with the shipment. (Azonix Supplier Deviation form QA-4-0186). This is not required for rework which means correcting a defect to bring it back to the original specifications. This process is MANDATORY for repair which means making the product acceptable for use but deviating from the original specifications. The supplier is not authorized to do so without express written approval from Azonix.

2.5 First Article Inspection Requirements/Process.

- New Part, First Production Run.
- Lapse in Production of two years.
- Revision change. (may only require a partial based on the severity of change)
- Change to Manufacturing Location, Source or Process.

Suppliers are required to submit all parts that meet the requirements above for a first article approval using the Azonix first article inspection request form (QA-4-0006), along with proof of any first article performed as a result of supplier third party outsourcing. Suppliers will be required to maintain records of their first article inspections for items that they have outsourced.

3.0 Purchasing Expectations:

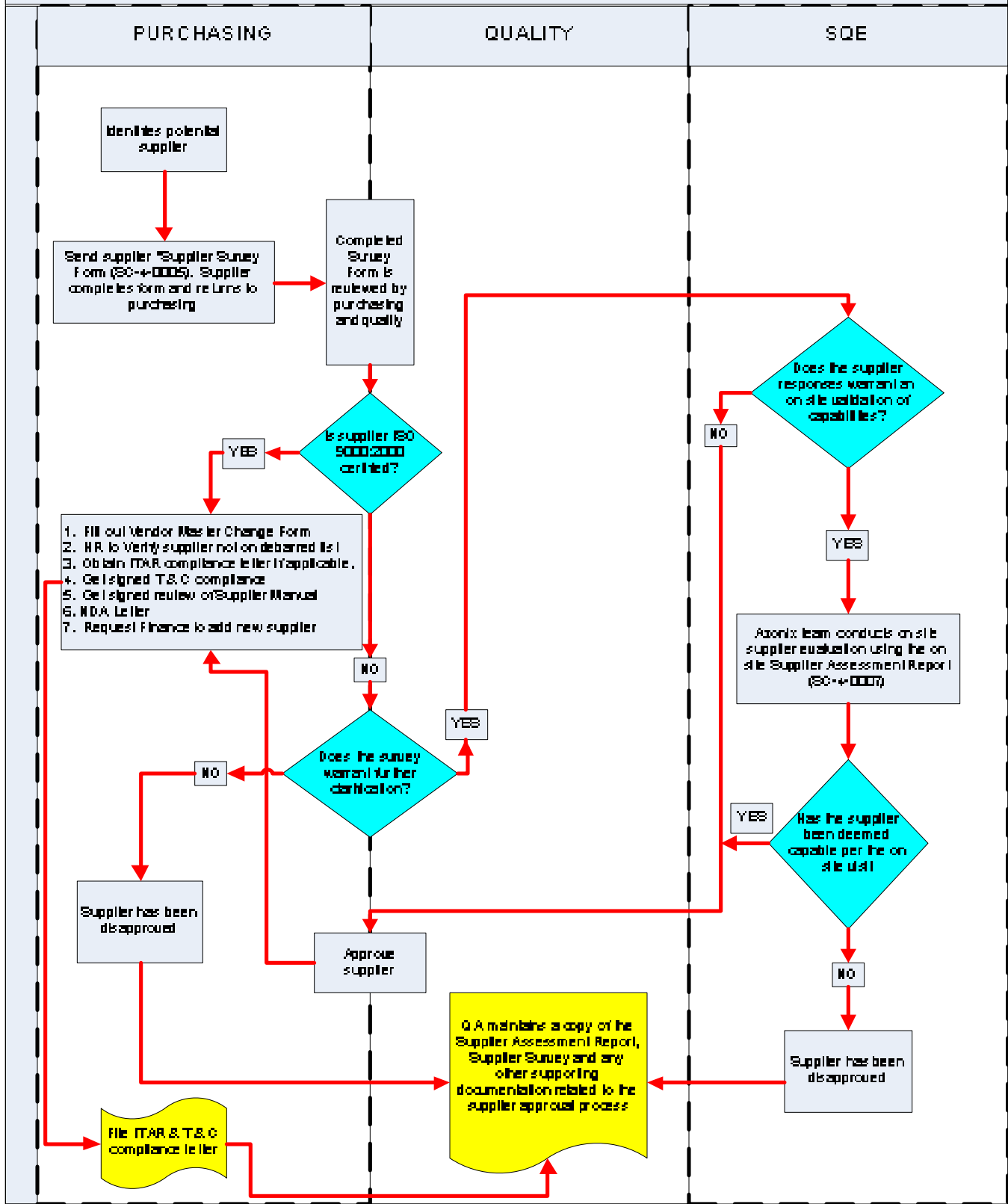
3.1 Supplier Selection/Qualification:

Based on the following, as appropriate:

1. Technical competent capability to meet our specifications
2. Ability to handle our capacity -orders
3. ISO or Aerospace or an equivalent Quality Management System
4. Prefer lean manufacturing with continuous improvement
5. Progressive models of supply (Kanban, consignment, etc...)
6. Completion of self survey and/or on site visit utilizing supplier assessment checklist.

Below is a section of our internal procedure with details about our supplier selection process depicted in a flow chart.

SELECTION/APPROVAL OF GROUP 1 SUPPLIERS



3.2 Supplier Responsibility

- Participate in supplier reviews, where applicable.
- Responsiveness to Supplier Corrective Action Requests as required.
- Maintain a 100% quality and OTD level. OTD is based on 5 business days early-1 business day late.
- Kanban deliveries are within 5 business days, unless otherwise agreed.
- Maintain a tooling and gauging preventive maintenance program. Customer owned tooling should be clearly identified as such-(asset tag for Azonix use).
- Inspection/test record retention as required.
- Notification of part obsolescence/product change including sub-suppliers.
- Holiday and predicted closures must be communicated to Azonix at the earliest possible time.

3.2.1 Documentation: (electronic media preferred for network storage)

- Certificate of Conformance-Every Shipment
- Certificate of Analysis-As required
- Evidence of Product Acceptance-Outgoing Inspection/Test Data-Every shipment
- First Article Inspection Data-As required
- ISO Certificate-Annually
- Supplier Survey-Annually
- Supplier Assessment-As required
- Supplier Notice of Change Agreement-As required
- Copy of Suppliers Quality Manual if applicable-Annually
- Any of the above documents not supplied to Azonix should be stored and backed up in a manner that they are easily retrievable for Azonix upon request.

3.2.2 Raw Material Verification Program (for metals and alloys, only)

If applicable, the supplier shall develop, document, and implement a raw material (sheet, plate, bar, rod etc.) verification program that will ensure that material(s) received from the supplier's sub-tier sources meets all the applicable technical and quality requirements. The supplier's verification program shall include provisions for monitoring and periodic testing (no less than annually for each material type from each material supplier) of raw material(s) upon receipt to ensure such material(s) meets all applicable requirements and implement appropriate storage and controls to preclude co-mingling of different heat/lots or batches of material(s). Raw material testing shall be in accordance with specification requirements and maybe performed by the supplier or by a National Aerospace and Defense Contractors Accreditation Program approved testing laboratory. Supplier's verification program shall document the frequency of such tests and the test results. Records showing the results of the supplier's material verification program and its effectiveness shall be made available to Azonix for review upon request.

If applicable, suppliers will be expected to comply with specialty metal requirements stated on the P.O.

3.3 Recovery

Suppliers may be financially responsible for cost associated with non-conforming product such as (rework performed by Azonix to meet customer deliveries, shipping charges for returned warranty product.

Time permitting; supplier may have option of returning material to their facility or completing necessary containment/corrective action steps at Azonix. Supplier may be accountable for all raw material, components, subassemblies, and finished goods that are nonconforming.

3.4 ITAR Requirements

In the event your company supplies ITAR controlled products to Azonix this section applies. Some of Azonix's products fall under licensing jurisdiction of the International Traffic in Arms Regulations (ITAR). The ITAR regulations are in 22 CFR 120-130 and full information can be found on the web at <http://pmdtc.state.gov/>.

Part of the State Department's requirements is that every company that manufactures parts that are specially designed or modified for military use (defense articles) be registered with the Department of State, whether or not such companies export. If a company only produces unclassified technical data and does not manufacture defense articles or furnish defense services, then that company does not have to be registered.

4.0 Labeling and Packaging Requirements:

4.1 Packaging Specifications

4.1.1 Packaging-Suppliers are responsible for packaging to ensure product integrity, protection and preservation during shipping and handling. All goods shall be packaged by the supplier in accordance with good commercial practice, unless referenced otherwise on the purchase order, in a manner sufficient to ensure arrival in a condition free of damage and deterioration. Packages/containers must be free of debris, foreign material and fluids when they are received at Azonix. In addition, suppliers are responsible to identify and communicate any packaging changes/improvements. Azonix reserves the right to reject and/or refuse delivery of goods damaged in transit as a result of improper packaging or improperly segregated. In such cases, goods will be returned to the supplier at the supplier's cost.

4.1.2 Labeling-All outer packaging must be labeled as a minimum with the Supplier's name and address, Azonix part number, purchase order number, quantity, box number ____ of ____, and if applicable deviation waiver number, NCMR/SCAR number, ECO number. In addition, for repaired material, items will be identified appropriately.

4.1.3 Timeliness-Delivery Schedules set forth in the purchase order (5 business days early/1 business day late) are based on arrival at Azonix receiving dock on the specified date. Shipments made by the supplier that are received at Azonix receiving dock prior to the delivery schedule set forth in the purchase order may be returned at the supplier's expense. In the case of Kanban deliveries it is 5 business days to the Azonix dock-Zero days late.

4.1.4 Shipment of Reworked/Repaired-Supplier shall ship Reworked/Repaired material to Azonix clearly identified as “Reworked Material” or “Repaired Material” and label as specified in section 4.1.2.

4.1.5 Domestic Shipping Carriers and Methods- Domestic suppliers shall always ship FedEx Ground unless Azonix specifies otherwise. **Suppliers shall not include insurance on shipments.**

When material has to be expedited for quicker delivery the following carriers and methods for shipping material to Azonix are to apply along with the Azonix Purchasing Representatives authorization.

- Overnight-ship Fed-X next day service.
- 2-Day-FedEx
- 3-Day-FedEX

4.1.5.1 International Shipping Carriers and Methods-International suppliers shall always ship Fed-X Standard unless Azonix specifies otherwise. **Suppliers shall not include insurance on shipments.**

When material has to be expedited for quicker delivery the following carriers and methods for shipping material to Azonix are to apply along with the Azonix Purchasing Representatives authorization.

- Overnight-ship Fed-X next day service.

4.1.6 Import and Export-Supplier shall comply with all statutes and regulations relating to the import and export of its products. Questions should be addressed to the Authorized Purchasing Representative.

5.0 Supplier Performance and Evaluation:

5.1 Supplier Measurable

Suppliers are monitored on a daily basis at Azonix by KPI (Key Performance Indicators)

- Daily Defects occurred
- OTD-5 business days early/1 business day late

Suppliers will be rated on a monthly basis. Through a monthly score card for OTD and quality.

- Quality Yield
- OTD Rating

Key Suppliers will participate in Quarterly Business Reviews which may include but not limited to the following:

- Quality-Yield and responsiveness to corrective actions
- Price
- Delivery
- Service

The purpose of this rating:

- Is to provide objective comparison of a supplier's performance.
- Serve as a tool to benchmark the supplier's competitiveness in the marketplace.
- Suppliers will have the opportunity to provide honest and direct feedback to Azonix Corporation

Suppliers are subject to corrective action for not meeting scorecard expectations. Azonix wants to ensure that our ratings are accurate and effective. If a supplier finds there is a discrepancy in their rating report, they should contact Azonix purchasing personnel within one week of the report receipt date.

Azonix suppliers who fail to meet the quality requirements may be subject to probationary action. Probation may consist of more inspection/test requirements and evidence of training if and when required. While on probationary status suppliers will be subjected to restrictions on bidding on or being granted new business.

6.0 Certified Product Supplier Requirements

Azonix certifying bodies require Azonix to retain/maintain evidence of critical component/critical characteristics verification of certified product. It shall be required that all Azonix suppliers that manufacture and provide certified product to Azonix, implement 100% parts (including component value), workmanship, dimensional and raw material verifications of critical components/parts. Critical components whose failure in operation could be catastrophic require strict controls and traceability throughout the manufacturing process. All certified product must be identified as such within the supplier Certificate of Conformance/Compliance. The above requirements shall be documented and submitted to Azonix for record retention.

Suppliers must use only Azonix approved suppliers for ATEX/IS certified parts.

Please print the certificate on the next page and fax / e-mail a scanned copy to your Azonix Buyer. An Operations Manager or equivalent must sign.



CERTIFICATE OF REVIEW AND AGREEMENT

By signing below I state that I have read the contents of this supplier manual and agree to comply with the general conditions and specific conditions as applicable to doing business with Azonix.

Company: _____

Date: _____

Name: _____

Title: _____