



Arwood Machine Corporation

Supplier Manual





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1.0 Introduction

Arwood Machine Corporation Mission Statement

Our mission is to meet or exceed our customer's expectations for quality, cost, delivery and responsiveness. Our philosophy of continuous improvement and highly focused attention to detail strengthens our pursuit of process perfection and the delivery of perfect quality.

We will always maintain the highest levels of professionalism, integrity, honesty and fairness in our relationships with our suppliers, subcontractors, customers and ourselves. We will put forth our best effort each day, every day with the understanding that our hard work is intrinsic to our success.

We will always treat our employees with respect and nurture their development. We will do no harm to the environment and always look for ways to minimize our impact to it. We will carry out our business in a socially responsible manner.

Arwood Machine Corporation Corporation's - Objectives

To be a leading supplier of precision machined components and sub-assemblies for our customers in the markets we choose to compete in. AMC strives for process perfection and perfect quality through our continuous improvement initiatives. AMC involves all of our employees in this worthy endeavor.



Arwood Machine Corporation Corporation's - Focus

- **Our Customer**
Our first responsibility is to our customers. In support of that philosophy, we will provide quality products that exceed their requirements and expectations. Understand each customer's needs and objectives through frequent and clear communication. Help them improve their competitive position within their markets.
- **Our Employees**
To provide a safe work environment that encourages honesty, integrity, trust, and personal development and involvement. AMC utilizes the talents of all employees to their fullest extent. We believe that proactive self-initiative is the driving force that produces continuous improvement. Recruit and retain people of the highest ability and integrity.
- **Our Stockholders**
AMC manages the business in such a way to return a profit to ensure continuation and growth of our company for continued growth and strength.
- **Our Environment**
AMC protects the environment as a part of our business practices and being a good neighbor to our community.
- **Our Community**
To take a positive role in our working relationship with our neighbors.



1.1 Overview

Arwood Machine Corporation is committed to meeting customer quality and delivery requirements. You as a supplier play a vital role in helping Arwood Machine Corporation to achieve customer satisfaction.

Arwood Machine Corporation 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 Arwood Machine Corporation's 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 Arwood Machine Corporation and is issued for reference to our suppliers. This document is maintained electronically by Arwood Machine Corporation. Printed copies of this manual are considered uncontrolled.

1.2 Scope

These standards apply to suppliers of Arwood Machine Corporation. 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 Arwood Machine Corporation Commitments

Arwood Machine Corporation 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
- 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

Arwood Machine Corporation 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, Arwood Machine Corporation quality system is based on the ISO 9001:2008 & AS 9100 quality system requirements.

In as much as the quality of our end product is highly dependent on the quality of purchased product, Arwood Machine Corporation believes that the implementation of a formal quality system equivalent to ISO 9001:2000; ISO9001:2008 or AS9100 within our suppliers operation is as important as it is within our internal operations.

Although encouraged, Arwood Machine Corporation will not require our suppliers to seek certification / registration for ISO9000 or AS9100, unless contractually required. Suppliers not certified to ISO 9001:2000; ISO9001:2008 and/or AS 9100 may be subject to a quality system assessment by Arwood Machine Corporation. 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.

Supplier are responsible for maintaining a FOD program. Elimination of foreign materials for their process of product, this include excess masking material, burrs and any other foreign material which is not specified per the drawing or Arwood Machine Corporation's purchase order.

Arwood Machine Corporation requires compliance with all aspects of the purchase order.

If product documentation does not comply with the AMC purchase order the shipment / order will be rejected **and** it will not be received until the documentation is corrected.



2.3 Corrective Action Process

If defective product is encountered, the supplier will be contacted and a corrective action will be requested. Corrective actions are required when:

- Non-Conforming product / damaged material
- 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 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 standing will be negatively affected.

2.4 Requests for Deviation:

Suppliers shall not make any repairs, changes in product or manufacturing processes without prior Arwood Machine Corporation 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.



2.5 First Article Inspection Requirements/Process.

- New Part, First Production Run.
- Lapse in Production of one year.
- 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 AS9102 First Article Inspection Requirements, along with proof of any first article performed. It is required supplier provide First Article documentation upon request via Arwood P.O. requirements.

3.0 Purchasing Expectations:

3.1 Supplier Selection

Based on the following:

1. Technical competent capability to meet our specifications
2. Ability to handle our capacity -orders
3. Quality Management System
4. Progressive models of supply (Kanban, consignment, etc...)
5. Completion of self survey and/or on site visit utilizing supplier assessment checklist.
6. ISO or Aerospace certificate.
7. Minimum 2 year warranty
8. Customer directed suppliers.

3.1.1 Defense Priorities and Allocation

To the extent this is a purchase order for National Defense use, Suppliers are required to follow all the provisions of the Defense Priorities and Allocations Systems regulations (15 CFR Part 700). Acceptance by the Supplier is mandatory unless rejected in writing in accordance with 15 CFR 700.13.

3.1.2 Correspondence

Any correspondence shall be sent to the responsible Arwood buyer referencing the Arwood P.O. number. The Arwood buyer is the only person who is authorized to make changes to the issued Arwood P.O.



3.1.3 Right of Entry

Suppliers shall allow for "Right of Entry" to their facilities by AMC, our customers and any regulatory authorities.

3.2 Supplier Responsibility

- Participate in supplier reviews.
- Responsiveness to Supplier Corrective Action Requests as required.
- Maintain a 100% quality and OTD level. OTD is based on 5 days early-1 day late.
- Maintain a tooling and gaging preventive maintenance program. Customer owned tooling should be clearly identified as such-(asset tag for Arwood Machine Corporation use).
- Inspection/test record retention as required.
- Notification of part obsolescence/product change including sub-suppliers.
- Holiday and predicted closures must be communicated to Arwood Machine Corporation at the earliest possible time.
- All Purchase Orders are to be confirmed via Fax, e-Mail.
- Supplier must verify that they are in possession of all current documents/ specifications referenced and applicable documents which are referenced on the Arwood P.O., drawings or specifications before proceeding with any processes. Any needed documents may be requested through the responsible Arwood buyer.
- Where possible, an agreement that the suppliers, contractors, and consultants agree to notify Arwood Machine Corp of changes in the product or service so that Arwood Machine Corp may determine whether the changes may affect the quality of a finished device.



3.2.1 Documentation (Where applicable or as required per Purchase order):
(electronic media preferred for network storage)

- Certificate of Conformance-Every Shipment
- Certificate of Analysis-As required. Required anytime raw material is supplied by sub tier.
- Evidence of Product Acceptance-Outgoing Inspection/Test Data-Every shipment Use AMC form 076 and include the method of inspection.
- First Article Inspection Data-As required
- ISO Certificate-Annually-Jan 1st
- Supplier Survey- as requested by the Arwood buyer.
- Supplier Assessment-As required
- Heat Treat Chart
- Work may not be subcontracted to another facility or vendor without AMC prior approval and may only be done at an AMC approved supplier.
- All parts must be kept traceable to the material heat lot. Any raw stock supplied by AMC remaining at the completion of a job must be returned. Material must be marked with the AMC job number.

3.2.2 Retention of Records

Suppliers are responsible for retaining records in support of our purchase order requirements for seven (7) years. Suppliers must notify Arwood Machine Corporation, if they are ceasing operations prior to 7 years from the last Arwood P.O.



3.2.3 Raw Material Verification Program (if applicable)

The supplier shall develop, document, and implement a raw material 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 Arwood Machine Corporation for review upon request.

3.2.4 DFAR

When required, suppliers must provide certification (Supplier's Certification of Conformance or by a separate certificate) for each item on this order stating compliancy with DFAR 252.225-7014, alternate 1. Any specialty metals used in any deliverable products must be melted in the United States or a qualified country which include the following:

Australia, Belgium, Canada, Denmark, Egypt, Federal Republic of Germany, France, Greece, Israel, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom of Great Britain and Northern Ireland.

If the items ordered contain specialty metal and either is not already compliant or cannot be considered compliant based on attached deviations, waivers or DNADS contained herein the supplier must immediately provide notice and impact if required compliant causes any cost or schedule impact or cannot be compliant.

Suppliers shall flow down these requirements to all lower tier subcontractors and applicable suppliers.

3.2.5 Domestic Specialty Metals

Special provision – Domestic specialty metals – H – 2713 IS hereby incorporated.



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 Arwood Machine Corporation. In addition, suppliers are responsible to identify and communicate any packaging changes/improvements. Arwood Machine Corporation 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.

Supplier packaging note:

When there are multiple line items for the same part number, each line item quantity must be separately packaged and labeled with Purchase Order Number, line item number, part number, and quantity.

4.1.2 Labeling

All outer packaging must be labeled as a minimum with the Supplier's name and address, Arwood Machine Corporation part number, purchase order number, quantity, box number ____ of ____.

Arwood Machine Corporation Policy requires that all invoices and shipping labels must reference the Arwood Machine Corporation purchase order number; packages not meeting this policy may be rejected or returned at supplier's expense.



4.1.3 Timeliness-Delivery Schedules set forth in the purchase order (5 days early/1 Day late) are based on arrival at Arwood Machine Corporation receiving dock on the specified date. Shipments made by the supplier that are received at Arwood Machine Corporation receiving dock prior to the delivery schedule set forth in the purchase order may be returned at the supplier's expense. In the event early shipment is desirable contact the Arwood purchasing manager for pre approval.

4.1.4 Shipment of Reworked/Repaired-Supplier shall ship Reworked/Repaired Material to Arwood Machine Corporation 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 UPS Ground unless Arwood Machine Corporation 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 Arwood Machine Corporation are to apply along with the Arwood Machine Corporation Purchasing Representatives authorization.

- Overnight-ship Fed-X next day service.
- 1 day UPS Red
- 2-Day-UPS Blue
- 3-Day-UPS Orange

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.

4.1.7 It is imperative that the Arwood Purchase Order number, part number is referenced on the packaging slip and invoice.

If drop shipping from a manufacturer, Arwood Purchase Order Number, Part Number and line item number must be on the packaging slip and invoice. Arwood cannot receive or pay to other than the Arwood Machine Corporation Purchase Order Number and Part Number.



5.0 Supplier Performance and Evaluation:

5.1 Supplier Measurable

Suppliers are continuously monitored based on time delivery and delivered quality (dimensions, documentation etc).

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

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

Suppliers are subject to corrective action for not meeting expectations. If a supplier finds there is a discrepancy, they should contact Arwood Machine Corporation purchasing personnel.

Arwood Machine Corporation 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. A supplier will be placed on probation after five (5) consecutive corrective action requests for similar products. Probation Suppliers may still receive request for product with approval of Arwood Machine Corporation Senior Management.

Approved Suppliers

- Completed supplier survey
- Accepted first lot of materials / processes

Disapproved supplier:

- 5 consecutive SCAR (supplier corrective action Request) for same or similar quality issues as determined by Arwood Quality Management
- Non-responsive to SCAR requests.

NOTE:

Disapproved suppliers may still receive request for product or service with the approval of Arwood quality management.



6.0 Certified Product Supplier Requirements

Arwood Machine Corporation certifying bodies require Arwood Machine Corporation to retain/maintain evidence of critical component/critical characteristics verification of certified product. It shall be required that all Arwood Machine Corporation suppliers that manufacture and provide certified product to Arwood Machine Corporation, 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 Arwood Machine Corporation for record retention.

7.0 ITAR

These items / technical data are controlled by the department of state, international traffic in arms regulations (ITAR) 22 CFR Parts-120-130 and cannot be exposed from the United States or shared with foreign persons without prior approval from the United States Government. Manufactures of such items are required to be registered with the Directorate of Defense trade controls. If your registration expires and is not immediately renewed, you must notify Arwood Machine Corporation buyer immediately.

8.0 Revision History

REV	REASON	Purchasing Mgr.	Quality Mgr.	DATE
0	INITIAL RELEASE	E. Dana	RR Lauersdorf	2/25/2009
A	Eliminated supplier rating system to align with supplier standing	E. Dana	RR Lauersdorf	6-30-09
B	Eliminated 3.3 Recovery	E Dana.	RR Lauersdorf	7-15-09
C	Section 3.2 added supplier notification of changes in the product or service. Ref Audit finding	E. Dana	RR Lauersdorf	9-30-10