



Supplier Requirements Manual

CURT Manufacturing Supplier Requirements Manual

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- 1.0 CONTROL RESPONSIBILITY**

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CURT Mfg Purchasing Department, hereafter referred to as Purchasing, has the responsibility to maintain and this manual.

In the event that a conflict arises between the requirements detailed in this document and any other CURT document, the supplier should immediately notify Purchasing, who will assume the responsibility to resolve these issues.

1.1 PROPRIETARY INFORMATION SHARING

CURT recognizes our responsibility to provide suppliers with complete definitions of quality requirements. To this end the supplier will be provided with materials specifications, test and control requirements, and all other pertinent information which defines a product's quality requirements.

This manual, all other provided specifications, technical data and engineering drawings are considered confidential. Suppliers are required to treat this information with strict business confidence. Disclosure to third parties, in any form, without written authorization is prohibited; with the exception of third party registrar access during a QMS registration audit.

1.2 PURPOSE

The purpose of this document is to communicate expectations to our suppliers. These expectations may be specifically defined here or in the form of a named reference that provides further detail.

All communication will be in English (American) whether verbally or written. Methods of communication used are telephone, email, EDI, or fax.

1.2.1 Scope

This manual applies to suppliers of production components and materials (**herein referred to as product**) that are used in the production and packaging process at CURT Manufacturing.

Long term business relationships will be developed with suppliers who demonstrate ability and commitment in meeting CURT Manufacturing requirements, ISO/TS16949 Quality System Requirements, deliver on-time and are competitively priced.

No portion of this manual is intended to imply that CURT Manufacturing will accept anything other than 100% defect free product.

1.3 QUALITY SYSTEMS REQUIREMENTS & EVALUATION

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1.3.1 QMS Standards

Suppliers are required to implement a quality system that meets the requirements of ISO9001 or TS16949 (minus servicing element and customer specific requirements.)

To obtain the Quality Systems Requirements and other related manuals see Section 1.13 of this manual.

1.3.2 Quality System Evaluation

Suppliers shall be ISO/TS registered unless a Customer approved CURT 2nd party audit is completed / accepted (annually or based on impact) or classified as a small supplier without adequate resources to develop and maintain a registered quality system.

Suppliers classified as “Small Suppliers” must show evidence of a quality management system, CURT audit, or a self assessment, or by certificate of compliance (to most current ISO or TS standard).

Note: CURT Manufacturing reserves the right to perform quality systems audits of any supplier.

1.4 ADVANCED PRODUCT QUALITY PLANNING

Suppliers will be expected to participate in the CURT Advanced Quality Planning (APQP) process.

In order to better communicate needs and concerns, a preliminary conference may be required at a CURT site. These conferences may also be held at the supplier location or via conference call. Purchasing will arrange for such preliminary conferences.

These conferences normally include a representative from CURT Purchasing, Product Engineering, and Quality Assurance.

Typical conference topics can include, but are not limited to:

- Identification of significant product / process characteristic(s)
- Product Design
- Preliminary control plan
- Packaging / labeling requirements
- Measurement system
- Enhancements to product

1.4.1 Process Failure Mode and Effect Analysis (PFMEA)

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A complete and detailed PFMEA must be created and maintained for all parts. Copies are to be available upon request. The PFMEA is to be revised any time a process changes or when a new failure mode has been discovered.

1.4.2 Control Plan

A control plan may be required for all products supplied and shall be submitted to CURT Quality Assurance with the PPAP package. A control plan review prior to PPAP may be requested by Purchasing. All Significant Characteristics (SC) must be included on the control plan.

1.4.3 Pass Through Characteristic Management

A Pass through characteristic of a product are those characteristics with potential fit or function issues that will not get detected within the assembly process at CURT or at our customer's plant.

- Proper fit assures that mating parts will assemble properly when required.
- Proper function assures that the part is 100% functional over its entire operating range.
- The Process FMEA and Control Plans should identify and adequately address the PTCs.

1.5 GAGES

1.5.1 Gage Control

Provisions for gages and testing devices (including tooling such as jigs, fixtures, templates, and patterns used as a media for quality control) are the responsibility of the supplier, unless otherwise negotiated.

1.5.2 Gage Repeatability and Reproducibility (R&R)

Gage R & R shall be performed on all gages or test devices used to measure product conformance.

- If total Gage R&R % is less than 10%, gage method is acceptable for measuring parts and producing capability data.
- If a gage or test device displays more than 10%, but less than 30% total R&R, the method must be approved by CURT prior to PPAP approval.
- A gage or test device with more than 30% total R&R is deemed unacceptable and cannot be used to reliably measure product.
- For requirements not listed above see appropriate AIAG Manual.

1.6 STATISTICAL PROCESS CONTROL

1.6.1 Preliminary Process Capability

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Process potential studies (Pp/Ppk) are required on all dimensions identified as significant characteristics (SCs), as shown on CURT drawings, or as determined by preliminary conferences, or those specifications that the supplier has identified as SCs.

- The minimum requirement for ongoing control is: $SC = Cp/Cpk \geq 1.33$
- CURT will define the sample size. Customer specific requirements may require larger sample sizes.
- Processes for SCs not meeting this capability may require 100% Inspection.
- If process capability falls below the minimum requirements, a detailed action plan is to be submitted to CURT Supplier Quality. The action plan shall include short term corrective action, in addition to plans to achieve the requirement.

1.7 PRODUCTION PART APPROVAL PROCESS (PPAP)

Sample submission must be in accordance with CURT defined submission requirements and any additional requirements defined in this section. Any deviations to requirements shall be detailed on the purchase order.

Note: IMDS reports are required and must be completed prior to any new PPAP submission. PPAP submissions will be rejected if the reports are not completed.

1.7.1 Preparation of Production Samples

- Requirements for production samples are:
- Samples manufactured by the production site seeking approval
- Each sample containing a minimum process cycle as defined by a CURT Quality Assurance Representative.
- In the case of multiple cavities, at least one part from each cavity sampled.
- Each submitted sample sequentially serialized to include section/cavity number, if applicable.
- All necessary inspection performed to determine conformance with drawings, specifications, requirements / notes documented on CURT blueprint.
- Certifications used to indicate acceptance contain actual test results including chemical, physical, and metallurgical requirements.
- Testing performed in the supplier's lab is acceptable providing:
 - i. the laboratory is A2LA accredited or
 - ii. the laboratory scope of accreditation is included in the suppliers QMS registration.

In all cases the test methods performed must fall under the laboratory's scope of accreditation. Required testing or inspection that cannot be performed by the supplier procured from a qualified source with test reports dated and signed by the laboratory responsible for the testing.

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1.7.2 Sample Submission

For each part number supplied to CURT the following information must be provided along with the PPAP as applicable.

- PPAP submission and samples are to be:
 - i. Identified with Yellow PPAP Sample Label.
 - ii. Directed to your customer Quality Assurance Representative

1.7.3 Annual Revalidation

Production components supplied to CURT are required to be revalidated one year after the preceding submission date. In some cases certain commodities, identified by CURT, may be exempt from PPAP and annual revalidation. Please contact your buyer if you have any questions. Suppliers have the responsibility for ensuring annual revalidations are completed in a timely manner.

The revalidation process will be fundamentally identical to the initial submission with the following exceptions:

- Actual samples are not to be submitted.
- At a minimum, PPAP revalidation will include PSW, dimensional, material, and capability analysis as required.
- Layout samples must be retained for one year or until next submission.

1.7.4 Process Changes

Process changes must be preapproved prior to any change. Process change means any change in processing which could alter the fit, function or durability of the part. Supplier must contact CURT Purchasing to gain approval prior to making any changes. These requests need to be in writing and gain written approval from CURT Purchasing.

- CURT Purchasing may request an action plan (time line, additional tooling, inventory banks, special lot identification, etc.) to assure that supply is protected.
- All approved process changes will require a new PPAP Submission unless modified or waived by CURT Purchasing.

1.8 PRODUCT QUALITY CRITERIA

The supplier is responsible for all additional expense incurred due to shipment of non-conforming product.

1.8.1 Inspection / Testing of Lots

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Prior to shipment, the supplier is responsible for performance of all required inspection and testing of lots (lot defined in 1.10.1 below), to substantiate product conformance to drawing, specification and contract requirements.

Inspection & test records for all significant tests shall be provided upon request.

Certificate of Conformance (C of C) or Certificate of Analysis (C of A) must be provided upon request.

1.9 PRODUCT IDENTIFICATION - PACKAGING -LABELING – SHIPPING

1.9.1 Supplier Product Launch Containment Process

SUPPLIER RESPONSIBILITY: The Supplier shall do the following:

- A. Establish a verification process that contains the following elements:
 1. Identification of the staff person responsible for ensuring the development and implementation of the verification process.
 2. Development of a Pre-Launch Control Plan consisting of additional controls, inspection audits, and testing to identify non-conformances during the production process. Depending on the dominant factor of the production process (set-up, machinery, fixture, tooling, operator, material/components, preventative maintenance, climate) additional controls shall include:
 - Off-line, separate and independent check from the normal production process whenever possible
 - Mandatory 100% inspection for all pre-production and pilot parts shipped
 - 100% inspection of first two production shipments
 - Increased frequency/sample size of receiving, process and/or shipping inspections after pre-production and pilot
 - Mandated sub-supplier containment and or sub-supplier support/audits
 - Addition of inspection/control items
 - Increased verification of label accuracy
 - Enhanced process controls such as error proofing
 - Error proofing validation through introduction of known defects
 4. Data to be saved at the supplier and can be audited at any time by CURT personnel.
 5. Immediate implementation of containment and irreversible corrective action when non-conformances are discovered.

EXIT CRITERIA: Supplier will be eligible to exit the supplier launch containment process after meeting the criteria listed below. If the supplier is unable to meet the exit criteria or the supplier's launch containment process plan continues to identify

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non-conformances the supplier shall continue the necessary containment measures to insulate the Customer Plant up to the time when the quality concerns have been resolved to the satisfaction of both the Supplier and the Customer and the Supplier's Production Control Plan is validated.

- A. Ship the number of pieces or for the duration specified by the procuring division with no discrepancies detected by the supplier launch containment process Control Plan or customer plant problem reports (CAR's) and supplier can self-exit from the supplier launch containment process.
- B. If the supplier does not meet self-exit criteria above, then to exit the supplier launch containment process the Customer Plant must close all problem reports.
- C. If the supplier launch containment process plan continues to identify non-conformances, the supplier launch containment process plan must be kept in place until process controls and capabilities have proven effective and the Production Control Plan is validated.
- D. If the supplier launch containment process was self-initiated, the supplier can suspend the supplier launch containment process if they meet the exit parameters (quantity or duration).
- E. If the customer mandated the supplier launch containment process, the supplier must notify the customer and provide evidence upon request prior to exiting the supplier launch containment process.

1.9.2 Packaging

All part quotations are to assume expendable packaging.

Containers designed to allow handling by hand shall not exceed 40 pounds (18kg) maximum weight, even if palletized.

Unique packaging requirements dictated by a part (e.g. excessive part oiliness, rust prevention, weight or fragility) should be specified in the quote and all other appropriate documents. Where supplier deems appropriate, returnables should be quoted.

All cartons of a specific part number are to be shipped on the same pallet(s), unless doing so causes quality, damage or safety concerns; or, if small quantities allow room for additional cartons of another part number. Pallets of mixed parts must be identified as such.

Standard pack quantities and shipments are to be annual usage divided by 240. Exceptions must be approved through the buyer.

Suitable reinforced tape or spot gluing are the only acceptable methods for carton closure. Staples are acceptable for bottom construction only, with prior approval.

1.9.3 Pallets

Policy regarding all product shipped on pallets. We expect all suppliers to use the following pallets when shipping to CURT Manufacturing:

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45" x 48"- 4 way pallets
6 top boards and 3 bottom boards
Maximum weight – 2469 lbs.
Print available

30" x 32"- 2 way pallets
6 top boards and 3 bottom boards
Maximum weight – 2838 lbs.
Print available

Pallet Specifications: **$\frac{3}{4}$ " wing –4 sides**
Nails/ no staples
4-way entry

Note: The only exceptions to this requirement are shipments that require a higher weight rated pallet or product is dimensionally too large. See weight restrictions above.

All purchased materials used in part manufacture must conform to all governmental, international, safety and environmental regulations as they apply.

*** If CURT shipping point is International, the pallet must be heat treated per ISPM15 regulations.**

1.10 PURCHASING

It is our belief that one of the important keys for a successful supplier-customer relationship is effective communication. This manual is to provide our suppliers and potential supplier's information of CURT standards and expectations for a successful supplier-customer relationship.

Supplier **communications** must go through Purchasing; (engineering requests, quality issues, delivery issues, accounts payable, etc.) the supplier's purchasing contact must be copied on all documentation. Undocumented issues that incur costs will be the supplier's responsibility. Communication may help reduce these costs.

1.10.1 RFQ

The bidder must understand that this quote price will be utilized for the purpose of production and service parts. If accepted it will be for the life of the part including service.

1.10.2 Supplier Selection

CURT uses a multi-discipline approach in selecting supplier(s).

The disciplines involved in making decisions are, Purchasing and Quality.

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Existing Supplier(s) Selection: Based on performance (i.e. rating) in the following key area(s):

- Quality
- Costing
- Delivery/Service

New Supplier(s) Selection: Quality System Assessment will be used to assess the supplier(s) capability. The assessment and final selection will be determined by the approval team: Purchasing, Quality, and Engineering, utilizing the following:

- Quality System Assessments
- Based on Performance
- Performance in Quality, Delivery, and Costing indicated above with the existing suppliers.

1.10.3 Costing

Supplier Cost Performance will be based on:

- Competitiveness; Material, Labor, Packaging, Tooling and Timing (Delivery).
- Pay terms and conditions.
- Cost Reduction Programs.
- Joint Continuous Improvement participation (Value Analysis/Value Engineering).

1.10.4 Delivery

Supplier Delivery Performance will be based on compliance to release due dates

CURT requires 100% on-time delivery. The on-time window is defined as + 2 days and – 0 days of scheduled receipt date.

All cost incurred due to late delivery (e.g., plant and/or line or machine down time, and /or excess freight) is the responsibility of the supplier. Delivery performance is tracked and corrective action may be issued for less than 100% delivery performance.

CURT Manufacturing reserves the right to refuse or return, without prior authorization, product which exceeds the total release quantity for the current week. Exceptions to this rule are standard package quantities, and/or quoted minimum release quantities or written approval from Purchasing.

CURT Manufacturing expects its suppliers to support its weekly release schedules and have an action plan in place to handle any increases that may occur. CURT requires each supplier to maintain a two week firm fabrication build requirements per CURT releases on their shelves in case of increase to release schedules. If the supplier has a long lead-time, a plan must be developed with CURT Purchasing to insure supply continuity.

CURT Purchasing must be immediately notified if you have any deviation to CURT requirements.

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1.10.5 Material Traceability System

The supplier must ensure the parts will meet both the procedural and material requirements on an ongoing basis:

- Traceable Production Lots
- Date Produced
- Packaging must protect parts from damage during transportation and storage; plus clearly identified. (Reference 1.10.2)
- Part number

1.10.6 Supplier Rating Criteria

The Supplier Rating package presents the criteria that will be used by CURT MFG to rate our production supplier capabilities.

Purpose

The purpose of the rating process is to enable CURT to:

- Recognize Top Class Performance
- Identify opportunities for Continuous Improvement
- Promote Improved Communications
- Measure Supplier Performance to assist in Ongoing Sourcing Decisions

Supplier Classifications

To participate, a supplier must comply with CURT's expectations. Performance to these expectations will result in the following classifications.

Preferred Supplier – 93 to 100 rating.

All CURT suppliers should make every effort to become a preferred source. Being classified as a Preferred source means that your company will be chosen before other suppliers for new product development and new business. Suppliers not meeting this level of performance will only be used in situations where our customer designates we use them or there is no other alternative.

Approved Supplier – 85 to 92 rating.

Approved Suppliers will be used when a Preferred source is not available. An Approved status means that your company adequately meets our requirements, but there is room for improvement.

Conditionally Approved – 75 to 84 rating.

Corrective actions may be opened for conditionally approved suppliers and further review will be completed by CURT Purchasing to determine if a subcontractor audit and development is needed. Without improvement by the following quarter, conditionally approved suppliers may be desourced.

Unapproved Suppliers – 74 or below.

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Usage of an unapproved supplier will require Purchasing management approval. Corrective actions will be opened and supplier will be desourced upon customer approval.

Rating System: CURT Supplier Performance ratings include two categories:

- 1) **Quality** - Quality performance is 50% of your overall score. We rate:
 % parts defective – The Quality rating is a comparison of good parts received vs. bad parts received.
- 2) **Delivery** – Delivery is 50% of your overall score. We rate:
 On-time delivery - The delivery rating is a comparison of shipment made on time to shipment not made on time. One hundred percent on time delivery is required and defined as + 2 days and – 0 days of scheduled receipt date.

Any supplier who does not agree with their rating should respond, in writing, to their buyer within 30 days of receipt. State your concern and provide all supporting documentation. CURT will consider and respond to all claims.

1.10.7 Minority Sourcing and Business Development Policy

It is our corporate policy to maintain a proactive Minority Sourcing and Business Development program. Our goal is to use certified Minority Business Enterprises (MBEs) where it provides value.

If your company is an acknowledged Minority Business Enterprises, please forward your certificate to CURT's Purchasing Department. We will maintain a list of approved MBEs which we will have quote both new opportunities and existing business.

CURT Manufacturing strongly encourages our suppliers to have their own Minority Sourcing and Business Development Program.

1.11 CORRECTIVE ACTION

Corrective action is initiated when the following conditions exist:

- Defective material received from suppliers
- Dimensional or performance characteristics are out of tolerance
- Customer complaints and/or warranty claims
- Supplier delivers product late to acknowledged delivery date

The appropriate CURT Manufacturing Quality Engineer initiates the corrective action. The Corrective Action is assigned to the Quality Engineer, Buyer and Supplier responsible for the product.

Pertinent information describing the problem is recorded within the corrective action form and the form is sent to appropriate Buyer to follow up with the Supplier. Follow up items include:

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- Containment of all suspect product is required within 24 hours. The Supplier will contain / verify all product in their facility and in transit. The Quality Engineer will contain all product in house
- If required, the Supplier may need to certify product until a root cause is determined and corrective action is completed. Special witness marks may be required to verify certification. The CURT Manufacturing Quality Engineer will determine the need for certification.
- **NOTE: If product requires sorting and/or certification, the Supplier will determine the inspection plan and have it approved by the CURT Manufacturing Quality Engineer prior to inspection. CURT Manufacturing's expectation is that these activities will be completed offsite and certified replacement parts are immediately delivery to eliminate the possibility of using defective product. All Inspection results will be shared with CURT Manufacturing.**
- The Quality Engineer will call a follow up meeting for the next business day to verify containment status and interim actions. The Quality Engineer will document status within the CAR form at the meeting. A "clean point" should be determined at this time.

Corrective Action root cause identification is expected within 5 business days. The Quality Engineer will call a follow up meeting for the 5th business day to verify root cause and other appropriate actions. The root cause is determined when the Supplier can turn the problem on, then off.

Corrective Action completion is expected in 10 business days. The Quality Engineer will call a follow up meeting for the 10th business day to verify permanent corrective action is in place.

If CAR is not completed after 10 business days the Quality Engineer will define the next steps. The Supplier may be called into CURT Manufacturing to present their corrective action or CURT Manufacturing may complete CAR follow up at Supplier's site.

CURT Manufacturing or designee will conduct an audit of all completed corrective actions to assure the actions taken are effective. When complete the corrective action can be "closed".

If CURT Manufacturing incurs any costs due to Supplier corrective action, those costs will be charged back to the Supplier.

1.12 MSDS (Material Safety Data Sheet)

Regulatory compliance; all purchased products or materials in part manufacture shall satisfy all current regulatory requirements applicable to the country of manufacture and sale such as environmental, electrical, electromagnetic and safety. Supplier is responsible for providing to buyer the necessary documentation on government and safety

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compliance that will affect the acquisition, transportation, and handling of materials purchased.

1.13 IMDS REPORTING (International Material Data System) (Address for CURT, not OEM)

Compliance to IMDS is required, unless otherwise specified by CURT Manufacturing.

1.14 Supplier Environmental Expectations

We expect our suppliers to have a good Environmental Management System and we encourage the pursuit of ISO14001 certification. We want our suppliers to recognize the benefits to the environment, opportunity for cost savings through elimination of waste and its importance to your future status as a supplier.

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A copy of this manual is available online, www.curtmfg.com (vendor access). An email will be sent out to all suppliers when revisions are made. It will be sent return receipt to insure all suppliers have received the updates. Your signatures as well as revision return receipts will signify you are: 1) in receipt of the manual; 2) responsibility for destroying previous issues; 3) you agree to follow requirements; and 4) in the event you don't agree with our requirements we need a letter of disagreement sent to the purchasing manager.

Title

Name (Printed)

Name (Signature)

Date