



ALEX PRODUCTS, INC.

SUPPLIER

QUALITY

MANUAL

Revision E 10/24/2007

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The purpose of the Supplier Quality Manual is as follows:

- Identify objectives and goals for API suppliers
- Proactively meet and exceed all API customer requirements

When used as intended, this manual will provide a roadmap through the quality requirements and procedures at each stage of product life. This manual starts each section with the “basics” and then offers relevant specifics for the topic.

An educated supply base can only improve our ability to work as a team to completely satisfy the needs of our customers. Together, through continuous improvement and a firm commitment to quality, we can meet our goals of being “the best of the best”.

Thorough understanding of all the information contained within this manual, in combination with the referenced TS-16949 ISO 9001/2000, will greatly improve your strength and focus as an Alex Products Inc. supplier.

All changes to this manual will be reviewed by the Supplier Quality Engineer and approved by Director of Quality, or designate.

A handwritten signature in cursive script, appearing to read 'Duane Sholl', written over a horizontal line.

Duane Sholl
Materials Manager

A handwritten signature in cursive script, appearing to read 'Jay Fleischmann', written over a horizontal line.

Jay Fleischmann
Director of Quality

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Appendix A

Controlled Shipping Level I Letter

Appendix B

Controlled Shipping Level II Letter

Alex Products began as an aluminum vent supplier to the building industry in 1973. Formally located in Alexander, North Carolina, former owner Dexter Benecke, named the company "Alex Products" after it's previous location. The name stuck and with a change in ownership in 1984, David Von Deylen became a partner with Dexter. Dave, with his strong engineering background, started a machine shop that soon grew a reputation for completing "problematic" and "special" jobs for it's customers with high quality and precision. The success of Alex Products, Inc. is directly related to the acceptance of these "jobs" and our formula for "building in quality".

The formula involves the machine builders and their direct relationship with the parts. Who better to keep "problematic" jobs running than the machine builders, capable of easily identifying and eliminating potential obstacles? Soon, these machine builders were "bending experts" with a niche for tackling customer nightmares.

Alex Products is now a fully automated manufacturer, which produces welded assemblies of formed wire, tube and stampings.

The present owner, David Von Deylen, has witnessed profound changes since 1984. Then, Alex Products was merely a 1000 square foot machine shop where a few men cranked out quality parts. Now, the company has expanded into three facilities, housing 950+ employees, operating three shifts, all within 350,000 square feet. Our business is still growing and we will focus on continued success in the present and the future.

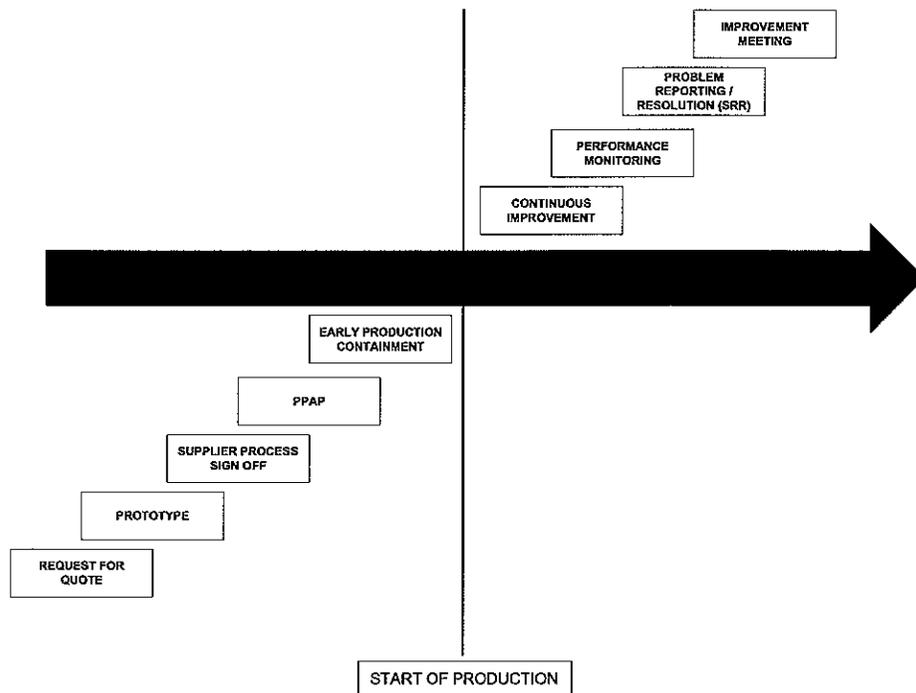
Production capabilities include automated wire and tube forming, metal stamping, robotic wire welding, automated resistance welding, assembly and E-coating. The business base is 97% automotive, which in itself proves to be challenging. The constantly changing industry is highly competitive with increasing demands for quality and service, including: TS16949 certification, quality RPPM<50, and annual price reductions.

Meeting these demands is coupled with continued growth of the business. Our continued growth is necessary to fit the growing footprint of a Tier 2 supplier with supply base reduction.

Alex Products' focus on quality demands a more uniform application of supplier quality procedures. Therefore, referencing TS 16949, we follow the Supplier Stages Timeline shown below.

This timeline provides a method for controlling supplied products and services from quote through the life of the part. This manual reviews, in detail, each of the steps on the timeline.

Note that the horizontal axis represents time of the life of the part. The vertical axis represents the point in time relating to the official Start of Production. The steps are broken into two phases by the vertical axis. The first phase is referred to as proactive planning and the second phase is reactive.



The first steps are employed prior to the start of production to proactively work with the supplier, ensuring a quality product at the start of production. A Supplier Quality Engineer, or quality representative, will work with a supplier to facilitate or implement the Advanced Quality Planning Activities.

The last steps are used to monitor suppliers' performance and to contain non-conforming product. The SQE, or designate, will act as a facilitator for problem solving and to support continuous improvement.

This document outlines the minimum quality expectations for supplying product to an API plant. The quality expectations cover requirements relating to the following:

1. Systems
2. Performance
3. Parts
4. Packaging and Labeling
5. Continuous Improvement
6. On site visits

SYSTEM REQUIREMENT

Suppliers are responsible for the development, documentation, implementation, and maintenance of a Quality system that complies with TS 16949:2002, or ISO 9001:2000 standards. Suppliers are Encouraged to become certified to ISO-14001 Environmental standards. All suppliers must have completed the transition to ISO 9001:2000 or TS: 16949: 2002 or submit a written action plan approved by their registrar to be registered to ISO/TS. Suppliers must at a minimum be compliant to all Local and Federal Environmental regulations

Notes:

- 1) TS 16949 registration does not exempt a supplier from a customer-conducted assessment, either business or quality related.

PERFORMANCE REQUIREMENTS

Our expectation is that the supplier Parts Per Million (PPM) will show continuous improvement with a goal of zero.

PARTS REQUIRMENTS

Our expectation is that all parts meet every blueprint specification.

PACKAGING AND LABELING

All material must be properly identified with the appropriate label information. Bar code labeling is recommended.

For more information on packaging requirements see section 15.

For more information on labeling requirements see section 16.

CONTINUOUS IMPROVEMENT

Alex Products Inc. requires every supplier to actively participate in continuous improvement activities. It is intended to reduce process variation and improve the quality of the parts.

Alex Products Inc. encourages all suppliers to become environmentally friendly. Each supplier should identify all activities that have an adverse impact on humanity and environment and strive to reduce these activities using continuous improvement.

For more information on continuous improvement see section 11.

ON SITE VISITS

Alex Products Inc. reserves the right to verify products at the supplier's location.

Also, all Alex Products Inc. customers have the right to verify product on the supplier's location when requested.

Alex Products is committed to aid subcontractors in the development of their Quality Systems the goal of which is to be compliant to TS 16949 or ISO 9001:2000

Alex Products Inc. will make available the quality manual, procedures and personnel to assist with the above.

Supplier audits may be performed at the supplier location to aid in this process.

Alex Products Sales or Engineering or the Materials Manager will generate all requests for quote documents for new parts. Quote packages could contain information such as:

1. Design Records
2. Quality Expectations
3. Statement of Work
4. Feasibility Commitments
5. Engineering Notes
6. Buyer Notes
7. Type of Containers (i.e.: returnable vs. expendable)
8. Due Date for Request for Quote

RESPONDING TO A REQUEST FOR QUOTE

Please note that Alex Products Inc. may not honor late responses. The bidder should quote exactly what is specified, including all quality requirements, specifications, and/or print dimensions. Packaging is to be included in the piece price. Lead times shall be listed separately. All exceptions must be very clearly defined in writing and also verbally to the Buyer for review. The request for quote shall be returned, on time, to its' originator.

QUOTE RESPONSE REQUIREMENTS

Quote requirements center primarily on quality, service terms, pricing, and engineering compliance.

Quality Requirements:

- Compliance to all quality expectations

Service Requirements:

- Quote and meet production lead times

Pricing Requirements:

- No price increase throughout the parts life. (unless approved by Materials Manager)
- Lifetime, long-term contracts
- Three years service parts at production prices (after production requirements stop)
- Parts during preproduction volumes purchased at production pricing
- Tool maintenance is included in the piece price.

Engineering Requirements:

- Do not start a tool without a tool purchase order; a part order is not a tool order.
- Tool payment is contingent upon PPAP approval

The materials manager will maintain an approved source list. Alex Products Inc. will purchase materials from vendors on this list. The materials manager may make additions to this list at his own discretion.

A blanket purchase order shall be issued to the supplier when a sourcing decision has been made. The blanket purchase order will contain the following information:

1. Alex Products part number
2. Print revision or specification
3. Payment terms
4. Piece price
5. Ship via Carrier
6. Material certifications are required as determined by API
7. PPAP when required
8. ASN 4 hours prior to shipment

Purchase orders may be canceled at any time due to unacceptable quality or delivery.

MATERIAL RELEASES

Supplier material releases are created as needed based on customer requirements. Releases will be faxed or emailed to the supplier. There will be two types of releases. One document is a weekly product release. This document will provide general information such as estimated annual volume, fabrication authorization, material authorization and estimated planning quantities. The second document is the shipping release, which authorizes shipment. The shipping release will be the only document to authorize shipment. Each release must be completed. 100% on time delivery is required. If a requirement cannot be met, it is expected that the supplier notify the business unit administrator. Avoid shortages of overages when shipping. Over shipments are subject to be returned at the supplier's expense. A \$100.00 administrative fee will be charged when over shipments are returned. Shipments shall follow first in first out stock rotation. Alex Products will monitor excess freight. Excess freight shall be debited back to the supplier provided Alex Products Inc. has met the supplier lead-time requirements.

OBSOLESCENCE

Alex Products Inc. will notify its' suppliers when material will become obsolete. Material releases must be followed closely upon obsolescence notifications. The last release will state that it is the final release. Over shipments will not be accepted.

Obsolete material claims must be submitted within 30 days of final release. All claims must be supported by a material release. Any material purchased by the vendor beyond material release authorization will not be honored.

**MATERIAL CERTIFICATION REQUIREMENTS,
INCLUDING PROTOTYPE / PREPRODUCTION SAMPLES**

MATERIAL CERTIFICATION REQUIREMENTS

All materials shall meet all blue print specifications and any additional requirements stated in the purchase order. Alex Products must approve any deviation to specifications. Any deviation not approved is subject to rejection.

Material certifications are required with each shipment to API for parts in pre-launch, and may be required for parts in full production. If an employee from API has to call for required material cert, the supplier may be subjected to a \$25.00 charge. The requirements for each supplier's shipment to Alex Products Inc. are defined on API's purchase orders and in this Supplier Quality Manual in section 6.

PROTOTYPE AND PREPRODUCTION REQUIREMENTS

Pre-production and Prototype parts are extremely important as they are our first opportunity to view the production intent process and product to ensure the voice of our customer is met. This opportunity also allows API engineers to evaluate the product and perform tests related to the part's assembly and operation. It allows API's program engineers to know the specific dimensional and inspection status of parts that are actually used for validation. As such, the supplier is expected to treat the Pre-production and prototype process and product as though they were production intent. The Pre-production and Prototype experience is the perfect time for the supplier to evaluate the robustness of the planned production process.

TOOLING

Customer owned tooling, in the possession of the supplier, remains the property of the customer. Alex Products reserves the right to remove customer owned tooling at any time.

It is the suppliers' responsibility to perform all normal tool maintenance during the life of the program.

Alex Products, through a purchase order, must approve changes to the tooling that require payment. Alex Products personnel may make tooling audits at the suppliers' facility.

The supplier shall not move any customer owned tooling to another site without written authorization by Alex Products.

SUPPLIER PSO

The purpose of the Supplier Process Sign Off (SPSO) is to ensure that a supplier's manufacturing process is capable of meeting the quoted tooling capacity, while satisfying all customer quality requirements. The Supplier Process Sign Off verifies that the actual manufacturing process conforms to the manufacturing process that will remain constant through start of production.

SPSO ELEMENTS AND REQUIREMENTS

Elements that shall be complete and in place at the time of SPSO include but are not limited to:

1. Plant layout
2. FMEA
3. Control Plan
4. Purchased components readiness
5. Product specifications/drawings/blueprints available
6. Tooling, equipment, and fixtures identified
7. Operator training
8. Operator Instructions
9. Parts handling plan available
10. Parts packaging/shipping specifications available
11. Containment plan available
12. Preventative maintenance plans established
13. Gage R&R studies completed
14. Product validation complete (as applies)
15. Line speed and capacity verified
16. Materials readiness verified

API will provide the supplier with the following:

1. Supplier Process Sign-Off Instructions
2. A blank copy of the SPSO form
3. Detailed questions
4. Supplier part plan
5. SPSO action item list

The API Program Manager, with input from the Advanced Quality Manager and Materials Manager, will identify which suppliers will require a Supplier Process Sign-Off. When chosen, a representative from the Alex Products organization will be at the supplier's manufacturing facility for the product run duration.

OVERVIEW

The intent of PPAP is to ensure that the supplier has the ability to manufacture product in the production environment meeting all requirements of the customer's design record and specifications. This process will also ensure that the supplier has a proper understanding of these requirements. Alex's goal for all suppliers is to obtain first time full approval of PPAP submission.

The AIAG Production Part Approval Process (PPAP) manual details:

1. When to submit
2. Levels of submission
3. Required run size
4. Capability requirements on SC/CC features
5. Submission requirements
6. Process requirements
7. Records and master sample requirements
8. Sample requirements

The manual also contains a detailed explanation on how to fill out the Warrant form, Appearance Approval Report, PPAP Dimensional Results form, PPAP Material Test Results form, and the PPAP Performance Test Results form.

API PPAP REQUIREMENTS

Suppliers must submit a Level 3 PPAP for initial product approval. This PPAP will need to be approved by Alex Products personnel before the supplied product can be used in production. Each PPAP shall be delivered by the due date agreed upon by Alex Products and the supplier. Any deviations to this due date shall be submitted by the supplier and approved by Alex Products Inc. Any late PPAP submission will show up on the supplier's scorecard. (see section 13)

REVALIDATION

Alex Products will also require annual revalidation submissions which, at a minimum, will include a six piece dimensional layout from a fully ballooned engineering drawing at the latest revision level, and current material certification. Deviations from these requirements must be granted in writing from the Alex Products Supplier Quality office.

PPAP RESUBMISSION

As stated in the AIAG Production Part Approval Process (PPAP) manual, some examples of PPAP resubmission are, but not limited to:

1. Engineering Changes to specifications or materials.
2. Production from new or modified tooling.

3. Production following refurbishment (non routine maintenance).
4. Rearrangement of existing tooling or equipment.
5. Production following any change in process or method of manufacture.
6. Production from tooling transferred to a different plant location.
7. Change of source for sub-tier suppliers.

Notes:

1. Familiarization with the detail contained in this section in no way dismisses the supplier from comprehending the detail within the AIAG PPAP manual.
2. Different submission levels do not change the supplier's responsibility of items that must be completed. It is the supplier's responsibility to complete all items that are required for part approval and maintain these items in their PPAP file.
3. It is the supplier's responsibility to submit corrective actions to an Interim PPAP approval prior to the Interim Approval expiration.
4. When a design record is modified, it is the suppliers responsibility to resubmit, at a minimum, a Warrant for each part number contained in the design record, even if a specific part number is not affected by the change. To effectively determine exact requirements for design modifications, contact an SQE or quality representative at Alex Products Inc.

OVERVIEW

- Early Production (pre-launch) / Running Change Containment provides an added layer of protection between the supplier's production process and the customer at start-up and changeovers. This added protection should prevent nonconforming product or engineering changed (old revision level) product from ever reaching customers of Alex Products Inc.

API EXPECTATIONS

API and the Supplier should set an appropriate Early Production / *Running Change Containment duration*. Duration can be specified in terms of either time or number of parts.

Early Production Containment:

All containers of product shall be identified with "100% Inspected" labels as proof of Early Production (pre-launch) Containment.

The default duration is 1000 parts minimum.

Running Change Containment:

At minimum, the last shipment of old revision product must be labeled as "Old Style" product. The new revised product shall be labeled with "New Style" product. All "New Style" products shall follow Early Production Containment.

The default duration is 1000 parts minimum.

Controlled Shipping

Controlled Shipping Level-I (CS1) is typically implemented when 100% certifying of product is required based on risk that may be posed by a particular quality issue. A sample CS1 letter including exit criteria requirements is available in appendix A.

Controlled Shipping Level-II (CS2) is a result of failed CS1 and or chronic repeat issues that pose a risk to Alex Products or their customers. CS2 includes the supplier bearing the expense of a third party inspection company certifying product until exit criteria described in appendix B CS2 notification letter is achieved.

OVERVIEW

All Suppliers are required to have an on-going process for continuous improvement. Continuous improvement is intended to reduce variation in the manufacturing processes and to improve the quality of the parts or materials produced as well as the service provided to API.

CONTINUOUS IMPROVEMENT ACTIVITIES

Continuous improvement activities can include, but are not limited to, the following:

1. Self assessment of quality system activities
2. Process control audits and capability study analysis reactions
3. Cost of quality improvements
4. Parts Per Million defective reductions
5. On-Time responses to both initial and final 8-D
6. Reduced RPN's or severity ratings on PFMEA's
7. Cost Improvements
8. Permanent corrective actions to resolve identified problems
9. On-Time delivery and customer communication improvements

ALEX PRODUCTS RECEIVING RESPONSIBILITIES

The receiving API plant is responsible for analyzing all supplied materials. Upon discovery of any nonconformance, the appropriate personnel will notify the supplier and a Supplier Material Rejection Report will be generated.

SUPPLIER RESPONSIBILITY

An 8-D specifying 100% containment must be submitted to Alex Products Inc. within 24 hours. The purpose of this initial response is to ensure no further nonconforming material will be shipped to API.

The supplier will need to provide a Return Material Authorization (RMA) number for disposition of the nonconforming material in question. If no response is given within five business days the supplier will be debited replacement costs.

In order for Alex Products Inc. to maintain delivery to our customer, the supplier may have three options in dealing with this non-conforming material. The first option is to send replacement material. The second option is for the supplier to sort material at API. The third option is for API to sort all nonconforming material. The supplier will be charged \$50.00 per hour.

The final corrective action identifying the root cause must be submitted within fifteen business days. Corrective actions should ensure irreversible corrective action has been implemented. Failure to contain and / or failure to define the Root Cause may result in the Supplier being placed on Level I / Level II containment. Documented changes to PFMEA's, Control Plans, and Operator Instructions should be included with the 8-D.

Suppliers must continue identifying products with 100% certified labels during investigation and should continue for three shipments after the final corrective action reports are submitted.

Alex Products tracks the performance of all suppliers. All suppliers will be issued a Supplier Performance Report every quarter. Then, this information will be averaged and sent to each supplier annually to provide benchmarks and goals. The report is a summary of supplier quality performance. The report is broken into sections.

These sections include:

1. Quality PPM
2. PPM Improvement
3. On-Time Delivery
4. On-Time 8-D
5. On-Time PPAP
6. Repeat Issues
7. Customer Issues

All ratings will begin anew each calendar year.

API EXPECTATIONS

Rejected Parts Per Million (PPM) is calculated by taking quantity rejected divided by quantity received and multiplying by 1,000,000. The goal for PPM is 0. The minimum acceptable PPM is less than 450. It is imperative for suppliers to continuously improve their quality PPM.

API will monitor on-time delivery. If a supplier fails to meet these requirements, they may be asked to submit an 8-D. Alex Products Inc. will monitor on time 8-D / corrective action. All PPAP submissions from suppliers must be submitted on time.

A score will be given Alex Products Inc. suppliers based on the above measurables. When all these points are totaled, new business may be prioritized to those suppliers who are able to maintain a high level of points via the supplier rating system. We may also honor those suppliers who show the greatest level of improvements.

Bonus points will be available to those suppliers who improve their Quality PPM.

For a breakdown of the actual point rating system - see page 2 of 2.

SCORE CARD PERFORMANCE POINTS AVAILABLE

Parts Per Million	
PPM	Pts.
0-50	30
51-150	25
151-250	20
251-350	15
351-450	10

% PPM Improvement	
BONUS	Pts.
75 to 100	5
60 to 74	4
45 to 59	3
30 to 44	2
15 to 29	1
% < 15	0

% On time PPAP	
Pts.	
100	5
95 to 99	4
90 to 94	3
85 to 89	2
80 to 84	1

Repeat Issues	
	Pts.
0-1	15
2	10
3	5
4	0

% On time 8-D	
	Pts.
100	10
99	9
98	8
97	7
96	6
95	5
94	4
93	3
92	2
91	1

On time Delivery			
%	Pts.	%	Pts.
100	20	86	06
99	19	85	05
98	18	84	04
97	17	83	03
96	16	82	02
95	15	81	01
94	14	< 80	0
93	13		
92	12		
91	11		
90	10		
89	9		
88	8		
87	7		

Customer Issues	
	Pts.
0	20
1	15
2	10
3	5

OVERVIEW

A Management Quality Review meeting is held between the supplier's leadership and an API representative(s). MQR's are recommended when previous steps have failed to resolve the problems.

REASON FOR MQR

An improvement meeting can be called for numerous reasons. The following are a few potential examples:

1. Missing critical start up dates
2. Poor delivery performance
3. Poor SSR (Supplier Rejection Report) responsiveness
4. High PPM
5. Repeat issues
6. Supplier related customer issue

API will notify the supplier of the location, and that their presence is required for an MQR. At the time of notification, the supplier will be notified of the reason for the meeting and provided an agenda.

An MQR is typically held at Alex Products Inc. Where appropriate the MQR will address the following:

- Introductory comments by API
- Reason for meeting
- Review of API quality expectations
- Review of the supplier's actual performance, key metrics such as:
 - o PPM
 - o SRR responsiveness
 - o Service and delivery
- Impact of the supplier's quality problems
- Financial liability of the problem including
 - o Line downtime
 - o Premium freight
 - o Sort Costs
 - o Etc.
- Supplier presentation of Corrective action plan
- General discussion
 - o Required help from API
 - o Key issues
- Questions and Answers

SUPPLIER PREPARATION EXPECTATIONS

The supplier must come prepared to present:

1. An account of how we arrived in this situation
2. Corrective action plans
3. API assistance required
4. Any roadblocks
5. Assurance (noted on the supplier's action plans) that the situation will not arise again

This meeting is an opportunity to solicit help from API in an effort to work together to improve performance.

FOLLOWING AN MQR

As a follow-up activity to the MQR, the supplier is expected to submit an action plan with timing for completion of all open issues. This information is expected within one week and should be sent to the SQE. The supplier is also expected to keep in close contact through the completion of all follow up activities on the open issue list.

OVERVIEW

All quote packages must include packaging material costs, quantity of parts per container, and the container size to be used. The supplier must ensure that packaging is adequate to prevent damage to material. When feasible, returnable containers are encouraged.

API EXPECTATIONS

Alex Products Inc. has packaging need that each supplier must meet. The following list contains specific requirements that suppliers must follow:

1. Each container must contain only one part number
2. Each container must be labeled: see sec. 16
3. Each shipment must be accompanied by a packing slip for both receipt and payment
4. The packing slip must be securely fastened to the container or delivered by the truck driver.
5. The packing slip must contain the following information:
 - a. Supplier name
 - b. API part number
 - c. Quantity
 - d. Purchase order number
 - e. Packing slip number

FIFO (first in, first out) method of shipment shall be used
Material Certifications must be provided upon request

OVERVIEW

All purchased parts suppliers are required to label each container. Compliance is mandatory to ensure proper incoming receiving of your product.

API EXPECTATIONS

Specific Labeling requirements are as follows:

1. Each container must have a label
2. Each label must contain
 - a. API part number
 - b. Lot or Heat number
 - c. Manufacture Date
 - d. Revision level
 - e. Quantity

When Alex Products Inc. provides product to a supplier that has an API Approval to Move Tag; the Supplier must complete the Approval to Move Tag that is located on each container.

The supplier will complete the following sections on the API Approval to Move Tag:

1. Operation
2. Date
3. Quantity
4. Approval Signature

The supplier is expected to guard against the following types of labeling errors:

1. Incorrect label on individual containers
2. Wrong quantity on label
3. Missing label
4. Missing information on label
5. Mixed parts
6. Mixed containers

Any mislabeled product received at API will be treated as 100% nonconforming material. Labeling errors are considered process failures and should be well documented on the Process Failure Mode and Effects Analysis. A minimum charge of \$50.00 will be charged for an API associates to correct labeling errors. (i.e. Change incorrect or replace missing labels.

Alex Products Charges

Any charges incurred by Alex Products due to supplier issues at our customer will be passed directly to that supplier with an additional administration fee of \$100.00.

Supplier Charges

Alex Products expects to receive 100% quality components and 100% on time delivery from our supply base. In the event that non-conforming material is received the following charges will be levied and corrective action required.

1. SRR Issued: Administration fee	\$100.00
2. Alex Products sort charge/hour	\$50.00
3. Operator down time/hour	\$50.00
4. Support staff labor/ hour	\$50.00
5. Material handler/hour	\$50.00
6. Customer incurred charges	As charged by customer
7. Overtime to prevent production disruption	\$100.00
8. Break in containment	\$200.00
9. Lost line time	\$ Value of lost production pieces
10. Assembly scrap	\$ Actual piece price
11. Over-ship/Under-ship	\$100.00 per occurrence
12. Late Shipment	\$200.00 per occurrence
13. Expedited freight charges	Cost, plus \$100.00 admin fee

Appendix A

Alex Products

Date:

Subject: Controlled Shipping – Level 1

Dear Supplier:

This letter provides formal notification and confirms discussions held with you, that the part(s) listed on the following sheet, and produced by your facility, have been identified as unacceptable, at the current quality level, for use within Alex Products. Due to our high level of concern for our ability to continue to produce quality assemblies for our customers, your parts are being placed on Controlled Shipping Level 1 effective immediately. The procedures you have enacted to date have been insufficient in stopping the flow of non-conforming material to our plant.

Therefore, you must immediately:

- 1. Implement an action plan to prevent non-conforming material from reaching Alex Products, including 100% inspection of the product,**
- 2. Return the attached “Controlled Shipping Confirmation Reply” that confirms that you received notification and understand the requirements, and**
- 3. Submit your containment and problem resolution plan to Alex Products, Quality Engineer.**

Inability to implement a successful action plan or successful containment will result in Alex Products, (Plant) arranging additional inspections, **at your expense**, (Controlled Shipping – Level 2) to insure that all parts shipped conform to all of our specifications. It is intended that the parts remain in Controlled Shipping until irreversible corrective actions are implemented and confirmed, which makes the continuation of the short-term containment plan unnecessary.

Details on Controlled Shipping are attached for your reference. If you have further questions about this procedure, or our expectations, please contact Supplier Quality Engineer, At (419-267-5240 ext 1164) / Fax (419-267-3815).

Sincerely,

Director of Quality
Alex Products

Quality Engineer
Alex Products

Circulation:

Alex Products	<i>Quality Manager</i>
Alex Products	<i>Quality Engineer</i>
Alex Products	<i>Plant Manager</i>
Alex Products	<i>Supplier Quality Engineer</i>
Supplier	<i>Plant Manager</i>
Supplier	<i>Quality Manager</i>
Supplier	<i>Sales & Application Engineering Manager</i>

Note: Controlled Shipping Level 1 inspection is to be conducted for each of the non-conformances listed below...

Part Number	Part Name	Non-Conformances

Exit Criteria:

- Inspection data shows no rejects into the audit area for a minimum of 60 working days after implementation of irreversible corrective action.
- **Implement error proofing within your process for the defect noted above.**
- Repeat shipments must be received with **NO** defects (including defects not being sorted in controlled shipping).
- Evidence that a thorough problem-solving process was used, the true root cause of the problem was discovered, and an irreversible corrective action was implemented by the supplier.
- SPC indicating a stable and capable process during the 60 working days after implementation of irreversible corrective action, including all Ppk requirements being met.
- All paperwork (Process Failure Mode and Effects Analysis (PFMEA), Process Control Plan, flow diagram, etc.) modified and PPAP submission and approval as required.
- A "PASS" status of the exit audit.
- Written authorization, by (Jeremy Snyder or Sonja Landers), Quality Engineer, Supplier Quality Engineer to exit Controlled Shipping.

Supplier Responsibilities During CS:

- Contain all non-conforming parts immediately upon notification of Controlled Shipping status.
- Establish an audit area, which is separate from the normal production area.
- Provide inspection data at a frequency determined by the Alex Products, Engineer (**Each Shipment**).
- Implement irreversible, permanent corrective action in a timely manner, i.e. implement error proofing.
- Revise all PPAP paperwork as required.
- Pay for all additional costs due to Controlled Shipping.
- Establish and communicate the status of improvement plans with the Alex Products, Quality Engineer.

Appendix B

Alex Products

Date:

Supplier:

Subject: Controlled Shipping – Level 2

Dear Supplier:

This letter provides formal notification and confirms discussions held with you, that the part(s) listed on the following sheet, and produced by your facility, have continued to be identified as unacceptable, at the current quality level, for use within Alex Products. Actions and plans implemented during Controlled Shipping Level 1 failed to contain and correct process problems as indicated by nonconforming material continuing to be received at Alex Products. Therefore, we have decided to **immediately implement Controlled Shipping Level 2**. This containment requires that Controlled Shipping Level 1 inspections remain in place, and your company bear the expense of a third party inspection company for containment and re-inspection of your products until you re-establish suitable process control.

Alex Products S.Q.E. will monitor Controlled Shipping Level 2 activities, by an impartial (ISO Certified) company trained to conduct controlled shipping activities. Details of Controlled Shipping Level 2 will be reviewed at an implementation meeting/conference call, which will be scheduled with Alex Products. It is intended that the parts remain in controlled Shipping Level 1 and Level 2 until irreversible corrective actions are implemented and confirmed, which makes the continuation of the short-term containment plan unnecessary.

Attached are the exit criteria for Controlled Shipping Level 2, as well as the nonconformities that must be addressed. If you have further questions about this procedure, or our expectations, please contact Alex Products S.Q.E. at (419-267-5240 Ext 1164) / Fax (419-267-3815).

Sincerely,

Jay Fleischmann
Director of Quality
Alex Products

LuVena Ripke
Supplier Quality
Alex Products

Circulation:

Alex Products	<i>Plant Manager</i>
Alex Products	<i>Quality Manager</i>
Alex Products	<i>Quality Engineer</i>
Alex Products	<i>Supplier Quality Engineer</i>
Supplier	<i>Plant Manager</i>
Supplier	<i>Quality Manager</i>
Supplier	<i>Sales & Application Engineering Manager</i>

Note: Controlled Shipping Level 2 inspection is to be conducted for each of the non-conformances listed below...

Part Number	Part Name	Non-Conformances

Exit Criteria:

- Inspection data shows no rejects into the audit area for a minimum of 60 working days after implementation of irreversible corrective action.
- **Implement error proofing within your process for the defect noted above.**
- Repeat shipments must be received with **NO** defects (including defects not being sorted in controlled shipping).
- Evidence that a thorough problem-solving process was used, the true root cause of the problem was discovered, and an irreversible corrective action was implemented by the supplier.
- SPC indicating a stable and capable process during the 60 working days after implementation of irreversible corrective action, including all Ppk requirements being met.
- All paperwork (Process Failure Mode and Effects Analysis (PFMEA), Process Control Plan, flow diagram, etc.) modified and PPAP submission and approval as required.
- A "PASS" status of the exit audit.
- Written authorization, by (Name), Quality Engineer, to exit Controlled Shipping.
- Approval to exit CS2 returns the Supplier to CS1 status until CS1 is successfully exited.

Supplier Responsibilities During CS2:

- Implement a daily review process at your facility to study and understand the discrepancies and drive corrective actions.
- Maintain Controlled Shipping Level 1 inspections.
- Contain all non-conforming parts immediately upon notification of Controlled Shipping status.
- Participate in the CS2 Implementation meeting.
- Establish an audit area, which is separated from the normal production area.
- Provide tooling, if required, for the production inspection.
- Provide inspection data at a frequency determined by the Alex Products Supplier Quality Engineer.
- Implement irreversible, permanent corrective action in a timely manner, i.e. implement error proofing.
- Revise all PPAP paperwork as required.
- Pay for all additional costs due to Controlled Shipping, and issue a purchase order to the CS2 source.
- Establish and communicate the status of improvement plans with Alex Products Supplier Quality Engineer.

Controlled Shipping Confirmation Reply

TO: **Alex Products, Supplier Quality Engineer**
19-911 Rd T
Ridgeville Corners, Ohio 43555

FROM:

We acknowledge receipt of your letter, dated (xx/xx/xx), advising us that our above facility has been placed in: (check those that apply)

- Controlled Shipping Level 1
- Controlled Shipping Level 2

- We understand the Controlled Shipping process requirements.
- We *do not* fully understand the Controlled Shipping process requirements.

Please contact: _____ (Name of contact)
_____ (Telephone number)

The following is a description of how conforming parts and shipments will be identified to indicate that they have been qualified as conforming to requirements.

The containment activity will be performed at the following location:

The person responsible for the Controlled Shipping activity:

Name: _____ Fax: _____
Phone: _____

(Signature of Quality Manager or Plant Manager) Date: _____

ALEX PRODUCTS, INC.



Paulding Office
810 Gasser Road
Paulding, OH 45879
Phone 419-399-4500
Fax 419-399-9023

Main Office
19911 Co Rd T, PO Box 326
Ridgeville Corners, OH 43555
Phone 419-267-5240
Fax 419-267-3815

114 S Main St. Suite 100
Chelsea, MI 48118
Phone 734-475-9585
Fax 734-475-9588

Regards,

I have provided you with the newest revision of the API Supplier Quality Manual.

Please sign and return this letter as acknowledgement of receipt.

Signature

Company

Title

Date

Thank you.

LuVena Ripke
Supplier Quality
Alex Products Inc.
419-267-5240 Ext.
419-267-3815 Fax