

YOKOHAMA INDUSTRIES AMERICAS



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SUPPLIER REQUIREMENTS MANUAL

Yokohama Industries Americas, Inc. is committed to achieving a POSITION OF EXCELLENCE by increasing CUSTOMER SATISFACTION in areas of QUALITY, COST, DELIVERY, and SERVICE.

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INTRODUCTION

In 1989, YCNA established Yokohama Industries Americas to meet the ever-growing demands of the United States automakers. Since then, Yokohama Industries Americas has served the entire automotive industry with quality automotive power steering and air conditioning components and other related products. Our emphasis on the highest standards has resulted in our rapid growth worldwide.

Yokohama Industries Americas is committed to achieving a Position of Excellence by increasing customer satisfaction in the areas of Quality, Cost, Delivery, and Service. This quality policy is more than just a statement – it is our approach to business. Leading automobile manufacturers around the world depend on Yokohama Industries Americas to supply superior products at competitive prices. Maintaining open communication with both our suppliers and our customers allows Yokohama Industries Americas to be flexible and responsive to the changing needs of the fast-paced automotive industry.

This manual serves as a means of communicating roles and responsibilities to all of our suppliers. All suppliers are expected to follow the guidelines set forth in this manual. The manual will be periodically updated and revisions forwarded to the suppliers when they occur.

Supplier Quality Assurance at YIA is the responsibility of the Quality Manager. Representatives of Quality Control, Purchasing, Materials, Manufacturing, and Engineering assist as needed. The channels of communication, written or verbal will be specified throughout the manual.

COMMUNICATION

- YIA requires English to be used for all forms of communication including but not limited to Purchase Orders, Packing Slips, Invoices, PPAP Documentation, Quality Documents and any YIA requested information for Approved Supplier List purposes.

PHILOSOPHY

Customer Oriented

- It is the customer who provides opportunities for YIA and its employees.
- YIA is committed to achieving higher levels of customer satisfaction, typically measured in areas of quality, delivery, cost, and service.
- YIA is committed to continuous improvement in all segments of our business.

Employee Oriented

- Employee relations program committed to a nonunion operation and built upon principles of individual respect and dignity.
- Open door policy and two-way communication.
- Employee training, development, growth, recognition and advancement.
- Employee involvement in small group problem solving activities.

Community Oriented

- Economic and tax base impact.
- Volunteerism and support of local charity organizations.
- Good industrial neighbor.
- Non-polluting operations.

Profit Oriented

- Profit is a valid and respectable motive which represents one measure of a company's success.
- Long term approach.
- Parent company investment and commitment to support.

SERVICE REQUIREMENTS

Unless otherwise agreed to in writing between the parties, Supplier agrees to continue to supply service parts as required by Yokohama Industries Americas ("Service Parts"), for each model of vehicle for ten (10) years from the date of last production of such vehicle model for which the Parts are supplied. The Service Parts shall be supplied at full production assembly level and/or at sub-component level, as required by Yokohama Industries Americas. The Service Parts shall meet all specifications provided by Yokohama Industries Americas.

The price of the Service Parts shall be the same as under Purchase Orders for corresponding production parts while parts are in production, except to the extent Supplier can quantify additional items not covered or specified. Once Parts are past model, Service Parts pricing will be established based on good faith negotiation and mutual agreement.

ENVIRONMENTAL REQUIREMENTS

In an effort to comply with our customer environmental requirements, all Suppliers must set-up a free IMDS (International Material Data System) account via www.mdssystem.com. The IMDS system is an on-line database that tracks all part numbers and the materials included in the product. The Supplier is responsible for entering all raw materials and components supplied to Yokohama Industries Americas into the IMDS database. All components are to be entered as the Yokohama Industries Americas part number and submitted to IMDS supplier identification number: 15395 (Yokohama Industries Americas, Inc. / Hose).

IMDS acceptance by Yokohama Industries Americas Engineering is required prior to PPAP submission. The approved IMDS report, showing Yokohama Industries Americas approval, is required to be submitted as part of the PPAP. The report needs to be printed from the point of view of Yokohama Industries Americas, as chosen within the IMDS print screen, in order to have the approval section shown on the report.

When changes are made to materials of current part numbers, the Supplier is required to update the IMDS database with the changes and re-submit for approval. All changes to existing part numbers are required to be re-submitted as a 'copy/new version' within the IMDS system. This will insure that the IMDS identification number remains constant for each Yokohama Industries Americas part number. As any change to a component requires PPAP submission, the same Yokohama Industries Americas Engineering acceptance requirement applies to any changed part number.

REACH

Suppliers to Yokohama Industries Americas, Inc. must comply with European Union Regulation Registration Evaluation Authorization and Restriction of Chemicals (REACH) and any / all amendments. This applies to suppliers that provide substances only or substances contained in articles. Compliance information can be found at the following web site: www.echa.europa.eu.

CONFLICT MINERALS

For suppliers that have identified any 3TG presence in material or components supplied to Yokohama Industries Americas, we would expect updated information including smelter information. Emphasis should be placed on improving your understanding of the smelters in your supply chain. There should be a measurable improvement in the number of Conflict Free Smelters and refiners. Annually, we expect a demonstrated improvement in this area and we will be requesting updates in reporting conflict minerals if there are changes.

REVISION RECORD

APPROVAL:

Matthew Etherington 02/09/24
Purchasing Director Date

Brian Nicholson 02/09/24
Materials Director Date

Caroline Powell 02/09/24
Quality Director Date

REVISION RECORD:

VER	DATE	PAGE(S) AFFECTED	DESCRIPTION
1.0	1/14/03	ALL	Created New Manual
2.0	1/17/03	17	Added "Special Revisions" Section
3.0	1/3/05	ALL	Revised to more adequately reflect requirements
4.0	8/1/05	33	Revised submission requirements for deviations
5.0	8/5/05	ALL	Updated version
6.0	2/23/06	ALL	Add SQE responsibility
7.0	5/17/06	8, 9, 10, 12, 13, 16, 23, 25, 26, 33, 35	Added requirements
8.0	11/20/06	12, 15, 23, 28, 30, 31	Added requirements
9.0	1/25/07	6, 12, 28, 29, 30, 31, 32	Revised wording from DMR to NCR
		20, 23, 26	Added requirements for PPAP submission, heat treat assessment, and exclusion from quality system requirement
		6, 22, 26	Added form SQA-FM-0001
10.0	4/21/08	All	Updates to Purchasing, Materials & Quality Sections
11.0	6/5/09	All	Updates to Purchasing, Materials & Quality Sections
12.0	6/8/09		Updates to Purchasing, Materials & Quality Sections
13.0	8/20/10	7, 18-33	New Program Launch Timelines, Quality Section of SRM
14.0	1/10/11	12,13,37	EDI, Supplier Requirement to Adhere to this Manual.
15.0	2/21/12		
16.0	11/26/12	13	Added note for persistent poor delivery
1.0	12/9/14	Title Page, 4, 5, 11, 36, several	Company Name Change. Added REACH, page 4, D1 and D3 Revision references for Materials Managers, page 5. Added NAFTA Statement, page 11. Deleted page 36. Replaced YH America with YIA and/or Yokohama Industries Americas.
2.0	9/29/15	4, 9, 19, 31	Added Conflict Minerals, Approved Suppliers Requirements, Supplier Development (Small Business Concern), PPAP submissions requirements (CQI Assessments) – Not sent to suppliers.
3.0	9/29/15	Version Clarification All pages	Update Version to 3.0 (Not sent to suppliers)
4.0	9/29/15	Version Clarification All pages	Update Version to 4.0 (Not sent to suppliers)
5.0	9/29/15	Miscellaneous clerical fixes	Update Version to 5.0 (Not sent to suppliers)
6.0	9/29/15	Version Clarification All pages	Update Version to 6.0 (Not sent to suppliers)
7.0	9/29/15	19	Supplier development (Not sent to suppliers)
8.0	9/30/15	31	Added CQI-15, -17, -23 to list of assessments
9.0	9/30/15	Miscellaneous clerical fixes	Date change on revisions corrected to 2015
10.0	12/13/21	Remove Terms and Conditions and removed SPA	YIA – Terms and Conditions of Purchase (Separate Document)
11.0	2/09/24	Added Communication / YIA Disruptions	Page 3 – English language. Page 17 – YIA Supply Disruptions

Revision History above is from previous YH America – Supplier Requirements Manual. Version 1.0 is the update related to the name change to Yokohama Industries Americas.

YIA CORPORATE PURCHASING DEPARTMENT

APPROVED SUPPLIERS

Supplier Approval Process

Approved supplier status is achieved by meeting the following criteria:

- Acceptance of the Supplier Requirements Manual (Authorization Required).
- Successful Completion of the Quality Audit (SQA-FM-0001).
- Completion of the Supplier Profile Form (PUR-FM-0005).

Suppliers are strongly encouraged to pursue ISO/TS16949 certification. At minimum, suppliers shall be ISO9000/9001 certified. Suppliers without ISO certification will have additional requirements prior to being added to the Approved Supplier List.

Removal from Approved Suppliers List

A supplier is subject to be removed at any time based on performance to YIA requirements or lack of procurement activity. This decision is made jointly between YIA Purchasing, Materials, and SQA Departments.

Reinstatement will require all initial requirements being met as stated above.

QUOTATION PROCESS

Cost Estimation Request

YIA may request a Cost Estimation for components in advance of firm drawings. This will most likely occur on new business opportunities. The Supplier may be allowed to provide this Cost Estimation by the following methods:

- Supplier Quote format (letterhead)
- E-mail

All Cost Estimations must include:

- Estimated Unit Cost
- Estimated Tooling
- Estimated Lead Time for Tooling and Components

Pre-Production and Prototype Orders

Pre-Production and Prototype Orders will unique Purchase Order Numbers that contain "PRE" as part of the purchase order number. Pre-Production and Prototype shipments must be clearly marked as such by the supplier. A Special Part Identification Label (PUR-FM-0016) is required with all Pre-Production and Prototype shipments. The shipment will need to be sent to the attention of the person identified on the purchase order.

Request for Quote (PUR-FM-0006)

After firm drawings and specifications are released for a component, a Request for Quotation (RFQ) will be released by Purchasing. The RFQ form (PUR-FM-0006) will be used to determine the final cost for a component. This information will be considered confidential and will not be shared with companies other than Yokohama Industries Americas. Suppliers will be required to provide detailed cost information in the following areas as specified by the Yokohama Industries Americas RFQ Form (PUR-FM-0006): Material Cost, Surface Treatment Cost, Packaging Cost, Labor Cost, Leadtime (Prototype, PPAP, SOP) Tooling Cost and Capacity.

QUOTATION PROCESS (cont)

Suppliers must quote production runs to match the "Total Purchase Volume" as specified on the RFQ. Total Purchase Volume is the total quantity of parts to be purchased during the production life of the program. For example, if the annual volume is 100,000 pieces on a 5 year program, the Total Purchase Volume would be 500,000 pieces.

Suppliers are expected to provide a minimum savings of 3% annually on new business awards as well takeover business.

Sourcing decisions will be made based on supplier competitiveness as well as quality and service performance.

Quoted Exceptions

Any exceptions to the Yokohama Industries Americas drawing must be clearly communicated at the time of quote. Yokohama Industries Americas's RFQ Form (PUR-FM-0006) contains a quoted exceptions section as part of the form. RFQ's submitted without exceptions confirm the supplier's ability and obligation to meet the print specifications at the prices quoted.

Design Review

A thorough design review must be completed prior to tooling release or PPAP request from Yokohama Industries Americas to the supplier. This will be done through the RFQ process.

New Program Launch Timelines

When submitting RFQ's, suppliers are required to submit detailed timelines stating what invents will take place in order to meet the PPAP requirements of Yokohama Industries Americas. It is the supplier responsibility to ensure that they are meeting the dates in accordance with their timeline submissions.

AWARD NOTIFICATION

Supplier Award Letter

Yokohama Industries Americas will issue a Supplier Award Letter (PUR-FM-0015) to those suppliers who were selected during the RFQ process. This is the official notification that Yokohama Industries Americas has been chosen as the supplier and that you will be moving forward with you as our supplier for the selected components. The supplier must acknowledge the receipt of the supplier award letter by returning a signed copy to the YIA Purchasing Team. Only approved suppliers will be issued Award Letters or PPAP Requests.

PPAP Orders

PPAP requests will come from YIA Purchasing Department. The PPAP requests will follow the APQP Timeline as outlined by the YIA Management Team. Annual validation PPAP's may be required.

The PPAP must be submitted in an 18 tab binder. Electronic PPAP's are not acceptable for PPAP submission (See Quality Section for 18 tab layout and description).

Purchase Orders

The Award Letter is the formal notification that a supplier will be awarded new business once they have successfully completed the PPAP process.

The Purchasing Department will be responsible for creating Blanket Purchase Orders or adding new part numbers to existing Purchase Orders. Regular Purchase Orders will be used when Blanket Purchases Orders are not necessary.

The PPAP Purchase Order will include the following:

- *PPAP Quantity* – Number of pieces for dimensional validation.
- *PPAP Quantity Due Date* – In accordance with the APQP Timeline.
- *PPAP Quantity Price* – Based on the RFQ Form (PUR-FM-0006) price.
- *PPAP Production Run Quantity* – Number of pieces required to produce "PPAP Quantity."
- *PPAP Production Run Due Date* – In accordance with the APQP timeline.
- *PPAP Production Run Price* – Based on the RFQ Form (PUR-FM-0006) price.
- *Tooling Quantity* – Quantity of tools needed to produce the part being requested.
- *Tooling Quantity Due Date* – In accordance with the APQP timeline.
- *Tooling Cost* – The cost of tooling needed to create the parts that are being requested for PPAP Submission.

PPAP Orders need to be submitted to the attention of the Quality Department Secretary.

PPAP Purchase Orders will have unique Purchase Order Numbers that contain "PPAP" as part of the purchase order number. PPAP shipments must be clearly marked as such by the supplier. A Special Part Identification Label (PUR-FM-0016) is required with all PPAP shipments. This will allow YIA Receiving Department to notify the Quality Department Secretary that the PPAP has arrived so that it may be properly received.

Once reviewed, the Supplier Quality Engineer will notify the supplier of approval status or if further documentation is required.

Suppliers who receive PPAP requests are required to plan Finished Goods, Fabrication and Raw Material in anticipation of PPAP Approval by YIA SQE.

AWARD NOTIFICATION (cont)

Tooling

Supplier shall maintain the customer owned tooling in good condition so that the quality, usability, and merchantability of the parts are not impaired. The parts will meet all specifications, and the delivery of the parts will not be interrupted.

Supplier shall properly store, care for, repair or, if necessary, replace all Vendor Tooling and shall bear the risk of loss or damage thereto (including normal wear and tear). The Vendor Tooling is lent by Yokohama Industries Americas to the supplier.

Supplier shall only use the Vendor Tooling for manufacturing the Parts for Yokohama Industries Americas. Supplier shall, immediately upon Yokohama Industries Americas's request, deliver the Vendor Tooling to Yokohama Industries Americas or its nominee in accordance with Yokohama Industries Americas's instructions. All Vendor Tooling shall be marked as property of Yokohama Industries Americas (or, where applicable, of the third party who supplied the Vendor Tooling to Yokohama Industries Americas) by Supplier, shall not be commingled with the property of the supplier or any third person, and shall not be moved from Supplier's premises (except for repair or modification) without Yokohama Industries Americas's prior written approval. Supplier shall not modify, lease, transfer or dispose of any Vendor Tooling unless Supplier obtains Yokohama Industries Americas's prior written consent.

PRICE ADJUSTMENTS

Price Changes

All requests for price changes must be submitted to and reviewed by YIA Purchasing. All pricing issues should come through Purchasing - no other department. YIA Purchasing will review the request once the receipt of all supporting documentation has been received.

Requests will only be reviewed upon the receipt of the following information:

- Current Quoted Material Cost (PUR-FM-0006 – Supporting agreed upon pricing)
- Proposed Material Cost (PUR-FM-0006 – With updated, proposed pricing)
- Supporting Documentation (Supplier Invoices, Charts, Graphs, Market Analysis, etc.)
- Actions taken by the supplier to offset the need for price changes.
- VA/VE ideas that could prevent price changes.

All price changes will require the Yokohama Industries Americas Purchasing Department to submit an Award Letter or a new Blanket Purchase Order reflecting any price adjustments. This is confirmation that Yokohama Industries Americas has agreed to the price change. The Award Letter or Blanket Purchase Order should include quantities, pricing and whether or not new tooling or PPAP is required as well as any other agreements.

Component Price fluctuations of +/- 5% will be absorbed by the supplier. No Exceptions.

SUPPLIER REQUEST FOR CHANGE

Submission

Any Change Request or Deviation Request must be submitted on the YIA Supplier Request for Change Form (PUR-FM-0008) through the Purchasing Department to the Buyer. Supplier Change Requests must be submitted a minimum of one hundred and twenty (120) days prior to the anticipated implementation date at the supplier.

The request must clearly indicate in detail the actual change/deviation compared to YIA's specification, the quantity of parts involved, and the scheduled shipment date.

Definitions

Change Request - requested change to a drawing, specification, material, production process, or sub-supplier for a new part or a part that has been previously approved through the PPAP process.

Deviation Request - requested change to allow the use of a nonconforming product if the discrepancy does not affect safety, fit, function, or appearance of the product.

Routing

All requests will be reviewed and approved by the appropriate YIA personnel in the Purchasing, Product Engineering, Manufacturing Engineering, Manufacturing, Quality Control, Materials, and Marketing departments. YIA will review each request and render a decision as quickly as possible. YIA may request physical samples prior to making a final decision.

Disposition

Upon disposition the Change/Deviation Request will be returned to the supplier indicating disposition. The request will also include any special instructions that may apply.

Implementation

YIA Purchasing will develop and coordinate implementation of a change request with the supplier. Any questions on interpretation of this process should be directed to YIA SQA.

Shipping Requirements

Receipt of an approved request (for deviation only) is the supplier's authorization to ship the deviated material. Unless otherwise specified, all material shipped under an approved deviation must be identified with the deviation control number marked on each individual container. Suppliers may not exceed the quantity as indicated on the deviation request.

Under no circumstances is an approved deviation request to be considered a specification change.

ACCOUNTING / TERMS and INVOICING

Invoicing

Invoices must contain the following before they will be processed by YIA Accounts Payable: PO Number, Line Number, Release Number, Part Number, Quantity, Price, Packing List and Bill of Lading number.

If any information is missing from the invoice or it is incorrect it will be rejected and payment terms will not begin until a correct invoice has been received by Yokohama Industries Americas Accounting.

Payment Terms

Payment Terms shall be 2%/10 net 60 days. Discounts are strongly encouraged.

Tooling / PPAP

Tooling will be paid once PPAP has been approved. YIA will pay in full once the Supplier Quality Engineer has approved the PPAP. PPAP's will be ordered at production pricing. YIA does not pay separate charges for PPAP documentation. The maximum amount that Yokohama Industries Americas will pay for PPAP's will be calculated as follows:

Quantity Ordered (usually 6) x Production Price = Total Cost of PPAP. Suppliers are required to run a minimum of 300 pieces for PPAP. Once PPAP has been approved, YIA will accept the balance of the parts (usually a minimum of 294) at the production price.

Annual validation PPAP's may be required. Cost for annual validation PPAP's will be the same as above.

Supplier Non-Conforming Material Report

The Supplier Non-Conforming Material Report will be forwarded to the Purchasing Department once the SQA Engineer has completed the Form. At that time, the Credit/Debit Memo form will be completed based on the information included in the SNCR form. Once completed by the Purchasing Department, it will be forwarded to Accounting where the Credit or Debit will be processed.

SUPPLIER RISK ASSESSMENT

Yokohama Industries Americas will periodically perform supplier Risk Assessment Reviews. The supplier will be required to complete the Risk Assessment Form in its entirety. This will form will be reviewed by Yokohama Industries Americas management to determine the risk status of a supplier.

NAFTA

Yokohama Industries Americas will require all suppliers to submit PUR-FM-0021 which can be found on our website. This form allows us to maintain the status for each component supplied by our suppliers. We will require this form to be completed at the beginning of each calendar year.

YIA – MATERIALS DEPARTMENT

SCHEDULING and ORDERS

Forecast

Forecast is sent to each supplier on a weekly basis. The Forecast is a report used as a method of communicating upcoming requirements to each vendor. Suppliers will use the forecast to plan shipments, production and materials for the items that each supplier has been awarded.

YIA will place firm releases 2 weeks prior to our requirement date. All lead-times will be loaded at 2 weeks. It is the responsibility of each supplier to maintain the following minimum inventories to support Yokohama Industries Americas requirements:

- 2 weeks of Finished Goods at all times.
- 4 weeks of Work In Process (FAB) at all times.
- 4 weeks of Raw Material inventory at all times.

Open Order Reports

The Open Order Report is a report used as a method of notifying each supplier of the current open order status for each item supplied to YIA. It is sent to each supplier on a weekly basis. Suppliers should review the open order status of each item and confirm the accuracy of the information received. Any discrepancy in open order status must be reported to YIA Materials immediately for clarification and/or reconciliation.

YIA suppliers are required to meet 100% on-time delivery. Therefore, it is the supplier's responsibility to communicate any possible delays. The Open Order Report is provided so that suppliers can confirm its accuracy. If a supplier does not dispute the dates on the open order report then the expectation is that due dates for PPAP, Blanket or Regular Purchase Orders are acceptable.

Material Status

It is the responsibility of the supplier to know the material status of our part as it is communicated on the open order report. The material status will be communicated as follows:

- Active Parts – There will be a blank beside the part number on Forecast/Open Order Report
- "Phasing Out" – This will be stated beside the part number on Forecast/Open Order Report

Blanket Purchase Orders

Blanket Purchase Orders will be created by the YIA Purchasing Department. The Blanket Purchase Order Quantity is only an indication of the anticipated requirements for the length of time (usually one year). Releases from those Blanket Orders will come from the YIA Materials Department. Suppliers that receive a Blanket Order may have all of their active components on the Blanket Order. Each Line on the Blanket Order will be for a unique Part Number. The Materials Department will place releases to each Line (or Part Number) as needed and in accordance with the MRP and production requirements. Orders must be confirmed once a release has been scheduled or adjusted.

EDI

In an effort to reduce costs and increase efficiencies, Yokohama Industries Americas requires 100% of all production suppliers to be EDI compliant. This will enable suppliers to electronically receive material release documents and process and return advanced ship notices (ASN) in the desired EDI format (ANSI X12).

The EDI specifications for Yokohama Industries Americas Blanket Purchase Orders will reference the Suppliers requirement to adhere to this Supplier Requirements Manual unless agreed upon in writing by the Yokohama Industries Americas Purchasing Department.

SCHEDULING and ORDERS (cont)

Regular Purchase Orders

Regular Purchase Orders will contain PO Numbers and Lines that will come from YIA Materials Department. Regular Purchase Orders will usually include service items or items that are considered "Slow-Moving." Orders must be confirmed once an order has been scheduled and the supplier has been notified.

Purchase Orders will reference the Suppliers Requirement to adhere to this Supplier Requirements Manual unless agreed upon in writing by the Yokohama Industries Americas Purchasing Department.

Change Orders

In the event that a purchase order is changed for quantity, due date, price, etc. a "Revised" PO will be released and sent again to the supplier. The date of change will be noted in the PO Date. Changes must be confirmed once a change has been scheduled and the supplier has been notified.

Delivery Requirements

YIA Suppliers are required to meet 100% on-time delivery. To assist in achieving this goal, YIA Materials issues a weekly forecast and open order report as stated above for planning and scheduling purposes.

Corrective action (MTL-FM-0006) will be requested from any supplier that falls below 100% on-time delivery on a monthly basis.

Poor on-time delivery will be considered as a reason for exclusion from quoting new business as well as seeking new sources to supply existing items.

Failure to meet delivery requirements will result in premium freight costs charged to the supplier. (YIA Materials monitors premium freight.)

Suppliers must submit premium freight cost information to the Materials Department. YIA must receive this information in order to meet the requirement of ISO/TS16949 standard.

In the event of "persistent" poor delivery, the supplier may be required to submit their corrective action in person to YIA. YIA Materials Department will determine when such action is needed.

Requirements are considered to be "on-time" under the following conditions:

- ◆ Receipt one day prior to due date
- ◆ Receipt same day as due date
- ◆ Receipt one day after due date

PACKAGING GUIDELINES

Packaging

Component items shipped by the supplier to YIA must be received by YIA in good condition and free of damage and/or contamination. To help achieve that goal, the following packaging guidelines have been developed.

Packaged Quantity

Boxes and/or containers must be packaged in increments of 50 or 100 pieces each.

PACKAGING GUIDELINES (cont)

Corrugated Boxes

Box sizes are to be product specific. Box/container weight not to exceed 40 lbs. Corrugated boxes must be closed to prevent contamination. Only use clear tape. Use of staples is not allowed. Corrugated box capacity must allow for double stacking of boxes without damage or box crush failure. Corrugated boxes must not over hang the footprint of the pallet. Use of supplier logo or identification methods other than bar code labels is discouraged.

Pallet Size (Wood)

Pallet Sizes are confined to the following:

<u>Stringer</u>	<u>Deck Boards</u>
36"	36"
48"	45"
50"	42"
58"	42"

Pallets must contain the required number of deck boards to prevent material and/or boxes from falling through.

Pallet Type (Wood)

Pallets must be non-reversible. Preference is for all pallets to include four-way entry. Pallets must be sturdy to support the load. Pallets must be free of excessive dirt, oil, grease, or other contaminations. Pallets must not have visible damage to the stringers and/or deck boards. All pallets used for international transport must conform to the "Guidelines for Regulating Wood Packaging. Material in International Trade" (Reference ISPM 15, NIMP 15, NIMF 15).

Pallet Type (Returnable)

Use of returnable pallets will be considered. Pallet footprint size is limited to 48.5" x 45.5".

Returnable Containers

Returnable container weight is not to exceed 40 lbs.
Returnable containers must be "nestable". The following sizes are to be used:

Bulk Containers

Bulk containers must be "nestable" and/or collapsible. Container size is limited to:
48" x 45" x 24"
48" x 45" x 42"

LOAD STANDARDS

Load Heights

Load heights are not to exceed the following standards:

- Cardboard Boxes on wood pallets.....36"
- Returnable Containers on wood pallets.....48"
- Returnable Containers on returnable pallets....48"
- Bulk Returnable Containers.....48"







Load Security

All loads must be palletized to prevent damage or contamination. Palletized loads must be adequately secured by use of stretch wrap and/or non-metallic banding. Pallets must not be double stacked while in transit. Top caps or covers are required for all material packed in returnable containers and/or bulk containers.

LABELING AND IDENTIFICATION

Label Contents

Material must be identified by use of bar code labels. Label information must be submitted using the following format:

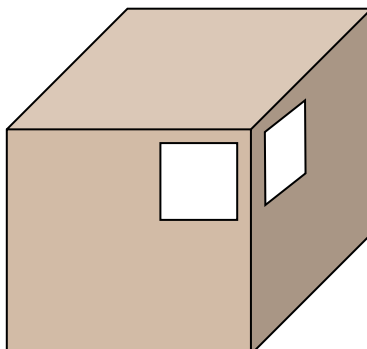
PART KYF1007- 19500 		REVISION A	LOT# L1234 
PO# P101505174 		DESCRIPTION DESCRIPTION	
LINE# 1 	VENDOR # V00000	QTY 300 	
RELEASE # 1 	SHIP DATE	FOR VENDOR USE	
VENDOR NAME & ADDRESS			

Label Format

The label shown is the format required for Yokohama Industries Americas scanning systems. Basic layout of items should be as shown. The following items also must be followed:

No leading indicators are to be used (ie. Q, P, V, etc. used as the first digit of the bar code). The lot number will be scanned for traceability of the supplier's goods. Make sure that whatever you need for traceability is placed in this field. No serial number is required. However, we understand that some suppliers also use this for traceability. Yokohama Industries Americas will NOT be scanning the serial number into our system and therefore, we will not be able to give this number back to you once the box has been discarded. The format type of the bar code itself should be 39. All purchase orders will contain multiple items under one purchase order number, listed as separate line numbers. Failure to comply with the labeling requirements will result in a NCR being written and a \$25 Service Charge to be debited your account for creation of a corrected label in order to properly receive the product into our system.

Labels must be located on two adjacent sides of each container.



LABELING AND IDENTIFICATION (cont)

Pallet "Master Label"

Each pallet of material must be identified with a "Master Label" and shall include the following data:

- Yokohama Industries Americas Part Number
- Yokohama Industries Americas PO Number
- Total Quantity for each item on the pallet
- Vendor Number

Any shipment that differs in any way from previous shipments as to packaging, labeling, revision levels, product specifications, or other aspects must be readily identifiable by a yellow tag minimum 75 x 125mm that specifies the exact differences. This is required for first shipment only of the revised product or packaging.

Note: Deviation from any of the preceding packaging requirements must be submitted on PUR-FM-0008. Photos of the requested deviation are requested.

Packaging material imported in to the U.S.A. must meet all standards as noted in the "International Standard for Phytosanitary Measures (ISPM)". Details of the ISPM standard can be found at the following:

Mail: IPPC Secretariat
Plant Protective Service
Food and Agriculture Organization of the United Nations (FAO)
Viale Delle Terme Di Caracalla
00100 Rome, Italy

Fax: +39-06-570.56347
e-mail: IPPC@FAO.org
Website: [HTTP://www.IPPC.int](http://www.IPPC.int)

MATERIAL DISCREPANCY

Receiving Discrepancy Report

YIA will closely monitor the accuracy of incoming shipments of material. Any error pertaining to the accuracy of YIA part number, purchase order number, or quantity will be reported back to the supplier via the Receiving Discrepancy Report (MTL-FM-0003).

The supplier must review this report and adjust the order status and invoice for the item in question.

Receiving Damage Notification

A Receiving Damage Notification (MTL-FM-0005) is used when YIA Receiving receives pallets and/or containers in which the material is packed are damaged.

YIA Receiving will submit a photo of the damage to the YIA QC Department.

YIA QC will release a Nonconforming Material Report (QCD-FM-0046b) for possible damage to material.

Vendor Returns

The Vendor Return (MTL-FM-0018) is used to ship nonconforming material back to the supplier. The Vendor Return is used in conjunction with the Nonconforming Material Report (NCR).

Supplier Routing Instructions

The Supplier Routing Instructions are the approved notification of the routing methods and carrier of material from the vendor to YIA. Deviation from these instructions must be approved in advance by YIA Materials.

YIA DISRUPTIONS

YIA will notify our supply base of any situation that has impacted our organization, regardless of origin (e.g. geopolitical, cybersecurity, organization, customer, supplier). The communication plan should cover identified/potential issues (e.g. unexpected plant stoppage, schedule changes with less than normal lead time, transportation, IT systems).

YIA SUPPLIER QUALITY DEPARTMENT

SUPPLIER MANAGEMENT

Audit Process

Potential Suppliers will be requested to submit to an audit of their facility at an agreed upon date. The audit will consist of the elements as listed on the Supplier Audit Form (SQA-FM-0001). The audit will consist of review in the following areas:

- Quality Planning
- Drawing and Change Control
- Gage Control and Calibration
- Product Identification and Traceability
- Process Control
- Inspection and Testing
- Control of Non-conforming Material
- Corrective Action
- Quality Records
- Internal Audits / Continuous Improvement

Total point value of the audit is 100 points. Supplier selection will be based on but not restricted to the following grade system:

100 to 90 Points	Supplier is recommended for sourcing
89 to 80 Points	Supplier is recommended for sourcing pending receipt of any open CAR's as a result of the audit
79 to 70 Points	Supplier is not recommended for sourcing. All open CAR's must be completed and a follow-up audit for verification and implementation is required.
69 to 0 Points	Supplier is not recommended for sourcing

The final decision for supplier source approval will be with the following:

- Purchasing Supervisor
- SQA
- Audit Results (SQA-FM-0001)

Quality Improvement Action Plan

A Quality Improvement Action Plan may be required based on needed improvement in either delivery and/or quality performance as referenced previously regarding Top 5, Top 10, or other critical performance rating. These plans may require on-site presentation to YIA SQA and other management representatives.

Quality Certificates: Approved Suppliers must provide an updated quality certificate upon expiration of the existing certificate.

Quality Rating System

Suppliers will be rated using two different criteria to determine their performance. The criteria include the number of NCR's written against the supplier, and Parts per Million Rating.

SUPPLIER MANAGEMENT (cont)

Supplier Development

YIA SQA is responsible for identifying, per the Quality Audit, areas where the supplier is required to develop. SQA is responsible for following up with the supplier to ensure proper developmental activities are occurring in a timely manner.

YIA SQA is responsible for issuing performance reports to all suppliers respective to incoming inspections, defect rates, supplier audit performance, PPM levels, etc.

This will be done on a quarterly basis. The focus will be On Time Delivery, Delivery incidents, PPM performance, and Quality incidents. There may be action requests for non-acceptable performance. This may be requested at any time and not on a quarterly basis.

YIA SQA is responsible for administering the supplier's quarterly performance report and following up with the supplier to ensure any required written corrective action responses are received in a timely manner.

Based on the Supplier Evaluation, the poorest performance record will be targeted for specific improvement and goal attainment against all criteria. When requested they are required to submit a written detailed action plan similar or equivalent to the YIA Supplier Action Plan (SQA-FM-0002).

Suppliers are strongly encouraged to pursue ISO/TS16949 certification. At minimum, suppliers shall be ISO9000/9001 certified. Suppliers without ISO certification will have additional requirements prior to being added to the Approved Supplier List.

Some suppliers may lack the resources needed to commit to an implementation of a formal quality system. These suppliers may request a waiver to be excluded from the ISO9001 or ISO/TS 16949 requirement.

The criteria for exemption to this requirement are as follows:

- Supplier Profile indicates "Small Business Concern" and/or
- Less than 50 employees and/or
- Less than \$10,000 in gross sales to YIA

SUPPLIER EVALUATION Quality and Delivery Performance

Yokohama Industries Americas has developed a Supplier Score Card to track supplier performance in the areas of Quality and Delivery. In an effort to improve communication, this evaluation will be provided to the supplier on a quarterly basis. The Supplier Score Card will be submitted no later than 15th of the month following the end of the prior quarter.

This information should assist the supplier in identifying problem areas and implementing necessary improvements. If required, the supplier may be notified of additional Action Plan Requirements to address poor performance.

Number of SNCR's

This indicates the total number of SNCR's written against a supplier for the entire month including any SNCR's for which points were not assessed.

PPM Ratings

Parts per million will be used to rate a supplier's performance. PPM will be calculated as follows:

The number of defects including any parts found to be scrap by Production or Quality, any parts that require rework before they can be used by Production, and any part that is returned as defective after being sorted at YIA divided by the quantity of parts received at YIA from a supplier times 1,000,000.

Defects that will not be applied to a supplier's PPM are as follows:

- Any parts that are determined to be USE AS IS on the NCR
- Any parts that have an approved Change/Deviation Request
- Any part that is returned to the supplier without sort or rework at YIA (to be sorted or replaced by supplier)

On-Time Delivery

Refer to YIA MATERIALS DEPARTMENT under SCHEDULING AND ORDERS for evaluation criteria.

QUALITY SYSTEMS

Purpose

The purpose of this section is to assist suppliers in achieving full compliance to YIA quality requirements. Each supplier should establish, implement, and maintain a documented quality system including, at minimum, the requirements listed in this section of the Supplier Manual.

On-Site Audit Requirements

YIA may require an on-site quality audit as part of the PPAP Evaluation and Approval Process. Whenever possible the audit is performed while the product is running. This requirement will be identified on the PPAP Request and appropriate arrangements will be made between the supplier and YIA SQA. This could include all or part of SQA-FM-0001.

Quality Planning

Quality Planning must utilize a team approach with emphasis on defect prevention and continuous improvement. Elements to be included in this process are:

- Design and Specification Review
- Process Flow Charts
- FMEAs
- Quality Control Process Chart
- Inspection Standards
- Performance Standards
- Launch Criteria (APQP, PPAP) using a gated process. This process will be sent to each supplier at the start of a launch. The SQE will track the status as the project progresses.

Drawing and Change Control

A documented system for drawing and change control must be maintained. The system should include the following elements:

- Review and approval of new or revised drawings and/or specifications by authorized personnel prior to use
- System for updating documents affected by changes or revisions
- System for removal of obsolete drawings and specs from points of use
- Master list or equivalent identifying revision status

Gage Control and Calibration

A documented system must be maintained for the routine calibration and maintenance of all gages, measurement devices, and test equipment at specified intervals to ensure continued accuracy.

Any production fixture, jig, or tool used for process control or to make product acceptance decisions must be maintained and documented in the same manner as any other gage.

All gages, measurement devices, or test equipment must be uniquely identified and indicate calibration status.

Calibration records and a calibration schedule must be maintained and available for periodic review.

QUALITY SYSTEMS (cont)

Product Identification and Traceability

Suppliers must have a documented procedure to provide positive identification of all materials throughout all stages of the process.

Suppliers must maintain a positive system for age control (FIFO).

Supplied parts, including components and raw materials, must be traceable to the supplier's receiving and manufacturing records.

Process Control

A documented system defining the procedures, methods, and documentation requirements for control of the manufacturing process must be maintained. This system must include:

- Work instructions for each operation
- Set-up verification
- Identification and handling of nonconforming material
- Application of statistical methods for critical characteristics
- Handling, Storage, and Packaging

Inspection and Testing

Suppliers must have procedures for and maintain records of all inspection and tests for the following items:

- Incoming parts and materials
- In-process inspection and testing
- Final inspection and testing
- Layout and functional testing

Additional inspections/containment may be required for product changes or new launches. This will be communicated to the supplier during the APQP process and supplier development stages.

Control of Non-Conforming Product

Suppliers must have a documented system for control of nonconforming products and materials. The system must include:

Positive identification of all nonconforming or suspect product or material
Segregation of all nonconforming or suspect material from the normal process flow
Defined responsibility for review and disposition of nonconforming and suspect product or material
Reworked products are re-inspected and/or tested for conformance to spec
Traceability

Corrective Action

Suppliers must have a documented corrective action system defining the methods and responsibilities for developing corrective action plans and implementing countermeasures to prevent recurrence. This system must include:

- Identification of root cause
- Containment Action
- Short Term corrective action
- Long Term corrective action
- Verification of effectiveness
- Timing or Containment (3rd Party)

QUALITY SYSTEMS (cont)

Corrective action response must be submitted on YIA form number SQA-FM-0006 for quality issues.
Corrective Actions related to late deliveries are to be submitted on form number MTL-FM-0006

Quality Records

Suppliers must maintain a system for control and retention of quality records for all products supplied to YIA for the active life of the product plus one calendar year. The records must be made available or copies furnished upon request for review by YIA.

Record retention requirements include:

- Drawing and Change control
- Gage and test equipment calibration
- Quality performance records indicating inspection and test results for all products shipped to YIA
- Material certifications

SUPPLIER NON-CONFORMING MATERIAL

Supplier Non-Conforming Material Discovered by YIA

YIA will issue a Nonconforming Material Report (SNCR) and normally return the defective material to the supplier at the supplier's expense. Maximum time allowed for completion of this process is 24 hours from the time of notification to the supplier. Return Material Authorization must be received by YIA within 24 hours or the material will be returned regardless.

Suppliers will be required to sort and/or rework discrepant material with the proper equipment (gages, fixtures, etc.) and proper attire (no shorts or open-toed shoes) within 12 hours of the initial rejection. YIA will sort only the quantity needed to support our immediate production needs.

Suppliers will be required to arrange for off-site third party sorting when deemed necessary by YIA SQA. YIA will not coordinate this activity but can provide local sources that provide this service.

YIA will charge the following rates for any sort/rework activity that we have to perform:

- \$75 per hour for normal working hours
- \$125 per hour for overtime working hours

A \$250 service charge will be assessed to all rejections. If this continues then a progressive charge will be applied. The next issue will be for \$500.00, the third \$750.00 and so on. This will be determined by the SQE as when to apply the progressive charges. Our intent is not to make money from non conformance, but drive quality assurance through low PPM and no repeat issues.

Suppliers are encouraged to provide "certified replacement" material when possible. Coordination of this activity must be done through the YIA Materials department.

"Certified Stock Tags" (SQA-FM-0012) must be completed and attached to each box of material sorted or reworked as the result of a NCR. This includes all material shipped until a corrective action is implemented and verified as effective.

All rework methods must be submitted to and approved by YIA SQA prior to the start of the rework process. Suppliers must submit this information on the Supplier Rework Method Approval Form (SQA-FM-0003).

Suppliers will not be allowed to sort any final assembly and/or finished goods.

Supplier Non-Conforming Material Report (SNCR)

If the supplier discovers non-conforming material has been shipped to YIA, the supplier must notify YIA SQA immediately and provide the following information:

- Part Numbers, Lot Numbers, and Quantities involved
- Shipment Dates
- Containment Action
- Temporary Countermeasure

YIA will issue a Nonconforming Material Report (QCD-FM-0046b) and return the defective material to the supplier at the supplier's expense.

Suppliers may be required to sort and/or rework discrepant parts at YIA when necessary to maintain production schedules.

Prompt response to YIA's need for replacement material, sorting, and/or rework is essential.

SUPPLIER NON-CONFORMING MATERIAL (cont)

Description of Information on SNCR

Supplier – Name of the company responsible for the nonconformance

Part Number - YIA's part number for the component having the nonconformance

Date Received - Date the suspect lot of material was received at YIA

Quantity Received - Actual quantity received in the lot of suspect material

PO Number - Purchase Order Number under which the suspect lot was received

Quantity Rejected - Total quantity of parts rejected

Problem Location - Where nonconformance was found

Problem Classification –

Critical: could result in field failure, field complaint, or assembly problem by YIA's customer, will affect fit, function, performance, or safety.

Major: could result in assembly problem at YIA, may affect performance or could result in rejection at YIA's customer, may require rework before use

Minor: does not affect fit, function, performance, or safety at YIA or at YIA's customer, no rework or sorting necessary

Problem Description - Brief description of nonconformance

Initial Disposition - Disposition of material with nonconformance

Use As Is: quantity determined to be useable without sort, rework, or replacement, may require Engineering Deviation

Return to Vendor: material determined to be unusable, to be returned to supplier for sort, rework, or replacement. The supplier has (5) five working days to coordinate disposition. If not determined within this time, YIA can choose to return (RMA) or scrap at the supplier's expense.

Sort/Repair: material to be sorted or reworked at YIA

QC Contact - Person at supplier that was contacted regarding nonconformance

QC Sign-off - YIA SQA personnel who handled disposition of material and contacted supplier

Final Disposition - Results of sort or rework at YIA

Use As Is: material determined to be useable as is by the sort

Return to Vendor: material determined to be unusable by the sort and is returned to supplier or supplier has not coordinated disposition within (5) five working days or the NCR origination

Reworked OK: material that was reworked to be usable

Scrap: material unusable that must be scrapped

Sort/Rework Time - Amount of time YIA personnel, or representatives spent quarantining, sorting, or reworking the nonconforming material that is charged to supplier

Corrective Action - If corrective action is requested, this section will identify CAR number and due date. Reference Corrective Action section of Supplier Manual

Material Disposition

When a defect is found, a SNCR is issued as previously defined in this manual. The immediate action is to contain all suspect material within the supply chain from the supplier to the end customer if needed. The first desire is to return all suspect material and immediately replace with 100%-certified material. Other possible alternatives are previously defined in greater detail.

The overall goal is to protect our customer(s) from defects and to minimize the overall cost incurred. This is to include financial recovery of all costs affecting YIA related to a specific occurrence of supplier defects.

SUPPLIER NON-CONFORMING MATERIAL (cont)

Financial Recovery

The areas of cost recoveries and debits are based on the following rates:

Loss of Production / Downtime
 \$75 per man-hour if straight time loss
 \$125 per man-hour if overtime loss
*Sort, Inspection, Repair ***
 \$75 per man-hour if straight time loss
 \$125 per man-hour if overtime loss
Scrap - \$ Cost of Inventory (Raw, WIP, FG)
Logistics and Freight - \$ Cost incurred by YIA
Travel and Expenses - \$ Cost incurred by YIA
YIA Customer Costs - \$ Cost incurred by YIA
Rejection Assessment Fee - \$ 250 per NCR rejection

** Unless performed directly by the supplier. Suppliers can only sort their raw material. Work in process or finished goods must be handled by YIA.

Financial recovery of all funds related to rejected material due to component s shall be the responsibility of the supplier.

CORRECTIVE ACTION REPORT

Request for Corrective Action

Suppliers are expected to develop and submit a Corrective Action Report (SQA-FM-0006 or similar format) due to the discovery of nonconforming material, customer complaint, shipping discrepancies, or other quality concerns.

A CAR is required when a Nonconforming Material Report (NCR) is issued. Immediate feedback as to containment is expected within 24 working hours. Final documented Corrective Action is due within 10 working days of NCR issue date unless otherwise requested on the NCR. Deviation from this can be approved only by YIA SQA or management personnel.

Content

The three steps of a CAR:

Step 1. Short term corrective action. This should be complete within 48 hours and consist of:

- Containment at YIA.
- Containment at supplier facility.
- Similar part consideration. Can defect appear across product line
- Clear identification of sorted material.
- Update corrective action form.
- Submit corrective action to YIA SQE.

Step 2. Long term corrective action and countermeasure . This should be submitted within 10 working days and should consist of:

- Define team
- 5 Why (Produced)
- 5 Why (shipped)
- Root cause (Why produced)
- Root cause (Why shipped)
- Countermeasure(s) (Why produced)
- Countermeasure(s) (Why shipped)
 - The date the countermeasure will be completed. NOTE: Due to circumstances such as not running the part in question, tool order, or other lead times the countermeasures DO NOT have to be completed with in 10 days but a firm date must be given, and the corrective submitted on time.
- Person responsible for completing each countermeasure.
- Submit corrective action to YIA SQE.

Step 3. Final corrective action start date. This should consist of:

- Updating ccountermeasures with completion dates.
- Updating the corrective action form with verification information.
- Updating the supporting documentation, (CP, FMEA, WI, etc.).
- Sign off.
- Submit Closed corrective action to YIA SQE.

If CAR's are not addressed in the timing listed within the context of the CAR, then your company can be placed on 3rd party containment.

Submission Requirements

Yokohama Industries Americas utilizes a 3 step process to resolve supplier performance issues (quality, delivery, etc).

Step 1 of the process is when the CAR is issued to the supplier. Unless otherwise specified, all CARs must be submitted to YIA SQA within ten (10) working days. All CARs must be attached to a copy of the NCR and/or reference the CAR control number indicated on the NCR, if applicable. If the CAR is not submitted on time or the issue is not resolved, the supplier will be elevated to step 2 in the process.

CORRECTIVE ACTION REPORT (cont)

In Step 2, the supplier will be required to present their corrective action at YIA to address issues not resolved at Step 1. The supplier may also be invited to a Step 2 meeting if they have had an issue that results in a production line stoppage, a complaint at Yokohama Industries Americas's customer, or is one of the poorest performing suppliers.

The supplier is expected to present the following at the Step 2 meeting:

1. Most recent quarterly supplier rating report.
2. Be prepared to explain any deficiencies in the supplier rating (Quality, Delivery, etc)
3. Be prepared to present an 8D that addresses your company's efforts to improve the systems that affected the areas with deficiencies.

The following personnel must attend the Step 2 Meeting:

1. Supplier Plant Manager
2. Supplier Quality Manager
3. Supplier Account Manager

If issues continue after a Step 2 Meeting has been held, the supplier will elevate to a Step 3 Meeting. Suppliers at Step 3 will be placed on No-Quote Status. YIA Purchasing will notify Executive Management of the delinquent supplier of such conditions. The supplier will remain on No-Quote Status until the Step 3

Meeting has been held and all actions agreed upon by both YIA and the supplier have been completed and validated to be effective.

For the Step 3 Meeting, the supplier shall come to YIA prepared to discuss the following:

1. Summary of events leading to Supplier's performance concerns
2. Summary of CAR for issue (s).
3. Preventive plans to address systemic root causes.
4. Strategic Improvement Plans

The following personnel must attend the Step 3 Meeting:

1. Supplier Plant Manager
2. Supplier Quality Manager
3. Supplier Account Manager
4. Executive Management Team of Supplier

PPAP SUBMISSION REQUIREMENTS

When Submission is Required

PPAP approval is required prior to the first production shipment. The only exception is PPAP, Pre-Production or Prototype orders required by YIA Purchasing prior to the first production shipment to support Line Trials, Tooling Trials or Equipment "Run-Off" prior to the PPAP run at YIA. Suppliers choosing to ship product other than PPAP, Pre-Production and Prototype requests without prior written approval from Yokohama Industries Americas will receive a corrective action.

PPAP will be required in the following situations:

- A new or changed part or product
- Correction of discrepancy on a previously submitted part or product
- Following an Engineering change to design, specification, tolerance, or material
- Annual Validation (part number specific) *
- Tooling idle for more than 12 months (excluding service parts)

** YIA will specify in writing those items that will require annual PPAP validation*

Suppliers must notify YIA and submit PPAP samples for approval prior to the first production shipment in the following situations unless this requirement is specifically waived in writing by YIA SQA:

- 1) Use of an optional construction or material other than what was used in the previously approved part.
- 2) Production from new or modified equipment or tooling (except perishable tools), dies, molds, patterns, etc., including additional or replacement equipment or tooling Production following a change in the manufacturing process, method.
- 3) Plant location Change of source for subcontracted parts, materials, or services (i.e. plating, heat treating, raw material, etc.).
- 4) To re-certify existing product due to a quality concern or re-certification requirement by a YIA customer Annual PPAP Submission.

Component suppliers are responsible for subcontracted material and services.

PPAP Request

PPAP request will be issued to the supplier when PPAP Approval is required. The request will include the 18 tab PPAP requirements for documentation. This is the only acceptable method for PPAP submission. Electronic PPAP submissions will be rejected.

Sample Requirements

Parts submitted for PPAP Approval must be taken from significant production run of at least 300 pieces unless otherwise stated by the YIA PPAP Purchase Order.

Unless otherwise specified on the PPAP Purchase Order, six samples or one sample from each fixture or cavity from a multiple station or multiple cavity die mold shall be measured, tested, and submitted for dimensional verification.

Each sample must be numbered to correspond to the data on the PPAP Sample Inspection Report (SQA-FM-0009).

Marked Drawings

All dimensions and notes on the drawing (excluding reference dimensions) must be numbered sequentially, circled in red, and correspond to the line items on the PPAP Sample Inspection Report.

PPAP SUBMISSION REQUIREMENTS (cont)

Dimensional Data Requirements

All dimensions and notes on the drawing (excluding reference dimensions) must be measured and recorded as variable data on the PPAP Sample Inspection Report for each sample. This data must correspond to the numbered samples from which they were taken **and submitted using Minitab statistical software.**

All data must be reported in the unit of measure shown on the drawing.

Dimensional data documents must include Yokohama Industries Americas's part number and engineering drawing change level.

Gage R & R Requirements

All gage R & Rs must be submitted using the ANOVA method. MSAs will not be accepted in any other format unless agreed in advance between Yokohama Industries Americas and the supplier. For more information on the ANOVA method, please refer to the AIAG MSA manual.

Material Certification Requirements

Material Certifications are required for all materials used to complete the product. The certification must show the comparison of the specification to the actual test results for chemical and physical properties.

Standard Certificates of Compliance are not acceptable.

Process Flow Requirements

A process flow chart must be included with each PPAP Sample Submission package unless otherwise noted on the PPAP Request. The chart must identify inspection points and routing for rework operations.

Process Flow Charts must include Yokohama Industries Americas's part number and engineering change level.

Control Plan Requirements

A control plan must be included with each PPAP Sample Submission package unless otherwise noted on the SIR Request. Reference Supplier Control Plan (SQA-FM-0011). Any changes to the control plan after PPAP Approval must be submitted to YIA SQA for approval.

Control Plans must include all critical dimensions (identified as ▼) and any other characteristics as identified on the PPAP Request.

Measurement System Analysis Studies (Gage R&R)

Critical dimensions (identified as ▼) must be included in the Gage R&R study.

Other characteristics identified on the PPAP Request as requiring a process capability study are also required to be included in the Gage R&R study.

Gage R&R documents must include Yokohama Industries Americas's part number and engineering change level.

PPAP SUBMISSION REQUIREMENTS (cont)

Process Capability Requirements

- Critical dimensions (identified as ▼) must have a process capability study.
- Other characteristics requiring a process capability study will be identified on the PPAP Request.
- All capability studies shall be performed using a minimum of 50 piece samples.
- Actual data from the 50 piece sample must be included with the capability summary.
- Minimum CpK of 1.67 is required for approval.
- Conflict with this requirement shall be handled between the supplier and YIA SQA.
- Process Capability Study documents must include Yokohama Industries Americas's part number and engineering drawing level change.

CQI assessments (including CQI-9, CQI-11 and CQI-12, CQI-15, CQI-17, CQI-23) shall be assessed annually. Each Assessment Validation Report must be submitted to YIA within 30 days of the assessment.

Any items identified as being "not satisfactory" or "needs immediate action" must be addressed in an action plan which contains root cause analysis and a risk containment action.

Special Requirements

Certain products or materials may require additional documentation, completion of engineering tests, qualification through YIA production process trials, or verification by YIA customers. When applicable, these special requirements will be identified on the PPAP Request and appropriate arrangements will be made between the supplier and YIA SQA.

PPAP Submission and Format

All PPAP Sample Submissions and documentation are to be sent to the Quality Department Secretary.

Each submission must include the appropriate documentation as required by the submission level indicated on the PPAP Request and the numbered product samples. Submission must be in a flat binder (Example: Office Depot Item# 934-331, Dark Blue). PPAPs may be submitted electronically if agreed to by Yokohama Industries Americas SQE in advance. All electronic submissions must be in the form of one scanned pdf file, with all documents in order by sections 1-18. Any sections that do not contain documentation must still have a one page placeholder scanned into the package (for example a page that says "Section 4. Design FMEA. Not Applicable")

The PPAP Submission shall be submitted on the referenced YIA forms or on the forms in the PPAP section of the AIAG manuals. Suppliers may use their own forms for the items listed below provided the reported information is the same as required on the YIA forms.

- Process Flow Chart
- Control Plan
- Process Capability
- Inspection Standard

For Material Certification, a copy of the actual mill certification or lab results are acceptable if the certification indicates the specification and the actual results obtained. A copy of the actual specification MUST be submitted as well.

PPAP SUBMISSION REQUIREMENTS (cont)

PPAP REQUIREMENTS FOR 18 TAB BINDERS

1. **DESIGN RECORDS** (YIA PART PRINT WITH ALL DIMENSIONS AND NOTES BALLOONED, **APPROVED** IMDS REPORT FROM YOKOHAMA INDUSTRIES AMERICAS “Point of View.” Search for part at IMDS website, click on preview, change “Point of View” to Yokohama Industries Americas, print .pdf file)
2. **ENGINEERING CHANGE DOCUMENTS** (COPY OF YIA PPAP REQUEST AND ANY APPROVED SRC)
3. **CUSTOMER ENGINEERING APPROVAL** (WHEN SPECIFIED BY YOKOHAMA INDUSTRIES AMERICAS ENGINEERING)
4. **DESIGN FMEA** (IF DESIGN FMEA DOES NOT APPLY TO THIS SUBMISSION, INSERT A FILLER SHEET WITH HEADING OF “DESIGN FMEA” DOES NOT APPLY)
5. **PROCESS FLOW DIAGRAM**
6. **PROCESS FMEA**
7. **CONTROL PLAN**
8. **MEASUREMENT SYSTEM ANALYSIS STUDIES** (MUST INCLUDE ALL MEASURING INSTRUMENTS, GAUGES, ETC THAT ARE SPECIFIED ON CONTROL PLAN)
9. **DIMENSIONAL RESULTS** (100% LAYOUT OF PPAP SAMPLES WITH NUMBERING THAT CORRESPOND TO BALLOONED DRAWING)
10. **RECORDS OF MATERIAL/PERFORMANCE TEST RESULTS** (RAW MATERIAL CERTIFICATIONS, SALT SPRAY TEST RESULTS, PLATING THICKNESS CERTIFICATIONS, ETC.)
11. **INITIAL PROCESS STUDIES** (PROCESS CAPABILITY STUDIES)
12. **QUALIFIED LABORATORY DOCUMENTATION** (COPY OF ALL QUALITY SYSTEM CERTIFICATIONS FOR ALL COMPANIES THAT PROVIDED MATERIAL, INSPECTION AND TESTING FOR THIS PPAP SUBMISSION)
13. **APPEARANCE APPROVAL REPORT** (IF NOT REQUIRED INSERT A FILLER SHEET WITH HEADING OF “APPEARANCE APPROVAL REPORT” DOES NOT APPLY)
14. **SAMPLE PRODUCTION PARTS** (INSERT A FILLER SHEET WITH HEADING “SAMPLE PRODUCTION PARTS” AND STATE HOW MANY SAMPLES WERE SUBMITTED)
15. **MASTER SAMPLE** (INSERT A FILLER SHEET WITH HEADING “MASTER SAMPLE” AND STATE “RETAINED AT SUPPLIER’S LOCATION, AVAILABLE UPON REQUEST.”)
16. **CHECKING AIDS** (MEASUREMENT SYSTEM ANALYSIS STUDIES, I.E. GAGE R&R FOR ALL OTHER FIXTURES, VARIABLE AND ATTRIBUTE GAGES, MODELS, TEMPLATES AND MYLAR OVERLAYS NOT LISTED ON THE CONTROL PLAN)
17. **CUSTOMER SPECIFIC REQUIREMENTS** (EXAMPLE: A COPY OF YOKOHAMA INDUSTRIES AMERICAS’S PLATING SPECIFICATION YES025). SUPPLIERS MUST SUBMIT A BARCODE BOX LABEL THAT MEETS THE REQUIREMENTS CALLED OUT IN THE “LABELING AND IDENTIFICATION” SECTION OF THIS MANUAL. IT MUST BE A SCANNABLE COPY SO IT CAN BE CHECKED FOR ACCURACY.
18. **PPAP WARRANT**

NOTE: DO NOT LEAVE ANY SECTION BLANK; ALWAYS INSERT A FILLER PAGE WITH SPECIFIC HEADING AND STATE “DOES NOT APPLY.”

PPAP APPROVAL PROCESS

Purpose

This section defines the requirements for production part approval (PPAP) for all supplied parts and materials to YIA. If there are any questions regarding the PPAP Process, contact the YIA SQA Engineer. Any deviation from the requirements of this PPAP Approval Process must be agreed upon in writing by YIA SQA.

Requirements needed to successfully complete the PPAP Approval Process shall be governed under the PPAP Manual, customer-specific requirements, and any other AIAG requirements.

PPAP Evaluation

YIA SQA will evaluate each PPAP Sample Submission to ensure it conforms to all necessary requirements. Results of this evaluation and disposition will be reported to the supplier using the PPAP Evaluation (SQA-FM-0008).

Disposition Criteria:

Approval – all elements of the PPAP Sample Submission criteria have been satisfied

Rejected – one or more elements of the PPAP Sample Submission criteria do not comply.

Conditional Approval – all PPAP Sample Submission criteria have been satisfied pending results from engineering tests, process trials, or YIA customer approval OR all criteria have been satisfied with only a small discrepancy.

Hold – all information or data is not available to give an actual disposition.

PPAP Sample Re-submission – Any PPAP Submission that is rejected or given conditional approval must be re-submitted in whole or in part as instructed on the PPAP Evaluation. Suppliers must contact YIA SQA to confirm the instructions and make arrangements for re-submission.

All PPAP's must be delivered on time with samples. The PPAP's must be completed with all documentation correct. Incomplete data such as but limited to, errors in PFMEA's, control plans, capability studies, will institute a 2nd request for updated documents or a re-submission of PPAP's. When the 2nd request goes out, there will be a \$250.00 charge. When a 3rd request goes out, this will escalate to \$500.00, and continue until the PPAP is correct. We are striving to have suppliers understand the product, processes, and controls they are responsible for to insure product integrity. This is the supplier's proof that they can produce the product to print specifications and will not have issues in the future with good controls. All suppliers are given a checklist of elements needed. You must follow the AIAG standards for PPAP documentation.

After all suppliers have submitted their PPAP's in the 18 tab AIAG format, annual validations will consist of the following:

- Updated Gage R&R's
- Material Certifications
- Inverted Deltas
- Capability on Critical Dimensions

Suppliers will be notified of when the validations are due.

PURCHASE ORDER TERMS and CONDITIONS

Please refer to “*YIA – Terms and Conditions of Purchase*” that can be found on our website at www.yokohamaia.com under Suppliers.