(ORG.) Company Limited

(ORG.) Suppliers Manual

Version 2.3

Address

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SECTION Ⅰ : Purchasing Policy

SOURCING POLICY

Apart from price and capability, the Supplier would satisfy and commit to meet the following requirements:

- ISO/TS16949:2002:2002 compliance or Approved Alternative Quality System Standards for instances VDA, ANFIA, FIEV, etc.
- Utilize Advanced Product Quality Planning (APQP) and Production Part Approval Process (PPAP)
- (ORG.) global terms and conditions
- 100% on time delivery performance
- Cost Reduction Program

SOURCING PROCEDURES

See the procedures in SECTION-Ⅲ .

SUPPLIER DEVELOPMENT

After the Supplier has been awarded business and confirmed by (org.) Purchasing, SDE and Material Control will work closely with supplier on quality system development and logistics concerns respectively.

AVL SUPPLIER CONTROL

Approved Vendor List (AVL) Supplier : *The Suppliers who have been selected to do business with (ORG.).*

Suppliers will be evaluated their performance on quality and delivery to verify their performance status for every during the last 3 months prior to the last complete month. (e.g., The May rating and status are based on performance for the months of January, February and March).

RE-SOURCING

Where unsatisfactory supplier quality performance has been denoted as “R” (Red) Supplier Status code for more than 3 consecutive months will be considered as candidates for re-sourcing. The replacement source would be selected by developing a market test.

MARKET TEST

Purchasing will develop a market test by given new sources a market test package which may contain Engineering Specifications, component/subsystem component prints (where appropriated), and explains guidelines.
The replacement source selection is determined from a competitive market test among multiple outside sources.

PROCEDURE FOR HANDLING CONFIDENTIAL INFORMATION OF SOURCING

During the time supplier is dealing business with (ORG.), (ORG.) and Supplier agree that where it is necessary for either (ORG.) or Supplier to disclose its proprietary and confidential information to the other, the following rules will apply to the parties:

1. A Party which receives such information from the other Party shall have a duty to protect only that information which is (a) disclosed to it in writing or as a tangible item and is marked as confidential at the time of receipt, or (b) disclosed to it in any other manner, is identified as confidential at the time of receipt and is also detailed and designated as confidential in a written memorandum delivered, within thirty (30) days of the first disclosure, to the receiving Party's representative designated for this purpose.

2. A Party which receives confidential information from the other Party shall use a reasonable degree of care, that is at least equal to the degree of care it uses to protect its own confidential information of a like kind and nature from disclosure to third parties, to protect the received confidential information from being disclosed to any third party without the express written permission of the other Party. This obligation shall continue for a period of four (4) years from the date of this Agreement or until (ORG.) commences production of products which incorporate the subject of a program, whichever first occurs. This obligation shall be replaced and superseded by the confidentiality obligations contained in any Purchase and Supply Agreement issued pursuant to this Agreement.

3. A Party which receives information under this Program from the other Party has no obligation to protect information which (a) was in the receiving Party's possession before receipt from the other Party; (b) becomes a matter of public knowledge through no fault of the receiving Party; (c) is rightfully received by the receiving Party from a rightfully possessing third party without a duty of confidentiality; (d) is disclosed by the other Party to a third party without a duty of confidentiality on the third party; (e) is disclosed under operation of law; or (f) is independently developed by the receiving Party's personnel who have not had access to the information designated as confidential by the other Party, and is provable by competent evidence.

SECTION II : (ORG.) Supplier Quality Rating (SQR)

II.1 Supplier Quality Rating (SQR) System

Purpose:

The purpose of this procedure is to document the actions required to monitor the quality performance of suppliers of production parts and provide objective quality ratings for all active (ORG.) production part suppliers.

Definitions:

- SQR: Supplier Quality Rating system - Online reporting system about supplier's Quality performance during the last 3 months prior to the last complete month. (e.g., The May rating and Status are based on performance for the months of January, February and March) that is available for (ORG.) personnel. The suppliers will receive the rating report from (ORG.) SDE in letter on a monthly basis.
- AIAG: Automotive Industry Action Group .
- VDA: Verband der Auto mobilindustrie (German National Standards Organization)
- ISO: International Standards Organization (Independent National Standards Organization)
- FIEV: Federaton des Industries des Equipments pour Vehicules (French National Standards Organization)
- ANFIA: Associazione Nazionale Fra Industrie Automobilisch (Italian National Standards Organization)

References:

- AIAG, ISO/TS16949:2002 Quality Systems Technical Specification
- AIAG, Quality System Requirements (QS9000)
- AIAG, Quality System Assessment (QSA)
- VDA German Quality System Standard (VDA 6)
- ISO 9000 Quality Systems Standard
- EAQF French Quality Standard
- AVSQ Italian Quality Standard

Procedure:

The Supplier Quality Performance Rating (100 Point Maximum Value as denoted by the total of the **Bold** values shown in each Rating Element) as defined by this procedure is calculated on a monthly basis for all active (ORG.) external production part suppliers and is based on the following objective criteria:

1. **Quality Performance Data** - 60 Points Maximum from the following 3 Rating Elements

   1.1. Parts Per Million (PPM) Performance (Last 3 Months) Rating Element
   [Rating Point Maximum = 25]

   1.1.1 PPM Performance:

$$\frac{\text{Total Parts Returned/Scrapped + Total Parts Reworked during Last 3 Months}}{\text{Total Parts Received during Last 3 Months}} \times 1{,}000{,}000$$

   Parts Returned/Scrapped : The number of parts returned and scrapped for MRR codes of FF, MN and NP.
   Parts Reworked : The number of parts reworked at (ORG.) and entered into (ORG.) Material Rejection Report (MRR) system
   Parts Received : The quantity of parts received at the (ORG.) location.

1.1.2 Rating Points are awarded per Supplier Rating data for the Last 3 Months as follows:

PPM Range	Points Awarded
Zero	25
1 thru 60	20
61 thru 200	15
201 thru 500	10
GT 500	0

1.2 Quality Rejection (QR) Performance (Last 3 Months) Rating Element
[Rating Point Maximum = 25]

1.2.1 QR Performance - Number of QRs issued against a supplier code during the Last 3 Months that affect PPM performance (coded as NP (not to print), FF (fit or function) or MN (miscellaneous non-conformance).

1.2.2 Rating Points are awarded per Supplier Rating data for the Last 3 Months as follows:

QR Count	Points Awarded
Zero	25
1	20
2	15
3	10
4 or More	0

1.3 Significant Quality Event (Last 3 Months) Rating Element
[Rating Point Maximum = 10]

1.3.1 Significant Quality Event: Recall, Owner Notification, Warranty or Line/Plant shut down issues that ,are directly attributable to the unacceptable quality of the parts supplied by a specific supplier location.

1.3.1.1 Staff STA will input rating adjustment upon notification by the assigned STA Engineer or Manager that their assigned supplier was responsible for a Significant Quality Event during a specified month.

1.3.2 Rating Points are awarded per Supplier Rating data for the next 3 Months is follows:

Number of Events	Points Awarded
Zero	10
1 or more	0

2. Quality Systems Data - 40 Points Maximum from the following Q Rating Elements

2.1 Quality System Status Rating Element
[Rating Point Maximum = 20]

2.1.1 TS 16949:2002:2002 Status: International Quality System Requirements for Automotive suppliers as defined by the current version of AIAG's ISO/TS16949:2002:2002 Technical Specification as prepared by the International Automotive Task Force (IATF).

Assessment Code and Explanation	Points Awarded
R (Current) = Third Party Registered (Date is less than 3 years old)	20
R (Not-Current) = Third Party Registered (Date is 3 years or older)	15
S (Current) = Self Evaluated (Date is less than 3 years old)	15
S (Not-Current) = Self Evaluated (Date is 3 years or older)	10
0 (Current) = Open, Registration or Self Evaluation in Process (Date is less than 1 year old)	4
Blank = Status Unknown	0

2.1.2 QS 9000 Status: Automotive Industry Quality System Requirements and Assessment as defined by the current versions of AIAG 's QS9000 and Quality System Assessment (QSA) Manuals respectively.

Assessment Code and Explanation	Points Awarded
R (Current) = Third Party Registered (Date is less than 3 years old)	15
R (Not-Current) = Third Party Registered (Date is 3 years or older)	10
S (Current) = Self Evaluated (Date is less than 3 years old)	10
S (Not-Current) = Self Evaluated (Date is 3 years or older)	5
0 (Current) = Open, Registration or Self Evaluation in Process (Date is less than 1 year old)	3
Blank = Status Unknown	0

2.1.3 VDA 6.0 Status: Quality System Requirements for German Automotive suppliers as defined by the current version of VDA 6.0 as prepared by the German Verband der Automobilindustrie (VDA) Qualitatsmangpment Center (QMC).

Assessment Code and Explanation	Points Awarded
R (Current) = Third Party Registered (Date is less than 3 years old)	15
R (Not-Current) = Third Party Registered (Date is 3 years or older)	10
S (Current) = Self Evaluated (Date is less than 3 years old)	10
S (Not-Current) = Self Evaluated (Date is 3 years or older)	5
0 (Current) = Open, Registration or Self Evaluation in Process (Date is less than 1 year old)	3
Blank = Status Unknown	0

2.1.4 ISO 9000 Status: International Quality System Requirements as defined by the current version of the ISO9000 Manual.

Assessment Code and Explanation	Points Awarded
R (Current) = Third Party Registered (Date is less than 3 years old)	10
R (Not-Current) = Third Party Registered (Date is 3 years or older)	5
S (Current) = Self Evaluated (Date is less than 3 years old)	5
S (Not-Current) = Self Evaluated (Date is 3 years or older)	3
0 (Current) = Open, Registration or Self Evaluation in Process (Date is less than 1 year old)	2
Blank = Status Unknown	0

2.1.5 Other Status: System Requirements as defined by the current version of Specific Country Standards such as the French EAQF and the Italian AVSQ Standards.

Assessment Code and Explanation	Points Awarded
R (Current) = Third Party Registered (Date is less than 3 years old)	10
R (Not-Current) = Third Party Registered (Date is 3 years or older)	5
S (Current) = Self Evaluated (Date is less than 3 years old)	5
S (Not-Current) = Self Evaluated (Date is 3 years or older)	2
0 (Current) = Open, Registration or Self Evaluation in Process (Date is less than 1 year old)	2
Blank = Status Unknown	0

2.2 BOS Status Rating Element

[Rating Point Maximum = 10]

BOS Status: Business Operating System status as defined by (ORG.) Quality Operating System Assessment Form dated June 29, 2007

BOS Assessment	Points Awarded
P(Current) = Passed, Meets All BOS Requirements (Date is less than 1 year old)	10
P (Not-Current) = Passed, Meets All BOS Requirements (Date is 1 year or older)	5
F(Current) = Failed, Does not meet All BOS Requirements (Date is less than 1 year old)	5
F(Not Current) = Failed, Does not meet All BOS Requirements (Date is 1 year old or older)	2
N or Blank = Status Unknown/Not Planned	0

2.3 Production Part Approval Process (PPAP) Level Rating Element

[Rating Point Maximum = 5]

Production Part Approval Process (PPAP) Level : PPAP and PSW requirements and details are defined by the latest released version of the AIAG PPAP manual.

PPAP level is determined by the STA Engineer who is responsible for a given supplier location.

PPAP Level and Explanation	Points Awarded
1 = Warrant only, Self Verified. Submitted to the Customer.	5
2 = Warrant, Samples and Limited Supporting Data. Submitted to the Customer.	4
3 = Warrant, Samples and Complete Supporting Data. Submitted to the Customer.	2
4 = Warrant and Specific Requirements as Defined by the Customer. (Default Level)	3
5 = Warrant, Samples and Complete Supporting Data to be Reviewed at the Suppliers Mfg. location	1

2.4 Part Submission Warrant (PSW) Slippage (last 3 Months) Rating Element Rating

[Point Maximum = 5]

PSW Slippages: The number off PSWs submitted during the rating period that did not meet the promised PSW timing and that were verified to be the supplier's fault.

Number of Slippages	Points Awarded
Zero	5
1 or More	0

Supplier must not cause Launch concerns of new model programs. Launch concerns are rejects or late deliveries that happened in the period from Job #1 (start of mass production) plus 3 month which affected (ORG.) new model launch into the market.

II.2 Preferred Supplier Status Performance Rating

Purpose:

The purpose defines the ***Preferred Supplier*** Status process for all active (ORG.) production part suppliers.

Definitions:

SQR: Supplier Quality Rating system - Online supplier quality reporting system that is available to for (ORG.) personnel

Procedure:

Preferred Supplier Status is determined by the Supplier site's current Supplier Quality Rating that is based on the site's Quality performance during the last 3 months prior to the last complete month. (e.g., The May rating and Status are based on performance for the months of January, February and March).

This G/Y/R rating is used in (ORG.) purchasing decisions and is made available on (ORG.) online system and distributed to (ORG.)'s suppliers by Supplier Quality Rating letter on a monthly basis.

1. ***Preferred Supplier*** Status Defined

   - Current Supplier Rating is at Preferred level. Therefore, site is a Preferred Supplier location.
   - Preferred Status is Supplier Rating equal to or greater than 70 and show as "G" (Green) on the SQR system.
   - Supplier sites with Status Code = "G" have no sourcing restrictions.

2. ***Non-Preferred Supplier*** Status Defined

   - Current Supplier Rating is NOT at Preferred level. Deviation for additional sourcing approval is required.
   - Non-Preferred Status = Supplier designations:

     "Y" (Yellow) on SQR system = Ratings of 50 thru 69.

     "R" (Red) on SQR system = Rating less than 50.

   - Supplier sites with an "Y" and "R" Status code should be placed on the "No-Quote" list *(see SECTION III.3 - Process for Placing a Supplier on the "No-Quote" list)*, and must have a Non-Preferred Sourcing Approval Request form for approved prior to authorizing additional sourcing.
   - Supplier sites with "R" status code for more than 3 consecutive months should be considered as candidates for resourcing.

3. Other Supplier Status Definition

- When a Preferred or Non-Preferred Status can not be determined as noted above for a Supplier site, the site Status shall be designated by one of the following codes by the assigned STA until this site has shipped sufficient product to receive the SQR score.

  - " " or Blank = The status of this site is unknown.
  - "N" or New = This site is new to (ORG.) and sufficient product has yet to be shipped. This code is assigned to a supplier manufacturing site when (ORG.) Purchasing set up the new site in SQR system. The "N" code will be replaced by the appropriate G/Y/R Status code when a Supplier Quality Rating is generated.

SECTION III : Purchasing Procedures

III.1 Sourcing to a *Non-Preferred* Supplier

To ensure the quality of incoming product when (ORG.) sources business to a *Non-Preferred* Supplier manufacturing site, (ORG.) Purchasing shall implement the following actions:

1. If a Buyer wishes to source business to a Non-Preferred Supplier manufacturing location, it is the Buyer's responsibility to obtain a signed off “Non-Preferred Sourcing Approval Request” for the selected supplier manufacturing location.

2. The "Non-Preferred Sourcing Approval Request" is initiated by the Buyer, completed in conjunction with the (ORG.) SDE and signed by the appropriate additional authorities prior to awarding (org.) business to the supplier manufacturing location. Specific instructions for completing the request as well as appropriate authorities are provided on the form. The approved request and related backup documents are retained by the Buyer with other sourcing documents.

III.2 Sourcing to a *New* Supplier

Definitions:

"New Supplier” is defined as a manufacturing site that has had no shipping history to (ORG.) manufacturing plants within the last 24 months.

Procedure:

Purchasing in conjunction with the appropriate activities, identify the need for a new suppliers to be considered as possible additions to the (ORG.) supply base and requests (ORG.) SDE Manager to assign the appropriate responsible (ORG.) SDE who will be responsible for the supplier's development.

Commercial Evaluation

- The appropriate purchasing team (e.g. Buyer, SDE, Process Engineer, etc) will initiate a Commercial Evaluation of the suppliers by sending a survey form to suppliers.

- The potential supplier's responses shall be reviewed by the relevant team that initiated the evaluation. The specific content of the evaluation should satisfy the requirements of the team. The team will decide whether to proceed with an on-site evaluation of the supplier, or to cancel any further activity with that supplier.

On-site evaluation of new suppliers:

- The purchasing team will evaluate the potential new supplier with an On-site Evaluation. Typically, the New Supplier Rating Survey, will be used. This survey consists of 50 questions, scored at 0, 1 or 2 points per question plus comments.

- The overall score of the survey and the current quality system status of the supplier will result in a G/Y/R allocation according to the matrix below:

Survey Score	Does the supplier hold third party registration to an appropriate quality system?	
	YES	NO
70 and above	G	Y
50 - 69	Y	Y
49 or less	R	R
Less than 50% score in each section	R	R

"G" (Green):
The supplier is rated "G" if an minimum initial Rating/Score of 70 is achieved on the New Supplier Quality Rating Survey and the supplier is third party registered to either ISO/TS 16949:2002:2002 , QS9000 or VDA 6.1.

Sourcing can proceed.

"Y" (Yellow):
The supplier is rated "Y" if an initial Rating/Score of between 50 and 69 is achieved on the New Supplier Quality Rating Survey or if the Score is 70 or above but the suppliers does not hold third part; certification to ISO/TS 16949:2002:2002, QS9000, VDA 6.1 or an equivalent and acceptable national standard.

Sourcing can proceed with supplier commitment and work plan that address the deficiencies of the survey.

"R" (Red):
The supplier is rated "R" if an initial Rating/Score of less than 50 is achieved on the New Supplier Quality Rating Survey **or if the total score in any of the 10 sections of the New Supplier Quality Rating Survey is less than 50% of the sections value** or if the supplier will not commit to attaining the appropriate Quality System within 24 months of initial sourcing.

Sourcing, although not recommended, can proceed only with (ORG.) Management's concurrence.

- If the supplier already holds third party certification to QS9000 or VDA 6.1, the requirement for ISO/TS 16949:2002 may be waived. If the supplier is already in the process of achieving QS9000 or VDA 6.1, the STA engineer shall decide whether the supplier is far enough advanced to waive the requirement to commit to ISO/TS 16949:2002.

- (ORG.) Purchasing will set up the new supplier manufacturing site in Supplier Quality Rating (SQR) system. "N" or New is an assigned code for this supplier. The "N" code will be replaced by the appropriate G/Y/R Status code when SQR is generated.

- (ORG.) SDE will enter the score to the new supplier database where the supplier's numerical and G/Y/R Ratings will be automatically fed into SQR system.

- The supplier shall be designated as a "New Supplier" until the initial 24 months from initial sourcing has elapsed, or until three consecutive months shipments have been received by a (ORG.) plant (which will result in an ongoing Supplier Quality Rating being generated in On line system), whichever occurs first.

- The method of ensuring quality product from the supplier shall be facilitated by assigning all new suppliers to PPAP level 4 or 5 status, and will be required to perform APQP in accordance with AIAG reference manual.

NOTE: If the proposed supplier site is being sourced because of external customer requirements or other compelling business reasons then sourcing, can process only with (ORG.) Management's concurrence on a Non-Preferred Sourcing Approval Request which is initiated by the buyer.

III.3 Process for Placing a Supplier on the "No-Quote" list

Purpose:

The purpose of this list is to assist Purchasing and others in preventing an inadvertent award of business to a supplier who has major outstanding issues. The list is posted on the internal Supply website for easy access.

Procedure:

- This list is used for suppliers who should not be quoted for new business and are on probation because they have not corrected a significant issue between the companies.

  Examples:
  - Suppliers who refuse to submit site quality assessment result/report
  - Suppliers who have chronic quality, delivery or cost issues, etc.

- The list is maintained on the (ORG.) Supply Base web so that buyers and management can have easy access to the information.

- (ORG.) Purchasing will nominate a supplier for the "No-Quote" List and will send the company name and parent company name to (ORG.) Purchasing Manager.

- Purchasing Manager will discuss the supplier case with (ORG.) Management. If approved, (ORG.) Purchasing posts the supplier on the supply website.

- The subsidiary or parent company will be consider whether should be listed for "No Quote".

- The supplier can be removed from the list by implementing and submitting corrective actions to (ORG.) Purchasing Manager. (ORG.) Management will reviewed and consider for the effectiveness and supplier's commitment.

SECTION IV : Cost Reduction (CR) Program

In order to support our customers requirements and ensure our ongoing competitiveness, (ORG.) requires suppliers to participate in our Cost Reduction Program. This program considers all ideas that relate to products/part design, materials, manufacturing, logistics and other areas that impact cost.

Cost Reduction ideas may be generated from :

- Productivity Improvements
- Value Analysis (VA) actions with regards pricing.
- Value Engineering (VE) actions with regards engineering.

(ORG.) purchases productivity of supplier and then expect to see supplier improvement on productivity which reflect to cost down. Therefore, (ORG.) Purchasing will send a Cost Reduction Request, including cost reduction target to supplier annually. The effective date will be measured by (ORG.) Purchasing. The supplier is requested to respond that request within 2 weeks; however, supplier can request for extension of response time if agreed by (ORG.) Purchasing.

Furthermore, during the production year supplier will be requested to propose VA/VE idea to improve productivity which return low cost competitiveness. (ORG.) will present supplier VA/VE proposal to (ORG.) customer for approval.

The effective date of agreed price and MRD which has been outcome by Cost Reduction Program (Productivity Improvements, or VA/VE) will be confirmed by (ORG.) Purchasing.

To implement the Cost Reduction Program, strict coordination between (ORG.) Purchasing, the supplier, and end customer will be indispensable in order to achieve the target. All supplier ideas for cost reduction will be very welcomed.

SECTION V : Quality System Requirements

This attachment is a part of (ORG.) Global Terms and Conditions. It is subject to the respect of the goal of (ORG.) supplier base on TS/ISO-16949:2002 requirement.

The supplier must bear responsibility for quality assurance of all part/product delivered to (ORG.). That is, the supplier must guarantee that delivered part/product conform to the quality specifications stipulated by (ORG.). The supplier is also expected to provide evidence of such conformance. Accordingly, the supplier has the responsibility to establish and maintain its own quality assurance system through implementation of the following measures included in ISO/TS-16949:2002.

- Establish and promote a Quality Assurance system based on consistent quality policies and quality goals.
- Incorporate the use of Design FMEA, Quality Function Deployment activities and adequate Design Validation Testing to ensure design requirements are met during development.
- Establish a manufacturing process control system utilizing Process FMEA that enables Parts Per Million (PPM) control and ensures 100% quality compliance.
- Ensure that the quality of subcontracted part/product meets (ORG.)'s quality requirements. To this end, suppliers must clearly indicate the required specifications, and provide guidance to their subcontractors regarding how to satisfy (ORG.)'s quality control requirements.
- Verify and calibrate test equipment; to this end, supplier must perform periodic accuracy inspections of test and measurement equipment.
- Establish and uphold preventative maintenance systems for all manufacturing and test equipment.
- Promote in-house standards for development, production, inspection, and shipment activities.
- Conduct accumulations and effective use of quality data for nonconformance prevention and continuous improvement.
- Promote quality control training throughout the company to ensure all employee understand and adhere to (ORG.)'s quality standard for supplier expectations.
- Detect and resolve quality issues utilizing internal auditing techniques.

Supplier who has been selected by (ORG.) Limited must to comply with the requirements defined in this manual.

V.1. Quality System Standard

(ORG.) performs supplier quality system development using ISO/TS 16949:2002 as the recommendation.

Quality System Standard(s) – Preferred Level;

- The preferred supplier quality system requirement is third party certification to ISO/TS 16949:2002.
- Third party certification to QS9000 or VDA 6.1 are acceptable next best desirable alternatives.
- Third party certification to ISO9000 or specific country system requirements (e.g., the French EAQF an the Italian ANFIA) are acceptable least desirable alternatives.
- Supplier that do not have a quality system third party certified to these systems can be sourced providing a commitment is made to achieve the agreed upon appropriate system within 24 months of initial sourcing.

- (ORG.) SDE Engineers are responsible for regularly monitoring the Quality System Standard(s) status via Supplier Quality Rating System for their assigned supplier locations.
- Suppliers are responsible for ensuring that the Quality System Standard(s) status and date(s) are shown correctly in (ORG.) Supplier Quality Rating letter that will be received every month from (ORG.) SDE.

- Quality System Standard(s) status will appear in the (ORG.) Supplier Quality Rating as one of the following codes:

"R" = Registered by a 3rd party, meets all requirements of standard.
"S" = Self-evaluated meets all requirements of standard.
"O" = Open - 3'd party registration or self-evaluation in process, discrepancies need to be corrected
" " = Blank, status is unknown and has not been reported by the supplier.

V.2. Quality System Assessment (QSA)

- The supplier who conduct self-assessment must use ISO/TS-16949:2002:2002 QSA or QS-9000 QSA Booklet. This self-assessment result shall be submitted to (ORG.) SDE with action plans for non-conformances.

- (ORG.) SDE will conduct reviews and at it's discretion request evidence or call for an on-site audit by (ORG.) SDE.

  Focused on:
  - Supplier's quality manual
  - Supporting procedures
  - Supplier's self assessment per (QSA)
  - Internal audit results by each department

- The suppliers that are certified by third party registration body are exempt of the above requirements. However, a copy of the certification, Assessment Recommendation letters and assessment result of surveillance audit is requested to submit to (ORG.) SDE. A copy of corrective actions is requested to send to (ORG.) SDE as well.

V.3. BOS (Business Operating System) Requirements

- BOS is a systematic, disciplined approach that uses standardized tools and practices to manage business and achieve ever-increasing levels of customer satisfaction through continual process improvement.

- Supplier will be required to implement and develop a BOS to measure their ability to meet customer expectations regarding quality, cost and delivery, and performance of their processes **monthly** by using the following processes:

  - Identify what customer expects.
  - Identify key processes that deliver customer expectations.
  - Select measurables that predict and verify the ability of key processes to deliver customer expectations.
  - Establish a BOS team to apply structured problem solving when measurables indicate a problem.

- When suppliers implement a Business Operating System methodology or equivalent process on a regular schedule, they are requested to do assessment.

- (ORG.) BOS Assessment Checklist shall be used by supplier management to evaluate effectiveness of the process. (ORG.) SDE and supplier must determine schedule of joint reviews of supplier's BOS.

V.4. Suppliers On-site Audit

- (ORG.) SDE may conduct supplier on-site audit to verify supplier's quality system, process and product evaluation at the supplier's location and facilitate the business relationship with the supplier. This may includes:

  - Discussing and resolving engineering issues with (ORG.)
  - Resolving delivery discrepancies.
  - Detecting and resolving quality problems.
  - Determining manufacturing problems and implementing solutions to resolve those problems.

- (ORG.) SDE and (ORG.) SDE Manager are responsible to determine the need of supplier on-site audit based on following situations:

  - Supplier Quality Performance Rating (PPM, MRR, Significant Quality Event)
  - Changing of Preferred Supplier Status
  - Becoming a candidate in No-Quote List
  - Result of Quality System Standard audit
  - Recurrence of quality concern
  - Evaluation of corrective and preventive action effectiveness

- Audit schedule, scope and purpose will be notified to the supplier in advance by (ORG.) SDE.

V.5. APQP (Advanced Product Quality Planning)

- Suppliers are required to implement Advance Product Quality Planning (APQP) processes as defined in AIAG reference manual and use APQP documents for all new parts or new processes.

- (ORG.) purchasing will notify supplier of generic APQP requirements when orders are placed for prototype and/or production parts.

- Although APQP is the responsibility of suppliers, (ORG.) SDE and engineering involvement may be required due to the critical or complex nature of parts or due to the level of supplier's quality expertise and performance. This will be the decision of (ORG.) SDE Manager or appropriate team.

- As required, *the assigned* (ORG.) SDE Engineer will initiate a visit to the supply source to review planning implementation and responsible for managing or assisting APQP progress.

- Suppliers shall use a Cross Functional Team (CFT) for the quality planning and APQP process that will assist suppliers with prototyping, quality benchmarking, critical and significant characteristics (CC/SC's) identification, Percentage of Inspection points which Satisfy the Tolerance (PIST), and Percent of Indices which are Process Capable (PIPC).

- Advance Product Quality Planning (APQP) Status Report (Form No. (ORG.)-F-6.2-002) is a required document to be used as a quality planning tool for managing the new part/product manufacturing to (ORG.). This report shall be prepared by suppliers to describe plan and schedule to achieve (ORG.) quality program timing and specifications of design drawing and engineering specification.

- Suppliers are responsible for reporting and submit the APQP Status Report to (ORG.) SDE no later than one (1) month after receiving business award notice of the order. And the report must be updated whenever the status of any element contained within the report changes and be resubmitted monthly bases until PSW approval is accepted. The APQP Status Report shall be reviewed and signed off by supplier's QMR or Plant Manager prior to submit to (ORG.) SDE. See APQP Status Reporting Guidelines in SECTION VI.

- Suppliers must develop the necessary standards to conduct progress evaluations according to the APQP Status Report. The progress of these activities will be monitored and reported directly to (ORG.) SDE by the Supplier's APQP team. The APQP team members should also periodically update the APQP Status Report to ensure program timing concerns are resolved before designated date, then submit to (ORG.) SDE as required above.

- The requirement results items (Inspection Standards, Control Plan, Process Capability Study, Part Submission Warrant, etc.) must be submitted to (ORG.) SDE. Additional items must also be submitted by (ORG.)'s requests. Refer to APQP reference manual of AIAG.

- Supplier shall consolidate all APQP documents in a composite binder and retain at appropriate location, and make readily available when (ORG.) request.

V.6. Production Part Approval Process (PPAP)

- PPAP is one of the quality planning process for all new parts or new processes. It is a process to determine if all customer engineering design record and specification requirements are properly understood by the supplier and that the process has the potential to produce product consistently meeting these requirements during an actual production run at the quoted production rate.

- Suppliers are required to follow Production Part Approval Process (PPAP) processes as defined in AIAG reference manual and use PPAP documents for (ORG.) SDE to assure that the new process or the new part/product produced for Mass Production processes meets (ORG.) requirements in a stable and effective manner.

- Suppliers shall submit PPAP items and/or records specified in PPAP reference manual of AIAG to (ORG.) SDE by the submission level as requested by (ORG.).

- PPAP Submission Levels are;

  Level 1 : Warrant only, Self Verified. Submitted to the Customer.
  Level 2 : Warrant, Samples and Limited Supporting Data. Submitted to the Customer.
  Level 3 : Warrant, Samples and Complete Supporting Data. Submitted to the Customer.
  Level 4 : Warrant and Specific Requirements as Defined by the Customer. **(Default Level)**
  Level 5 : Warrant, Samples and Complete Supporting Data to be Reviewed at suppliers location

  Preferred suppliers are normally assigned PPAP Level 1 by the assigned (ORG.) SDE. Level 1 supplier self-certify their Part Sample Warrant (PSW). Until a supplier location demonstrates correct usage of the PPAP process, the STA may assign PPAP Level 2-5 to the location. Default level for (ORG.) suppliers is Level 4.

  Non-Preferred suppliers will be assigned PPAP submission levels by the assigned STA. Levels 3-5 are *normally assigned to* these locations.

- The assigned STA is responsible for entering suppliers PPAP level in (ORG.) computer system for (ORG.) Supplier Quality Performance Rating.

- The assigned STA will review the PPAP data package and will disposition the warrant when the supplier is assigned submission level 2-5.

- The required items, documents and/or records that suppliers shall prepare for PPAP approval must be in accordance with PPAP Submission Requirements Table of the latest released version of the AIAG PPAP manual.

- Suppliers shall obtain PPAP approval from (ORG.) SDE at least 2 weeks before

  1) Delivery Pilot Production Shipment of a new part or product (i.e., a specific part, material, or color not previously supplied to (ORG.)).

  2) Delivery first shipment of the product from the following situation;
     1 Correction of a discrepancy on a previously submitted part.
     2 Product modified by an engineering change to design records, specification, or materials.
     3 Any situations required by Section I.3 of the AIAG PPAP manual.

  NOTE : If there is any question concerning the need for production part approval, contact an assigned (ORG.) SDE for your location.

- Suppliers shall issue a document called Part Submission Warrant (PSW) to (ORG.) SDE for PPAP approval. The approval status can be an indication of Approval, Interim Approval or Rejection. See the explanation in Section I.5.2 of the AIAG PPAP manual.

- In addition to the above, (ORG.) SDE may choose to implement a process audit at the supplier's facility in order to confirm that the processes have been completely established.

- Supplier shall consolidate all PPAP documents in a composite binder and retain at appropriate location, and make readily available when (ORG.) request.

PSW Slippage

- PSW Slippage is a delay of PPAP Approval that did not meet the promised PSW timing and that were verified to be the supplier's fault.
  For example, starting Pilot production or later build without approved PSW.

- Supplier must not cause Launch concerns of new model programs. Launch concerns are rejects or late deliveries that happened in the period from Job #1 (start of mass production) plus 3 month which affected (ORG.) new model launch into the market.

- If (ORG.) find a concern or functional approval is rejected, the supplier must not proceed to mass production phase until the concern is resolved. Otherwise, the supplier must notify (ORG.) SDE in advance by submission of an Alert Report and get the approval from (ORG.) SDE prior to ship the non-conformance products (see V.11 : Alert Report).

V.7. (org.) - Specific Instruction for Production Part Approval Process (PPAP)

Suppliers are required to comply with all PPAP requirements and follow the instructions described in Production Part Approval Process (PPAP) reference manual of AIAG, including with the following specific requirements of (ORG.).

V.7.1. Part Submission Warrant (PSW)

Suppliers will submit Part Submission Warrant (PSW).

- **Family of Parts**

  Suppliers are permitted to submit multiple part numbers (same family of parts) on a single PSW with all part specifics (e.g., prefix, base, suffix) clearly noted on the PSW.

- **Interim Approvals**

  When non-conformances on a production part submission are identified, the assigned STA will contact the buyer and concerned engineer(s) for the situation. The supplier shall initiate an Alert Report to (ORG.) Purchasing, specifying the time period or quantity for which the non-conforming product shall be used. If the buyer, STA and the concerned engineer(s) agree to use of product affected by the non-conformance, the Alert Report will be approved with approval number and return a copy to the supplier. The supplier shall enter the alert approval number on the PSW form under "Additional Engineering Changes". **Once parts are available from the permanent tooling/process, a new part submission warrant (PSW) is required. Should incomplete or in-process test data result in an "alert", a new PSW is required upon availability of completed test data.**

V.7.2. Drawing Submission and Approval

- Supplier will receive updated drawing from (ORG.) Purchasing that has been affected by ECN or part/product change. The drawing must be stamped as **ORIGINAL** with (ORG.) Purchasing's signature authority only. Supplier can check the latest revision drawing by contacting to (ORG.) Purchasing.

- (ORG.) may have only CAD data to provide for supplier, supplier is automatically requested to complete drawing for (ORG.) approval. The approval will be done by (ORG.) SDE and (org.) Product Engineer or Process Engineer after (ORG.) PPAP to customer is approved.

- During development stage, supplier will be informed in a written by (ORG.) Purchasing Manager for tooling kick off authorization.

V.7.3. Control Plans (Quality Control (QC) Process Chart)

- The Control Plan is the document that describes the process and product characteristics that must be monitored during production to produce a part/product that meets (ORG.)'s requirements. This chart clearly specified who will control what, when and how during each stage of the process flow.

- Control Plans shall be developed by the supplier and be available for review by (ORG.) SDE as early as possible and in any case prior to the production part submission date. The supplier shall submit one copy to (ORG.) SDE for approval as a program need date specified on APQP Status Report. (ORG.) SDE will review and approve the document in a timely manner. A signed copy of the document will be returned to the supplier. Supplier must describe the information on the Control Plan form that is provided in Appendices-J in Advanced Product Quality Planning (APQP) reference manual of AIAG as a minimum information required.

- Control Plans shall be prepared for each production stage (Prototype, Pre-launch, Mass Production). Prototype Control Plan is not required when the supplier does not has design responsibility. If there is no change the content of Pre-launch Control Plan and Production Control Plan, issued date is only required to change and submit it.

- Control Plans must include all Critical and Significant characteristics. During Process Control development and improvement activities, the supplier must determine what the Control Points are (i.e., Significant Characteristics "SC" and Critical Characteristic "CC" of process and product characteristics) and how to manage those Control Points during the production process. Control Points are divided into two classifications:

  Product Characteristics

  Product Characteristics (e.g., dimensions, appearance, etc.) are result from Process Control activities and should be monitored frequently to determine whether or not the process is in a controlled state.

  Process Characteristics

  Process Characteristics are process parameters (e.g., temperature, time, speed, electric power, current pressure, etc.) that are expected to have a major effect on process results and should be monitored accordingly.

- Control Plan must be reviewed and updated as appropriated after mass-production phase and when a revision required for any reason it must be discussed timely with (ORG.) SDE for the need of resubmission and approval.

(ORG.)'s mutual agreement with the supplier does not negate the supplier's responsibility for accuracy of the document or for product quality.

V.7.4. Appearance Item Approvals

- Suppliers of the sensory characteristics part/product, for all interior, exterior, and select underhood components which are visible to the customer, shall prepare 2 Appearance (Acceptance) Samples and Appearance Approval Report (AAR) (Form No. (ORG.)-F-6.2-015) to submit to (ORG.) SDE as required by PPAP.

- Appearance Approval Report and Appearance (Acceptance) Samples must be completed for each part/product. For example, submission is required for each color of a part number.

- Appearance (Acceptance) Samples are physical samples describing the acceptance standard for sensory characteristics, and this is used as a part of inspection standard.

- Appearance Approval evaluation shall be performed in accordance with the design records that identify any appearance features included but is not limited to color, texture, gloss, grain, finish, appearance standard and mastering standards.

- All Appearance (Acceptance) Samples shall be reviewed by (ORG.)'s customer representative(s). After approval signatures have been obtained from (ORG.)'s customer representative, a signed copy and sample shall be returned to the Supplier. The report shall be obtained with Warrant in PPAP package.

- The supplier shall provide appropriate labels for Appearance (Acceptance) Sample items, or apply signatures to such samples directly. See identification requirements of sample products in V.7.5.

- The Appearance (Acceptance) Samples must be updated and replaced if they become unfit for use because of damage or aging or new engineering change.

- Special Requirements for Interior and Exterior Parts (Color Parts)

1. Evaluation

A color specialist of supplier must evaluate and judge using a Macbeth light (or Sunlight). Visual inspection is the final determination for acceptability. The color difference calculations, tristimulus data should be used only as a reference for color upgrading.

NOTE : Color, Grain and Texture Masters will be provided by (ORG.) if available otherwise ultimate decision shall be done by (ORG.)'s customer.

2. Submission

When the Supplier submits color parts to get approval, the supplier must provide the following items.

A. Two samples of each color, grain or texture.
If there are multiple cavities or molds, two samples from each cavity or mold are required

B. Supplier's evaluation results.

C. Interim approval prior to texturing or graining

D. Completed Appearance (Acceptance) Approval Report

If samples are rejected, additional samples must be submitted until approval is received prior to mass production part/product PSW. One sample will be returned to Supplier.

3. Facilities requirements for Appearance Items Suppliers

The Suppliers of products which have an object of appearance items must have provide:

A. Appropriate lighting for evaluation areas.

B. Masters for color, grain and texture as appropriate.

C. Protection and maintenance of masters for color, grain and texture, etc.

D. Test and evaluation equipment as appropriate.

E. Training and qualification verification of personnel making appearance evaluations.

V.7.5. Sample Product

- **If submitting PPAP for Level 2, 3 or 5, the supplier shall submit sample part(s) upon the requisition from (ORG.) Purchasing. For multiple processes, the selected sample part(s) shall represent from each process e.g., part(s) per cavity, tool, cells, assemble lines. The sample part(s) have to be the same part(s) that were dimensionally measured and documented on the marked drawing or check sheet.**

- **All sample part(s) shall be labeled with following information;**
  - **Supplier name**
  - **Part number**
  - **Engineering Change Level**
  - **Sample Characteristic ("Dimension", "Material Tested Sample" or "PV Tested Sample")**

- **Treatment of the Sample Product**

  - Sample Products from inspection stored by the supplier

    Inspection samples that have not been submitted to (ORG.) must be stored with label until the Part Submission Warrant Approval is obtained for the Parts, or until a (ORG.) audit is carried out.

  - Sample Products submitted to (ORG.)

    If the inspection samples have been reviewed and/or approved, the treatment of the samples must be left to the discretion of (ORG.) SDE.

V.7.6. Master Sample

- Supplier shall prepare master sample as requested by PPAP. The master sample can be the same part of sample product in SECTION – V.7.5. with approval of (ORG.) authorized personnel.

- The master sample shall be used as the product acceptance criteria for on-going quality. Therefore, the supplier shall maintain the master sample by a suitable care.

- After Job#1 (start of mass production), the master sample under the conditions described in NOTE 1 of I.2.2.17 in PPAP – AIAG, must be kept for 1 year. If there is no market claim or customer concern, the master samples can be disposed off with (ORG.) SDE acknowledgement.

- **All sample part(s) shall be labeled with following information;**
  - **Supplier name**
  - **Part number**
  - **Engineering Change Level**
  - Sample Characteristic (“Dimension Sample”, “Color Sample” or Lighting Sample”)
  - Criteria (“Good Sample”, “No-good Sample” or “Limit Sample”).
  - Expiry date, as appropriate with shelflife.

- The master samples must be updated and replaced if they become unfit for use because of damage or aging or new engineering change.

V.7.7. Inspection and Test Requirements

Implementing INSPECTION on Pilot or Production part/product for PPAP/PSW approval

Suppliers shall implement the following inspections to complete all required measurements and tests for PPAP/PSW approval.

1. 100 % inspection for all characteristics identified on the Inspection Standard (destructive test items are excluded).

2. 100 % inspection for all Critical and Significant Characteristics on components and assembly other than characteristics that were described on the Inspection Standard.

3. 100 % inspection for all characteristics that experienced problems or concerns during development stage.

4. All inspections and tests shall be performed in accordance with Inspection Standard and Production Validation Plan and Report (PVP&R) documents that are prepared by supplier during part/product development.

V.7.7.1. Inspection Reports

1. Material inspection and test for all components and / or raw materials.

   - See explanation in I.2.2.8.1 of PPAP of AIAG.
   - When design records identify part/product material specification on chemical, physical, or metallurgical requirement, the supplier shall identify the test requirements on Control Plan and/or Inspection Standard.
   - Certification data of raw materials analysis are required, otherwise upon request. If more than one sub-supplier, a certification from each is necessary.
   - Material Test Results form no# CFG-1004 in Appendix-D of PPAP manual shall be used as the summary report.

2. Appearance Acceptance Evaluation – see Appearance Approval Report at SECTION V.7.4.

3. Performance Test

   - See explanation in I.2.2.8.2 of PPAP of AIAG.
   - When performance or functional requirements are specified by the design records, the supplier shall identify the test requirements on Control Plan and/or Inspection Standard.
   - Performance Test Results form no# CFG-1005 in Appendix-E of PPAP manual shall be used as the summary report.
   - Implementation of destructive test items a minimum of N = 1 piece (unless some other quantities specified in engineering specification) per each cavity/mold.

4. Dimensional Inspection

   - See explanation in I.2.2.7 of PPAP of AIAG.
   - Dimensional Results form no # CFG-1003 in Appendix-C of PPAP manual shall be used as the summary report.
   - Suppliers is required to use an Inspection Sample Report (Form No. (ORG.)-F-6.2-008) to record the raw data of dimensional results of the dimensional characteristics as identified on the Inspection Standard.
   - A minimum of n = 10 pieces raw data
   - Inspection Sample No. must be corresponded with pilot/production shipment part/product, and attach Sample No. on part/product. For marking method, ask (ORG.) SDE or QA.

5. P.I.S.T. and P.I.P.C. Result (Special requirements for fitting part/product.)

   5.1. Definitions and Methods

   - P.I.S.T - Percentage of inspection points that satisfy the tolerance indicated on the design drawing. All samples inspected for a given point must satisfy the tolerance, and if a sampling data is out of specification for one characteristic, P.I.P.T. will given at 0 %.

$$\text{P.I.S.T.} = \frac{\text{The number of inspection points that satisfy the tolerance}}{\text{The number of inspection points}} \times 100$$

" Inspection points" are shown on the checking fixture concept drawing provided by (ORG.) or on the Inspection Standard indicated by (ORG.) SDE. Tolerance of inspection points must be included on the design drawing.

- P.I.P.C. - The percentage of process capability points of which process capability is greater than or equal to 1.33. (Cp 汾 1.33) or satisfy Cpk requirements of each Special Characteristic Rank.

$$\text{P.I.P.C.} = \frac{\text{The number of process capability points that satisfy Cpk}}{\text{The number of process capability points}} \times 100$$

"Process capability points" are indicated on the inspection standard by (ORG.) QA.

5.2. P.I.S.T. and P.I.P.C. Target for each Pilot/Production Part Submission

Target of P.I.S.T. and P.I.P.C. at each step of development (Electronic Component/Product)				
Step / Result	1st Pilot	2st Pilot	3rd Pilot	Mass Production
P.I.S.T.	95%	100%	100%	100%
P.I.P.C.	90%	100%	100%	100%

Target of P.I.S.T. and P.I.P.C. at each step of development (Non-electronic Component/Product)					
Step / Result	Tooling	1st Pilot	2st Pilot	3rd Pilot	Mass Production
P.I.S.T.	90%	95%	100%	100%	100%
P.I.P.C.	-	90%	100%	100%	100%

Terminology and definition of each development step will be identified in accordance with (ORG.)'s customer norm.

This target will be used for process potential investigation. Nonconforming part/product must not ship to (ORG.).

5.3. Data Submission Requirements

The supplier must perform P.I.S.T. and P.I.P.C. at each development step. The submission procedure is as follows:

1. Inspection Method – Production checking fixtures or other appropriate method of inspection must be used.

2. Sample date quantities. Quantity ordered, or as shown below:

   - P.I.S.T. 5 pieces minimum / cavity.

   - P.I.P.C. 30 pieces / cavity. If Final Process no available, contact (ORG.) SDE

3. If P.I.S.T. and P.I.P.C. targets are not satisfied, a part quality improvement action plan must be submitted for all nonconforming items.

4. Format

   - P.I.S.T.
     Use the format shown on Form No. -F-6.2-009. Use one line for each part. If a part has more than one set of tools, use one line for one set of tools.

   - P.I.P.C.
     Use the format shown on Form No. -F-6.2-009. Use one line for each part. If a part has more than one set of tools, use one line for one set of tools.

5. A copy of the PSW Documents package are required, and to be sent directly to (ORG.) SDE.

V.7.7.2. Disposition for Nonconforming Part(s) / Product(s) delivery for PPAP/PSW Approval

If parts/products are found to be out of specification, the characteristic must be identified by circling the dimensions on the Inspection Sample Report, and indicating this nonconformance on the PSW sheet. The following must then be implemented:

1. The supplier shall initiate Alert Report (Form No. (ORG.)-F-6.3-003) to submit to (ORG.) Purchasing to request for an authorization of delivery the nonconforming part. See Alert Report requirements and instructions in SECTION V.11 : Alert Report.

2. If possible, the parts shall be reworked, the reworked characteristics shall be identified on the Alert Report.

V.7.8. Measurement System Analysis (MSA)

- Suppliers are responsible for conducting appropriate statistical studies to analyze the variation present in the results of each type of measuring and test equipment system referenced on the Control Plan. (ORG.) requires suppliers to utilize the AIAG Measurement System Analysis manual. Measurement System Analysis must be completed on all special product characteristics related to the end item.

- Suppliers shall complete Measurement System Analysis prior to perform Initial Process Capability Studies.

- The guide lines for acceptance of gage repeatability and reproducibility (%R&R) are:
  - Under 10% error - The measurement system is acceptable
  - 10% to 30% error - May be acceptable based upon importance of application
  - Over 30% error – Unacceptable, measurement system needs improvement. Make every effort to identify the problems and have them corrected.

  NOTE : If there is any question concerning the acceptance, contact your assigned (ORG.) SDE.

V.7.9. Initial Process Capability Studies

- Suppliers shall follow the instruction I.2.2.9 in PPAP reference manual of AIAG for this requirement.

- Acceptance Criteria of Initial Capability Study for (ORG.) on Critical Characteristic (CC) point is meet a minimum of 1.67 Cpk and Significant Characteristic (SC) point is meet a minimum 1.33 Cpk.

- Sample quantity for attribute data is 250 pieces minimum, or per the agreed/approved by (ORG.) SDE.

  NOTE 1 : When not enough data is available, contact (ORG.) SDE to develop a suitable plan.

  NOTE 2 : For on-going process control and quality maintenance on CC and SC points, supplier shall monitor their process capability base on the above target, otherwise 100% inspection is required.

V.7.10. Special Characteristic Requirements

- All special characteristics identified on drawing or design records shall be captured for the Initial Process Capability Study.

- If supplier has design responsibility or responsible for initiate an engineering drawing, the supplier shall determine and identify all characteristic points to review with (ORG.) SDE and approval. See Drawing Submission and Approval in SECTION V.7.2.

- (ORG.) SDE is able to determine and indicate the special characteristic points on the drawing or design records and Inspection Standard when it is needed as the measure of the distinctive control. The determination is based on one or more of the following conditions;

  - Quality history such as high warranty or quality rejection on current model, surrogate product or similar product.
  - Supplier's historic launch concern or (ORG.) lesson learns
  - High product or process complexity, high visibility or functional performance
  - Quality characteristics that have a significant effect on which could be a direct cause of concern resulting in a considerable drop of the product value and a great harm to the (ORG.)'s image when it fails.

    The word "concern resulting in a considerable drop of the product value and a great harm to the (ORG.)'s image" means to
    - Results in high degree of dissatisfaction to (ORG.)'s customer
    - Difficult to repair on vehicle
    - Large monetary loss for (ORG.)

V.7.11. Layout Inspection

- Layout Inspection is required for all dimensional characteristics on the design records specification or drawing. The data maybe written on the design drawing next to the corresponding dimensions or "Production Part Approval Dimension Result" from PPAP manual, otherwise using supplier's format.

- Inspection quantity is N = 1 piece (unless some other quantities is requested by (ORG.) SDE). from each position of a multiple cavity die, mold, tool or pattern.

V.7.12. Production Validation Plan and Report (PVP&R)

- Suppliers shall prepare Production Validation Plan and Report (PVP&R) to support PSW documentation and maintain in PPAP package as a historical document for future reference.

- PVP&R is a document to identify the tests and inspection timing plan and method required by design records, engineering specification and drawing to assure the parts made from production tools and process meet engineering intent. This document detailing the necessary tests (e.g., function and performance of part/product), quantities and the pass/fail conditions that attest to the production process meeting the engineering requirements.

- Sample size is more than 10 pieces. Sample size of Reliability tests is a minimum of 1 piece is requested to report by each cavity or mold. Sample size should be confirmed with (ORG.) SDE prior to performing the test. No full sample approval may be granted without competed testing.

- Supplier shall submit Production Validation Plan and Report (PVP&R) to (ORG.) SDE as the program need date specified on APQP Status Report. (See PVP&R Form No. (ORG.)-F-6.2-014).

V.7.13. Inspection Standard

- Suppliers shall prepare Inspection Standards to submit for (ORG.) approval. It is a document to clarify the standards for the testing & inspection of material, part/product that are based on the design drawings and engineering specification.

- The Inspection Standards consists of two separate forms. The first form “pictorial” (see Form No. (ORG.)-F-6.2-007) is a “sketch” or drawing which identifies numerically, critical/significant characteristics. The second form “inspection criteria” (see Form No. (ORG.)-F-6.2-007) corresponds numerically with the first form and will include a description of all critical/significant characteristics associated with in-process and off-line tests (including of periodical PV test), matching surfaces, mounting dimensions and tolerance characteristics indicated on the design drawing and in engineering standards. The second form also identifies the measuring methods, data recording methods, quality control sample size and frequency to be utilized at mass production (MP) stage.

- The Supplier is required to submit a proposed inspection standard to (ORG.) SDE as the program need date specified on APQP Status Report.

- When there is commonality between part(s)/product(s) or their inspection items, a common inspection standard can be used.

- Inspection Standard shall identifies all Special Characteristic items by using customer characteristic symbols in the column of “Characteristic item” in the second form. Suppliers shall determine the characteristic items by reviewing the following;

  A. Documents:
     1. Design drawing:
     2. Engineering specification or applicable engineering standards
     3. Past part or similar part quality history
     4. Previous supplier inspection standard and control plan, (if applicable)
     5. Design and product engineering information, if applicable

  B. Evaluation criteria:
     1. Material
     2. Dimensional
     3. Functional/performance criteria
     4. Durability requirements
     5. Appearance
        The part/product sensory characteristic (color, texture, appearance, etc) that is developed and approved by submitting and obtaining approval using the “Appearance Approval Report”.
     6. Marking of Lot Numbers/Method (e.g. white paint, adhesive label, rubber stamp)

- (ORG.) reserves the right to identify characteristic point and ranking, if not identified in the design drawing or engineering specification. See Special Characteristic Requirements in V.7.10.

- Inspection Standard shall be identified sample & frequency for in-process and off-line inspection by the supplier.

  A. In-process identifies the inspection quantities and frequencies utilized in the manufacturing process to confirm design specifications (Example 5 pcs./hr).

  B. Off-line identifies all other inspection/tests performed other than in-process to verify part/product characteristics. (Examples are as follows:)

1. Measurement and testing in laboratory for surface finish, metallurgical etc. for inspection purposes.

2. Functional performance for verification purposes.

3. Other auditing methods. Example : Final inspection auditing.

NOTE : Attachment sheet should be utilized where areas of the form do not permit adequate space.

- (ORG.) SDE will review the inspection standard for accuracy and concurrence, and return a signed copy to the Supplier. If the inspection standard was not agreed or temporarily agreed by (ORG.) SDE, the Supplier is required to make improvements and resubmit.

- At least, temporary approval of the Inspection Standard must be obtained before Pilot Production part / product delivery to (ORG.).

- The supplier must obtain final approval before the first mass production delivery to (ORG.).

- If the inspection standard is changed for any reason after obtaining approval, the supplier must resubmit the revised inspection standard to (ORG.) SDE for review and approval of (ORG.) SDE.

- If the supplier does not submit the Inspection Stanadrd and receive approval before the part or product of pilot are delivered, (ORG.) SDE will return the part/product to the Supplier or suspend their delivery.

(ORG.)'s mutual agreement with supplier does not negate the supplier's responsibility for accuracy of the document or for product quality.

V.7.14. Significant Production Run (RUN @ RATE)

Purpose

A Run @ Rate is to verify the supplier's actual manufacturing process is capable of producing components that the meet on-going quality requirements at quoted tooling capacity for a specified period of time and conforms to the manufacturing and quality plan documented by the supplier in PPAP and other required documentation.

Procedure

- All new parts require a RUN @ Rate, unless exempted by (ORG.) SDE.
- The supplier will be notified of the need to perform a customer monitored Run @ Rate as early in the Advanced Product Quality Planning Process as possible.
- The number of components to be produced during the Run @ Rate should be sufficient to demonstrate manufacturing process capability predetermined by the supplier and will be confirmed by (ORG.) SDE. Factors such as product complexity, shelf life, storage, cost and single shift vs multiple shift operation are taken into consideration in determining the length of the Run @ Rate.
- The entire Run @ Rate shall be performed with participation of a (ORG.) SDE.
- RUN @ RATE review contents will base on the questionnaires in RUN @ RATE Worksheets.
- Upon completion of the Run @ Rate, the worksheet must be completed and a decision made whether or not to approve the review. The Run @ Rate can have one of three results; open or fail.

A. Pass

1. All Run @ Rate requirements were met. The supplier demonstrated the capability to produce parts that meet on-going quality requirements at quoted capacity (net output). All key product characteristics were monitored and meet Cpk/Ppk requirements and quality systems were documented and practiced.

B. Open

1. Some minor non-conformances to the requirements were found that need to be corrected.
   Examples of this are net output meets volume requirements but not quoted capacity, quality systems have minor deficiencies (i.e., preventive maintenance system lacking, lack of error proofing, incomplete or inadequate operator instructions/visual aids, operator training not complete, minor deficiencies in meeting customer's on going quality requirements).

2. Corrective Action Required A documented Action Plan to correct the non-conformances is required. This plan is due to the (ORG.) SDE for approval, within two (2) business days of the completion of the Run @ Rate.

3. Verification of Corrective Action verification of successful completion of the corrective action plan can be accomplished in several different way, for example, through correspondence, a part review or a plant visit Generally an additional Run @ Rate is not required. Once the Corrective Action plan is successfully completed, the (ORG.) SDE will change the Run @ Rate result from open to pass.

C. Fail

1. A serious non-conformance exists that requires significant action by the supplier to correct. An additional Run @ Rate will be required.
   Examples quality systems are not in place and serious nonconformance, Initial Process Capability Study do not meet requirements, supplier fails to meet Volume requirements.

2. Corrective Action Required A documented Action Plan to correct the non-conformances is required. This plan is due to the (ORG.) SDE for approval, within two (2) business days of the completion of the Run @ Rate.

3. Verification of Corrective Action Once the Corrective Action plan is completed, the (ORG.) SDE will change the Run @ Rate to verify the successful implementation of the corrective action plan.

- Corrective Actions Required

A. Actual to Requirements. If the results of the actual manufacturing process do not meet customer requirements for on-going quality and quoted tool capacity, corrective action must be taken to correct any non-conformances.

B. Actual to Plan. If the manufacturing and quality plan do not agree with the actual process, changes must be made to bring them into agreement.

C. Non-conformances. If non-conformances occurred during the Run @ Rate which were not identified previously by the normal PPAP control plan, a corrective action plan need to be put in place (i.e., error proofing or a change in the control plan) and document in the PFMEA and/or process flow diagram.

V.8. Nonconforming Product Rejection Processing (Fault Control)

V.8.1. *Material Rejection Report*

- Material Rejection Report (MRR) is a documented communication from (ORG.) to suppliers for nonconforming parts/products which found at (ORG.) plant (Form No. (ORG.)-F-6.3-001).

Description of Guideline:	Data Entry into Supplier Quality Rating:
1. Parts are out of print or not to specification and is a supplier concern.	1. Enter the actual quantity not meeting print. If less than the total lot quantity, enter only the fraction number not meeting print. The number not meeting print may be either estimated by sampling or obtained from the results of re-testing of the whole lot by the supplier. If parts are returned to the supplier for sort, it is the responsibility of the supplier to identify the quantity defective, in writing, within 30 days.
2. Shipping and Labeling Issues for foreign stock, mixed stock, mis-identified, incorrect quantities, wrong color.	2. a. If the issue is caught in the process and wrong parts are used, enter the actual number of wrong parts used in assemblies. b. If the issue is caught at incoming, enter 1 reject.
3. Parts meet specification but do not function properly or application/process issue is not covered by the specification.	3. a. Enter (1) for the reject quantity if it is the initial concern. b. Enter the actual reject quantity if it is a repeat of a concern (only after agreed corrective action implementation).
4. Non PSW parts delivered without an approved alert. NOTE: May impact *Preferred* status.	4. a. Enter launch QR with quantity of (1) if no quality issue results. b. Enter actual rejected quantity in the launch QR if an issue arises during launch.
5. Sales return form a customer (downstream plant) that is a supplier concern.	5. Enter a QR with actual rejected quantity.
6. Failures from audit testing, such as functional end of line tests.	6. Enter a QR with actual rejected quantity.
7. Violation of SREA procedure. Shipping parts without a proper alert when packaging is changed. NOTE: May impact *Preferred* status.	7. If the change does not affect quality, enter a QR for actual reject quantity.
8. Supplier ships known defectives after notification of the concern.	8. Enter a QR with the actual quantity of rejects or one QR per receipt. Preferred to enter QR per week with the accumulated report.
9. Bulk parts such as fasteners, terminals, etc. of low value and high quantities.	9. Estimate the quantity defective by sampling and enter the quantity of rejects.
10. Part meets specification on black box print but does not work in the application (design responsibility is the supplier).	10. Enter a QR with the actual part quantity rejected. Reduce the counts over time, as TNI is resolved.

11. Parts rejected after supplier PSW is approved but prior to Job #1 plus 15 days.	11. Enter a launch QR with actual quantity of rejects.
12. Defective product discovered at (ORG.) while more defective stock is in transit to (ORG.).	12. a. If supplier reacts to either sort/rework the in-transit stock then enter one QR for the initial issue. b. If the sorbing or rework is not 100% effective then enter a second QR with the number of rejects discovered after sorting/rework. If supplier does not react to either sort rework the in-transit stock then enter a second QR with the total rejected quantity.

V.8.2. Supplier Response

- When the supplier receives notification of the MRR, the supplier must respond with interim action immediately. That is, the supplier must inform (ORG.) SDE how will handle the nonconformity and, if necessary, how to implement modifications to the part/product. The most common interim action response form suppliers for nonconformance include:

  - If necessary, the supplier (or its representative) comes to (ORG.), confirms of investigates the nonconformance, determines how to sort out the non-conforming part/products, and obtains (ORG.)'s agreement.

  - At (ORG.), the supplier (or its representative) sorts out the nonconforming part/product, including part/product incorporated into vehicles, or reworks the inventory of part/products already shipped, as necessary.

  - Such sorting of part/product and reworking of inventory is to be carried out at the supplier's expense.

  - Supplier delivery 100% inspection.

- If there is no action response by the supplier within 24 hours, or if the situation is urgent, (ORG.) reserve the right to take appropriate interim action, at the supplier's expense. See Charge Back Policy in SECTION VII.3.

- *Lead time of response* - When Problem Classification in MRR is identified as

  - **Critical** : the supplier shall submit a written 8D until at D3 to (ORG.) SDE within 24 hours, and re-submit the further steps of 8D as soon as possible *after receive the defective sample returned by (ORG.) or after finish investigation of the root cause.

  - **Major** : the supplier shall submit a written 8D to (ORG.) SDE within 5 working days *after receive the defective sample returned by (ORG.). The 8D shall be prepared at least at D4 as a potential root cause is acceptable, in case the actual root cause take a long lead time to study.

  - **Minor** : 8D submission may not be required, depends on discretion and agreement of (ORG.) SDE and (ORG.) Production. If 8D is needed, it shall be submitted within 10 working days.

NOTE : * In case of defective part is required for supplier's investigation, (ORG.) will return the part(s) to the supplier and disregard the timing of shipment for supplier's performance. If defective part is not required, the supplier shall response 8D to (ORG.) SDE as soon as possible or within 5 working days after receive a notification from (ORG.) SDE about the non-conforming.

V.8.3. *Corrective and Preventive Actions*

- If nonconformance of a part/product occurs, the supplier must quarantine all suspect material and investigate the cause.

- After the cause of the nonconformance is determined, the supplier must take corrective action to prevent the nonconformance from recurring.

- If (ORG.) requests a written reply with MRR (Material Rejection Report) or field quality information, the supplier must submit 8D report (Form No. (ORG.)-F-6.3-002) (team oriented problem solving report) or Analyzed Report for Recurrence Prevention to (ORG.) SDE. In addition, the supplier may, as necessary, be requested to come to (ORG.), provide an explanation of measures to be taken to prevent re-occurrence of the nonconformance, and obtain (ORG.)'s approval of them. However, in case of quality improvement activity cannot expect, (ORG.) may request 100% inspection by resident person of the supplier at (ORG.) plant. And also (ORG.) may elect to conduct an on-site inspection to discuss and observe the corrective action that the supplier proposes. The supplier must confirm the effectiveness of the corrective action before the part/product is delivered or before production resumes.

- If supplier cannot successfully resolve the quality issue in a satisfactory and timely manner, it will be escalated to (ORG.) management through processes such as supplier operating review with supplier's management personnel.

- The supplier must revise and resubmit (if applicable) the Control Plan, FMEA and Inspection Standards to (ORG.) SDE when a modification occurs.

V.8.4. *Follow-up Process*

- To close MRR, the supplier must submit 8D report at least at D4 as a potential stage. (ORG.) SDE will follow-up the countermeasures of the quality concerned from the supplier. The MRR will be indicated as "CLOSED" with the attached evidences, as appropriate. Closing MRR does not negate the supplier's responsibility for completion of the 8D until step D8.

- The supplier will be contacted by (ORG.) Material Control Department regarding logistic on non-conforming products (Refer to SECTION VII.4 - Logistics on Non-conforming Products)

- The frequency of a supplier's quality concerns and the supplier's ability to support concern resolution will be considered in any future sourcing decision.

V.8.5. *Determination of Problem Classification in MRR:*

- **Critical** Critical Quality Characteristic related to safety, government regulation
- **Major** Quality Characteristic that have a significant effect on which could be a direct cause of concern resulting in a considerable drop of the product value and a great harm to (ORG.) image when it fails such as;
  - Results in high degree of dissatisfaction to (ORG.) customer
  - Difficult to sort or repair at (ORG.)
  - Disappearance of product feature intended by design and planning
  - Large monetary loss for (ORG.)
  - Cause any recall, line interruptions / production loss in (ORG.)
- **Minor** All other concerns excepted Critical and Major.

V.8.6. *Material Rejection Codes and Definition:*

- **"FF" (Fit or Function Reject)**
  This code is used for materials that do not fit for their intended use, and conformance to specifications is suspect or the material is to specification and the supplier has design responsibility.
- **"MN" (Miscellaneous Non-Conformance Reject)**
  This code is for material that was manufactured to specification, but is received damaged, mislabeled, mixed stock, or has any other non-conformance issue for which the supplier is responsible.
- **"NP" (Not to Print Reject)**
  This code is for all materials that have not been manufactured to print (material has an out-of-specification condition).

V.9. (ORG.) Incoming Inspection Requirement

Suppliers are requested to ensure on-going quality of parts/products delivered to (ORG.) site by performing the tests, inspection or verification methods as documented in approved Control Plan and Inspection Standard. Suppliers will be requested by (ORG.) SDE to implement one or more of the following methods to ensure that the suppliers have been implementing the system as required;

1. If suppliers are Q1, Preferred, ISO/TS 16949:2002, QS9000, VDA 6.1, Chrysler Supplier Quality assurance or GM Target for excellence etc (including Mazda's own Q1-type award) - Generally, (ORG.) will not do incoming inspection on those parts/products. They may be requested to send their testing data or inspection records to (ORG.) SDE in occasionally.

2. If suppliers are not in above mentioned category, they will be requested for the following methods;

   For local suppliers
   - Accompany statistical reports and raw data, with every shipment of a new lot to (ORG.).
   - Accompany inspection or testing report with every shipment of a new lot to (ORG.). The inspection and testing can be done by suppliers' facilities or by accredited test laboratory if need.

   For oversea suppliers;
   - Send statistical reports with raw data to (ORG.) SDE prior to ship each delivery lot.
   - Send inspection or testing report of each delivery lot to (ORG.) SDE prior to ship.

(ORG.) may perform incoming inspection on the parts/products that are under one or more following conditions;

- The receiving parts/products are critical for (ORG.) manufacturing processes and products.
- Parts/products from ***Non-preferred*** suppliers
- When receiving inspection is needed for (ORG.) containment action

NOTE: The inspection or testing reports that required by this element are the reports that suppliers may have from their in-process inspection or final inspection as defined in Control Plan and Inspection Standard or from the a sampling process before delivery.

V.10. Change Control

- After mass production of a part/product has begun, modifications may be made due to quality improvements, productivity improvements or adjustments of production quantities, etc. These modifications may affect quality. Therefore, the supplier must confirm part/product quality when modifications are made, and notify (ORG.) Purchasing.

- It is supplier responsibilities to ensure that all related documents in PPAP binder are updated in accordance with the change as appropriate. Confirmation of the change shall be reviewed by (ORG.) SDE.

- When changes occur in the Mass – Production stage, the supplier must conduct the appropriate quality verification activities to ensure the "changed" part/product meets the design specification.

- (ORG.) defined 2 types of Change as follows:

  1. *Design Change*

     Specification change of a characteristic on the Design Drawing, This also refers to the supplier's internal specification characteristic changes that are not identified in the drawing.

  2. *Process Change*

     Process Change in man, machine, material or methods and measurement (5Ms) which affect quality. All major Process Changes require careful planning and scheduling on the part of the supplier.

V.10.1. (ORG.) Notification and Submission Requirements on PPAP/PSW

- Supplier shall follow the instructions of this requirements as defined in I.3 of PPAP-AIAG manual.

  1. **For all change described on table I.3.2 (see PPAP 4th edition)**

     - The supplier shall submit PPAP documents for PSW approval to (ORG.) SDE at least 2 weeks prior to the first shipment of the changed part/product.

     - The supplier shall review and update the PPAP documents, as necessary, all applicable items in the PPAP file to reflect the change, including with the documents required in SECTION V.6 and V.7 of this manual.

     - Supplier is required to complete Change Control Checklist (Form No. (ORG.)-F-6.4-003) and submit to (ORG.) Purchasing at the planning stage for the change.

- Supplier is required to submit Delivery Announce Notice (DAN) to (ORG.) SDE at least 2 weeks prior to the first shipment of the changed part/product. It can be accompanies with PSW submission.

2. For all change described on Table I.3.1 (see PPAP 4th edition)

- The supplier shall notify (ORG.) SDE of any design and process changes as indicated in this table. (ORG.) SDE will determine whether or not a PSW is required based on the nature and impact of the change. If (ORG.) SDE determines that a PSW is required, the supplier shall follow the instructions defined above in item# 1.

3. For all change described on Table I.3.1 (see PPAP 3rd edition)

- The supplier is not required to notify and submission (e.g. PSW) to (ORG.) SDE for the situations described in this table.

- Although it is not required for the notification and submission, the supplier does not relieve the responsibility for ensuring the part/product quality and the nonconformity if it occur. The supplier is still responsible for monitoring and assuring the change is effective, utilizing revised procedures and collecting inspection data.

V.10.2. Change Request

- Change Request is a starting point of change that can be initiated by either (ORG.) or supplier, when necessary. This Change Request is a communication tool between (ORG.) and supplier for both Product Change and Process Change in order to understand the required actions and timing to incorporate the change into the production part or process.

Change Request from Supplier to (ORG.)

- Supplier shall use Change Request (Form No. (ORG.)-F-6.4-001) as a change proposal to submit to (ORG.) Purchasing for approval prior to implementing the change. The Change Request shall be submitted together with its work plan, timing and risk assessment by using Change Control Checklist (Form No. (ORG.)-F-6.4-003)

- (ORG.) Purchasing will discuss with (ORG.) engineer and (ORG.) SDE, and then propose to (ORG.) customer for approval as need. Supplier can contact to (ORG.) Purchasing regarding the result of the request or keep informed by (ORG.) Purchasing.

- When the Change Request are approved, the supplier is required to follow the instruction in SECTION V.10.1.

Change Request from (ORG.) to Supplier

- Supplier shall receive Change Request (Form No. (ORG.)-F-6.4-002) from (ORG.) Purchasing for any change required by (ORG.) or (ORG.)'s customer that includes;
  - Engineering Change Notice (ECN)
  - Process Change
  - Change due to VA/VE program that generally confirmed by releasing of ECN documents
  - Change for problem resolution of quality concern or improving the part quality
  - Change for productivity or workability improvement

- When the supplier has received the Change Request from (ORG.), the supplier shall follow the instruction in SECTION V.10.1

V.10.3. Change Approval

- For all the changes that requires Notification and Submission (Table I.3.1 and I.3.2, see PPAP 4th edition), (ORG.) must get an approval or acknowledgement from (ORG.)'s customer prior to approve and notify the supplier to implement the change. In case of Product Change, (ORG.) Purchasing will release Engineering Change Notice (ECN) to authorize supplier to implement change accordingly.

V.10.4. Engineering Change Notice (ECN)

- Engineering Change Notice is a documented evidence for customer approval on any engineering change.

- Supplier will be received ECN package, including drawing together with Change Request (Form No. (ORG.)-F-6.4-002) that has been specified Material Require Date (MRD) from (ORG.) Purchasing concerning about purchased parts, process or design changes occur in Mass Production Stage.

- Supplier will be requested to return the form with duly signed for acknowledgement immediately when receive the form and have to implement that ECN within the specific time, otherwise has been agreed to (ORG.) Purchasing.

- Supplier will be requested for verifying the quality of that change, and submit the PSW Documents that are reflected by the change to (ORG.) SDE at least two (2) weeks before delivery of changed part/product or at the same time of submission Delivery Announce Notice (DAN). Sample part/product may be required as requested.

V.10.5. Design Records Control and Traceability Requirements

- Supplier will receive updated drawing from (ORG.) Purchasing that has been affected by ECN or part/product change. The drawing must be stamped as **ORIGINAL** with (ORG.) Purchasing 's signature authority only. Supplier can check the latest revision drawing by contacting (ORG.) Purchasing. See SECTION – V.7.2 for Drawing Submission and Approval.

- Supplier shall has a system to control, maintain and update all engineering design records that are used for (ORG.)'s part/product. The system shall has traceability for the reference of any engineering change or design change made to (ORG.)'s part/product. The engineering and design records shall be maintained for the length of time that the part (or family of parts) is active for production and service requirements plus one calendar year.

V.10.6. Delivery Announce Notice (DAN)

- Delivery Announce Notice (DAN) is intended to provide (ORG.) with advance notice regarding changed process/product including ECN's. It applies to the first delivery of changed process/product in the mass production stage. Supplier can request for DAN Form (Form No.: (ORG.)-F-6.4-004) and issue no. of DAN from your (ORG.) Purchasing.
- Supplier must perform appropriate quality verification activities to ensure that changed process/product conform to the design drawings, and submit Delivery Announce Notice 2 weeks in advance to (ORG.) Purchasing. After received the approval of DAN, supplier will be allowed to ship actual the changed process/product.
- For delivery of all Design Changes and Process Changes Describe on Table I.3.1 and I.3.2 (see PPAP 3rd edition), the supplier must submit a Delivery Announce Notice to (ORG.) Purchasing.
- (ORG.) SDE may contact the supplier to stipulate additional requirements regarding necessity of meetings prior to changes or examination of processes, etc.
- "New ECN Part" label must be affixed to each shipping container/box of the first shipment of changed part/product. (Refer to SECTION IX.3 – First Shipment of New Part from ECN Change, Existing Supplier).

V.11. Alert Report

- An Alert report (Form No. (ORG.)-F-6.3-003) is a temporary authorization to deliver/use of a specified quantity of part/product which do not comply with the design drawing and/or engineering specification.

- Alert Reports are approved only when the noncompliance will not affect the following.

    1. Marketability of (ORG.) and (ORG.) customer quality image and service.

    2. Safety, function, performance, durability (evidence must be available)

NOTE: (ORG.) will not accept part/product that come from an non-approved manufacturing process to repair
defects.

- An Alert Report must be limited to a specific part number, quantity or time period. An Alert Report is not to be considered a permanent change to design drawing or engineering specification.

V.11.1. Submission of Alert Report

1. The supplier must complete the Alert Report and submit it together with a sample to (ORG.) SDE for approval prior to ship.

2. The supplier must identify all discrepant parts or materials, and store them in a location that will prevent them from being shipped or used(Quarantine Area)

3. For those suppliers whose PSW is not corporate and/or approved by (ORG.) SDE. The Alert Report shall be submitted with action plan that specifies the completion date of PPAP and PSW.

    (ORG.) SDE will and Production Manager will review the Alert report and the final approval will be done by (ORG.) Managing Director.

V.11.2. Delivery of Alert Reported Part/Product

Identification Marking

All lots of discrepant parts must be identified by Alert Tag must (SECTION – IX.7) be affixed to each shipping container/box. If the actual parts are identified with a discrepancy mark, the method of marking must be described in the Alert Report.

Date of Delivery

Applicable parts must be delivered on the date specified in the Alert Report.

When nonconforming product or suspect product are found at (ORG.) without notification from supplier by Alert Report, (ORG.) will reject all suspect material by supplier expense. If that rejection effects to (ORG.) production line, supplier is responsible for sorting the suspect material at (ORG.) location.

V.12. Requirements for Supplier Internal Audit

- **As require by Quality System Standard, supplier shall perform internal quality audit to verify and to determine the effectiveness of their quality system. At a year-end, Suppliers will be requested to send a copy of their annual internal quality audit schedule of the following year to (ORG.) SDE.**

- A copy of the supplier's internal audit results/reports shall be sent to (ORG.) SDE when the audit has been completed. A copy of corrective action for any nonconformance identified from the audits shall be submitted to (ORG.) SDE at appropriate timing as well.

- The auditor qualifications for internal quality audit of supplier are required to have completed an inhouse or external quality system auditor training course. The inhouse training shall be conducted by a qualified trainer. At least one auditor in the plant must have completed an accredited "Lead Assessor" course.

V.13. Records Retention Requirements

- Production part approvals, tooling records, purchase orders and amendments shall be maintained for the length of time that the part (or family of parts) is active for production and service requirements plus one calendar year.

- Quality Performance records (e.g. control charts, inspection and test results) shall be retained for one calendar year after the year in which they were created.

- Records of internal quality system audits and management review shall be retained for three years.

- Retention periods longer than those specified above may be specified by a supplier in their procedures. The supplier shall eventually dispose of records.

SECTION VI : APQP Status Reporting Guideline

APQP Definition

Advanced Product Quality Planning (APQP) is a structured method for defining and executing the actions necessary to ensure a product satisfies the customer.

Goal

The goal of APQP is to facilitate communication with all persons involved in a program and ensure that all required steps are completed on time, at acceptable cost and quality levels.

Approach

This guideline focuses on 23 key APQP disciplines. This guideline is written from a supplier standpoint.

APQP Fundamentals

Teams with Roles and Responsibilities

The first step in the Advanced Product Planning Process is to assign responsibility to a cross functional team . Effective product quality planning requires the involvement of more than just the quality department. The team should include representatives from engineering, manufacturing, material control, purchasing, quality, sales, field service, subcontractors, and customers, as appropriate.

Program Timing

Program timing shall be aligned with customer program timing and corresponded to customer program need dates. Program timing and need dates for elements may differ from program to program and must be decided for each individual case.

Elements

This guideline focuses on 23 key APQP disciplines, identified as APQP elements. These elements, when summarized and reported, communicate the status of a program.

Of the 23 APQP elements, 19 are requirements of the Chrysler, Ford, and General Motors Advanced Product Quality Planning and Control Plan manual. The four additional elements meet unique requirements for APQP status reporting and communications between supplier and customer.

The 19 industry standard elements follow

- Design FMEA
- Design Verification Plan
- Prototype Build Control Plan
- Manufacturing Process Flow Chart
- Process FMEA
- Pre-Launch Control Plan
- Operator Process Instructions
- Production Control Plan
- Design Reviews)
- Facilities, Tools and Gages
- Prototype Builds
- Drawings and Specifications
- Team Feasibility Commitment
- Measurement Systems Evaluation
- Packaging Specifications
- Production Trial Run
- Preliminary Process Capability Study
- Production Validation Testing
- Production Part Approval (PSW)

The four additional elements are :

- Sourcing Decision
- Customer Input Requirements
- Subcontractor APQP Status
- PSW part delivery at MRD

VI.1 APQP Status Report

Purpose
The APQP Status Report summarizes the program status for the 23 APQP elements. The Status Report facilitates communication between suppliers and customers, particularly when information, direction or support is required. It also provides a dated record that future programs can reference.

Status Reporting Responsibility
The supplier has primary responsibility for the Status Report. The supplier must conduct GYR (Green-Yellow-Red) assessments on the 23 APQP elements. The status report summarizes the results of the assessments.

Reporting Requirements
- The Status Report must be submitted to on a monthly basis.
- Customers or suppliers should conduct frequent status reviews as needed.
- The customer must provide a list of all scheduled program status review dates to the supplier.
- Supporting documentation must be submitted upon customer request.

GYR Status

Green-Yellow-Red (GYR) status communicates the progress toward the successful completion of an APQP element by the program need date. Program need date is the last possible date an element can be completed and not adversely affect quality or timing of the program. The "GYR Status" column of the report shows the assessment for each element.

Definitions

Green - "G" ratings are given before the program need date to indicate the element will meet the program need date and will meet all quality expectations. "G" ratings given on the program need date indicate the element is complete and meets all quality expectations (see SECTION – VI.3 for element expectations).

Yellow - "Y" ratings are given prior to the program need date to indicate an element may not meet the program need date or quality expectations. To be considered "Y", a recovery plan must be in place for the element. "Y" ratings indicate a need for program management attention. A "Y" rating can only be given to an element prior to the program need date.

Red - "R" ratings are given prior to the program need date to indicate an element will not meet the program need date or quality expectations. "R" signifies the program is at risk and needs immediate management attention. Any element rated "R" at its program need date must carry the "R" rating through the remainder of the program. Completion of the element after the program need date does not change the timing status of the element; the element is late and must stay red.

Adjustments

APQP team shall evaluate the need of 23 APQP elements that may be required differ from program to program and must be decided for each individual case.

For example, if the product is a carryover with minor changes, existing control plans can be used, and packaging evaluations may not be required. The customer must agree to all deviations from the APQP process. If the customer and the supplier agree that an element is not required, the supplier should write "NA" for not applicable in the remarks section of the Status Report.

VI.2 APQP Status Report Fields

The following section describes how to fill in each of the fields on the Status Report. Refer to the status report example on page 44 for the number of each field.

1	Date	Enter the current date.
2	Review Number	Enter the number of the status report review with the customer. Increment the number after each review.
3	Diamond Point	Enter the point of review as conformer specific program milestones.
4	Supplier	Enter the company name.
5	Location	Enter the location of the facility manufacturing the system subsystem
6	Supplier Code	Enter the UCCS code for the facility listed in item #5.
7	Program	Enter the name of the customer program.
8	Model Year	Enter the model year for the customer program.
9	Part Number	Enter the part number or lead part number for families of parts (ie., same part, different color) being supplied to the customer. For families of parts, attach a list of all part numbers associated with the lead part number to the status report.
10	Part Name	Enter the name of the part.
11	Notice Level	Enter the latest engineering release notice number associated with the part.
12	User Plant	Enter the name of the customer plant(s) to which the lead part number will be shipped for assembly or manufacture.
13	Team Members	Enter core APQP team members. The first team member to be noted must be the supplier program manager.
14	Company / Title	Identify the company and title of each core team member.
15	Phone / Fax / e-mail	List each core team member's phone, fax number and e-mail address.
16	Build Level	List each prototype build required by the customer.
17	Material Required Date (MRD)	Enter the customer's material required date for each prototype build listed in the build level column.
18	Quantity	Enter the quantity required to support each prototype build.
19	Number SCs Concurred	Enter the number of significant characteristics concurred either the customer and supplier for each prototype build.
20	Number CCs Concurred	Enter the number of critical characteristics concurred with the customer and supplier for each prototype build.

21	P.I.S.T. %	Enter the percentage of inspection points that satisfy tolerance for each build.
22	P.I.P.C. %	Enter the percentage of Ppk indices process capable for each build.
23	APQP Elements	A list of the APQP documents, tasks, and disciplines which must be amplitude to support a customer program. See SECTION – VI.3 for an explanation of each element in this column.
24	GYR Status	GYR assesses whether the expectations of the element will be completed in time to meet the program need date. See SECTION – VI.1 for GYR definitions and assessment procedures. Enter G,Y, or R as appropriate.
25	Program Need Date	Enter the last possible date the element can be completed without adversely affecting quality, cost or timing of the program. It is suggested that this column be one of the first columns filled out when initiating the status report.
26	Supplier Timing date	Enter the date the element is currently planned to be completed. Whenever timing changes, there should be comments in the "Remarks" column that explain why the original date was revised.
27	Closed Date	Enter the date the element is successfully completed.
28	Responsible Person	If an element is reported as (Y)ellow or (R)ed, assign the element to a team member, and enter their initials in the box. The responsible person's full name and phone number must also be listed in the Team Member block.
29	Remarks	For any APQP element reported as Y or R, enter a brief remark addressing the situation. If the original timing has been revised, note the reason for the change.
30	Comments	Enter any additional comments regarding the status of the program.

VI.3 APQP Element Instruction

The following section describes each of the APQP elements found on the Status Report. Refer to the status report example on page 44 for the number of each element.

1) Sourcing Decision

Sourcing Decision is a formal customer commitment to work with the supplier on the program.

Expectations

The Sourcing Decision is completed andcommunicated to the supplier before the program need date.

2) Customer Input Requirements

Customer input requirements are the design criteria and the program requirements necessary to initiate the supplier Advanced Product Quality Planning process.

Expectations

- **Design goals** are a translation of the voice of the customer into tentative and measurable design objectives. The supplier must receive initial system and component designs and specifications including:
  - product assumptions
  - functional performance
  - dimensions
  - weight
  - materials

- **Reliability and quality goals** are established based on customer wants and expectations, program objectives; and reliability benchmarks. The supplier must receive reliability and quality goals that include the following targets:
  - Things gone wrong targets (TGW)
  - Things gone right targets (TGR)
  - Useful Life Reliability Targets
  - Warranty targets (R/1000)
  - Incoming quality targets (parts per million, defect levels, and scrap rates)

  Note: The above targets should be supplied as appropriate to the system, subsystem, or component.

- **Program timing** is a plan that lists tasks, assignments, events and timing required to provide a product that meets customer needs and expectations. Program timing dates must be communicated for the following:
  - Program status reviews
  - Design freeze
  - Prototype builds
  - Material required dates
  - Job 1

- **Affordable cost targets** have been communicated for the vehicle, system, sub-systems, and components.

- **Capacity Planning volumes** have been given to the supplier.

- A list of **Key Contact Personnel** within (ORG.) has been given to the supplier. The list should include names, locations and phone numbers of the program manager, design and release engineers, purchasing agent, Supplier Technical Assistance engineer, and others as appropriate.

3) Design Failure Mode and Effects Analysis

A Design or Concept FMEA is a systematic approach used by a design responsible team to assure that potential design failure modes and their associated causes have been considered and addressed.

4) Design Reviews

Design reviews are regularly scheduled meetings led by the supplier's design activity and must include other affected areas. Design reviews are a series of verification activities that are more than an engineering inspection. The design review is an effective method to prevent problems and misunderstandings; it also provides a mechanism to monitor progress and report to management.

Expectations

- Design feasibility concerns are resolved in time to support each build material required date.
- Review Design Verification Plan and Sign Off Report (DVP&SOR) progress. Unanticipated failure modes encountered during design verification testing must be addressed in the design FMEA.
- The (ORG.) APQP Status Report must be reviewed during the design reviews.
- Review progress toward achieving reliability, quality, cost and timing targets.

5) Design Verification Plan

Design verification plan is a document that lists the engineering evaluations and tests required to establish that the design is fit for use in its intended environment.

6) Subcontractor APQP Status

Subcontractor APQP Status is a supplier summary of its suppliers or subcontractors APQP status. Suppliers should cascade APQP requirements to their suppliers or subcontractors and conduct APQP reviews as appropriate. The results of those reviews are summarized on line 6 of the APQP Status Report. When reporting Subcontractor APQP status, if all the subcontractors are (G)reen, then "G" should be reported. If any one of the sob element status is (Y)ellow or (R)ed, the effect of that status on the supplier program should be assessed and the box should reflect GYR as appropriate (see SECTION VI.1 for a full explanation of GYR status assessment).

Expectations

- All suppliers must assess risk and specify the level of their suppliers' APQP participation. Subcontractors that affect special characteristics must follow APQP disciplines.
- Suppliers will allocate sufficient resources to work with their subcontractors as part of a cross functional APQP effort.
- Suppliers will hold regularly scheduled APQP status reviews with their subcontractors.
- Concerns are reported to the customer and action plans are developed for elements that do not meet quality, cost, and timing objectives.

7) Facilities, Tools and Gages

Facilities, tools, and gages are those additional, new, gages refurbished, and relocated resources required to produce the product at the customer specified quantity and quality levels.

Expectations

- *Facilities,* permits, planning approval, drawings, and utilities must be included on the product quality timing plan and funding approval must be complete.
- Tooling, equipment and gages must be sourced with statistical requirements and acceptance criteria agreed upon.
- Tooling and equipment must comply with released TE 9000 requirements.
- Equipment, tooling and gages should be qualified atthe machine builder's location using a trial run.

- Corrective actions for all gages and tooling that do not meet customer requirements must be completed prior to the production trial run.

- Equipment, tooling and gages must be delivered, set up, and approved prior to the production trial run.

8) Prototype Build Control Plan

Prototype build control plans are a description of the dimensional measurements, material, and functional tests that will occur during prototype build.

9) Prototype Builds

Prototype builds are the manufacture or assembly of components, systems, or sub-systems supplied to the customer for builds occurring prior to the production trial run.

Expectations

- All customer prototype material required dates (MRD) will be met with the correct level parts, customer specified data and customer approval for all non conformances.

- The prototype build control plan was followed in the manufacture of the prototype build.

10) Drawings and Specifications

Drawings and specifications cover all engineering drawings, CAD data, material specifications and engineering specifications.

Expectations

- Program need dates must be communicated to the customer. The drawings and specifications program need date is the last possible date the supplier can accept a design change and support PSW delivery at the Material Required Date.

- Design Freeze is a point in time determined by the Program Management when the design must be completed to support a prototype test program. Changes following the frozen design are not accepted without agreement from the (ORG.) Purchasing Manager and (ORG.) Program Management Team.

- Drawings and specifications must include engineering specification tests, product validation test requirements and must be documented in time to support pre-launch control plan development.

- Major feasibility concerns must be resolved prior to the production trial run.

- Material used by either the supplier or subcontractor must be approved.

11) Team Feasibility Commitment

The cross-functional Advanced Product Quality Planning Team must assess the feasibility of manufacturing the proposed design. Customer design ownership does not preclude the supplier's obligation to assess design feasibility.

Expectations

- The team must be satisfied that the proposed design is fit for its intended use and can be manufactured, assembled, tested, packaged, and delivered in sufficient quantity at acceptable cost and quality to the customer on schedule.
- Suppliers must assess risk and determine which of their suppliers must do a feasibility assessment. Subcontractors that affect special characteristics must do a feasibility assessment.
- The team must provide a formal feasibility document to its customer.

12) Manufacturing Process Flow Chart

The process flow chart is a graphic representation of the current or proposed manufacturing process flow.

13) Process Failure Mode and Effects Analysis

A process FMEA is a systematic approach used by a manufacturing responsible team to assure that potential process related failure modes and their associated causes have been considered and addressed.

14) Measurement Systems Evaluation

Measurement systems evaluation assesses the variation of the measurement system and determines whether the measurement system is acceptable for monitoring the process.

Expectation

- The customer must approve the measurement system evaluation methods, standards, acceptance level, statistical and analytical requirements. This must include an agreement with the customer regarding correlation when duplicate gages and test equipment exist.
- All gages and test equipment must be modified to reflect the latest engineering level prior to the production trial run.
- The customer must be given the opportunity to review and concur with the gage and test equipment study results prior to the production trial run.
- Measurement systems evaluation must be repeated and approved following all gage and test equipment modifications.

15) Pre-Launch Control Plan

The pre-launch control plan is a description of the dimensional measurements and material and functional tests that will occur after prototype and before full production.

16) Operator Process Instructions

Operator Process Instructions describe the details of controls and actions that operating personnel must perform to produce quality products.

17) Packaging Specifications

The Advanced Product Quality Planning Team should ensure that individual product packaging for shipment (including interior partitions) is designed and developed. Customer packaging standards or generic packaging requirements should be used when appropriate.

Expectations

- Packaging requirements will be agreed to by the supplier and the customer plant.
- Packaging evaluations must test the packaging under the expected conditions of transport and material handling.
- The packaging design must assure that the product performance and characteristics will remain unchanged during packing, shipping and unpacking.

18) Production Trial Run

The production trial run is a validation of the effectiveness of the manufacturing process, using production tooling, equipment, environment (including production operators), facilities and cycle times. Output of the production trial run is used for Production Part Approval (PSW).

Expectations

- The pre-launch control plan is followed during the production trial run.
- The trial run must be used to confirm or add linkages between product and process characteristics.
- Corrective design and process actions must be established for concerns identified during the trial run.

19) Production Control Plan

The production control plan is a written description of the systems for controlling parts and processes during full production.

20) Initial Process Capability Study

The initial process capability study is a statistical assessment of the ability to produce product within specification (Refer to P*roduction Part Approval Process* manual for details concerning the initial process capability study).

Expectations

- All special characteristics must be studied.
- Statistical and analytical techniques used to determine capability must be acceptable to the customer.
- Initial capability studies must be performed as documented in the pre-launch control plan.
- Initial capability studies must be completed and the customer given the opportunity for review before Production Part Approval.

21) Production Validation Testing

Production validation testing refers to engineering tests which validate that products made from production tools and processes meet engineering standards.

Expectations

- Parts for production validation testing must be selected from the production trial run per the sample sizes and frequencies outlined in the pre-launch control plan or Inspection Standard.
- All customer-specified dimensional, material, functional and reliability tests must be completed prior to production part approval. If not, appropriate action plans and customer approvals are required.

22) Production Part Approval

Production part approval is the documented verification that all customer engineering design requirements are met by the supplier and the process has the potential to produce to these requirements during an actual production run.

Expectations

- All 1*4* items of the *Production Part Approval Process* manual must be completed and the required documentation provided to the customer with the Part Submission Warrant.
- Production part approval is complete before the material required date for the user plant's production trial run.

23) PSW Part Delivery at MRD

PSW part delivery at Material Required Date (MRD) is the latest date that fully approved (PSW) material must be received at the customer's plant to support their production trial run.

Expectations

- The customer's material required date must be included in the supplier's timing plan.
- Production part approval requirements must be completed prior to user plant MRD.

SECTION VII : Delivery Requirements

VII.1 SHIPPING PATTERN & RELEASE VIEWING

All (ORG.) suppliers are requested to view the release weekly and use our 830 planning release as your shipping release. Below are our basic requirements to be strictly followed:

1. All DDL suppliers will receive a new weekly release 830 via transmitted SOLMIS on every Monday. You are requested to use 830 as your shipping requirement.
2. Non-DDL suppliers will be faxed a weekly printed out release, sent to you by plant Material Control Analyst directly. (see your Material Control Analyst under Delivery Contact. See SECTION – XI.
3. ASN (Advance Shipping Notice) accuracy and timeliness is mandatory (Applicable for DDL suppliers).
4. Be sure to put the ASN with a correct quantity, part number and unit of measurement of kg for suppliers who supply the raw material.
5. Always state your invoice number as your packing slip number in the ASN in order to facilitate our accounting payable when matching against receiving transaction.
6. All USA based suppliers are requested to ship material on the first and third week of the month, quantity depending on release requirement, to our consolidation center with below destination, unless instructed otherwise. All inland freight movement to our consolidation center is subject to be arranged with two parties directly.

   (Contact persons.)

7. Always accompany a copy of invoice as well as a copy of packing slips with consignment to consolidation point.
8. Original collecting invoice should be sent by registered mail to our A/P department once the shipment is effected (overseas), Thai suppliers can place your invoice upon your delivery.
9. Mode of transportation for overseas suppliers is set as ocean mode, unless agreed by plant Material Control Analyst.
10. All Thai suppliers are to ship by your own truck weekly or daily, depends on your location.
11. All suppliers are requested to deliver the part according to the stated quantity required on that week and to the stated ship frequency day. Please note below code. If you have any difficulty delivering on a specific day, please contact your part analyst for code adjustment. This is very important as it will be a criteria for tracking your on-time delivery score.

VII.2 DELIVERY PERFORMANCE RATING

(ORG.)'s target is to have all our suppliers deliver the parts to us timely and most accurately. Since we have revised our quality rating system, your delivery performance score is no longer included in your total score. A "Preferred/Green " and " Non-Preferred/Red" in term of delivery has following score broken down:

Preferred/Green: Delivery performance score by monthly is between 85-100 %
Non-Preferred/Red: Delivery performance score by monthly is less than 85%

Criteria

1) DDL suppliers : you are basically rated your delivery performance through our corporate scorecard system by using our corporate Mechanical Rating Process (Refer to (ORG.) Supplier Delivery Performance Manual, Version 1.0) . Please refer to our web site www.12345.com ? to view your monthly rating.

   DDL suppliers are requested to view your own rating under mentioned website. You need to submitted evidence/document with specific request to (ORG.)'s material control manager if wish to dispute your delivery rating towards FI1RA.

2) Non-DDL suppliers : your delivery performance calculation will be done manually by plant Material Control Analyst. Your full score of 100% is calculated based on following criteria :

2.1) *Quantity Respond :* Exact quantity from release is requested, unless authorized by your material analyst. Under ship condition will be granted as zero% automatically.
2.2) *Date Respond* : Your delivery should be made on the date of your ship frequency (See ship frequency code on Release Viewing page).
2.3) *Problem Handling* : Calculation is base on the incident incurred on a specific shipment (i.e. wrong invoice, missing document, etc.) and supplier's coordination to solve the problems.

If you disagree with the score receive, please immediately contact your part analyst or fax any evidence with brief explanation to the concerned person.

If you get a score of less than 85% (0 score), an 8D is requested to submit to (ORG.) Material Control Department within 2 weeks after receipt of above fax.

Note : Please find format and flowchart in SECTION XIII : Forms & Distribution
1) Sample formats of Delivery Performance Rating for non-DDL supplier (Form No.: (ORG.)-6.2.2-C2)

VII.3 PRODUCT EXPEDITION AND PREMIUM CONTROL

In case that a specific shipment is requested other than normal mode of transportation or extra quantity is requested other than that said on the release, part Material Control Analyst will communicate with supplier and DAEI by issuing an AETC form (Authorization for Excess Transportation Charges). **AETC** will be faxed to supplier and DAEI prior to shipment movement. AETC will clearly identify if the excess freight cost will be born at which party.

Premium Freight : is the cost difference incurred between the normal mode of transportation and special shipment (ORG.) expects. (i.e. by air or express air, etc.) The premium cost will be calculated against all cost from normal route which will include all cost such as freight, duty, handling charges, etc. Premium should always conform to the AETC previously issued as a reference and is calculated by part analyst. The calculation will then be forwarded to accounting department for further proceed.

Instances that may lead to premium freight charge back:
1. Suppliers who fail to deliver according to release requirement
2. Suppliers who deliver with a wrong mode of transportation specified in the release
3. Suppliers who deliver to a wrong location
4. Non-conforming products found at (ORG.) and need immediate replacement
5. Incorrect inventory found at (ORG.) (in this case, the plant will absorb the cost)
6. Document error that results in extra freight / duty.

Guidelines and Principles for premium charge-back:

A. Supplier responsibility is determined by :
- Supplier acceptance of responsibility and charges, or
- No response by the supplier within the allotted time period, or
- (ORG.)'s material control analyst, purchasing, STA agree on supplier responsibility.

B. Supplier must be made aware of the charges in advance (i.e. AETC)

A. All premium charge-back must be justified and documented

B. The supplier charged with responsibility for a concern has the right to review the concern and accept or refuse the responsibility

C. Disputed charges will be referred to material control manager, purchasing manager or quality manager for resolution

Note : Please find format and flowchart in SECTION XIII : Forms & Distribution
1) AETC form (Form No.: (ORG.)-F-6.2.2-A1)
2) Premium freight and duty charge-back (Form No.: (ORG.)-F-6.2.2-002)

VII.4 LOGISTICS ON NON-CONFORMING PRODUCTS

Supplier must demonstrate a commitment to (ORG.) quality target of Zero MRR or zero defects. However, when such a case happens, an MRR (Material Rejection Report) is issued by the production area and forwarded to our STA (Supplier Technical Assistance) engineer to feed back to the supplier. *(Please refer to V.8.1 Material Rejection Report)* In the case that final quantity of the non-conforming parts will cause our production line stop, part analyst will immediately request the supplier to ship a new lot (which has been sorted and verified as conforming product), and be shipped as a normal sales. (NO FREE REPLACEMENT IS ALLOWED) After a completion process of MRR, the supplier is requested to sign off the RMA form sent to you by part analyst, or else, issue us your internal RMA. A signed-off RMA must be returned back to (ORG.) within 10 working days or parts to be disposed at (ORG.) under your cost. Supplier is to confirm in RMA the following whether the parts to be:

1. scrapped at (ORG.)
2. returned back with specified route and schedule to ship
3. picked-up by supplier's own transportation and pick-up schedule

After the material / product / parts are disposed per your instruction, supplier will then be contacted by our finance department for claims (see attached MRR cost analysis) accordingly. (ORG.) finance department will confirm all costs with the supplier before request you to issue Credit Note to (ORG.).

Please note : the credit note covers actual material cost only. Other related costs will be charged back separately though billing process.

Charge-back shall cover following costs:

1. Material Cost
2. Freight & Duty Cost (Incoming).
3. Sorting / Re-working hours required for remediating MRR at the rate of 50 U$/hr (minimum 4 hours per shipment).
4. Other incidental costs.

Note : Please find format and flowchart in SECTION XIII : Forms & Distribution

1) MRR flowchart
2) Return Material Authorization (RMA) Form (Form No.:(ORG.)-F-4.15.1-J)
3) MRR Cost Analysis (accounting document) (Form No.: (ORG.)-F-4.13.1_(2)-002

SECTION VIII : Packaging Requirements

VIII.1 GENERAL REQUIREMENT

VIII.1.1 Packaging Design

- All part quotations must clearly identify type of packaging to be used for mass production. The supplier is responsible for the design of the packaging
- An approval on packaging design is required from (ORG.) affected activity prior to shipment.
- Packaging design must conform to the minimum container standard describes in the following items; VIII.1.2 Packaging Material and VIII.1.3 Handling. Wherever possible, a small lot size of total weight no more than 15 kgs when lifted by a person or suitable at line site is preferred.
- Pack design and parts counts (pieces per container) shall not vary and containers are to be shipped completely filled except when the release is marked " Final release" , or " Balance out " or initially agreed by the part analyst.
- All returnable containers are required to have the supplier name permanently marked on the containers.
- Suppliers must ensure that all parts arrive at (ORG.) in satisfactory quality condition. Any damages due to packaging will be responsibility of the suppliers
- Shipment with different packaging than the approved is not allowed. An approval of any packaging change request must be complete prior to any changes.

VIII.1.2 Packaging Material

- Whenever possible, recyclable material should be used, such as corrugated paper, reusable containers, in this case, refers to as a returnable container
- The returnable container durability shall last throughout the program life without replacement
- Reuse of packaging materials and/or containers, pallets, and other shipping aids must have prior written approval by the affected activity

VIII.1.3 Packaging Data Form

- Within 30 days of receipt of purchase order, a Proposal of Packaging and Shipping Specification form (From No.: (ORG.)-F-4.15.4-001) must be submitted to the purchasing department for internally review and approval.
- The approval of stated form must be complete by (ORG.) prior to shipment
- The supplier is responsible for carrying out a packaging test and related cost if required by (ORG.) affected parties
- All shipments are to be made in accordance with the approved packaging, unless initially agreed by the affected activity for temporary shipments.

VIII.1.4 Handling

- Hand-held containers, including bundles, shall not exceed 33 pounds (15Kg) maximum weight. (when filled with part)
- Maximum gross weight of mechanically handled expendable unit loads must not exceed 1,816 kilograms
- Ergonomics must be considered as part of the packaging design

VIII.1.5 Miscellaneous Packaging Requirements

- Unique packaging requirements dictated by a part (e.g. excessive part oiliness, rust prevention, weight or fragility) not covered by these specifications are the responsibility of part suppliers and must be qualified/approved by the receiving activity.
- Where part appearance is concerned, they must be packaged to prevent part-to-part contact within and between layers
- Parts which must be kept clean or protected from transportation, storage, and/or plant environment, must be covered

VIII.2 EXPENDABLE PACKAGING/CONTAINERS

Although it is the responsibility of the suppliers to develop packaging design for their products, (ORG.) is vitally interested in obtaining the most economical packaging, transportation, and handling costs, while ensuring part protection and quality.

Suppliers who want deviations from these guidelines must receive approval for the deviation in writing from the affected parties. Deviations initiated by (ORG.) will be provided by the affected parties.

VIII.2.1 Pallet Sizes

- The standard pallet size for (ORG.) is 1220 x 1015 x 150 mm. Any non-standard pallet sizes must be approved by (ORG.) prior to shipping.
- Pallet construction must be of standard grade or better
- Maximum gross weight of mechanically handled expendable unit loads must not exceed 1,816 kilograms
- All pallets are to be four-way entry
- Pallet load heights, including the pallet, shall not exceed 1100 mm to facilitate sea container utilization
- Cartons are to be palletized in full layers only to allow tiered unit loads in transit and storage
- When cartons quantities are inadequate to complete full layers, additional cartons should be shipped loose – weight must not exceed 15 kgs
- Palletized loads shall be adequately secured by stretch/shrink wrap, banding, or other stabilizing techniques

VIII.2.2 Containers

- Strippable reinforced tape is the recommended method of closing carton
- If gluing is selected, glue transfer to the part surface is unacceptable
- Packaging size, strength, and size must be selected to fit method of transportation and applicable carrier regulations.
- They must be recyclable and environmental friendly
- One container/carton shall contain one part number

VIII.3 RETURNABLE CONTAINERS

- Many parts can be shipped in standard containers which are available and require little or no modification. Some example include corrugated tote boxes, collapsible plastic pallet box and steel and wire racks
- Frequently, parts may require unique or specialized packaging design due to part characteristics, automated handling, ergonomics, etc,
- Manually handled containers should not exceed 15 kgs
- Suppliers shall be responsible for all repair, cleaning and maintenance of returnable containers
- One container/carton shall contain one part number

SECTION IX : Shipping/Part Identification Label Requirements

To identify parts delivered to (ORG.), all suppliers are requested to attach a clear, accurate label to ensure the delivery of quality products to (ORG.). Label shall identify essential part information, and status to notify us from the receiving stage till finishing stage to avoid any mistake of using wrong parts into our production.

IX.1. LABEL FOR MASS PRODUCTION DELIVERY

Upon delivery of any production parts, suppliers are requested to attach a " White Color " label on every packaging. Label format is recommended at (ORG.)'s standard format as per shown below. However, suppliers' own standard label is allowed as long as following information is maintained on such label. Label size shall not be too big or too small, and should still allow visibility at no closer than 1 meter distance.

Label Format
Color : **WHITE** Size : L x W = 100 x 140 mm

(Supplier's Name)
Project : Customer : (ORG. DEPT.) Ltd.
Supplier Code/GSDB :
Part No: Part Name :
Quantity : pcs/kg
Lot No.:
Manufacturing Date :
Ship Date :

IX.2 FIRST SHIPMENT IN NEW PART, NEW SUPPLIER

Additional from a "White" label, at the first delivery of truly new part, (ORG.) "new supplier" is requested to attach a "Pink" label on every packaging next to the "White" label. A copy of approved DAN is also requested upon the delivery. (Please refer to Section V.10.6 : Submission Requirements for Delivery Announce Notice) This is requested for only the first mass production shipment, next delivery onwards will be required only "White" label (A).

Label Format
Color : **PINK** Size : L x W = 100 x 140 mm

NEW PART / NEW SUPPLIER / FIRST SHIPMENT
Supplier Name :
Supplier Code/GSDB :
Part No. : Part Name :
Qty :
ECN. Level No.:
ORG Contact Person :
Ship Date :

IX.3 FIRST SHIPMENT OF NEW PART FROM ECN CHANGE, EXISTING SUPPLIER

Existing supplier will be advanced notified from our Purchasing if there is any engineering change on their current part supplied to (ORG.). Upon first delivery of new part with the ECN change, supplier is requested a " Yellow" label to indicate the part is delivered upon the ECN change. A normal standard "White" label is required. Also, a copy of approved DAN must be attached with the shipment.

Label Format
Color : **YELLOW** Size : L x W = 100 x 140 mm

NEW ECN PART
Supplier Name :
Supplier Code/GSDB :
Part No. : Part Name :
Qty :
ECN. Level No.:
ORG Contact Person :
Ship Date :

IX.4. LAST SHIPMENT

Upon delivery of any last shipment with (ORG.), a "Blue" label indicates " LAST SHIPMENT" is strictly requested.

Label Format
Color : **BLUE** Size : L x W = 100 x 140 mm

LAST SHIPMENT

IX.5. MARKING FOR OVERSEAS SHIPMENT

Overseas suppliers are requested to attach a bright **ORANGE** label with " " in black letters on its loose carton or on each pallet.

THAILAND

IX.6 MARKING ON PROTOTYPE SHIPMENT

Suppliers will be requested to use green color label to indicate any sample or prototype shipments. Prototype or Pilot status should be checked upon delivery to (ORG.).

Label Format
Color : **GREEN** Size : L x W = 100 x 140 mm

SAMPLE /DO NOT USE IN PRODUCTION

Supplier Name :
Supplier Code/GSDB :
Part No. :
Part Name :
Qty :
ORG Contact Person :
Ship Date :

○ Prototype
○ Pilot#1_____
○ Pilot#2_____
○ Pilot#3_____

IX.7 MARKING ON SHIPMENT UNDER ALERT CONDITION

Suppliers will be requested to use RED color label to indicate any part/product that is delivered under Alert condition, see SECTION – V.11 : Alert Report. This Alert tag shall be used together with one of the tag shown above.

Label Format
Color : **RED** Size : L x W = 100 x 140 mm

A L E R T P A R T

Supplier Name :
Supplier Code/GSDB :
Part No. : **Part Name :**
Qty : **ECN. Level No.:**
ORG Contact Person : **Ship Date :**

ALERT NO. :

* Part/Product under this ALERT shall be recorded and traceable when used.

SECTION X : Notification on Part Termination

(ORG.) purchasing will notify supplier concerning Part Termination by letter prior to terminate. The Termination may be "Obsolescence", "Exhaust", or "Balance-Out" which depends on agreement and confirmation between Purchasing and supplier. For "Obsolescence", (ORG.) is responsible for finished goods (part/product) and raw materials that the supplier has in their possession or has on order to support their release requirements. This is 3 weeks finished goods (part/product) and 6 weeks of raw material based on the latest (ORG.) release requirement specified in the notice prior to obsolete the part.

NOTE: **"Obsolescence"** means that the change affects the current part/product has no longer supply to (ORG.).

"Exhaust" means that changed part/product must be used for production after the old part/product exhausted.

"Balance-Out" means that changed part/product must be used simultaneously at (ORG.) assembly line.

SECTION XI : Payment Process

For foreign supplier

Submission of the original invoice to below address by registered mail or courier after the shipment is effected.

(ORG.)

Attn : Mr. xxxxxxxxxxxx Accounting Manager

The invoice must specify your supplier code, part number, part description, quantity, invoice date and the current release program number (prog.no. __) that you are making the shipment on.

Payment Process : The payment will be processed by wire transfer on 26th of the month

- Monthly Statement of your outstanding is requested to send to above address detail.

For local supplier

Effective 1st January 2007, (ORG.) ( ) Ltd will change the billing and payment practices as follows:

For invoice/Tax Invoice that submitted to (ORG.) within 31st, will get pay by check on the 26th of next month. Deferment of submission to (ORG.) account payable section not later than the 2nd of the next month. Otherwise the payment will automatically post to another month payment.

Billing :

Receiving of **all delivery will authorize by Receiving Operator at the receiving area** located by the West Side of (ORG.) facility.

- Submission of the **original Invoice / Tax Invoice together with a copy** to (ORG.) receiving operator when delivery is a must that (ORG.) would carry the Invoice / Tax Invoice as a completion of billing practice.
- Perfection Invoice/ Tax Invoice that acceptable to the (ORG.) accounting should have **(ORG.) recipient signature,** reference with **(ORG.) PO number.**

Note : *the (ORG.) PO with non-specifies location to pick up check will assume to make payment at Rayong Plant for the place.*

- The submitted Invoice / Tax Invoice stated the (ORG.) name and address as follow :

  (ORG address)

- The invoice must specify your supplier code, part number, part description, quantity, invoice date and the current release program number (prog.no. __) that you are making the shipment on.

Check Receiving :

(ORG.) provide the check pick up spot at both Bangkok and Rayong as follows :

- Bangkok collection :
- Chonburi collection :

Provision of official Receipt must be given to the check payer upon received.

(ORG.) CONTACT PERSONS

Telephone Number (66) xxxxxxx (58 lines automatic)
Facsimile Number (66) xxxxxxx

Purchasing Department
ORG Contact person
Tel,
Email

Quality Assurance Department
ORG Contact person
Tel,
Email

Material / Logistics Control Department
ORG Contact person
Tel,
Email

Accounting Department
ORG Contact person
Tel,
Email

SECTION XII : Flow Chart

SECTION XIII : Form & Distribution

SECTION XIII : Record of Revision