



Global Supplier of Automotive Tire Products & Refrigeration Components

SUPPLIER QUALITY MANUAL

Air Controls Products, LLC
Oxford, NC

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2/19/07 Revision

Dill Air Controls Products, LLC

“Quality Policy”

“It is the policy of Dill Air Controls Products to meet or exceed Internal and External Customer Expectations by providing superior Products and Services. We do this by focusing on Customer-led Quality Objectives and continually improving The Quality Management System.”



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SECTION 01: FOREWORD

1. ABOUT - Oxford

Air Controls Products – Oxford, NC, USA is a leading global supplier of highly engineered air and fluid control components for Automotive, Aerospace, and Commercial applications. Our products are manufactured and sold worldwide, to original equipment manufacturers (OEMs) and after market customers.

2. ABOUT THIS SUPPLIER QUALITY MANUAL

- a. DILL ACP recognized the importance of a Supplier Quality Manual that would clearly define and communicate our expectations to our Suppliers. This manual was developed to be a communication tool for DILL ACP and their Suppliers in order to:

- b. Review existing Supplier related procedures & identifies DILL ACP best practices.
- c. Define expectations of our Suppliers relative to Quality, Delivery, & Cost.
- d. Develop a Supplier Measurement, Rating, & Report Card system.
- e. Standardize Production, Prototype, & Practices within DILL ACP.
- f. Improve the quality of DILL ACP compliance with ISO/TS 16949.
- g. Define all areas that should be communicated and seek feedback from the supply base throughout the development phase.

SECTION 02: INTRODUCTION

1. GOAL

The goal of this manual is to standardize, define, and communicate DILL ACP's expectations to our Suppliers and their Suppliers.

2. COMPLIANCE

Full compliance to this manual begins April 22, 2005

3. SCOPE

The DILL ACP Supplier Quality Manual provides direction and expectations for DILL ACP Suppliers.

4. PURPOSE

The process of Supplier improvement for DILL ACP requires that the Supplier and the related supply chain (i.e., Suppliers) maintain a comprehensive Quality System to ensure compliance to the requirements of the contract and this document. This manual explains DILL ACP's expectation as well as the process DILL ACP follows to assess the capability and performance of each Supplier. DILL ACP seeks Suppliers who not only have ISO 9001 or TS16949 certified quality systems, but also demonstrate a commitment to continuous improvement.

DILL ACP will actively encourage, assist, and monitor Suppliers' compliance to the expectations defined in this manual. We look forward to developing long-term relationships and mutual success with those Suppliers who share DILL ACP's philosophy.

SECTION 03: PURCHASING REQUIREMENTS

1. GENERAL

- a. DILL ACP seeks Suppliers that offer the most comprehensive design, manufacture and service support, including:
- b. Full compliance to this Supplier Quality Manual
 - Quality support on site at DILL ACP, as required
 - Warranty responsibility
 - Compatible software for electronic receipt and transmission of drawings & applicable data
 - "State of the Art" technology for design and manufacture of components
 - Full design responsibility of the component
 - A design team to review and coordinate design and test activities
 - Design validation testing and ongoing engineering specification (ES) testing
 - Engineering support at DILL ACP, as required

2. PURCHASE PROCESS

- a. Suppliers must have a 'Supplier Agreement', 'Supplier Quality Survey Report', and a current 'Supplier Profile' on file with the Purchasing department, prior to being issued a Purchase Order.
- b. DILL ACP Purchasing Department will issue a 'Request for Quote' package to Suppliers, including:
 - Request for Quote (RFQ) Form
 - Part Drawing(s)
 - Engineering Test Specifications, as required (for required validation & ongoing testing)
 - Material Engineering Specifications, as required
- c. The DILL ACP Purchasing department utilizes the following Supplier Selection Criteria for the award of new business. The Supplier has:
 - A clear understanding of all requirements, specifications, and expectations
 - Completely filled out the RFQ
 - Documented all proposed design changes for manufacturability
 - An acceptable DILL ACP Quality, Delivery, & Cost performance rating (if the Supplier is currently on a DILL ACP Approved Supplier List)
 - Demonstrated technical / administrative capabilities & adherence to program timing requirements
 - Submitted a competitive Total Cost quotation (Piece Price, Tooling, Delivery, Packaging, and Payment Terms)
 - Submitted a Minority Business Sourcing Content / Plan if applicable

3. MINORITY BUSINESS ENTERPRISE SOURCING PROGRAM

All current and potential Suppliers are required to develop a viable minority sourcing program. This program should target 5% of purchased goods and/or services from a certified minority enterprise.

4. GOVERNMENT, SAFETY AND ENVIRONMENTAL REGULATIONS

DILL ACP requires that all Suppliers of production material furnish the necessary documentation (i.e. Material Safety Data Sheets, etc.) for supplied product, prior to delivery, in order to satisfy current government, safety, and environmental considerations.

5. SERVICE AND REPLACEMENT

Purchase Order requirements apply for a minimum period of ten (10) years of service after production or as otherwise stated in writing by DILL ACP.

6. WARRANTY

The Supplier must have a system in place to investigate all warranty concerns.

7. PURCHASE ORDER SYSTEM

DILL ACP will issue purchase orders as follows:

8. REFERENCE DOCUMENTATION:

- Supplier Agreement
- Supplier Quality Survey Report
- Supplier Profile
- Request for Quote form

SECTION 04: TOOLING POLICY

1. GENERAL

- a. DILL ACP issues purchase orders for DILL ACP owned tooling, including: dies, molds, etc. which are purchased or specially constructed for use by Suppliers in the manufacture of parts for specific models, assemblies, or products, and which usually have a limited life cycle.
- b. DILL ACP reserves the right to move tools to an alternate facility at our discretion.
- c. Suppliers must request written authorization from DILL ACP before:
 - i. Moving or destroying tooling
 - ii. Altering tooling capacity
 - iii. Selling products made from DILL ACP tooling to any other customer
 - iv. Disposing of service parts tooling

2. DEFINITION OF SPECIAL TOOLS

- a. DILL ACP follows the Internal Revenue Services guidelines for classifying special tooling assets. The following guidelines define what DILL ACP considers as tooling:
 - Specially designed Life is limited to the production and service lives of the parts, which they produce.
 - Tools that touch the part that they produce (including stamping dies, fixtures, gear cutters, broaches, molds, and jigs)
 - Tools that can be re-located (molds and dies).
 - Tools found between the 'bolster plates' of a machine and piece of equipment (including stamping dies, welding fixtures, subplots, or automation handling devices).
 - Non-US DILL ACP affiliates may have a modified version of this definition to comply with local government requirements.

3. QUOTATION AND TOOLING ORDER PROCESS

- a. Suppliers must establish methods to control capacity fluctuations from schedule releases and production requirements. If additional tooling must be purchased, the Supplier must inform the DILL ACP Purchasing department immediately.
- b. Supplier tooling quotations should be based upon the volumes indicated on the RFQ form. Capacity for these volumes should be calculated based on a workweek that does not exceed five days of three shifts each, unless otherwise agreed upon in writing by the DILL ACP Purchasing department. The quotation must also include:
 - Tooling life (total quantity tool can produce)
 - Supplier must document minimum set-up quantities; commodities may require various numbers of parts and run-off iterations to ensure DILL ACP a smooth production launch.
 - Tooling expense breakdown, including fixtures, dies, gauging and other costs
 - Suppliers are expected to maintain and repair tooling at their expense.
- c. Purchase Orders will describe capacity and capability (tooling run-off) specifications that may be necessary beyond PPAP requirements.

4. INVOICING

- a. Supplier invoices should document expenditures for DILL ACP owned tooling. In addition, invoices must show the exact physical location of where the tools will be used, including:
 - city, township or village
 - state or province
 - country

- b. Supplier invoices for tooling should reflect the *tooling order amount* or the *actual costs incurred* whichever is less. Any discrepancies should be brought to the attention of the DILL ACP purchasing department.
- c. DILL ACP Purchasing department will approve tooling payment when PPAP and Pre-Production parts are approved, or as otherwise agreed upon with DILL ACP. In addition, the DILL ACP Purchasing department will approve Gage and Measurement Equipment payment when DILL ACP Quality department approves the required statistical studies.

5. TOOLING IDENTIFICATION

- a. The Supplier will mark or label tooling, as appropriate, with an identification tag. The tag number will be entered into the DILL ACP Capital Database. This database will identify ownership of the tool (DILL ACP or DILL ACP's OEM Customer) and the part number that the tool is intended to produce.

SECTION 05: QUALITY EXPECTATIONS

1. GENERAL

- a. Component and material suppliers are expected to be either:
 - TS-16949 certified
 - ISO9000 certified

Suppliers that are not 3rd party registered will be subject to Assessment as basis to remain on ASL.

“Must comply with” all AIAG reference documents, including:

- Production Part Approval Process
- Failure Mode and Effects Analysis
- Advanced Product Quality Planning
- Measurement Systems Analysis
- Statistical Process Control

b. Calibration suppliers must be accredited to ISO/IEC 17025 or national equivalent.

2. SUPPLIER ASSESSMENTS

- a. The completed DILL ACP Supplier Profile and Supplier Assessment Audit will be the basis for the assessment. The Supplier Quality Engineer and Purchasing will decide if a Supplier is added to the Approved Suppliers List.
- b. DILL ACP will conduct full or partial - ongoing Supplier assessments on an annual basis for those that are not 3rd party registered.

3. APPROVED SUPPLIERS LIST (ASL)

- a. Suppliers may be added to the ASL if they:
 - Receive an acceptable score from the Supplier Assessment Audit (information can be gathered during an on-site visit of their facility or by completing a DILL ACP Supplier Quality Survey)
- b. The Supplier will be given a specified period to submit an action plan detailing corrective actions for all survey scores less than 5 points. The DILL ACP Quality department is responsible for conducting the assessment and will review the action plan. Once all of the corrective actions are approved, the assessment is considered completed.
- c. If the corrective action plan is not submitted and approved within the specified period, this information may be submitted for review by the Purchasing/Quality team. The team can elect not to add the Supplier to the ASL or they can elect to extend the period allowed to complete the corrective actions.
- d. Supplier removal from the ASL is addressed in Section 08: Supplier Metrics of this manual.

4. ADVANCED PRODUCT QUALITY PLANNING

- a. Using the AIAG Advanced Product Quality Manual, latest edition (APQP), DILL ACP seeks to involve Suppliers early in the product development cycle to optimize the design of components and processes.
- b. DILL ACP reserves the right to perform a 'PPAP Run Review' with the Supplier, prior to the PPAP run. **DILL ACP requires conformance to the following:**
 - i. All equipment and processes used in the manufacture of DILL ACP production components must have their capacity rates verified and documented. Supplier must be ready to run production at the quoted capacity and conduct an in-house process validation (PV) prior to production.
 - ii. Operators and support personnel must be trained in the requirements of the current or updated Control Plan, equipment, and gages.
 - iii. Process capability and gage R & R studies must be completed and documented, including bias, stability, and linearity.
 - iv. Material handling systems, packaging, and routings must be in place.

5. PROCESS CAPABILITY AND MONITORING

- a. DILL ACP Quality and Supplier representatives should develop a list of Customer and Process Special Characteristics (SC's), as required. The list must be reviewed and approved by DILL ACP Quality department.
- b. Suppliers must possess a Statistical Process Control (SPC) system with minimum acceptable values of 1.67 Ppk for PPAP submission and 1.33 Cpk

for monitoring ongoing production capability. Suppliers shall utilize the APQP process to list and submit all Special Characteristics for DILL ACP Quality department approval, during the APQP process.

- c. Suppliers will submit quarterly Cp and Cpk statistical data for all customer-designated and process special characteristics to the DILL ACP Quality department personnel.
- d. If the process does not meet the 1.33 Cpk capability target, the Supplier must obtain approval from DILL ACP Quality department and submit the containment plan and 100% inspection results or a sampling method that prevents out of specification parts from being shipped to DILL ACP DILL ACP. The Corrective Action Plan for capability improvement must also be shipped.

6. ENGINEERING DEVIATION

- a. The following steps must be taken when an DILL ACP Supplier seeks permission to ship product that does not meet specification:
 - First - The Supplier must submit to DILL ACP a request for an Engineering Deviation for approval.
 - Second - Once approved by DILL ACP Product Engineering, the Engineering Deviation will list the expiration date and applicable quantity of product affected.
 - Third - The Supplier must ship product, including a completed Delivery Notice of Product/Process Change form indicating changes within the guidelines of the signed Engineering Deviation.
 - Fourth- The Supplier must obtain written authorization for additional shipments beyond the expiration period.

7. ENGINEERING CHANGE REQUESTS

- a. Suppliers must submit an Engineer Change Request form, to DILL ACP's Purchasing department, in writing, any proposed changes to DILL ACP product drawings.

8. PROCESS CHANGES

- a. Suppliers must re-submit and comply with the AIAG PPAP (current revision) process for **all** process changes. Examples of process changes requiring PPAP approval may include, but may not be limited to, the following:
 - Changes in Manufacturing or Assembly location
 - Movement of or modifications to Equipment, Fixtures, or Tools
 - Changes or alterations in Material Processing

- Changes to Inspection Methods
-
- Changes in Sub-contractors used

9. CONTROL OF NONCONFORMING PRODUCT

- a. Suppliers will be responsible for the quality and reliability of their parts. Product must meet all DILL ACP drawing and Engineering specifications. Supplier's responsibility is inclusive of costs incurred for containment, sorting, rework, repair, and replacement of defective material.

10. NON-CONFORMING MATERIAL NOTICES (NMN)

- a. When DILL ACP identifies non-conforming product, a NMN will be issued to the Supplier's Quality department. Each NMN requires an 8-D Response, unless otherwise agreed upon. The NMN will remain open until an acceptable response is received, and the Supplier has demonstrated that the corrective actions are implemented and proven effective.
- b. DILL ACP will issue a NMN to the Supplier regardless of the disposition and or use of the nonconforming material. DILL ACP will apply only the number of nonconforming parts to the PPM factor.
- c. DILL ACP will not issue a NMN and defective parts will not be counted toward the Supplier's PPM number, if the Supplier:
 - i. Requests and gets approval through an Engineering Deviation to allow use of the supplied product.
 - ii. Notifies DILL ACP of a potential quality concern prior to being received by DILL ACP and removes or sorts the suspect material and replaces it with "certified" material.
- d. DILL ACP requires that the Supplier perform the following to close a NMN:
 - i. Conduct failure analysis of parts returned from DILL ACP or from DILL ACP customers.
 - ii. Submit a preliminary written 8-D Response with containment action and sort results, within 24 hours of notification. Closure includes objective evidence that the corrective actions are implemented and proven effective.
 - iii. Submit the Final 8-D Written Closure no later than 30 days from the NMN issuance date, the Supplier may request approval from DILL ACP for an extension of the 30-day time limit.

11. SUPPLIER CHARGEBACK SYSTEM FOR NON-CONFORMING MATERIAL

- a. DILL ACP's Suppliers will be charged back for costs associated with each verified NMN issued for non-conforming material. DILL ACP will handle non-

Preferred Option – Non-conforming Material is returned to the Supplier.

Situation: DILL ACP's production schedule and/or inventory levels allow enough time to send the non-conforming material back to the Supplier. The Supplier issues a Return Material Authorization Number (RMA #) to DILL ACP to document and track material being returned for sorting, rework, or scrap at the Supplier's facility.

Charges: The Supplier will be charged a default rate of \$100.00 per MN upon verification of root cause of non-conforming material. Default Rate is broken down as follows:

"Investigation" time, including review, layout, identification, and quarantine of the suspect parts.

"Labor" time, including time spent on layout inspection, material control, and product engineering.

"Administrative" time, including issuing NMN, filling out Supplier Charge Back Worksheet, obtaining RMA #, generating Shipping Documentation, notifying the Supplier (faxes and phone calls), and moving suspect material from "available" status to "non-conforming" status.

- b. The Supplier is expected to accept responsibility for freight costs related to returning (freight invoices) or disposing (scrap charges) of any non-conforming material.

Secondary Option – Supplier Must Sort Material at DILL ACP Facility

Situation: The Supplier's employees sort material at the DILL ACP facility because our existing production schedules and/or component part inventory levels do not allow time to return the material to the Supplier's facility.

Charges: The Supplier will be charged a default rate of \$100.00 per NMN upon verification of root cause of non-conforming material. Default Rate is broken down as follows:

"Investigation" time, including review, layout, identification, quarantine of the suspect parts, and support of the Supplier's sorting crew.

"Labor" time, including time spent on layout inspection, material control, and product engineering.

"Administrative" time, including: issuing NMN, filling out Supplier Charge Back Worksheet, generating Shipping Documentation, notifying the Supplier (faxes and phone calls), and moving suspect material from

"available" status to "non-conforming" status, moving material from "non-conforming status to "available" status once sort has been completed and material is considered certified.

- c. Supplier is expected to accept responsibility for costs related to returning (freight invoices) or disposing (scrap charges) of any non-conforming material.

Third Option – Supplier Must Sort Material @ DILL ACP Facility Using a Contract Sorting Service

Situation: DILL ACP requires the non-conforming material to be sorted on-site because our existing production schedules and or component part inventory levels do not allow time to return the material to the Supplier's facility. The Supplier is unable to send its own employees to sort material and must arrange for an outside source to perform the sort. DILL ACP can arrange this at the contractor's expense.

Charges: the Supplier will be charged a default rate of \$100.00 per NMN upon verification of root cause of non-conforming material. Default Rate is broken down as follows:

"Investigation" time, including review, layout, identification, quarantine of the suspect parts, and support of the Supplier's sorting crew.

"Labor" time, including time spent on layout inspection, material control, and product engineering.

"Administrative" time, including: issuing NMN, filling out Supplier Charge Back Worksheet, generating Shipping Documentation, notifying the Supplier (faxes and phone calls), and moving suspect material from "available" status to "non-conforming" status, moving material from "non-conforming status to "available" status once sort has been completed and material is considered certified.

- c. Supplier is expected to pay for any expenses associated with the contract sorting service hired to perform the sort.
- d. Supplier is expected to accept responsibility for costs related to returning (freight invoices) or disposing (scrap charges) of any non-conforming material.

Final Option – DILL ACP Personnel Must Sort Material

Situation: DILL ACP requires the non-conforming material to be sorted on-site because of one or more of the following:

- Existing production schedules and/or component-part inventory levels do not allow time to exercise any of the options listed above.
- Supplier refuses to send his or her own employees to sort

material.

- Supplier refuses to arrange for an outside source to perform the sort.
- DILL ACP has no choice but to perform the sort in order to protect our customer and meet production schedules. Supplier's performance rating will be impacted by this option.

Charges: The Supplier will be charged a default rate of \$100.00 per NMN upon verification of root cause of non-conforming material. Default Rate is broken down as follows:

"Investigation" time, including review, layout, identification, quarantine of the suspect parts, and support of DILL ACP sorting crew.
"Labor" time, including time spent on layout inspection, material control, and product engineering.

"Administrative" time, including: issuing NMN, filling out Supplier Charge Back Worksheet, generating Shipping Documentation, notifying the Supplier (faxes and phone calls), and moving suspect material from "available" status to "non-conforming" status, moving material from "non-conforming status to "available" status once sort has been completed and material is considered certified.

- e. Supplier is expected to pay a \$75 per hour sort fee for the actual sort hours performed by DILL ACP personnel (formula: \$75/hr X Sort hours X Number of DILL ACP employees sorting material).
- f. Supplier is expected to accept responsibility for costs related to returning (freight invoices) or disposing (scrap charges) of any non-conforming material.
- g. There will be a 30 calendar day period between the time the Supplier Charge Back Worksheet is mailed to the Supplier, and the date that the costs are actually deducted from the Supplier's account. This will allow sufficient time for the Supplier to contact DILL ACP personnel with any questions regarding the complaint or the amount of the charge back. The date field in the upper left of the Supplier Charge Back Worksheet titled "Charge Back Report Date" is the date that the Worksheet is generated and sent to the Supplier and is considered the start date for the 30 day review period. The costs identified on the Worksheet will not be charged to the Supplier until 30 days after the "Charge Back Report Date".

12. VERIFICATION AT SUPPLIER PREMISES

- a. DILL ACP and their customers reserve the right to verify product conformance to all specified requirements at the Supplier and/or Supplier's premises.

SECTION 06: PPAP SUBMISSIONS

1. GENERAL

- a. Suppliers must comply with the latest edition of the AIAG Production Part Approval Process (PPAP) manual and all DILL ACP requirements.
- b. DILL ACP requires Level 3 PPAP Submission. Parts for production part approval must be taken from a significant production run. This run would typically be from one hour to one shift's production, with the specific production quantity to total 300 parts minimum unless a different quantity has been agreed upon and documented on the PPAP Purchase Order. Parts from each position of a multiple cavity die; mold, tool, or pattern is to be measured and representative parts tested. Suppliers are expected to retain one master sample from the PPAP run.
- c. Suppliers must resolve all Quantity and revision level discrepancies between parts and part drawings, prior to PPAP run and submission.
- d. DILL ACP will notify the Supplier when the PPAP submission is approved or rejected via a countersigned PSW.
- e. Supplier PPAP submissions must include:
 - i. A copy of the PPAP purchase order and/or ECR.
 - ii. 6-piece sample with a dimensional layout inspection report for DILL ACP verification and approval (Supplier may use the Production Part Approval – Dimensional Results form located in the Forms Section of the AIAG manual. The Material Test Results form and the Performance Test Results form may be used, if applicable)
 - iii. All part characteristics serial numbered in correlation with the inspection results and engineering drawings
 - iv. Material certification of the finished part (complete material analysis)
 - v. A full gage R&R study including bias, stability, and linearity
 - vi. Engineering Specification (ES) test data.
 - vii. Sub-assembly Suppliers must submit PSW copies of sub-contracted parts with the sub-assembly submission.
 - viii. Sample of production intent shipping container/packaging including proper Bar Code labeling

2. PART SUBMISSION WARRANT (PSW)

- a. Suppliers need only submit a PSW when DILL ACP, specifies a Level 1 PPAP. Please utilize the AIAG Part Submission Warrant form when

completing a Level 1 PPAP.

3. PPAP WAIVER

- a. Suppliers must submit a request for PPAP Waiver when requesting any variation from the above stated requirements. The request will be reviewed by the DILL ACP Quality, Product Engineering, and Purchasing for content. DILL ACP will issue a written authorization upon concurrence.

SECTION 07: PURCHASING / DELIVERY EXPECTATIONS/ PURCHASING EXPECTATIONS

1. GENERAL

- a. All Suppliers must comply with the DILL ACP Purchasing expectations defined in this section.
- b. DILL ACP will specify expectations for Purchasing via the APQP process, quotations, purchase orders and other forms of communication. The requirements include:
 - Labeling
 - Capacity
 - FOB Point
 - Containers
 - Warehousing
 - Consignment
 - Product Identification
 - Preservation of Product
 - Release and Pull Systems
 - Transportation Mode and Carrier Route
 - Returnable Dunnage (when cost effective)
- c. Suppliers are expected to comply with the following general expectations and requirements:
 - AIAG B-3 publication, "Shipping Parts & Identification Label Application Standard"
 - AIAG B-1 publication, "Bar Code Symbology Standard"
 - AIAG RC-8 publication, "Single and Multi Use Container Systems Guideline"
 - AIAG RC-5 publication "Returnable Containers Management Guideline"

2. INVENTORY OF DUNNAGE

- a. Suppliers are expected to manage returnable dunnage and ensure material flow. Damaged containers, trays, or other DILL ACP supplied product should be removed from use, tagged as defective, and returned with notification to the DILL ACP facility. The Supplier will reimburse DILL ACP for damages incurred by the Supplier.

3. DELIVERY PERFORMANCE – PRODUCTION SUPPLIERS

- a. The Supplier must ship 100% on time (three days early to two days late) to the DILL ACP facility. Suppliers are financially responsible for all freight charges and costs incurred due to late deliveries.
 1. Suppliers must ensure Shipment Quality, which includes Labeling/Identification and Shipping Information.
 2. Labeling / Identification Requirements:
 - Packing Slip must be present and contain correct information
 - Shipping Label must be present, bar coded, in the correct location, contain the correct information and meet AIAG standards
 - Special Labels (PPAP, PSW, ECR) must be present, if applicable
 3. Shipping Information Requirements:
 - Shipments must be 100% on time (2 Days Late / 3 Days Early)
 - DILL ACP preferred carriers must be used per routing instructions
 - Must obtain premium freight authorization, in writing, to address responsibility for expedited freight charges prior to shipping

4. PRODUCTION PARTS INVENTORY

- a. DILL ACP requires our Suppliers to ensure proper rotation of inventory using a First In/First Out (FIFO) system.
- b. Suppliers must obtain a written Stocking Agreement from DILL ACP's Purchasing department prior to carrying safety stock of finished goods inventory

5. REFERENCE DOCUMENTATION:

- AIAG B-3 publication, "Shipping Parts & Identification Label Application Standard"
- AIAG B-1 publication, "Bar Code Symbology Standard"
- AIAG RC-8 publication, "Single and Multi Use Container Systems Guideline"
- AIAG RC-5 publication "Returnable Containers Management Guideline"

SECTION 08: SUPPLIER METRICS

1. METRICS

- a. DILL ACP uses Supplier Metrics as:
 - i. A measurement system for award of new business and

identification of long term Suppliers

- ii. As a communication tool for alerting the Suppliers' Management of problems with their quality system and requires a timely response from the Suppliers' Management.

2. QUALITY METRICS = 50 POINTS

a. Defective Parts Per Million (PPM)		Points Awarded
<p>The expectation is 0 ppm.</p> <p>Formula: (Total # of Defective Parts Found / Parts Delivered in the Month) * 1,000,000</p> <p>DILL ACP will count only nonconforming parts but the supplier must forward sort results from "in-house" sorts or the full quantity will be applied to the Suppliers' PPM calculation.</p>	0 ppm	50 points
	1 ppm to 100 ppm	40 points
	101 ppm to 1000 ppm	30points
	1001 ppm to 2000 ppm	20 points
	2001 ppm to 3000 ppm	10 points
	>3000 ppm	0 points

3. 8.3 DELIVERY METRICS = 50 POINTS

a. On-Time Deliveries		Points Awarded
<p>The expectation is 100 % on-time delivery with accurate quantities.</p> <p>Formula: # of Deliveries on time / # of Releases or Standard Packs required.</p> <p>DILL ACP appreciates Suppliers' quick reaction to schedule fluctuations and will not penalize the Supplier when lead-time is excessively crushed.</p>	100% on time	50 points
	95% to 99%	40 points
	90% to 94%	30 points
	85% to 89%	20 points
	80% to 84%	10 points
	<80%	0 points

4. METRIC SUMMARY

METRIC POINTS AWARDED

QUALITY 50

DELIVERY 50

TOTAL 100

SECTION 09: SUPPLIER RATINGS AND REPORT CARDS

1. SUPPLIER RATINGS

- a. DILL ACP Supplier Ratings is used as a basis for alerting the Supplier's management to problems with their quality system. Suppliers should utilize established problem solving techniques to determine root cause(s) and provide plans for the timely implementation of corrective action(s).

Total Score	Overall Rating
95-100	Exceptional
89-94	Acceptable
83-88	Needs Improvement
<83	Unacceptable

2. SUPPLIER REPORT CARDS

- a. The Supplier's management will be issued a report card with ratings on quarterly basis for Suppliers who have shipped product within the previous 3 months. Suppliers are encouraged to review their rating with the DILL ACP Quality department.

8D	Eight Discipline Report
AIAG	Automotive Industry Action Group
APQP	Advanced Product Quality Planning
ASL	Approved Supplier List
Cpk	Ongoing production statistical capability monitoring
CP	Control Plan
ECR	Engineering Change Request
EDI	Electronic Data Information
ES	Engineering Test Specifications
FIFO	First In First Out
FMEA	Failure Mode and Effects Analysis
JIT	Just In Time
MAPS	Manufacturing & Planning Systems
MRO	Maintenance, Repair and Operating Supplies
MRP	Material Requirements & Planning System
MSA	Measurement Systems Analysis
NMN	Non-conforming Material Notice
OEM	Original Equipment Manufacturer
Ppk	Minimum piece run - statistical capability monitoring
PPM	Parts Per Million
PO	Purchase Order
PPAP	Production Part Approval Process

PSW	Part Submission Warrant
QFD	Quality Function Deployment
QOS	Quality Operating System
QR	Quality Reject
RFQ	Request for Quote
RPN	Risk Priority Number
RYG	Red, Yellow, Green APQP Status
SC	Special Characteristics
SCM	Supply Chain Management
SRM	Supplier Resource Management
SPC	Statistical Process Control
SQ	Supplier Quality
TCM	Total Cost Management
TQM	Total Quality Management
TQE	Total Quality Excellence