Valued Supplier:

Enclosed is the STRATTEC SECURITY CORPORATION Supplier Quality Manual, which has been developed to assist you in understanding our Corporate Materials Management and Supplier Quality Assurance requirements.

This Manual represents STRATTEC's commitment to quality and supplier partnerships. The information contained and its attachments are confidential and only for STRATTEC use. Distributing & Copying is strictly prohibited.

Future updates for the manual will be directed to your attention as you have been designated as the person in your organization assigned the responsibility for the control and maintenance of the Supplier Quality Manual. If you require additional copies of the manual for your facility, we will be happy to supply them to you.
Please **destroy any previous copies in your facility** of the Supplier Manual; the current Supplier Manual has been developed with a new revision.

If you require additional copies of the Supplier Quality Manual, have any questions, or require further clarification, please contact Supplier Quality through SupplierQuality_Admin@strattec.com

Please complete this Supplier Quality Manual registration form and return it to:

SupplierQuality_Admin@strattec.com

Upon receipt of the signed form, you will be added to the Supplier Quality Manual mailing list and future updates will be sent directly to you.

SUPPLIER MANUAL REGISTRATION FORM

To: Supplier Quality

Supplier Quality Manual

I acknowledge receipt and review of the new STRATTEC SECURITY CORPORATION Supplier Quality Manual.

_____ _____

Representative Signature Company Name

_____

Date

STRATTEC SECURITY CORPORATION

SUPPLIER MANUAL

STRATTEC SECURITY CORPORATION
SUPPLIER QUALITY MANUAL

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SCOPE

This procedure applies corporate wide and at all facilities within STRATTEC.

REFERENCES:

Available upon request:

Supplier manual suggestion form (06L4M013)
Supplier Corrective Action Form (8D) (14L4M.005)
Supplier Non-Conforming Report Form (10L4M.018)
Supplier Quality System Survey (06L4M.011)
Supplier Quality Self Survey (06L4M.012)
Supplier Quality Run at Rate form (06L4M.026)
Scorecard (06L4J504)
SPI Audit Check List (06L4J505)
Design, Process and Site Change Request (06L4J506)
STRATTEC Packaging Manuals (CWI Packaging Standard & 15L4M~~0~~038 Packaging Form)

1.0 PURPOSE, POLICIES, MISSION, AND PRINCIPLES

1.1 Purpose

The Supplier Quality Manual defines the necessary requirements and procedures to assure the Quality of Purchased parts. Special cases may exist and have to be reviewed on a case by case basis. The responsibility for the Quality of purchased parts lays with the Supplier. The Supplier Quality Manual applies to all external purchased direct material and shall be used on a daily basis as reference for execution of activities and follow up of suppliers.

1.2 At STRATTEC, procurement of goods and services is a vital function within the organization and plays a significant role in the profitability of the corporation.

Management of the supplier base is key to maximizing material management's contribution to corporate profitability. We believe in developing and maintaining partner-like relationships with our suppliers. To be effective in this relationship, it is important to communicate to our suppliers the policies, mission, and guiding principles that are the foundation of our organization.

1.3 Corporate Materials Management Quality Policy

Our prime responsibility is the development of both current and potential suppliers that have committed themselves to providing defect-free products to STRATTEC. The emphasis is in the development of those suppliers who will add value to our product at the lowest total cost.

In development of our supplier base, the emphasis will be on quality, delivery, price, customer service and support for a flawless launch execution.

1.4 Corporate Materials Management Mission Statement

The mission of the Corporate Materials Management Department and the Procurement Department is to enhance the profitability of STRATTEC and to support its long-range plan by procuring components, materials, and services at an excellent quality level, on time, and at the lowest total cost.

We will identify effective sourcing opportunities to achieve superior performance and to enhance profitability and productivity in conjunction with supplier partners and their developing technologies.

1.5 Corporate Materials Management Values and Beliefs

Corporate Materials Management will be guided by the STRATTEC values and beliefs and further dedicates itself to:

Conduct all activities in a fair, ethical and professional manner.

Create and maintain an atmosphere that demands excellence.

Challenge our suppliers to provide a quality product in a timely manner at a competitive price.

It is our intention to enter into partner-like relationships with those suppliers who share our values and beliefs. Corporate Materials Management will always be open to new suppliers that will add value to our product and enhance the profitability of our Corporation.

Current or new suppliers wishing to conduct business with STRATTEC should first contact Corporate Materials Management or the Procurement Departments. Meetings will then be scheduled with the other functional organizations.

1.6 Relationship with External Suppliers

It is the policy of STRATTEC to maintain relationships with suppliers that are legal, ethical, and consistent with good business practices. STRATTEC considers it good business practice to:

Provide a competitive environment for all suppliers, large and small, local, national and international, to earn a share of STRATTEC business.

Evaluate all suppliers fairly using the following criteria: quality, delivery, price and any other relevant factors, while safeguarding confidential and proprietary information of both STRATTEC and the supplier.

1.7 Materials Management / Procurement Responsibilities

Corporate Materials Management/Procurement have responsibility for negotiating major contracts with suppliers of materials and services on a company-wide basis. Procurement Departments have the responsibility of negotiating contracts for commodities within their Divisions. Corporate Materials Management and Procurement Departments will coordinate procurement activities.

Corporate Materials Management / Procurement Departments will be the primary contact on all business communications with the supplier. The overall responsibility for the quality of the supplier base rests with the Supplier Quality / Procurement Departments. However, the Supplier Quality Organization will have the responsibility to address specific quality issues either directly or through Procurement Departments in an effort to enhance the overall quality and development of supplier components. Specific tasks of the Supplier Quality Organizations are addressed later in this manual.

1.8 Supplier's Responsibility for Quality

Suppliers are fully responsible for the quality of their goods and/or services. Each Supplier is required to meet at all times the STRATTEC Supplier Quality Manual requirements. Failure to comply with these requirements may result in consequences such as loss of existing / future business with STRATTEC. For each business, Suppliers and their sub-Suppliers must ensure that comply with the ISO 9001 or TS 16949 requirements and are committed with zero defects and 100% on time Delivery mindset. Suppliers must ensure that they conform to all STRATTEC requirements outlined in this manual.

Suppliers must accept responsibility for any costs STRATTEC may incur because of delivery of non-conforming parts or parts received beyond their due date. Shipment of non-conforming / late material will jeopardize a supplier's quality rating.

1.9 Language

STRATTEC official language is English, every established communication, documents, or electronics data between STRATTEC and Suppliers will be in English. PPAP Documentation shall be in English.

2.0 CONSIGNMENT PROGRAM

2.1 Cycle Counting Responsibility
The Supplier will be responsible for "accurately counting" STRATTEC owned inventory within their facilities, on request.

"Accurate counting" may include the use of scales, hand counting, and use of STRATTEC supplied container counts if no materials from that specific container have been handled.

The results of the count will be documented by part number, and forwarded to the respective STRATTEC Purchase Planner.

If the supplier performs a non-requested count and identifies an inventory problem as a result of that count, it is the supplier's responsibility to communicate that problem to the respective STRATTEC contact.

2.2 Inventory Loss Reporting / Responsibility

Although the consignment inventory is owned by STRATTEC, the supplier has the responsibility to take "due care" in handling and controlling this material.

If an inventory loss or gain is identified within the supplier's system the loss or gain will be analyzed by the respective STRATTEC Procurement Representative and/or Purchase Planner. Dependent on the results of this analysis, negotiations may follow concerning the responsibility and charge impact of that loss.

2.3 Scrap Reporting/Responsibility

It is the responsibility of the supplier to document all scrap incurred within the supplier facilities and forward this documentation to the respective STRATTEC Purchase Planner. STRATTEC reserves the right to request that this scrap be gathered, documented and returned as necessary.

Documentation will include part number, quantity, defect information, and charge responsibility.

If the scrap percentage reflects a substantial increase over the set standard it is the responsibility of the supplier to contact the respective STRATTEC procurement representative for approval prior to continuing production /assembly.

3.0 NEW SUPPLIER DEVELOPMENT / QUALIFICATION PROCESS

3.1 Supplier Development / Qualification

"Supplier Development/Qualification Process" brings a new supplier from qualified to approved. Supplier Development/Qualification process ensures that:

- STRATTEC standards for suppliers are clearly defined
- Supplier's quality system meets STRATTEC requirements.
- Supplier's processes are in control, capable, and product shipped to STRATTEC is defect free.
- Suppliers work with STRATTEC Engineering to insure that components are designed for manufacturability and cost effectiveness and submit timing and status updates in specific customer formats.
- Suppliers work with Supplier Quality Engineering group to ensure that adequate quality planning activities occur.
- Sourcing decisions are based on the supplier's commitment to work with STRATTEC to achieve zero defects, 100% on-time delivery and to provide continual product and cost improvements.

When specified in the customer contract STRATTEC will utilize approved subcontractors.

Achieving preferred status is the supplier's goal.

3.2 The Mission of Supplier Development/Qualification

The mission of the supplier development/qualification process is to:

Ensure that competitive pricing is committed to total defect-free quality, 100% on-time delivery, and technological expertise.

Reduce quality costs, with an emphasis on defect prevention techniques. This includes unreported quality costs, i.e., requests for deviations, excess transportation, etc.

3.3 Supplier Development process requires :

STRATTEC Purchasing conducts a preliminary evaluation of the supplier. Besides demonstrate competitive price and confirm manufacturing feasibility , Supplier will be required to conduct a self-survey of quality system, demonstrate quality certification, confirm agreement on the present Supplier Quality Manual.

Supplier Quality to determine if the self-survey and risk evaluation support to proceed with the sourcing or an On Site Survey/Audit need to be conducted by STRATTEC.

Purchasing to conducts drawing review meeting with supplier and appropriate STRATTEC personnel.

Specifications and Special Characteristics are reviewed. Cost and Timing Plan communicated and understood.

STRATTEC Security Corporation Purchasing, Project Management and Supplier Quality will then sign off on the sourcing in agreement of the new supplier being utilized.

Supplier submits PPAP with samples for final evaluation and approval by STRATTEC.

STRATTEC dispositions the PPAP.

Purchase order is issued.

Supplier delivers parts on time with zero defects or provides advance notice of potential problems to facilitate cooperative resolution (communication must be done via e mail to the respective Supplier Quality Engineer). A containment plan is defined and implemented.

Supplier quality will contain and/or evaluate consecutive shipments to verify effectiveness of controls (See Section 7.3

3.4 STRATTEC Development /Qualification Methodology

Following is a summary of STRATTEC's supplier development/Quality Methodology:

Encouragement of open communications and partner-like relationships between the supplier and STRATTEC.

Advise the supplier of the resources and support available from STRATTEC, to aid the supplier in quality planning, process control methods, gage development, and statistical methods for assessment, improvement, and control.

Discussion of STRATTEC's supplier development/Qualification plans and expectations of the supplier, including requirements for continual improvement.

Explaining the function of the part(s) or process(es) used as they relate to the performance of the final product. This includes descriptions of the product into which the part is assembled, subsequent processing performed on the part, handling methods used within STRATTEC, etc., where such information is not considered confidential or proprietary.

Actions following the initial supplier development meeting will generally include:

A survey of the supplier's quality system by STRATTEC survey team or self-survey.

Communication between STRATTEC and the supplier to develop and finalize quality planning elements.

Review of the supplier's performance history with any deficiencies noted and discussed.

Supplier has prime responsibility for:

Corrective action and in time response required based on the results of the quality system survey conducted by STRATTEC.

Meeting the requirements set forth by STRATTEC and the AIAG requirements for PPAP submissions, using the AIAG format.

Maintain defect-free parts, 100% on-time delivery along with an acceptable quality rating.

3.5 Disqualification of Suppliers

Once a supplier becomes active, that supplier will be monitored per section 8 of this manual. Other areas may be monitored as determined, which may include PPAP accuracy, completeness, customer service, status of ISO 9001 or ISO/TS 16949 latest version. Any of these items that are consistently found to be non-conforming could disqualify an approved supplier.

4.0 STANDARDS FOR SUPPLIER QUALITY SYSTEM

4.1 Quality Manual and Procedures

All suppliers will be required to document their quality system in a written manual. The manual is to reflect all the processes and procedures utilized in their manufacturing system. The manual must be reviewed and updated annually.

4.2 System Concepts

STRATTEC Supplier Quality Manual specifies the quality elements and supporting activities necessary to satisfy STRATTEC's minimum requirements for suppliers of purchased components and services.
The following concepts are fundamental to STRATTEC requirements for supplier quality systems:

a) Goal of Supplier conformity with ISO TS 16949 may be met with either of the following:
   - Supplier to achieve accredited third party certification to ISO/TS16949, or the current version of ISO 9001.
b) All sorting and reworking companies that will be used at any STRATTEC facility must be:
   1) A STRATTEC Security Corporation approved supplier.
   2) Need to be listed on STRATTEC Security Corporation approve Supplier list.
c) Suppliers are also required to submit all renewed certificates for each manufacturing location at time of renewal. Information on all certificates must match the name and address of record of the manufacturing location.
d) Emphasis on preventative quality assurance techniques and the use of statistical methods.
e) Supplier responsibility for development and maintenance of a process flow description and control plan for each part or part family supplied.
f) Supplier responsibility for continual product improvement and quality planning.
g) Ongoing STRATTEC assistance in supplier quality system refinements, quality planning, and efforts to reduce product variability.
h) Assurance that suppliers are aware of STRATTEC's requirements and are supplying defect-free products.

4.2.1 Components of a Quality System

This section is organized to match the order of the supplier quality system survey. The categories are:

a) Quality Assurance Organization.
b) Advance Quality Planning.
c) Change Control.
d) Purchased Material.

e) In-Process Material Control.
f) Gage Control.
g) Material Review.
h) Final Audit / Test.
i) General Housekeeping.
j) Packaging & Handling
k) Customer Satisfaction

4.3 Quality Assurance Organization

This section defines the requirements that must be reflected in the suppliers policies and procedures.

4.3.1 Management Policy for Quality

a) Stated Objectives: Suppliers must have a written policy statement that reflects their philosophy and/or goals and shall ensure that the quality policy:

- Is appropriate to the purpose of the organization.
- Includes a commitment to comply with requirements and continually improve the effectiveness of the quality management system.
- Provides a framework for establishing and reviewing quality objectives.
- Is communicated and understood within the organization, and
- Is reviewed for continuing suitability.

4.3.2 Management commitment for quality:

a) Commitment to a system that prevents defective material from being produced and demonstrates process control.
b) Commitment to using employee input and suggestions.
c) Evidence of a systematic flow of information downward within the organization. Vehicles such as department meetings, bulletin board postings and newsletters offer evidence that information is shared.
d) Actions to increase management and engineering emphasis on quality.
e) Measurements of customer perceptions and concerns.
f) Goals and objectives for improved performance
g) Assessment of the strengths and weaknesses of the organization with respect to quality.
h) Programs for continual improvement.
i) Organizational Responsibilities: The supplier must support the philosophy that quality is every employee's responsibility. This requires employee involvement in quality-related decision making,

direction of activities, and attention to quality performance on an ongoing basis. The quality function's responsibilities should include planning, forecasting, measuring, reporting and directing improvement activities.

j) Quality Organization Autonomy: The organizational structure should be established and operated so that quality procedures are not violated for the expedience of other functions.

4.3.3 Management Participation

Internal Audits: Periodic internal audits of the quality system are necessary to verify that appropriate practices and procedures have been established and are being properly used.

The supplier must have a written procedure for conducting internal audits. Internal audits must include evidence of the items audited. The audit is to be conducted by qualified personnel independent of the activity being audited. Results must be distributed to the manufacturing plant manager and staff for information and corrective action. These internal audits allow the supplier to monitor its own activities effectively.

STRATTEC may require copies of supplier internal audit reports. During the on-site system survey, STRATTEC will determine that internal auditing is being performed and adequate response to unsatisfactory results is being provided.

The frequency of internal audits should be determined by the supplier based on performance. The minimum frequency is once per year.

Quality Costs: The management of quality costs is an important tool in the ongoing effort to improve the quality of products and services delivered to the customer as economically and effectively as possible.

Quality cost reporting encompasses expenses incurred in prevention, appraisal, internal and external failure. In practice, prevention costs must be incurred and some appraisal costs will be unavoidable.

The total elimination of failure costs should be a permanent goal.

Properly reported quality costs often provide ample justification for necessary preventive and corrective actions and will also verify the results of such actions.

In addition to defining and measuring quality costs, the supplier should interpret and compare the costs against an index such as, percent of sales, profit, etc. Quality costs should be reported to management on a regular basis.

Quality cost improvement plans are vital to the basic objective of reducing quality costs. Not only should valid estimates of cost improvements be made for forecasting purposes, but actual cost improvements should be monitored regularly to determine the effectiveness of each improvement plan.

Continual Improvement: To achieve continual improvement the supplier must demonstrate that methods are effective in improving quality. Formalized long-range planning should direct and prioritize efforts to upgrade equipment and methods. Specific plans should be available for all areas of the organization, with evidence to demonstrate plans are being carried out in a timely fashion.

4.3.4 Commitment to Improvement

Training programs should include a plan for the qualification and training of all personnel in:

a) The skills necessary to perform their job.
b) Fundamental quality procedures appropriate to each individual's job requirements.
c) Statistical techniques.
d) Advanced quality techniques such as: design of experiments, Taguchi methods, failure mode effects analysis, value engineering, quality function deployment, design for assembly, analytical problem solving and others.

Education and training should include:

a) Documented training requirements for existing, new or transferred employees.
b) Assignment of responsibility for ensuring the training is accomplished.
c) Records of employees attending seminars and/or training sessions.
d) In addition the organization should encourage and offer guidance to employees in education for advancement and in achieving certification in their particular discipline.

The organization should:

a) Actively solicit contributions of employees through quality circles, improvement teams, etc.
b) Have a program for updating equipment.
C) Allocate funds for quality improvement.

4.4 Advanced Quality Planning

Advance Quality Planning reviews the important activities that must occur prior to production of new products or of new suppliers producing existing designs. A properly organized and systematic approach assures the best possible tool and process design. It also assures that necessary training, controls and gauging are in place when production occurs.
There must be a clearly defined method of design review by all key individuals involved in the manufacturing process. This review and subsequent activities should follow specific guidelines to assure complete and thorough planning. Print reviews must take place with the customer so requirements and design intent are clearly understood. APQP includes such items as: DFEMA, Flow Diagram, PFEMA, Control Plan, and Validation Process.

Follow the AIAG format for advanced quality planning and control plans.

NOTE: Some of the STRATTECs Customer could have their specific APQP guidelines

Meeting a production date is critical to STRATTEC. Timelines must be developed to track the project and assure parts meeting blueprint specifications are available when scheduled. STRATTEC will require project status updates.

4.5 Supplier-Requested Changes.

Changes cannot be made by the supplier without prior written authorization from STRATTEC. Supplier changes are considered as a program within STRATTEC. Suppliers seeking changes in product design, manufacturing processes, methods, procedures, and/or control measures must request approval by STRATTEC prior to implementation so that re-qualification actions can be accomplished when deemed necessary by STRATTEC.

NOTE:

For all Design, Process or Site changes STRATTEC Security Corporation requires the **Design, Process and Site Change Request** format to be submitted to the STRATTEC Security Corporation Purchasing or Supplier Quality representative prior any planning phase. Most of the changes needs to be approved by STRATTEC customers. The format is available upon request.

Unauthorized changes are the basis for product rejection and possible disqualification of the supplier. Supplier is not allowed to deliver modified

product/processes prior to STRATTEC official approval through PPAP and is requested to inform STRATTEC Purchasing/SDE department for the date of first modified parts delivery, parts shall be clearly identified in accordance to STRATTEC requirements. The supplier will be held responsible for all direct, indirect, and consequential damages which arise from or are related to the unauthorized change.

4.6 STRATTEC Changes

Often, engineering changes or deviations are needed during the production process to meet customer requirements or improve quality. When this situation occurs, STRATTEC suppliers must be prepared to implement the required changes.

If change is requested by STRATTEC or the customer, the STRATTEC Purchasing Department will communicate any changes. It is up to the supplier to determine if the change will affect cost, delivery, tooling, gauging , any process revisions, any anticipated defect rate change in parts per million (PPM) and any other pertinent items.

4.7 Management of Secondary Suppliers

Suppliers are responsible for ensuring that all products and services purchased from secondary-suppliers conform to STRATTEC and its customer's requirements by:

- Identifying their critical processes.
- Qualifying their process and components
- Managing the performance of its supplier panel
- Keeping information available at any time upon STRATTEC request

STRATTEC's suppliers must work with their sources to develop a defect free level of quality and continual improvement, supplier shall ensure that critical processes of purchased parts are audited and managed to prevent STRATTEC from being impacted by quality, quantity, or no on time delivery issues.
Upon STRATTEC request, supplier shall make it possible for STRATTEC to audit critical processes of sub suppliers to assure that proper controls are in place throughout the entire supply chain
Suppliers must ensure that the quality systems of their sources conform to the same requirements, outlined in this manual, for STRATTEC primary suppliers.

NOTE:

In all the cases, when a supplier is considered a distributor, the

Latest version of ISO-9001 compliance will be required to the secondary supplier.

When source changes are planned, the supplier must notify STRATTEC in advance. A change in secondary-suppliers may require the supplier to submit samples to STRATTEC for approval with a PPAP.

4.8 In-Process Material Control

4.8.1 Operating Methods

Set up sheets must be established and documented with evidence of control on all shifts.

Written operator and inspection instructions, which include inspection frequencies and sample size, must be readily available at each workstation.

Written inspection instructions may be supplemented with standardized tests or special engineering or manufacturing instructions.

Inspection instructions must be based on the latest engineering drawing and process level and must include:

Part name, part number, and revision level

Specification of statistical techniques, including sample size and sample frequency, to be used for inspection or test of material.

Special Characteristics or features to check.

Lab checks or reference to a lab procedure.

First piece inspection prior to production runs and after each machine set-up, die change, or process change to assure compliance to specification.

The measuring equipment required. This equipment must be part of the supplier's gage control system.

Records must indicate that inspections and tests are being performed in accordance with the supplier's written procedures and instruction sheets. These records should be accurate, properly dated, and signed or initialed by the inspector or operator.

Regular audits must be conducted to verify compliance with inspection instruction sheets. Responsibilities must be defined and corrective action required if not in compliance.

Examples of process audits include a review of the methods used to conduct the following:

Definition of process parameters.

First piece inspection after a tool or die change.

Operator checking of in-process inspections.

Roving or in-process inspections.

Manual or visual checks.

Conformance to control plans and process flow descriptions.

4.9 Control Plans

The supplier's manufacturing operations must adhere to the following requirements:

Current control plans must be adhered to for all STRATTEC parts. Control Plan need to comply with the APQP and Control Plan Automotive Standards (AIAG).

All Special Characteristics must be included in the supplier's Control Plans. The methods of control should be appropriate for the Special Characteristic and must be approved by STRATTEC as part of the control plan. See Section 15.0 for more information on Special Characteristics.

4.10 Statistical Process Control

Statistical methods must be used as an integral part of the supplier's process to provide the information necessary for process control, continual improvement in quality and productivity. In addition to Special Characteristics, the supplier may also select other significant process characteristics to be monitored using statistical methods.

The supplier must ensure that production processes remain in statistical control.

4.11 Inspection Records and Traceability

Quality system and performance records must be made available for review by STRATTEC representatives; those records must be kept for three years and furnished upon request. The lost control code must provide traceability of material and records from the point of shipment back to the point of origin.
Supplier is requested to achieve the complete product traceability, drawings and production documents during the requested time frame.
Any control operation involving functional test shall be systematically identified and traceable on the concerned parts, the identification method shall be agreed between supplier and STRATTEC.
Supplier shall establish an effective batch definition and traceability procedure.

4.12 Performance

Inspection instructions must be reviewed with each operator/inspector during training or when changes occur.

Employees should know customer requirements and, whenever possible, be given visual aids.

Wherever possible, production operators should be given responsibility for the quality of the output of their processes, with authority to take proper corrective action.

4.13 Material Status

The supplier must have formal procedures for material identification and control.

The supplier must have effective controls in place to provide accurate part number identification throughout processing, storage, packaging, and shipping. Material certifications from an accredited lab must be available upon request.

The supplier is responsible for identifying the status (accept, reject, sort, hold for rework, etc.) of the product through all stages of the process.

Non-conforming material must be clearly identified to ensure it cannot be mixed with conforming material.

4.14 Preventative Maintenance

A significant element in producing a high quality part over a sustained period of time is effective preventative maintenance for machines and tooling.
All production equipment shall to fulfill the product quality requirements.

Supplier is requested to develop a system for preventive maintenance of its production equipment and tools.
Frequency of preventive maintenance procedures shall be defined in order to ensure the conformance of delivery parts to STRATTEC requirements.
Supplier is responsible to define and set up sufficient preventive maintenance procedures in order to fulfill STRATTEC agreed quality targets, it implies;

- Definition of minimum preventive maintenance equipment
- Definition of preventive maintenance frequency per equipment
- Definition and follow up of a preventive maintenance planning

4.15 Gage & Measuring Devise Control/Calibration

The supplier must have a written plan to verify the accuracy of gages and other measuring and test devices at sufficiently frequent intervals to ensure continued accuracy. Frequency of calibration should be decided by the supplier considering the accuracy and use. Masters, standards and/or calibration services used must be traceable to the National Institute of Standards and Technology (NIST formerly NBS) or equivalent. Records of the inspection and calibration are to be maintained. These records should include gage identification, location, date, numerical results of the inspection or calibration, and the date of the next scheduled inspection. The documented calibration system may be a manual or computerized system with all information retained for a minimum of three (3) years.

The supplier's system for gage control must ensure that gauging will not be used beyond the calibration due date.

STRATTEC may request evidence of supplier calibration schedules.

4.16 Gage & Measuring Devise R&R

Since the use of measuring and testing equipment is a source of variation, appropriate statistical studies should be conducted to determine stability and capability.

Prior to release for use, all new gages, inspection devices and test equipment must be inspected to design specifications, calibrated and approved based on gage accuracy and gage R&R studies. Gage R&R's must be performed prior to process capability studies. Gage R&R's are required for all the equipment used to verify the Special Characteristics listed on Section 15.0 and should be equal to or less than 10% to be considered acceptable. In the event of a result between 10% to 30%, the gage could acceptable depending on the application, control system evaluation and STRATTEC verification and approval for submitted data during the PPAP process. A gage with a result

major than 30% is unacceptable. For Gage R&R studies, The number of distinct categories must be equal or major than 5 to assure an acceptable measuring system.

Supplier must follow the MSA manual requirements (AIAG). If the measurement system is used for process improvement (reducing part-to-part variation), %StudyVar is a better estimate of measurement precision. If the measurement system evaluates parts relative to specifications, %Tolerance is a more appropriate metric.

Production tools, fixtures, tool masters and other such devices are not to be used as gages.

4.17 Material Review

4.17.1 Review Requirements

The supplier must have a formal method of documenting problems and the corrective action taken. It should contain the following:

a) Procedure for addressing in-house deviations with multi-disciplinary sign-offs.

b) Defects should be analyzed and include root cause and process corrective action.

c) Corrective action should be verified.

d) Responsible personnel for C.A. should be identified.

e) Customer complaints/returns must be analyzed for feedback and corrective action in a timely manner. A delayed response will affect a supplier's quality rating. A 24-hour written conformation response is required.

4.17.2 Non-Conforming Material Handling

The supplier must have a formal procedure for controlling non-conforming material.
Non-conforming material must have defects clearly identified, be segregated and moved to a clearly marked area for non-conforming material.

Rework operations must be documented and material must be re-inspected through normal inspection procedures.

4.18 Final Audit

Final inspection tests or dock audits of product and packaging are necessary supplier functions, and should be monitored and recorded preferably by the Quality Department.

The supplier must have formal written instructions/procedures including sampling method and size, date, revision level and authorizing signature. The sampling method must be based on zero defects. Packaging audits must include product identification, and when applicable, deviation number.

There should be evidence of analysis and documentation of actions taken based on the results.

4.19 General Housekeeping

Suppliers are responsible for maintaining cleanliness and practicing good housekeeping in their manufacturing facilities.

4.20 Packaging, Labeling and Handling

The supplier must have a system in place to prevent damage to raw and in-process materials. Stockroom areas should be clean and offer protection from adverse conditions. Packaging, identification and shipping instructions should be available.

Please follow up the STRATTEC Packaging Manuals: (CWI Packaging Standard & 15L4M0038 Packaging Form)

SAMPLE, PILOT AND PREPRODUCTION
Since sample, pilot and pre-production materials have limited availability and are highly valuable; the packaging of these materials must meet or exceed the minimum guidelines of the manuals. Therefore, extra care must be used when choosing and implementing a packaging system.

Supplier shall to communicate when there is a risk situation that STRATTEC needs to be aware of, Supplier shall to inform of every instance out of the normal operations, including Labeling, packaging and transportation .

4.21 Customer Satisfaction

Suppliers must have a method of periodically surveying their customers for feedback on overall performance. There should be evidence of analysis and documentation of actions taken based on the results. Suppliers should also have evidence of recognition from their customers in the form of letters, plaques or certificates.

4.22 Service requirements

Service plays an integral part of STRATTEC's overall commitment to or customer base, suppliers are required to have means to provide service parts where applicable. Costing should be included in the initial return of the Request for Quote.

4.23 Warranty related issues

Supplier will be solely responsible for all warranty issues that derive from purchased components at STRATTEC Security Corporation and our customers.

5.0 SUPPLIER QUALITY SYSTEM SELF SURVEY

5.1 When Surveys are Conducted

There are two primary reasons for conducting a STRATTEC Supplier Quality System Survey (06L4M011/ 06L4J505).

5.1.1 (1) To evaluate potential suppliers and determine their ability to meet STRATTEC requirements.

5.1.2 (2) To evaluate current suppliers having reoccurring non-conforming materials and/or unsatisfactory performance history rating.

5.1.3 The type of survey will be dependent upon the product, the impact of that product on final quality and where applicable quality reports and / or past performance and will be done as needed basis as outlined above.

5.2 Preparation

STRATTEC to request visit confirmation and provide respective agenda based on the Survey requirements. Supplier need to be prepare with supporting data or documentation according Agenda and visit purpose requirements.

5.3 Methodology

The on-site survey will be conducted by a team consisting of STRATTEC Procurement, Supplier Quality and/or representatives as deemed necessary.

The following supplier representatives should be available for the survey.

General Manager - Participate in the entrance briefing and the closing conference.

Quality Manager - Participate in the entrance briefing and the closing conference and accompany the survey team during the survey.
Sales Manager - Participate in the entrance briefing and the closing conference
Operations Manager, Plant Manager and managers, such as the Manufacturing Manager, Engineering Manager, Laboratory Manager, and Procurement Manager must be available at all times during the survey to address elements related to their particular functional areas.

5.4 The Entrance Briefing

At the entrance briefing, STRATTEC will:

- Explain the purpose of the survey.
- Explain survey methodology.
- Schedule a time for the closing conference.

During the entrance briefing, the supplier will:

- Provide an overview of the company including product line, organization, and goals.
- Advise of any restrictions relative to proprietary areas of safety or EPA regulations.

5.5 The Survey

As part of the survey, STRATTEC will:

a) Tour the facility and make observations of the quality system.

b) Obtain examples of various documents and/or products and track them through the system, e.g., an engineering change or rejected material.

c) Verify a sampling of the supplier's responses to the elements in the STRATTEC Quality System Survey

d) Rate each discipline.

e) Discuss and clarify non-conformance to the STRATTEC standard with the appropriate supplier representatives.

5.6 The Closing Conference

At the closing Conference, STRATTEC will:

a) Summarize the results of the Supplier Quality System Survey, identifying the supplier's strengths and weaknesses.

b) Discuss specific items requiring action and request timing for a formal plan if appropriate.

c) Discuss STRATTEC supplier development strategy when appropriate.

d) Provide a summary of future actions.

During the closing conference, the supplier will address any concerns raised by the survey team.

5.7 Rating Requirements

Rating requirements are defined on the Survey forms (06L4M011/ 06L4J505) and are communicated in advance to supplier.

Survey for potential suppliers requires a rating of:
80%-100% (green) to be considered as STRATTEC recommended supplier,
STRATTEC may request an improvement plan in the event that score is between 80% to 84%
60%-79% (yellow) may be considered as STRATTEC supplier, and action plan to be required
59% or less (red) cannot be considered as STRATTEC supplier, unless an action plan is provided and accepted by STRATTEC to re-evaluate results.

Survey for current suppliers having a non-conformance will be rating :
>85% (green) for acceptance
70%-85% (yellow) Conditioned acceptance
<70% (red) Rejected
Any disciplined rated on red will require an action plan even though overall rating is on green

5.8 Distribution of results

Results to be communicated between STRATTEC and Supplier. All information shared during the Survey process is considered as confidential.

5.9 Supplier Quality System Self-Survey (06L4M012)

Potential Suppliers will be required by STRATTEC Purchasing to provide a Self Survey form together with certification evidence (ISO 9001 or ISO/TS 16949) and agreement to the present Supplier Quality Manual.
STRATTEC Supplier Quality to evaluate information provided and risk level together with Purchasing to determine if an On Site Survey is required.

5.9.1 All Suppliers may be subject to an on-site survey.

5.9.2 All suppliers not meeting the required score may be subject to a re-audit unless substantiated documentation can be provided.

6.0 QUALITY PLANNING METHODS AND PROCEDURES

6.1 Production Part Approval Process (PPAP)

An integral part of product development or product change and the associated quality planning activities is the verification of the initial parts for use in production. This process begins with supplier input at the conceptual design phase including the design review and continues throughout the product life. All costs incurred for a component PPAP (up to 300 pieces) and/or including all cavities will be the responsibility of the supplier according quote or commercial agreements with STRATTEC Purchasing. Tooling invoices will not be paid unless full PPAP approval has been documented.

For production parts, product for PPAP shall be taken from a significant production run. This significant production run shall be from one hour to eight hours of production, and with the specific production quantity to total a minimum of 300 consecutive parts, unless otherwise specified by the authorized STRATTEC representative.

This significant production run shall be conducted at the production site, at the production rate using the production tooling, production gaging, production process, production materials, and production operators. Parts from each unique production process, e.g., duplicate assembly line and/or work cell, each position of multiple cavity die, mold, tool or pattern, shall be measured and representative parts tested. Any testing required for P.V, must be completed utilizing a production ready line.

When appropriate, a STRATTEC Supplier Quality representative will be on site to validate PPAP run, production process, and/or run-at-rate.

Supplier must submit PPAP using the latest PPAP Manual (AIAG) revision available.

6.1.1 When a PPAP is required

The requirements for initial sample approval must be completed:

a) PRIOR TO the first production shipment of a new product.

b) PRIOR TO the first shipment following an engineering change. All engineering revisions, regardless of whether or not actual dimensional changes occur, must be responded to for approval to that revision level.

c) PRIOR TO the first shipment following a process change. A change in secondary suppliers is considered a process change.

d) PRIOR TO the first shipment from a new die or mold.

e) PRIOR TO the first shipment from a different manufacturing location utilizing both new or relocated tooling and equipment.

Any other requirement set forth by AIAG (PPAP) requirements

STRATTEC and the supplier will agree upon an initial sample due date, which will precede the first production shipment.

Production shipments are not to be made until written approval is received from STRATTEC.

6.1.2 What is required in the submittal?

PPAP's must include all items required for a **level 3 submission** per the latest edition of the PPAP Manual (**AIAG).**

There may be exceptions to this based on the PPAP requirements, PPAP Manual, and our customer or STRATTEC requirements.

For all non-automotive products the Level III could be changed to a Level II PPAP with limited documentation defined by STRATTEC.

For all BULK material such as screws, pins, rivets and all fasteners a Level 3 PPAP will be required, for resins a PPAP Level IV with limited documentation defined by STRATTEC will be required. All raw metals such as Zinc, Brass and Aluminum a material certification will be required.

6.1.3 STRATTEC PHASED PPAP PROGRAM.

In order to improve launch performance, STRATTEC has structured the PPAP process into a Phased approach that will require a supplier to demonstrate manufacturing capability, production quality and production capacity. Phased PPAP will provide STRATTEC and the supplier with an improved understanding of supplier manufacturing process and part

readiness. Phased PPAP will be considered as an option depending on the component, if it's a critical component for the assembly, this will be determine by STRATTEC project team. Phased PPAP steps are:

a) PHASE 0: Initial Process Planning

Objectives: To confirm that all production input requirements are available and understood, including commercial items, customer input, design records and respective initial process planning items. To provide an early indicator that the design of the process/tool/facility has the potential to produce according requirements.

b) PHASE 1: Quality Verification (single production stream)

Objectives: Key process planning items review To confirm ~~all~~ customer design record and specification requirements are properly understood by the supplier.

To provide an early indicator that the design of the process/tool/facility has the potential to produce product consistently meeting of single production stream.

c) PHASE 2: Quality Verification. (on remaining production stream)

Objectives: Key process planning items review To confirm ~~all~~ customer engineering design records and specification requirements are properly understood by the supplier, and ALL production streams have the potential to produce product consistently meeting these requirements

Depending on project needs and timing, Phase 1 and Phase 2 can occur at the same time

d) PHASE 3: Capacity Verification.

Objective: Verify the supplier's production system can support STRATTEC production requirements while meeting Phase 2 requirements.

ALL TEST DATA MUST MEET THE FOLLOWING CRITERIA

6.1.3.1 Test Data:

Refers to **all** test data necessary to provide evidence of compliance to specifications on all details of an assembly or component. This applies to raw material, durability, validation and performance requirements on the primary part drawing and any detail drawings. Test data must meet the following criteria

a) Testing must be performed by a facility registered to ISO/ TS16949 or an ISO-17025 accredited lab as described above.
b) All data must be on the letterhead of the test facility.

c) Each data set must be legible, signed, and dated.

d) Data must be current (**less than one year old**).

e) A copy of the registered facilities accreditation certificate must accompany the PPAP.

A general statement indicating the parts conform to specifications **is not acceptable**. If the supplier does not have access to the equipment needed to supply this information, outside sources should be employed at the supplier's expense. If complete data is not provided the samples will be rejected and returned to the supplier.

6.1.3.2 DEFINITIONS:

6.1.3.2.1 Accredited Test Lab:

An accredited lab has been evaluated and approved to ISO-17025 standards by an accreditation body (e.g. SCC, A2LA, SINALP, etc.). This body then accredits the lab to perform testing to specific methods and standards. The laboratory is subject to periodic reassessment.

6.1.3.2.2 Registered Test Lab:

A registered lab has completed a satisfactory assessment by an Accredited Registrar certified by a national body (e.g. RAB, Registrar Accreditation Board). The audited facility is registered as meeting the requirements for a given commodity. The laboratory is reassessed at appropriate intervals.

Any non-conformance to the specifications must be corrected prior to sample submission unless prior approval to submit has been received from STRATTEC.

A Temporary Deviation Request will be requested with submittal. Initial production samples must be manufactured on production tooling using the production processes. Temporary approval for prototype tooling may be required until production tooling is available.
The quantity of sample parts required for initial sample approval would be 5 pieces unless other specified by STRATTEC Supplier Quality

In the case of multi-cavity tooling, a minimum of 3 pcs per cavity will be required unless other specified by STRATTEC Supplier Quality based on ~~an~~ analysis performed on the specified number of parts from each cavity supported with the AIAG (PPAP manual) for multi-cavity tooling. The paperwork and sample parts submitted to STRATTEC must be clearly marked to ensure that the data is traceable to an individual cavity and inspected parts.

6.1.4 PPAP REQUIREMENTS FOR DIRECTED SUPPLIER

For all suppliers that are directed by our customers, it will be required a PPAP level 3 Submission, unless our customer agreement and direction is to be approved directly by them requiring only a PPAP level 1 with the support data of our customer direct PPAP approval and the respective PSW and IMDS submission to STRATTEC.

6.1.5 ADDITIONAL REQUIREMENTS

CAPABILITY AND R&R STUDIES

Statistical Tools

Identification of Statistical Tools – The supplier should use the latest edition of AIAG SPC for manufacturing process controls and AIAG MSA for measurement system equipment management.
Minitab is the recommended statistical software package for preparation of Measurement System Analysis, and Process Capability studies.

Supporting Documentation, Forms or Reference:
- www.aiag.org
- Reference TS16949 Clause 8.1.1

CAPABILITY STUDIES FOR PPAP

125 piece capability studies are required at the time of PPAP for all Special Characteristics indicated as Significant and Critical Characteristics on Section 15.0 Products with multiple cavities must have

separate capability studies on each of the cavities. In the case of multiple cavities (major than 10), documented approval from STRATTEC Supplier Quality is required in advance if less than 125 samples are used from each cavity.

On the initial process studies the supplier needs to demonstrate that the process is stable and in control through the use of a control chart. Normality **(P value)** and capability must also be demonstrated. Capability Six Pack, within Minitab can be employed for these calculations. Other software such as Excel can calculate Normality using the Anderson/Darling formula or similar methods.

See Section 15.0 for more information on Special Characteristic requirements for PPAP and in-process capability index target minimum values.

Gage R&R (Measurement System Analysis)

Unless otherwise agreed upon with STRATTEC:

Gage R&R's shall be completed on all measurement systems identified on the control plan. This includes hand tools such as micrometers or calipers, as well as those features checked by a CMM, Optical Comparator, Smart Scope, attribute gages, etc.

Shall be included in PPAP submission for Special Characteristics and those features that will have capability studies submitted at the time of PPAP.

Minitab is the recommended statistical software package for preparation of Measurement System Analysis.

Variable Gage Studies – Shall be completed with all operators who will be using the gage as part of normal production process. The study shall consist of a minimum of 3 trials, using a minimum of 10 parts. All variable gage R&R studies should have a minimum of 5 distinct categories. The required method for calculating the gage R&R is by using the ANOVA method. Recent gage R&R's may be used if completed within one year at the time of submission.

For process control situations (where measurement determines stability, direction, and compliance with natural process variation) percentage R&R should be calculated based on study variation.

For product control situations (conformance or non-conformance) the allowable deviation is 10% R&R calculated based on part tolerance.

Upon request from the STRATTEC, the Supplier is required to provide linearity and bias studies.

Attribute Gage Studies – Shall be completed with 3 operators, 3 trials, using 50 parts and evaluated with KAPPA calculations as outlined in the AIAG Manual. NOTE: 25 parts should be discrepant parts. 50% of the discrepant parts should be outside each boundary limit, and 50% should be near each boundary limit (on both sides of the limit). The remaining 25 parts should represent the full range of the process variation.

All attribute gages for Special Characteristics used for process control must be built to 75% of the specified tolerance, centered around the target, unless otherwise agreed upon with STRATTEC.

Gages to the full tolerance may be used for product control (i.e., EPC, final inspection, or sorting operations). Separate gage studies are required for any attribute gage using appropriate discrepant parts for each study.
Gages not meeting the acceptance criteria per the AIAG MSA manual shall have a containment plan (such as 100% inspection, gage improvement, or other means) and shall be submitted in writing to STRATTEC for approval.

Gage studies should be re-verified at a frequency that is appropriate for gage use and wear.

Recommendation – Gage re-verification studies should be completed at the time of calibration.
Reference TS16949 Clause 7.6.1

RUN AT RATE REQUIREMENTS

Run at rate will be required to all STRATTEC suppliers. STRATTEC forms for run at rate will be provided as a part of the requirements to comply for capacity data and PPAP. The onsite verification of this document will be at the discretion of STRATTEC Supplier Quality based on component, supplier, process or customer request (ex. New process, new supplier, Component complexity, customer request, etc.)

All completed Run-at-Rate Forms (06L4M026) must be available for review upon request from STRATTEC.

ANNUAL LAYOUTS AND WARRANT REQUIREMENT

Annual layouts of dimensions and a Level IV PPAP submission will be required per customer specific requirements (Ford, FCA, Nexteer & others). Once your initial PPAP has been completed, the supplier must complete an annual layout and get data available upon request by STRATTEC Failure to do so will result in charges from STRATTEC for any external or internal cost incurred to complete annual layouts.

PART INSPECTION

It is required that the personnel responsible for part inspection have a strong understanding of GD&T.

Special areas of concern when inspecting with a CMM are as follows:

When establishing a datum plane enough points must be taken to ensure that the calculated plane is representative of the true geometric counterpart.

When checking features and geometric controls enough points must be taken to ensure functionality of the part as intended by the ASME standard specified on the drawing.

The practice of averaging points when measuring features or defining datum(s) is strictly prohibited.

When a CMM is used to establish conformance, the supplier must provide a data file (i.e. .xlsx or .txt file) containing all the raw data points that were used.

ENVIROMENTAL REQUIREMENTS

Suppliers of STRATTEC should have an environmental management program that supports the industry, state or federal guidelines for the particular commodity that is being produced at their facility. Guidelines should be patterned after ISO 14001, with the emphasis on continual improvement in line with your organization policy.

TRACEABILITY

When required by our customer, traceability of material from our sub-contractors and their tiers two / three sub-contractors will be in accordance with all applicable customer and STRATTEC requirements. Clear, concise marking will be performed to identify the material being used. This may be by means of heat numbers, lot numbers, etc. or whatever means necessary to permanently maintain traceability.

RIGHT TO VISIT

Where specified in the contract, the customer or designated representative will be afforded the right to verify product conformance to the requirements at the suppliers / sub-contractor's premises.

IMDS (International Material Data System)

OEM automotive suppliers now require their suppliers to use the IMDS to disclose and quantify the chemical and recycled content of the article and hazardous material of the products purchased and incorporated into the finished product.

1. STRATTEC Security Corporation requires suppliers to utilize the IMDS for reporting and disclosing 100% substance and recycled contents to SSC prior to their PPAP submission.

2. The PPAP Part Submission Warrant (PSW) must identify the IMDS ID number or numbers and version in the assigned section. (AIAG PPAP Manual)

3. Also as part of the PPAP submission, suppliers are required to include a hardcopy receipts from IMDS containing the following verbiage.

    a) Article name
    b) IMDS ID#(s) and version #(s)
    c) STRATTEC Security Corporation Part Number
    d) IMDS transmitted date
    e) Verbiage acknowledging the part or parts as "Accepted" by SSC.

Failure to submit "acceptable" data via IMDS and provide a hard copy receipts showing the data "acceptable" by SSC will result in the PPAP rejection.

Each supplier is responsible to contact EDS (the creator of IMDS), submit an online registration form to obtain the access to the IMDS, and receive appropriate training on entering and receiving data via the system. Information for the IMDS is available as follows:

- Website for IMDS is located at www.mdssystem.com

Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)

As of June 2007, the European **Regulation (EC) 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH**) entered into force.

REACH affects all industries, including the Automotive Industry (AI). As the AI is made up of vehicle manufacturers and many tiers of the supply chain, it has several roles and obligations under REACH. Action is required from the OEMs and suppliers, some immediately and some over the coming 11 years and beyond.

In order to be prepared for REACH, representatives of all the major vehicle manufacturers and the automotive supply chain around the world developed an "Automotive Guideline on REACH" which can be used to get a quick overview of REACH, its requirements and the recommended actions arising. This guideline can be found at: www.acea.be/reach

CONFLICT MINERALS COMPLIANCE

Supplier must meet the Conflict Minerals Compliance requirements specified in the Terms and Conditions on the Purchase Order.

PLANT TRIAL VERIFICATION

All parts are subject to PTV to confirm compatibility to the equipment at Milwaukee, SDM or SCA. This applies to new suppliers of previously run parts.

SPECIAL PROCESS SYSTEM ASSESSMENTS (CQI-9, CQI-11, CQI-12, CQI-15, CQI-17, CQI-23, CQI-27)

Suppliers shall conduct special process system audits annually using the AIAG assessments: Heat Treat System Assessment (CQI-9) Plating

System Assessment (CQI-11), Coating System Assessment (CQI-12), Welding System Assessment (CQI-15), Soldering System Assessment (CQI-17), Molding Assessment (CQI-23), and Casting Assessment (CQI-27)

Individual assessments are required for each heat treat, plating, coating, welding, and soldering process used in the supply chain (this includes all sub-suppliers). If multiple suppliers/sites are used for process, an assessment must be conducted for each supplier/site.

INTERNAL QUALITY AUDITS (FCA, FIAT CHRYSLER AUTOMOBILES CUSTOMER SPECIFIC)

STRATTEC Security Corp. SUPPLIERS must comply with FCA's Internal Quality Audits specific. As a part of the Internal Quality Audit, the Supplier shall perform a self-assessment to ensure their Quality Management System is in compliance with the Objectives, Example Metrics and support Mechanisms defined in Chrysler's document "Elements of Manufacturing Basics". This Self-Assessment is mandatory, beginning with Supplier's first internal audit occurring on or after January 7, 2008. The document is available through the Chrysler Global Supplier Portal via the Quality Management Systems Information" page or upon request to STRATTEC Security Corp. Supplier Quality Representative.

All Suppliers shall maintain records of this self-assessment, including any corrective actions required for compliance.

MISC.

ALL NON-CONFORMING ITEMS SHOULD BE HANDLED THROUGH PURCHASING AND ENGINEERING AND TAKEN CARE OF BEFORE PPAP SUBMITTAL

6.1.6 TAM REQUIREMENTS (TOOLING ASSET MANAGEMENT)

The TAM is a customer specific requirement related to the management of assets like tooling that is located at a Supplier location and it's owned by either STRATTEC or one of our customers. As part of this process, the following are the specific requirements that all STRATTEC Suppliers must comply with, before receiving Tool payment.

6.1.6.1 All tooling must be identified with a tag or engraved with a legend that includes property of "(General Motors, STRATTEC, Chrysler, etc…) this information must be: Legible, Permanently Affixed to Tool (engraved or riveted to the tool), Glue or Tape will NOT be accepted and must include the Tool Asset Number.
Example:

6.1.6.2 Supplier must provide tooling general information like (tooling, dimensions, capacity, tool location, etc.) All of this information must be provided to STRATTEC Purchasing and TAM Coordinator.

6.1.6.3 Supplier must provide photos of the tooling.

- Pictures need to meet the 100kb file size limit in JPEG Format
- Picture of the tool and the tag, 3 separate pictures: Tag, Tool Open, Tool Closed
- Pictures can NOT be in Power Point
- Tool picture only (NO People or other items on picture)

NOTE:

TAM requirements should be completed to get tooling payment

7.0 CONTINUAL IMPROVEMENT

7.1 Objective

Supplier shall always measure its process / product performance, and implement continual improvement techniques in order to achieve zero defects target and on time delivery mindset. This practice applies for serial production after PPAP Approval.

7.2 Supplier Development for Continual Improvement

The following continual improvement elements must be incorporated into the supplier's quality systems. These elements will help assure cost effective quality parts delivered on time.

Update layouts, material certificates, control plans, process flow descriptions and PFMEA's on a yearly basis, or as changes happen.

Act upon warranty feedback provided by STRATTEC.
Participate in STRATTEC product improvement programs through the achievement of improvements made within the supplier's facility or processes or through suggestions made to STRATTEC procurement.

Recommend to STRATTEC procurement changes which will improve the quality of the product or service provided, regardless of whether the recommendation results in a price increase or decrease. Recommendation may include changes in material, supplier processing, design, packaging, handling, freight or processing by STRATTEC after receipt.

Participate and/or collaborate on STRATTEC Supplier Process Improvement program (SPI). SPI is a development process to improve the supply base quality systems, with emphasis placed on rapid corrective actions, error proofing and continual improvement activities. Suppliers with high PPM's, CSI or CSII shipping status or high numbers of Non-Conforming Reports (SNCR) for each fiscal year, will be required and moved to this program.
NOTE: Read Top Focus charts from page 41 to 45 under 7.2.2.1 for more information.

Actively participate with STRATTEC, beginning with the early stages of new programs and new part designs. This includes the following STRATTEC activities.

7.2.1 Simultaneous engineering of both the product and process to ensure that new products are initially designed with a focus on reliability and manufacturability.
7.2.2 Team engineering to resolve key issues and value engineering to take cost out of the product.

7.3 Reduction of Incoming Inspection

All Purchased materials for STRATTEC are to be received defect free. To re-inspect and verify defect free product is a waste of valuable resources.

7.3.1 Part Certification

Certification of a part indicates that the quality level is high enough to warrant reducing or eliminating routine incoming inspection at STRATTEC. The goal is to have all purchased materials obtain the status of being "Certified". The criteria for "Certified" parts include:

1) An approved PPAP.

2) Part history based on quality information from receiving inspection (more details upon request from supplier).

   Part Certification will be by supplier and part number. For service-related parts or extremely low volumes, refer to the PPAP book. Audits of certified parts may take place on a random basis.

3) Components have successfully passed the safe launch period.

7.3.2 Revocation of Part Certification

Once a part has reached the certified status, removal of certification can occur by the following:

7.3.2.1 Verified complaints from STRATTEC or a customer. In case of incidents, a new safe launch period starts.

8.0 SUPPLIER QUALITY RATING SYSTEM

8.1 Categories of Performance

STRATTEC purchasing considers supplier performance an important factor in determining the allocation of purchases among suppliers. The evaluation of individual component and overall supplier performance is done by a rating system that will provide a quantitative and comparative measure of competitiveness.
This section will define the supplier performance rating system. The factors that are involved are as follows:

8.1.1 There are three main categories:

Quality

Delivery (SNCR)

Customer Disruptions

Those categories are broken down as follows:

A. Quality

- **Supplier Non-Conforming Report (SNCR) incidents (Quality)**
  - A. 0 incidents (30 points)
  - B. 1 incident (10 points)
  - C. > 2 incidents (0 points)

  (30 points total)

- **Response to incidents**
  (Quality/Delivery)
  - A. Containment 24 hrs. (5 points)
  - B. Root cause (+ 5 days) (5 points)
  - C. Corrective actions and 8D (+ 10 days) (5 points)

  (15 points total)

- PPMs
  - A. 0 to 150 = -5
  - B. 151 to 300 = -8
  - C. 301 to 450 = -12
  - D. >451 = -15

  (15 points total)

- PPM for resins and raw material (metal), the rejected pounds.
  - A. 0 to 150 LBS= -5
  - B. 151 LBS to 300 LBS = -8
  - C. 301 LBS to 450 LBS = -12
  - D. > 451 LBS = -15

  (15 points total)

- PPAP Performance
  - A. 100% = -0
  - B. 90-99%= -2
  - C. 71 – 89% = -4
  - C. 50 – 70% = -6
  - D. 0 – 49% = -10
  - E. No PPAP Required = -0

  (10 points total)

B. Delivery Performance (SNCR)

A. Delivery Discrepancy (10 points)

0	10 points
≥1	0 points

B. Delivery Timeliness (10 points)
(20 points total)

C. Customer Disruptions (any instance culminating in product flow interruptions to STRATTEC Security Corporation)

A. Instances:
0 10 points
≥1 0 points

D. Overall Scoring System

A. 100 – 85 Preferred/Acceptable Supplier

B. 84 – 75 Needs Improvement

C. Below 75 Unacceptable. Corrective action is required

Suppliers will receive their score at a minimum of five times per year, at the end of each quarter and an annual. Suppliers will be monitored throughout the year for quality, delivery and disruptions. Supplier Non-Conforming Report will be issued if warranted.

It is the goal of all STRATTEC suppliers to maintain 0 PPM; your rating score will be dramatically affected with high PPM and incidents.

Every nonconformance issues with delivery (under, over and late shipment) will be penalized by following STRATTEC SNCR (Supplier Non-Conforming Report) process.
A supplier with a score of 75 or less will be required to submit a corrective action.
Continued scores of 75 or less could result in that supplier being removed or placed inactive as a supplier to STRATTEC Security Corp.

100% on time delivery is required (even though your overall rating score may be in the acceptable range) a corrective action may be required if your individual on-time delivery score is less than 100% or if this caused any disruptions to STRATTEC production.
This rating system is part of the STRATTEC's computer IS system and is available for review by the Quality Department, Materials, Purchasing and Senior Management.

9.0 NON-CONFORMING MATERIAL, INCIDENTS DEFINITION AND COST RECOVERY

9.1 Non-Conforming Material

All non-conforming material found at STRATTEC Receiving Inspection would have an NCR (MKE: 13L4M002 / SMO: 13L4J003-06) written and SNCR (10L4M018) form filled out and forwarded to the supplier. Samples of non-conforming material will be sent to the supplier at their expense, if so requested. Corrective action will be required (form 14L4M005 (8D) for suppliers) if so noted on the SNCR. Once the review of material is concurrent or it is agreed upon at the time of rejection, an RMA number will be obtained for return of the material to the supplier. In all instances, the material will be held in the non-conforming cage until disposition is determined.

9.1.1 All suppliers will have an RMA number within 3 working days of the initial contact from STRATTEC, if it has been determined that the material is non-conforming and was the responsibility of the supplier. (This applies to both internal and external suppliers)
If no written or verbal RMA number is received within 3 working days, material may be returned or scrapped at the supplier's expense , (This applies to both internal and external suppliers). There may be other situations that will require disposition.

9.1.2 Is the responsibility of the Supplier's Quality Department to notify their Materials / Logistics Departments when an RMA is issued as a consequence of reported non-conforming material? The material must be replaced according to STRATTEC needs and any cost associated to shipping and manufacturing of the material is responsibility of the Supplier.

9.1.3 All SNCR's written against both Quality or Delivery must comply
With the following time of completion and reported to the STRATTEC Security Corporation supplier quality representative:

A. Containment Actions (24 hrs.)
B. Root cause (+ 5 days, after Containment actions)
C. Permanent Corrective Actions (+ 10 days, after Root cause)

An RMA will be required for all non-conforming material transferred between any facilities at STRATTEC.

9.2 Incidents Definition

Category	Definition
C0	Warranty Incident
C1	0 KM Incident
C2	In Process Incident

C3 Incoming Incident
C4 Delivery Incident

9.2.1. Guidelines

A. Once a defect is confirmed (after analysis), rejected parts are considered for PPM.
B. If a defect cannot be confirmed at STRATTEC, parts will be considered for PPM after confirmation through supplier analysis.
C. Any incident before SOP is not considered for PPM.
D. C0 and C1 are based on official claims.
E. C0 are not considered for PPM.
F. Any incident and/or parts considered for PPM identified at STRATTEC production line, incoming inspection, or any customer claim shall be reported and considered on the same month reported.

9.2.2. Rules

C0 = Warranty claims

	Cases	PPM	Incidents
C0	Parts with identical failure after corrective action introduction	No	Yes NB=1
	Parts with identical failure before corrective action introduction	No	No
	Parts with different failures on each part	No	Yes NB= X

C1, C2, C3

	Cases	PPM	Incidents
C1, C2, C3	Parts with identical failure before corrective action introduction	Yes = NbX (to be charged on the previous claim)	No
	Parts with identical failure after corrective action introduction	Yes = NbX	Yes = Nb1
	Parts with different failures on each part	Yes = NbX	Yes = NbX
	Batch of Y Parts, after sorting X parts with identical failure, Z parts reworked: X-Z parts to reject.	Yes Nb = X - Z	Yes = Nb1

9.3 Cost Recovery

For each incident with Supplier recognized responsibility, STRATTEC will charge back a $200USD fee in order to recover administrative impacts. This cost is additional to direct cost related to the reported incident.

A. STRATTEC will require cost recovery if we have to remove defective parts from a line, sort defective parts, and otherwise incur cost relative to defective parts sent by the supplier. Also included is any warranty cost incurred from our customer for the duration of the vehicle warranty on which the supplier's part is being used.

B. The seller must promptly replace and or correct any items found defective if the supplier fails to replace or correct any defective material STRATTEC may repair them or have them repaired at the supplier's expense.
This will include the expense of purchasing or manufacturing similar items to maintain normal production requirements.

Corrective Actions

All corrective actions required per the Supplier Non-Conformance Report will require proof of implementation. This proof must be provided with the corrective action, if the information is proprietary it must be stated on the corrective action or by separate cover. Corrective actions will not be considered closed without this.

10.0 MATERIAL CERTIFICATIONS / ACCREDITATION'S - (OTHER THAN PPAP REQUIREMENTS)

10.1 Material Certification need to comply with STRATTEC requirements based on PPAP Manual (AIAG)

10.2 Material certifications / accreditations for raw material suppliers.

10.2.1 Raw material suppliers shall include material certifications with each shipment.

10.2.2 Material certs shall be from an accredited / registered source ISO-17025 / ISO/TS 16949, ISO 9001 if it is not from an accredited source, material must be sent out for testing at a qualified lab.

10.2.3 A copy of the accreditation certificate shall accompany the material certification. The **material certification must be updated within one year of the date stated on the material certificate**. All material certifications must be **legible, signed and dated**.

10.2.4 Material certifications shall state **point of origin (producer**) unless the source is the producer.

10.3 Material certifications / accreditations **other than raw material**.

10.3.1 All products, by design record requirements shall have material certifications; **a statement of conformance is not acceptable**.

10.3.2 **Material certifications shall be supplied and updated at a minimum of once per year, sooner if a new source is used or the material certificate expires before the year time frame**. If the same material is being used to produce the product for more than a year time frame, a letter stating this instead of the yearly update certification is required. Material certifications also include all operations where the design record calls out i.e. plating, heat-treating, etc.

10.3.3 All material certifications shall be from an accredited / registered source ISO-17025 /ISO TS 16949 if it is not, it must be sent out for testing at a qualified lab.

All material certifications must be **legible, signed and dated**.

10.3.4 A copy of the accreditation certificate shall be sent with the material certification.

10.3.5 All material certifications (raw material and production parts) including accreditations will be scanned on the STRATTEC computer system and updated as new or yearly certifications / accreditations are received. Material certifications are stored by part number, accreditations by supplier.

10.4 Failure to comply with requirements

10.4.1 Failure to comply with the above requirements is subject to the Supplier Quality Manual section 9.0, Non-Conforming material. If testing is required and time restraints prohibit having the supplier test the material, STRATTEC reserves the right to send out material for testing at the supplier's expense.

11.0 CONTROLLED SHIPPING

11.1 General

Controlled Shipping is a demand by STRATTEC to a supplier to put in place a redundant inspection process to sort for non-conforming material resulting from an out-of-control process. This redundant inspection at the supplying location is in addition to normal controls. The data obtained from the redundant inspection

process is critical as both a measure of the effectiveness of the secondary inspection process and the corrective actions taken to eliminate the initial non-conformance. Controlled shipping MUST become a corrective action process at the supplier. It is not just an inspection process.

Two levels of Controlled Shipping exist:

a) **Level I Controlled Shipping** is defined as a redundant inspection process enacted by the suppliers employees at the suppliers location in order to isolate STRATTEC from receipt of non-conforming parts/material.

b) **Level II Controlled Shipping** is the same activity but the person(s) performing the sort is an impartial third party selected by STRATTEC and paid for by the supplier. In special cases, the Level II activity may be required to be performed outside the supplier's facilities at the third parties location or at a facility deemed appropriate by STRATTEC.

The key points of this process:

a) Consensus within STRATTEC management that current controls by the supplier are not sufficient to insulate STRATTEC from the receipt of non-conforming parts/material.

b) Determination by the customer location which level of controlled shipping is required.

c) Communication to the supplier of impending action (Level I or Level II) to be taken including exit criteria.

d) Controlled shipping has a minimum of 8 weeks, unless specified by STRATTEC.

e) A **STRATTEC Supplier Management Meeting** with the supplier's management (Quality Manager, Plant Manager or equivalent representative **will be required** for both Level I and Level II containment. Travel by the supplier representative to either our SDM, SCA, Milwaukee or a customer location **must** occur within 5 days of original notification for a full explanation of the containment process to be implemented and the roles and responsibilities of the involved parties is also required.

The **mandatory** meeting must follow these steps:

Describe the purpose of the meeting:

a) STRATTEC has determined that Level I or II Controlled Shipping is being implemented at their facility

b) The production source is out of control and that the non-conforming / material must be isolated

Meeting agenda must include the following:

a) Review of the process flow diagram

b) Description of the problem

c) Definition of the roles and responsibilities

d) Establish the controlled shipping plan details

e) Definition of the exit criteria

f) Definition of the communication plan

STRATTEC involvement would include the following people: purchasing, supplier quality, operations managers and the plant manager or staff representative from the respective department.

An 8-D within 48 hours or sooner, prior to the mandatory visit will also be required.

These supplier meetings are mandatory if level I or II containment is invoked, but it will be STRATTEC's decision to call a supplier in prior to any containment actions if the situation warrants it.

11.2 Determination of the need for Level I or Level II Controlled Shipping

The STRATTEC location experiencing the part/material non-conformance makes the determination whether the supplier can effectively correct the situation through the SNCR process and/or isolate STRATTEC from the problem. Standard guidelines for implementation of Controlled Shipping may consider one or several of the following:

a) Repeat SNCR'S

b) Duration and severity of the problem

c) Incapable processes

d) Quality problem in the field

e) Inadequate containment and/or resolution of non-conformance's via the SNCR process

Based on consideration of the above, STRATTEC decides whether Level I or Level II would be appropriate. STRATTEC management may include the Plant Manager, Purchasing manager, the plant Quality Manager and appropriate process engineering resources. Level II situations are characterized as situations where the suppliers past actions have proven ineffective and the next step of hiring a third party inspection company to isolate the plant is warranted.

11.3 Level I Controlled Shipping process:

A STRATTEC employee (usually from the SQA group) communicates in writing defining the problem, the need for additional inspection, containment efforts and the exit criteria.

The supplier is required to:

a) Complete the Controlled Shipping Confirmation Reply form and return it to the STRATTEC location.

b) Immediately establish a separate sort area at their location.

c) Commence the sort activities and display the results in a public and visible location.

d) Track breakpoints of nonconforming material.

e) Management must meet daily at the sort location to review the results and ensure that corrective actions taken are effective or require changes.

f) Communicate results of sort activities to customer location.

g) Request exit from controlled shipping by providing documentation on performance to appropriate customer location representative (STRATTEC location will notify Supplier Quality representative).

STRATTEC evaluates if exit criteria have been met and communicates, in writing, that the supplier is no longer considered in Controlled Shipping.

Controlled Shipping containment guidelines:

a) Containment area must be highly visible and properly lighted, equipped, etc.
b) Must have well defined efficient material flow including clearly identified areas for incoming and outgoing parts/material.

c) No repair must be done in the containment area.

d) Sorting area must be independent of the supplier production process.

e) Information boards must prominently display non-conformances, measures, actions taken and results of containment activity.

f) Charts must be updated on a daily basis and reviewed by top supplier management.

g) Problem solving must be formal, data driven and documented.

h) Containment operators must have available to them proper job instructions, quality standards, boundary samples, etc.

i) Operators must be properly trained.

j) Preventive maintenance must be employed if required.

11.4 Level II Controlled Shipping process:

The STRATTEC representative will analyze the non-conformance situation and determine if Level II is required. CSLII implies the same rules as CSLI with an added 3rd party inspection.
The 3rd party inspection shall be:

- Approved by STRATTEC
- Selected and paid by Supplier
- STRATTEC may require the 3rd party inspection to be performed outside of the supplier production line.

Based on severity of the incident, STRATTEC may choose to go directly to CSLII.

Communication in writing to the supplier management, from STRATTEC's Purchasing Manager (or other appropriate management representative) describing:

a) The action being undertaken

b) The non-conformance

c) The inspection checks required

d) Exit criteria required to be achieved

Supplier must complete the Controlled Shipping Confirmation Reply form and return it to the STRATTEC location.

Roles and responsibilities:

Customer Location Supplier Quality Engineer / Plant

a) Participates in decision of which contract engineering firm will conduct the Level II containment activities. This decision will also include the appropriate staff of Supplier Quality and plant management.

b) Defines the required checks

c) Facilitates definition of the exit criteria

d) Drives resolution of all issues

Purchasing (buyer)

a) Assumes responsibility for all commercial and financial issues arising from the controlled shipping activity.

b) May participate in the decision of which contract engineering firm will conduct the Level II containment activities, if requested.

Controlled Shipping Partner (Third Party)

a) Provides people to perform the inspection activity and record results.

b) Provides documentation to the supplier and the SQE on the progress of the controlled shipping activity.

Production (supplier) source

a) Issue a purchase order to the Controlled Shipping Partner (Level II third party). Supplier is responsible for all costs of the contract-engineering firm either performing the actual

containment activities or supervising the supplier's employees in the supplying location.

b) Provide proper space and tooling to perform re-inspection activity

c) Drive permanent corrective actions

11.5 Information boards should prominently display the following:

a) Quality standards such as boundary samples, technical specifications, drawings, etc.

b) Non-conformance's and action plans.

c) Process Control Plan highlighted to show where non-conformance occurred.

d) Operator instructions.

e) Gate charts showing number of discrepancies found, PPM, SNCR's, etc.

f) Measurable charts (Pareto, Trend, etc), must be available on a daily basis.

11.6 Communication plan should address the following:

a) Format and frequency of communication to the customer location.

b) Primary focus is progress toward the exit criteria.

c) Controlled Shipping Level II source is to report ALL issues identified during the containment.

d) Exit criteria to remain constant.

11.7 Exit criteria must:

a) Include clear and measurable elements, 0 defect, at CSL control and at STRATTEC facility, for all CS duration.

b) Must be specific and relevant to the non-conformance issues to be addressed.

c) Provide a timetable to ensure corrective actions taken are permanent.

11.8 STRATTEC evaluates if exit criteria have been met and communicates in writing that the supplier is no longer considered in Controlled Shipping.

12.0 EARLY PRODUCTION CONTAINMENT (EPC) – SAFE LAUNCH CONCEPT (SLC) (EXAMPLE : GP-12)

12.1 SCOPE.

This procedure applies to all suppliers required to use the Production Part Approval Process (PPAP). It is to be used for all pre-production and initial production run that require the Production Part Approval Process. EARLY PRODUCTION CONTAINMENT or SAFE LAUNCH CONCEPT (SLC) should not be used for carry over quality concerns, they should be addressed using the Controlled Shipping Procedure.

12.2 DEFINITION AND PURPOSE

The purpose of EPC/SLC is to document the supplier's efforts to gain control of its processes during start-up and acceleration so that any quality issues that may arise are quickly identified and corrected at the supplier's location and not at STRATTEC manufacturing location.

EPC/SLC requires a significant enhancement to the supplier's production control plan which will raise the confidence level to ensure that all products shipped initially will meet STRATTEC's expectations.

12.3 SUPPLIER RESPONSIBILITY

As a part of the EPC/SLC, STRATTEC requires that Suppliers submit the plan of additional controls or verifications to perform during the initial production runs and as minimum to cover the first 3 shipments to STRATTEC. The plan need to be included in the Control Plan as a special section for EPC/SLC, including any support data such work instructions and material identification during this period of time.

The Supplier need to establish a containment process that contains the following elements:

1. Identification of the person responsible for the containment process.

2. Development of a Pre-Launch Control Plan consisting of additional controls, inspection audits and testing to identify non-conformance's during the production process. Depending on the dominant factor if the production process (set-up, machinery. fixture. tooling. operator. material/components,

preventative maintenance and climate) additional controls could include:

a) Increased frequency/sample size of receiving. process and or shipping inspections

b) mandated sub-supplier containment and or sub-supplier support/audits

c) Addition of inspection/control items

d) Increased verification of label accuracy

e) Enhancement of process controls. such as error proofing

f) Error proofing validation through introduction of known defects

g) Increased involvement and visibility of top management

3. Prompt implementation of containment/correction when non-conformances are discovered.

4. Identification of the measurement equipment and data collection devices/activities to be used where applicable

EPC/SLC duration is as a standard for the first 3 shipments to STRATTEC unless another agreement approved by STRATTEC Supplier Quality.

12.4 EXIT CRITERIA

Exit criteria is zero nonconformance during this period, otherwise it will be required to extend the EPC/SLC period until demonstrate shipping of parts under zero non conformances.

13.0 ELECTRONIC COMMERCE

STRATTEC Security Corporation follows MMOG (Materials Management Operations Guideline/Logistics Evaluation) as do many of the automotive OEMs. A required component of MMOG is the use of EDI to communicate with suppliers.

Suppliers are required to receive and/or send these EDI transaction sets 830 – Weekly Release, 856 – Advanced Shipping Notice (ASN), 864 - Text Messages, 997 – Functional Acknowledgment).

STRATTEC's EDI specifications are available at http://www.iconnect-corp.com/specs/#/strattec.

For further information on these systems and their benefits contact your procurement representative.

14.0 STRATTEC TOOL DESIGN STANDARDS

Tool & Equipment Design to be evaluated during the quote/commercial agreements process, also with the involvement of STRATTEC Engineering and the final approval from STRATTEC with PPAP.

15.0 STRATTEC SPECIAL CHARACTERISTICS

Special Characteristics designated on STRATTEC documents have particular significance to quality or customer satisfaction. They may be associated with product safety, customer or STRATTEC regulatory compliance (regulations), fit or function. They require control above standard care in the manufacturing process. The use of Special Characteristics is not intended to minimize the importance of other specifications or characteristics which must be controlled by the supplier. The supplier should develop a total manufacturing quality system plan for all parts and characteristics, regardless of category.

STRATTEC may use specific symbols on drawings and specifications to designate Special Characteristics. See the charts at the end of this section for specific symbols and requirements.

STRATTEC Special Characteristics must be clearly identified on the supplier's documents, including PFMEA, PFD, PCP and operator instructions. Supplier management must assure that all operators are knowledgeable of Special Characteristics existing on the parts being produced at their work station.

The Supplier should communicate to STRATTEC Supplier Quality, any expected non-normal distributions so that the capability analysis method and acceptance criteria can be discussed and agreed upon prior to PPAP submission. (Reference TS16949 Clause 7.2.1.1 & 7.3.2.3).

In selecting Special Characteristics, the following items are taken into consideration:

- Functional or safety-critical product dimensions where ongoing control charting is required on the plant floor.

- Vehicle interface dimensions.
- Possible pass-through defects.
- Design & process knowledge.
- Past customer returns, recalls, lessons learned
- Similar part:
- Control plans.
- Design & Process FMEA.
- Process capability
- Customer requirements
- Compliance with government regulations

The following are the different **Special Characteristics** and the process/inspection requirements related to each type of Special Characteristic:

STANDARD DIMENSIONS – NOT SPECIAL (see table below for details)

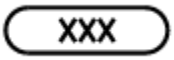
QUALITY CHARACTERISTICS (see table below for details)

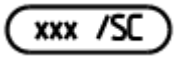
SIGNIFICANT CHARACTERISTICS (see table below for details)

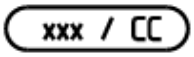
CRITICAL CHARACTERISTICS (see table below for details)

STANDARD DIMENSIONS – NOT SPECIAL

Drawing and Document Symbols	Process Requirements	Minimum Documentation Requirements	Response to Nonconforming Material
Standard Dimensions, NOT Special Characteristics. No symbols	Reasonable explanation of the control strategy is required at a review of the manufacturing process plan, gage plan, PFMEA, & control plan.	Unless otherwise specified, minimum documentation is a three piece inspection (per cavity) at: ● PPAP ● Tool repair for identified features or datum affecting an identified feature ● Tooling refurbishment ● Annually. Archiving: as defined by manufacturing location document retention procedure.	STRATTEC approved Temporary Deviation Request (TDR) required for use of nonconforming parts.

QUALITY CHARACTERISTICS			
Drawing and Document Symbols	**Process Requirements**	**Minimum Documentation Requirements**	**Response to Nonconforming Material**
QC  QCI  Checking Dimension  QC can be used for identification instead of symbols on documents such as Control Plans.	Documented control strategy, specifically referring to the characteristic in process documentation (manufacturing process plan, gage plan, PFMEA, control plan).	Plant floor documentation is required. Specific documentation requirements are a function of process capability and must be defined on the control plan. Unless otherwise specified, minimum documentation is a three piece inspection (per cavity) at: • PPPAP • TTool repair for identified features or datum effecting an identified feature • TTooling refurbishment • AAnnually. Archiving: 3 years min.	STRATTEC approved Temporary Deviation Request (TDR) required for use of nonconforming parts.

SIGNIFICANT CHARACTERISTICS			
Drawing and Document Symbols	**Process Requirements**	**Minimum Documentation Requirements**	**Response to Nonconforming Material**
SC: Fit /Function and/or Safety  Legacy:  KPC: Fit/Function  Significant Characteristic  SC can be used for identification instead of symbols on documents such as Control Plans.	Documented control strategy, specifically referring to the characteristic in process documentation (manufacturing process plan, gage plan, PFMEA, control plan). Process Indices Acceptance Criteria: Initial (PPAP) process study: Process Performance Index target **Ppk** > 1.67, & demonstrated statistical control or 100% inspection and/or error prevention. Ongoing Process Capability Index target Cpk > 1.33 or 100% inspection and/or error prevention. OR If ongoing capability is demonstrated with an attribute gage on less than all of the parts, the gage must be built to 75% of the specified tolerance. Sample size and frequency to be large enough to demonstrate reliability as approved by STRATTEC Quality Engineer.	Plant floor documentation is required. Specific documentation requirements are a function of process capability and must be defined on the control plan. STRATTEC customer specific requirements must be shown on the drawing and included in the control plan. Capability is to be demonstrated on each cavity at: • PPPAP • TTool repair • TTooling refurbishment Annual layout. Archiving: 5 years min.	STRATTEC approved Temporary Deviation Request (TDR) required for use of nonconforming parts. When Capability is demonstrated using an in-process attribute gage on less than all of the parts and a part fails, then a full tolerance gage must be used to check 100% of the parts produced since the last acceptable check. Reduction in variability required when capability (Ppk / Cpk) is not met or when process is not in statistical control. Documented containment plan for all nonconforming parts.

CRITICAL CHARACTERISTICS			
Drawing and Document Symbols	**Process Requirements**	**Minimum Documentation Requirements**	**Response to Nonconforming Material**
Safety/ Compliance KPC  Critical Characteristic  CC can be used for identification instead of symbols on documents such as Control Plans.	Documented control strategy, specifically referring to the characteristic in process documentation (manufacturing process plan, gage plan, PFMEA, control plan). Process Indices Acceptance Criteria: Initial (PPAP) process study: Process Performance Index target Ppk > 2.0, & demonstrated statistical control or 100% inspection and/or error prevention. Ongoing Process Capability Index target Cpk > 1.67 or 100% inspection and/or error prevention. OR If ongoing capability is demonstrated with an attribute gage on less than all of the parts, the gage must be built to 75% of the specified tolerance. Sample size and frequency to be large enough to demonstrate reliability as approved by STRATTEC Quality Engineer.	Plant floor documentation is required. Specific documentation requirements are a function of process capability and must be defined on the control plan. STRATTEC customer specific requirements must be shown on the drawing and included in the control plan. **On-going Statistical Process Control: Evidence of this capability <u>will be required with each shipment</u> under separate cover due to shipments to stock.** Capability is to be demonstrated on each cavity at: • PPPAP • TTool repair • TTooling refurbishment Annual layout. Archiving: 15 Years min.	STRATTEC approved Temporary Deviation Request (TDR) required for use of parts accepted with a full tolerance gage. When Capability is demonstrated using an in-process attribute on less than all of the parts and a part fails, then a full tolerance gage must be used to check 100% of the parts produced since the last acceptable check. Reduction in variability required when capability (Ppk / Cpk)is not met or when process is not in statistical control. Documented containment plan for all nonconforming parts.

16.0 SUGGESTIONS FOR IMPROVEMENT

This manual has been designed as a tool to be used by our suppliers. The manual provides information essential for the development and growth of new and existing suppliers.

The sections in this manual have been designed to act as requirements for doing business with STRATTEC.

Great care was used to include the necessary information; however, suppliers may be able to help us further enhance this manual. If sections do not include enough detail for a clear understanding, please obtain the suggestion form (06L4M.013) (available on request from supplier quality). Please send the completed form to the attention of supplier quality. See References.

Current Author: Lucero Cruz	Author Supervisor: A. Gallegos

DOCUMENT REVISION LOG

Revisions level may not contain the letters I, O, Q, S or Z.

Rev.	Date	Section(s)	Description
AH	(07/16)) Date on Doc. due to changes agreed upon by team for reference) 10/18/16 approved in VKMS.	Sec. 1.1, 1.8, 1.9 Sec. 3.1, 3.2, 3.3,3.5 Sec. 4.3.4, 4.5, 4.7, 4.9, 4.10, 4.11, 4.14, 4.15, 4.16, 4.20 Sec. 5.1, 5.2, 5.5, 5.6, 5.7, 5.8, 5.9 Sec. 6.1,6.1.2, 6.1.3, 6.1.4, 6.1.5, 6.1.6 Sec. 7.1,7.2,7.3 Sec. 8.1 Sec. 9.1,9.2,9.3 Sec. 10.1, 10.2,10.3 Sec. 11.4,11.7 Sec.12.0 Sec. 13.0 Sec. 14.0 Sec. 15.0	Update using CM-Manual Template (VKMS #MC-305212) part of SAQ2.0 QMS/EMS Document System. Starting with Rev. "AH"because this is sent to our suppliers and we needed the Revision for tracking purposes. Doc. from 06L2M002 & 06L3M006. To view history changes go to VKMS this document in VKMS, under History tab see version "AG". Additional Approvers:M. Shishu, M. Loza, R. Chaloupka, E. Avila, S. Guerrero, J. Valenzuela, M. Shishu, M. Rocio. Changes include updated document revisions and procedures as well as more detailed information regarding supplier and STRATTEC responsibilities.
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