1. PURPOSE

To establish a document that describes activities required to inspect and process purchased product and to inspect in-process machining operations performed in house.

2. SCOPE

This procedure identifies how the Receiving Inspection process is applied to purchased product and product machined in house which is to be used as an integral part of the manufacture of saleable products.

3. APPLICABLE DOCUMENTS

3.1 05.06.00 Issue of Controlled Documents
3.2 06.03.00 Supplier Quality Control Requirements
3.3 06.03.01 Supplier Deviation Request
3.4 06.03.02 Assignment of Standard Quality Codes
3.5 08.01.00 Product Identification and Traceability
3.6 10.01.00.01 Receiving Inspection Plan and Supplier History Card
3.7 10.01.01 Receiving Inspection Templates
3.8 10.01.02 First Article Inspection
3.9 10.01.03 Inspection of Wireform or Helicoil Inserts
3.10 10.01.04 Inspection of AWPS Purchased Products
3.11 10.01.05 Inspection and Test of DC Motors
3.12 10.01.06 Inspection Using CMM Equipment
3.13 10.01.07 General Workmanship Requirements for Purchased Product
3.14 10.07.00 Positive Recall
3.15 11.01.00 Control of Inspection, Test and Measurement Equipment
3.16 13.01.00 Nonconforming Material Control & Review
3.17 14.01.00 Corrective Action Request
3.18 15.01.00 Materials Handling

Note: On-line documents and assigned sets are approved and valid. Printed copies are for reference only!
Subject: Receiving Inspection

3.19 15.04.00 Materials Preservation
3.20 Tecstar Material Code Index
3.21 Honeywell Material Code Index
3.22 Tecstar Approved Supplier List
3.23 ASTM E 29 Using Significant Digits in Test Data to Determine Conformance with Specifications

4. DEFINITIONS

4.1 B - Base level or baseline inspection - the minimum inspection criteria for all purchased product used as an integral part of the manufacture of saleable products.

4.2 C = 0 Acceptance sampling - A derivation of ANSI/EIA-585-1991. All attributes listed on the receiving inspection template must be inspected for conformance. Use of this plan requires that an entire lot be rejected if one sample is found to be nonconforming.

<table>
<thead>
<tr>
<th>Lot Size (N)</th>
<th>Sample Size</th>
<th>Acceptance Probability (Pa)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 20</td>
<td>N x 1</td>
<td>100%</td>
</tr>
<tr>
<td>21 - 100</td>
<td>N x .225</td>
<td>95%</td>
</tr>
<tr>
<td>101 - 250</td>
<td>N x .220</td>
<td>95%</td>
</tr>
<tr>
<td>251 - 630</td>
<td>N x .215</td>
<td>95%</td>
</tr>
<tr>
<td>631 - 1000</td>
<td>N x .210</td>
<td>95%</td>
</tr>
<tr>
<td>&gt; 1000</td>
<td>N x .2</td>
<td>90%</td>
</tr>
</tbody>
</table>

4.3 R2 - Reduced inspection - Perform C = 0 inspection on every other lot. Perform base level inspection on all lots.

4.4 R10 - Reduced inspection - Perform C = 0 inspection on every tenth lot. Perform base level inspection on all lots.

4.5 S=100 - Sampling set at 100% – due either to most recent receipt of product requiring First Article Inspection or contractual requirements.

4.6 Lot – Any group of purchased items manufactured to the same requirements the same manufacturer during the same production run. Depending upon the drawing or purchase order requirements, a lot of parts may or may not be identified with a unique lot number by the manufacturer. A lot of parts is usually packaged and marked identically by the Supplier. A group of parts perceived to be of the same

Note: On-line documents and assigned sets are approved and valid. Printed copies are for reference only!
production lot, but not packaged or marked identically may not be from the same production lot and should be treated as such.

4.7 Tecstar Material Code Index - A listing of Tecstar controlled material and sundry codes accessible via the Intranet.

4.8 Honeywell Material Code Index - A listing of Honeywell controlled material and sundry codes accessible via the Intranet.

4.9 Tecstar ASL (Approved Supplier List) – A list of Suppliers who have been determined to meet specific customer or Tecstar specifications, or are capable producers of conforming parts, services, or special processes for Tecstar programs. The ASL is accessible via the Tecstar intranet by searching under Quality. Supplier ratings data may be listed within the ASL.

4.10 Approved Supplier - A supplier who has been determined to meet specific customer or Tecstar specifications, or are capable producers of conforming parts, services, or special processes for Tecstar programs. Approved suppliers are listed within the Tecstar Approved Supplier List (ASL), documented on Source Control Drawings, listed within either the Tecstar Material Code Index or the Honeywell Material Code Index and designated by Tecstar customers.

5. RESPONSIBILITIES

5.1 The Receiving Inspection Supervisor or his/her designee coordinates all activities required to complete the Receiving Inspection process.

5.2 Inspectors verify requirements for purchased product as identified by the purchase order and sampling plan specified in 10.01.00.01. Receiving Inspection Templates are recommended to facilitate the Receiving Inspection process for all items other than "SUB" part numbers. "SUB" part numbers are to be inspected in accordance with purchase order requirements only. If a Receiving Inspection Template does not exist for an item to be inspected, the item shall be inspected using the same guidelines required for Receiving Inspection Templates as defined within 3.7. Inspection results are to be documented on 10.01.00.01. NCMR activity is to be recorded per 3.16. The Inspector documents and files the results of such verifications and inspections as required via electronic media or manual file data.

5.3 Receiving Inspection may also inspect machining operations conducted in house in accordance with OS and print requirements. The Inspector documents and files the results of such verifications and inspections as required via electronic media or manual file data.

Note: On-line documents and assigned sets are approved and valid. Printed copies are for reference only!
Subject: Receiving Inspection

5.4 Inspectors shall ensure that all material leaving the Receiving Inspection area is properly labeled and packaged to ensure traceability where required and to ensure adequate protection for transportation and storage. Hazardous material must be marked with a hazard code. All items requiring a cure date must be marked with cure date information. All sundry items must be labeled with the following information: material code number, received date and purchase order number. In addition, all perishable material must be marked with an expiration date. The expiration date shall be the first day of the month of expiration. For additional information regarding processing of perishable material, hazardous material or material requiring a cure date, see 6.7.4, 6.7.5 or 6.7.6, respectively.

5.5 All employees are responsible for ensuring that all purchased material to be used as an integral part of the manufacture of saleable products shall be routed through and processed by Receiving Inspection prior to releasing the material to stock or production. Any noted violation of these practices shall be documented as a Corrective Action Request (CAR) per 3.17 and the material moved in violation will be written up on a Nonconforming Material Report (NCMR) per 3.16.

5.6 Receiving Inspection Templates shall have been created, reviewed and locked in accordance with 3.7 prior to use. Receiving Inspection Templates found to be non-compliant should be unlocked, corrected and re-locked in accordance with 3.7.

5.7 Any employee may request a review of an existing Receiving Inspection Template whenever the inspection requirements of the template are believed to be either inadequate or excessive for the item to be inspected, whenever a perceived error is discovered within the template, or whenever NCMR activity has occurred.

5.8 Receiving Inspection is responsible for requesting approval of 10.01.00.01 (including sampling plans) from either the Receiving Inspection Supervisor or Supplier Quality. Any changes made to 10.01.00.01 (including sampling plans) other than those allowed by this procedure must be approved by either the Receiving Inspection Supervisor or Supplier Quality.

5.9 Receiving Inspectors are responsible for ensuring that all consumable product was procured from an approved supplier as defined within 4.10. Consumable product may be defined as all product for which the purchase order lists a Tecstar product code such as but not limited to 10, 20, 30, 31, etc.

5.10 The Director of Quality or Supplier Quality Manager may act on behalf of the Receiving Inspection Supervisor in his/her absence.

6. PROCEDURE

Note: On-line documents and assigned sets are approved and valid. Printed copies are for reference only!
Subject: Receiving Inspection

6.1 Locate the Receiving Inspection documentation file for the item requiring inspection. The documentation should be filed in the Receiving Inspection department by part number or material code number and should contain 10.01.00.01 as a minimum. If 10.01.00.01 is not available, the inspector shall immediately notify the Receiving Inspection Supervisor. The Receiving Inspection Supervisor may direct the Inspector to create a new 10.01.00.01. The sampling plan per 10.01.00.01 shall be approved prior to use.

6.2 Obtain the latest revision drawing or specification for the item to be inspected in accordance with 3.1. Purchased parts and subassemblies should have a drawing or specification that corresponds to the drawing or specification number listed on the purchase order. Items purchased with a “SUB” prefix are to be inspected in accordance with the requirements of the purchase order only (See 6.16.7 for additional information). Items such as raw material or sundries, which are procured in accordance with a Tecstar material code, should have specification requirements listed in the Material Code Index (3.20).

The Tecstar Material Code Index can be accessed electronically as follows:

- 6.2.1 Click on the “Internet Explorer” icon.
- 6.2.2 Click onto “Documentation On-Line”.
- 6.2.3 Click onto “Quality”.
- 6.2.4 Click onto “TECSTAR Material Code Index”.
- 6.2.5 Scroll through the information to locate the appropriate material code required per the purchase order.

6.3 It is recommended that a Receiving Inspection Template be used to facilitate the Receiving Inspection process for all items other than Sub-items. A Receiving Inspection Template may be obtained by following the below listed instructions. If a template does not exist for the item requiring inspection, a new template should be created in accordance with 3.7 or requested from the Receiving Inspection Supervisor or his/her designee. Note: If a Receiving Inspection Template does not exist for an item to be inspected, the item shall be inspected using the same guidelines required for Receiving Inspection Templates as defined within 3.7.

6.3.1 Access the Receiving Inspection Templates using one of the following two methods:

- 6.3.1.1 Click onto the “Inspection Procedure” icon.
- 6.3.1.2 Click onto the “Network Neighborhood” icon and use the following path:

Note: On-line documents and assigned sets are approved and valid. Printed copies are for reference only!
6.3.2 Type in the unique individual user password.

6.3.3 Click onto “Find Existing Part Number” to review the templates in the system.

6.3.4 Click onto or enter the part number or material code number in the system for the template required. If a template does not exist in the system for the item requiring inspection, create or request a template per 3.7.

6.3.5 A hard copy of a Receiving Inspection Template may be printed by clicking onto the print icon.

6.4 Determine inspection requirements by reviewing the purchase order and Receiving Inspection Template (if available and if applicable). If First Article Inspection is required by the purchase order, refer to 3.8 for additional inspection and documentation instructions. Items shall not be inspected beyond the scope of the purchase order requirements and Receiving Inspection Template per the sampling plans in 10.01.00.01 unless an obvious discrepancy exists.

6.5 If necessary, create a new Receiving Inspection Plan and Supplier History Card by recording the below listed information beginning with **Part Number or Material Code of Item to be Inspected** onto 10.01.00.01. If the inspection history for the item to be inspected is documented onto a superceded form, create a new Receiving Inspection Plan and Supplier History Card using 10.01.00.01 in the same manner. Permanently attach (staple) any old inspection history to the back of the new form for future reference. A separate 10.01.00.01 form should be created for each unique part number or material code number requiring inspection. For example, a separate 10.01.00.01 form should exist for “SUB”(or any other alpha-numeric prefix) part numbers and “~99X”(or any other dash number or alpha-numeric suffix) part numbers. A separate form should also exist for each unique Supplier for the item requiring inspection. All 10.01.00.01 forms for a unique drawing or material code number or Supplier should be filed under that base drawing or material code number in the Receiving Inspection area.

**Part Number or Material Code of Item to be Inspected** - Part number or material code number as listed on the purchase order. Should include any alphanumeric prefixes such as “SUB”, etc., and/or any alphanumeric -99X” or “(SP)”, etc.

**Description** - Description as shown in drawing title block or as listed in Material Code Index.

**Supplier** - Supplier name as listed on purchase order. Vendor number may be entered. Verify that the supplier is an Approved Supplier as

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Note: On-line documents and assigned sets are approved and valid. Printed copies are for reference only!
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defined within 4.9. If the supplier is not an Approved Supplier, complete the inspection process and generate an NCMR for using a non-approved supplier. See 5.9 for additional information.

**Drawing or Specification Number** - Drawing or specification number that defines requirements for the purchased part or material.

**AWPS?** - Check “yes” or “no” after reviewing drawing for AWPS nomenclature in the title block.

**Sampling Allowed per SOP 10.01.00?** - Check “yes” or “no” in accordance with the requirements of this document and purchase order requirements.

**Receiving Inspection Plan** – Check box in accordance with receiving plan being implemented at this time.

**Approved By** - Obtain approval signature or initials from the Receiving Inspection Supervisor or Supplier Quality for the initial plan.

**Date** - Today’s date (month, day, year)

**Notes** - Not required, but may be added at any time to facilitate the inspection process.

6.6 Once a Receiving Inspection Plan and Supplier History Card has been created, the Receiving Inspection process may begin by recording all of the below listed information beginning with inspection date onto form 10.01.00.01. The drawing or specification revisions required by the purchase order shall be compared to the drawing or specification revisions of documents obtained in accordance with 3.1 and in the Receiving Inspection Template (if available and if applicable). Drawing or specification revisions from all three sources should agree. The Inspector shall notify the Receiving Inspection Supervisor if the documentation revisions do not agree and an NCMR may result.

**Inspection date**- Today’s date (month, day, year)

**Receiver Number** - Receiver number (from receiver)

**PO Number** - Purchase Order number (from receiver)

**Drawing or Specification Revision** - Record drawing or specification revision per document control. Record “N/A” if not applicable.

**FAI Required?** - Determine by reviewing quality codes listed on the Purchase Order and by reviewing inspection history in accordance with requirements of 3.8.

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**Note:** On-line documents and assigned sets are approved and valid. Printed copies are for reference only!
Sampling Plan - Determine per 6.15.

Sampling Plan Approval - Any relaxation of the sampling plan requirements must be approved by the Receiving Inspection Supervisor or Supplier Quality. List “N/A” if no changes are made to sampling plan.

Quantity received - Number of actual parts in lot received

Sample size - Determine per 4.2. If entire lot was inspected, record “All”.

6.7 Conduct base level inspection, B, per requirements 6.7.1, 6.7.2 and 6.7.3 for each lot and indicate Pass/Fail/Not Applicable (N/A) results on 10.01.00.01 in the appropriate columns as noted below. Requirements 6.7.4, 6.7.5, 6.7.6 and 6.7.7 below may be added as baseline inspection criteria by listing the requirements on form 10.01.00.01 for any item to be inspected if applicable. Addition of these items to 10.01.00.01 does not require approval.

Correct Part or Material Supplied? – Record on 10.01.00.01 as “Pass” or “Fail” based on results of 6.7.1.

Certification Supplied and PO Requirements Met – Record on 10.01.00.01 as “Pass” or “Fail” based on 6.7.2.

Proper Packaging and Handling/No Damage – Record on 10.01.00.01 as “Pass” or “Fail” based on 6.7.3.

Base level inspection, B, is as follows:

6.7.1 Verify that the part or material supplied is correct. Visual inspections of piecemark (physical piecemarking of the part is not required if MIL-STD-130 is referenced on the drawing, although the marking requirements of MIL-STD-130 do apply - consult a member of engineering or quality familiar with MIL-STD-130 requirements before generating an NCMR) and obvious appearance are the preferred methods of verification. The generation of test data and dimensional data are also methods that can be used to verify presence of correct part or material, although the generation of test data and dimensional data should be minimized.

6.7.2 Review Supplier certification and purchase order requirements (including quality codes per 3.2) to confirm that all quality and purchase order requirements are met. Quality codes listed on each purchase order should comply with the requirements of 3.4 as a minimum. Items not in compliance with certification requirements shall be processed in accordance with 3.16.

6.7.3 Verify that proper packaging and handling techniques were used by both the Supplier and by Tecstar Receiving (reference 3.16) in accordance
with the drawing and purchase order requirements and that the part
 supplied is not damaged. General workmanship of the part should be
 inspected in accordance with 3.13. Note: A visual inspection may be
 used to confirm these requirements have been satisfied.

6.7.4 Verification of shelf life for perishable items is required for the group
codes in the Tecstar Material Code indexes listed below and some items
such as adhesive-backed nameplates or labels. (Material code format is
GC-XXX-XX, where GC signifies Group Code). This information may be
confirmed through certification as received from the Supplier, or by
contacting the Supplier or Manufacturer directly. Shelf life may also be
obtained from the Tecstar Material Code Index if available for the specific
item. The remaining shelf life for these items as received must be in
accordance with the requirements of code 10 per 3.2. An NCMR will
be generated for items found to be in violation of this requirement. Label
perishable items in accordance with 5.4. For additional information and
requirements regarding perishable items, reference specification 3.19.

Note: The expiration date for thinners and solvents may be extended for
one year following a successful visual examination of the material. The
thinner or solvent shall be transparent, not dark or cloudy in appearance.
This visual examination shall be conducted by pouring a sample of the
material into a clear glass container, such as a beaker.

<table>
<thead>
<tr>
<th>Group Code</th>
<th>Basic Material Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Chemicals, Gases, and Solvents</td>
</tr>
<tr>
<td>61</td>
<td>Lubricants and Fluids</td>
</tr>
<tr>
<td>91</td>
<td>Electroplates and Surface Treatments</td>
</tr>
<tr>
<td>94</td>
<td>Enamels and Lacquers</td>
</tr>
<tr>
<td>95</td>
<td>Marking and Miscellaneous Processing Materials</td>
</tr>
<tr>
<td>97</td>
<td>Adhesives and Sealants</td>
</tr>
<tr>
<td>98</td>
<td>Insulating Varnishes, Coatings, and Embedments</td>
</tr>
</tbody>
</table>

6.7.5 Verification of hazard codes is required for the below listed materials.
Hazard codes may be obtained from the Supplier, Manufacturer, the
Tecstar Material Code Index (3.20) or from the Honeywell Material Code
Index (3.21), if available. Label hazardous material using hazard code
labels if not done so by Tecstar Receiving.

Note: On-line documents and assigned sets are approved and valid. Printed copies are for reference only!
Subject: Receiving Inspection

Group Code   Basic Material Group
11  Chemicals, Gases, and Solvents
61  Lubricants and Fluids
91  Electroplates and Surface Treatments
94  Enamels and Lacquers
95  Marking and Miscellaneous Processing Materials
97  Adhesives and Sealants
98  Insulating Varnishes, Coatings, and Embedments

6.7.6 Verification of cure dates is required for specific items listed in the material groups below within either the Tecstar Material Code Index (3.20) or the Honeywell Material Code Index (3.21). The requirement for a cure date may be identified within either the Tecstar Material Code Index, or the Honeywell Material Code Index, or within specifications listed within either the Tecstar Material Code Index or the Honeywell Material Code Index, or within the drawing. If a cure date is necessary, it should be required by the purchase order (code 10 per 3.2). The cure date for these items as received must be in accordance with the requirements of code 10 per 3.2. An NCMR will be generated for items found to be in violation of this requirement.

Group Code   Basic Material Group
52  Packing, Gasket, and Friction Materials
76  Rubber and Rubber-Like Materials

6.7.7 Verify that the material has correct traceability and identification by lot or serial number (if applicable per PO requirements). Material found to be nonconforming during the base level inspection may be placed on NCMR at this point (without completing the rest of the inspection). If this is done, the Inspector is required to add “Note: Only base level inspection performed.” as one of the defects in the NCMR. This is to alert MRB members that additional inspection may be required if material is not returned to the Supplier.

Note: On-line documents and assigned sets are approved and valid. Printed copies are for reference only!
If quality code 60 per 3.2 is invoked on the purchase order, record “Pass” or “Fail” in accordance with the results of the Supplier’s data.

**PC Numbers (AW/PS only)** - Record the PC numbers of the received material either as a range of numbers (PC00001XX-PC00010XX where XX is the two letter company code assigned by Firstmark) or a listing of the individual numbers if they are not consecutive (i.e. PC00001XX, PC00004XX, PC00105XX).

6.9 Non-conforming material must be placed on NCMR. If sampling inspection was used, the entire lot quantity will be rejected on an NCMR. When using sampling inspection, the “Sample Size” listed on the NCMR is to reflect the total number of parts within the group of parts that was inspected and found to contain the documented defect(s). Any NCMR activity for an item from an external Supplier (including challenged parts from the production floor) should result in the failed requirement being added to the Receiving Inspection Template at a sampling rate of 100%. The following information must be entered onto 10.01.00.01, regardless of whether or not NCMR activity occurred:
Subject: Receiving Inspection

Number Failed – If applicable, record on 10.01.00.01 the quantity of parts from a received lot that failed one or more inspection criteria. If entire lot of parts failed one or more inspection criteria, record “All”. If no parts failed, record “0”.

NCMR Number - Record onto 10.01.00.01 in appropriate location if applicable. If there was no NCMR activity, record “N/A”.

6.10 The Inspector shall notify the Receiving Inspection Supervisor or his/her designee, Supplier Quality and the respective Buyer and Planner of each Supplier NCMR activity as it occurs (including challenged parts from the production floor).

6.11 The Inspector shall notify Quality, Engineering and Planning of each NCMR activity as it occurs (including challenged parts from the production floor).

6.12 The Inspector completes all other applicable required documents including AWPS Forms & Tags, ITA Tags and Inventory Control Forms. Electronic versions of these forms and/or processes are acceptable alternate methods of documentation.

6.13 Upon completion of the inspection process, the Inspector documents the final inspection results onto 10.01.00.01 as follows:

Inspection Results – Record “Pass” or “Fail” onto 10.01.00.01 at closure of inspection process and validate using an inspection stamp.

6.14 Immediately following inspection, all items are to be packaged in a manner to prevent damage during storage in and transit from Receiving Inspection. All items should be re-packaged in original containers as received from the Supplier whenever practical to do so. Easily damaged items including but not limited to bearings, magnets, castings, machined items and electromechanical components should be individually packaged by compartmentalizing to eliminate the possibility of contact between the parts, resulting in damage during transit or storage. Small castings or machined items (dimensions less than approximately 2”x2”x2”) may be packaged in bulk, provided that each part is individually wrapped with adequate padding to prevent damage during transit or storage. In addition, items identified as ESD sensitive by the drawing or Purchase Order such as electronic components or assemblies shall be handled to prevent ESD damage and packaged to provide protection from electrostatic discharge. All perishable items shall be packaged and stored in a manner to prevent degradation of the products.

6.15 Sampling Plan Provisions

6.15.1 Supplier Quality or the Receiving Inspection Supervisor or designee shall determine and approve the appropriate sampling plans for incoming material as listed on 10.01.00.01. Deviations from the normal
progression of sampling plans per 6.15.2 are acceptable provided that they are approved on 10.01.00.01 by either the Receiving Inspection Supervisor or Supplier Quality.

6.15.2 Upon the determination of inspection level the following progression shall occur:

6.15.2.1 S=100: If the material is deemed to be a viable candidate for acceptance sampling and it is determined that it should begin with 100% inspection, it must pass one lot at 100% inspection before progressing to the C=0 plan.

6.15.2.2 C=0: After passing one lot at 100% inspection or if it is determined that the inspection shall begin at the C=0 plan, it must pass two consecutive lots at C=0 before progressing to the R2 plan. If a lot fails at C=0 it remains at the C=0 plan for three successful consecutive lots at C=0. If the subsequent lot fails, the Inspector shall notify the Receiving Inspection Supervisor to determine action taken on inspection of subsequent lots.

6.15.2.3 R2: After two consecutive passed lots under the C=0 plan or if it is determined that the inspection shall begin at the R2 plan:

First lot requires only the basic inspection B
Second lot is inspected under C=0
Third lot requires only the basic inspection B
Fourth lot is inspected under C=0
Fifth lot requires only the basic inspection B
Sixth lot is inspected under C=0
Seventh lot requires only the basic inspection B
Eighth lot is inspected under C=0
Ninth lot requires only the basic inspection B
Subsequent lots are handled according to the R10 plan.

6.15.2.4 R10: After a supplier’s product passes nine consecutive lots under the R2 plan the applicable parts are eligible for R10 sampling plan or every tenth lot received from the respective supplier shall be acceptance sampled per the C=0 plan. For
those lots where only base level inspection is performed, indicate this by entering “B” under inspection level used.

6.15.2.5 Failures: Any failure from R2 sampling or R10 sampling should require a return to the C=0 plan. This change to the sampling plan does not require approval.

6.16 Special provisions:

6.16.1 Certification Issues:

Problems with certification shall be resolved by Purchasing within 3 business days. Receiving Inspection must notify (in writing such as email) Purchasing of a certification issue immediately following the inspection process and must provide Purchasing with the following information: 1) Part number or material code number listed on the Purchase Order, 2) Receiver Number, 3) Purchase Order Number, 4) Quality Code(s) per 3.2 for the applicable certifications, 5) A brief explanation of the problem.

Purchasing shall resolve the certification issue(s) with the Supplier and must respond (preferably in writing such as email) to Receiving Inspection within three business days from the date of the original request.

Following resolution of the problem by Purchasing, the Inspector shall complete the Receiving Inspection process.

If the certification issue has not been resolved by Purchasing within 3 business days following notification of the problem, Receiving Inspection shall place the material in bond per 3.16.

In lieu of code 76 certification per 3.2, the Inspector may record the name of the original manufacturer and each unique lot or batch number onto the code 12 certification and release the product to production. This only applies to product labeled with the original manufacturer’s name and product identified with a lot or batch number.

6.16.2 Raw Material: The Inspector shall order a spectrographic analysis of raw material for the following material codes in the Tecstar or Honeywell Material Code index. (Material code format is GC-XXX-XX, where GC signifies Group Code). Spectrograph analysis is not required for solder. Raw material shall be identified by color code prior to leaving the Receiving Inspection area.

<table>
<thead>
<tr>
<th>Group Code</th>
<th>Basic Material Group</th>
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Note: On-line documents and assigned sets are approved and valid. Printed copies are for reference only!
Subject: Receiving Inspection

03  Aluminum and Aluminum Alloys
05  Titanium and Titanium Alloys
06/13 Brasses, Bronzes, and Copper
32  Iron
37  Lead and Lead Alloys
42  Magnesium and Magnesium Alloys
45  Nickel and Nickel Alloys
48  Electrical and Magnetic Alloys
69  Precious and Misc. Metals
82  Steel, Carbon
85  Steel, Alloy
86  Steel, Tool
87  Steel, Stainless
89  Tin and Tin Alloys
92  Zinc and Zinc Alloys

6.16.3 Standard Hardware

6.16.3.1 Standard hardware such as screws, nuts and bolts that may have slight swells or burrs from the manufacturing process, are acceptable unless ordered as instrument grade. Loose or hanging burrs are not permissible.

6.16.3.2 Standard brass hardware such as screws, nuts, and bolts that are not required to have protective coatings may exhibit slight darkening and discoloration from oxidation. This discoloration is permissible.

6.16.4 Laminations:

6.16.4.1 Lamination I.D., O.D., and other roundness dimensions should be initially checked in the free state. Dimensions found to be out of tolerance in the free state may be re-inspected using the Engineering specified stacking fixture. Laminations meeting the specified requirements using the stacking fixture are to be considered acceptable.

Note: On-line documents and assigned sets are approved and valid. Printed copies are for reference only!
6.16.4.2  Spectrographic Analysis is not required for laminations. Material Certifications are acceptable.

6.16.5  Items Requiring Base Level Inspection Only: The following items are to be inspected in accordance with the Base Level Inspection, B, per 6.7. The inspection results must be recorded on 10.01.00.01 and the sampling plan for these items will be listed as “B”.

6.16.5.1  Customer furnished material or material purchased from the customer.

6.16.5.2  Standard mechanical hardware or electronic components purchased to military or industry standards shall be baseline inspected at an R10 sampling rate (this includes items purchased for use within space products) unless NCMR activity has occurred. This practice shall be reflected within the Receiving Inspection Templates and on 10.01.00.01.

6.16.5.3  Materials ordered as one of the following groups from Tecstar Material Code index. (Material code format is GC-XXX-XX, where GC signifies Group Code)

<table>
<thead>
<tr>
<th>Group Code</th>
<th>Basic Material Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Chemicals, Gases, and Solvents</td>
</tr>
<tr>
<td>20</td>
<td>Felt and Textiles</td>
</tr>
<tr>
<td>25</td>
<td>Glass, Ceramics, and Crystals</td>
</tr>
<tr>
<td>29</td>
<td>Insulating Materials (Electrical and Thermal)</td>
</tr>
<tr>
<td>52</td>
<td>Packing, Gasket and Friction Materials</td>
</tr>
<tr>
<td>59</td>
<td>Paper, Vulcanized Fiber and Wood</td>
</tr>
<tr>
<td>60</td>
<td>Miscellaneous Materials</td>
</tr>
<tr>
<td>61</td>
<td>Lubricants and Fluids</td>
</tr>
<tr>
<td>63</td>
<td>Plastics, Thermosetting</td>
</tr>
<tr>
<td>64</td>
<td>Plastics, Metal Clad</td>
</tr>
<tr>
<td>65</td>
<td>Plastics, Thermoplastic</td>
</tr>
<tr>
<td>76</td>
<td>Rubber and Rubber-Like Materials</td>
</tr>
<tr>
<td>91</td>
<td>Electroplates and Surface Treatments</td>
</tr>
<tr>
<td>94</td>
<td>Enamels and Lacquers</td>
</tr>
</tbody>
</table>

Note: On-line documents and assigned sets are approved and valid. Printed copies are for reference only!
Subject: Receiving Inspection

95 Marking and Miscellaneous Processing Materials
97 Adhesives and Sealants
98 Insulating Varnishes, Coatings, and Embedments

6.16.6 Transfer of Old Sampling Plans to 10.01.00.01: For items having inspection history documented on a previously used form, transfer the old sampling plan to 10.01.00.01 by inputting the converted sampling plan onto 10.01.00.01 using the following table and mark the “Sampling Allowed?” block accordingly. This activity does not require approval.

<table>
<thead>
<tr>
<th>Previous</th>
<th>NEW</th>
<th>Sampling Allowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>100%</td>
<td>NO</td>
</tr>
<tr>
<td>Tightened</td>
<td>S=100</td>
<td>Yes</td>
</tr>
<tr>
<td>Normal</td>
<td>C=0</td>
<td>Yes</td>
</tr>
<tr>
<td>Skip lot</td>
<td>R2</td>
<td>Yes</td>
</tr>
<tr>
<td>Reduced</td>
<td>R10</td>
<td>Yes</td>
</tr>
<tr>
<td>Dock to Stock</td>
<td>R10</td>
<td>Yes</td>
</tr>
</tbody>
</table>

6.16.7 Inspection of “SUB” Items: Items purchased with a “SUB” prefix are to be inspected in accordance with the requirements of purchase order only. A Receiving Inspection Template is not recommended for the inspection of “SUB” items due to the variations possible within purchase orders for “SUB” jobs. Any obvious discrepancies noted that are NOT the result of processing in accordance with purchase order requirements are to be recorded per the NCMR process (3.16). However, the following note must be added within the defect description on the NCMR: “Discrepancy may not be due to supplier’s prevent suppliers of “SUB” items from being falsely charged with discrepancies.

6.16.8 Certified Suppliers: Physical inspection at Tecstar is not required for any product supplied by a Certified Supplier or for a specific product for which a Supplier is Certified, provided that either quality code 60, 61 or 63 per 3.2 is invoked on the purchase order. Critical inspection parameters identified within either the Receiving Inspection Template per 3.7 or by the drawing for AWPS products shall be

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confirmed at Tecstar by reviewing Supplier certifications and/or Supplier inspection/test data during baseline inspections. Certified Supplier status may be determined by accessing 3.22.

6.16.9 Positive Recall: Items on NCMR for which there is a high level of confidence of acceptability by Engineering and Quality may be released to production in accordance with 3.14.

6.16.10 Use of CMM (Coordinate Measuring Machine) Inspection Equipment: Inspections using CMM equipment shall be conducted in accordance with 3.12.

6.16.11 Inspection of Helicoil or Wireform Inserts: The inspection of Helicoil or wireform inserts shall be conducted in accordance with 3.9.

6.16.12 Inspection/Test of DC Motors: The inspection/test of DC motors shall be conducted in accordance with 3.11.

6.16.13 Use of Significant Digits in Inspection Data: For the purposes of determining conformance with drawing or specification requirements, an observed or calculated value must be rounded to the nearest unit and then compared with the drawing or specification limit. Conformance or nonconformance with the drawing or specification requirement shall be based on this comparison. The actual rounding procedure is as follows:

6.16.13.1 When the digit next beyond the last place to be retained is less than 5, the digit in the last place retained shall be unchanged. i.e. .0014 shall be read as .001.

6.16.13.2 When the digit next beyond the last place to be retained is greater than 5, the digit in the last place retained shall increase by 1. i.e. .0016 shall be read as .002.

6.16.13.3 When the digit next beyond the last place to be retained is 5, and there are no digits beyond this 5, or only zeros, the digit in the last place retained (if it is odd) shall increase by 1. i.e. .0015 shall be read as .002. Leave the digit unchanged if it is even i.e. .0025 shall be read as .002. Increase by 1 the digit in the last place retained, if there are digits beyond this 5. i.e. .00251 shall be read as .003.

6.16.14 Generation of Nonconforming Material Reports (NCMRs): NCMRs shall be processed in accordance with 3.16. Any conflicts between the purchase order requirements and drawing or specification requirements shall result in an NCMR. Each NCMR discrepancy
resulting from an inspection or test must be repeatable within a second inspection or test setup using the same sample part and equipment. NCMR discrepancies resulting from either the Vari-roll gear checker or CMM inspections must be substantiated with two sets of recorded inspection data. Each set of recorded inspection data must be generated within a separate inspection setup using the same sample part and equipment. Each set of recorded inspection data must be validated (stamped) and dated by the Inspector. The inspection data must be labeled and traceable to both the NCMR and to the particular sample part which was inspected. All inspection data generated in support of NCMR activity shall be attached to the NCMR and forwarded to the bond room along with the parts for review by Engineering and Quality.

6.16.15 Inspection of AWPS Product - AWPS purchased product shall be inspected in accordance with 3.10.

6.16.16 Supplier Deviations - Pre-approved Supplier deviations shall be processed in accordance with 3.3.

6.16.17 General Workmanship - Purchased product shall be inspected in accordance with 3.13 to verify proper workmanship. This work instruction contains guidelines regarding burrs or flashing including NCMR generation.

7.0 RECORDS

<table>
<thead>
<tr>
<th>Record Description</th>
<th>Form #</th>
<th>Minimum Retention</th>
<th>Responsible Dept.</th>
<th>Storage Location</th>
<th>Filing Sequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receiving Inspection Plan and Supplier History Card</td>
<td>10.01.00.01</td>
<td>No minimum retention required. Information on form is all retrievable from either M2M or Mapper systems</td>
<td>Receiving Inspection</td>
<td>Receiving Inspection</td>
<td>Part Number Sequence</td>
</tr>
<tr>
<td>First Article Inspection Form</td>
<td>10.01.02.01</td>
<td>7 years for non-AWPS product and indefinite for AWPS product</td>
<td>Receiving Inspection</td>
<td>Receiving Inspection</td>
<td>By First Article Inspection Report #</td>
</tr>
</tbody>
</table>

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Subject: Receiving Inspection
“may” to “shall” or must” in paragraphs 6.16.1, 6.16.13, 6.16.14, 6.16.16.  Added “or designee” to 5.1, 6.3 and 6.10.  Added requirement for color-coding of raw material to 6.16.2.  Added “or material purchased from the customer” to 6.16.5.1.  Added instructions addressing use of non-approved suppliers within 5.9 and 6.5.  Added paragraph 6.16.17.  Removed all references to the Honeywell Material Code Index.

4/5/02

D  Added provision to 6.7.4 that allows extension of shelf life for thinners and solvents.  Added Group Code 11 to 6.7.4 and 6.7.5.  Added PC Numbers subparagraph to 6.8.  Changed all references to 3.6 to 10.01.00.01.  Changed Receiving Inspection Plan Approved By from one field to two fields in 6.5.  In paragraph 6.5, added provision to use vendor number in Supplier block in addition to the supplier’s name.  Changed name from Tecstar ESD, Inc. to Firstmark Aerospace Corp.

8/14/02