# Supplier Quality Specification

3DS Document 51000-P14

Rock Hill, South Carolina

Revision A

## Revision History

<table>
<thead>
<tr>
<th>Change Description</th>
<th>Revision Date</th>
</tr>
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<tbody>
<tr>
<td>All</td>
<td>6/26/16</td>
</tr>
<tr>
<td>All New Release</td>
<td></td>
</tr>
<tr>
<td>A Updated supplier classification section, revised PPAP requirements; Revised</td>
<td>9/26/16</td>
</tr>
<tr>
<td>Approved Supplier classifications; new logo; Removed appendix E and F</td>
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Supplier Quality Specification

1.0 Purpose

The purpose of this quality specification is to communicate 3D System’s supplier quality requirements and expectations to suppliers. The intent of 3D Systems (3DS) is to partner with suppliers who are able to provide parts, material, processes and service (purchased items) consistently to specification, at a competitive price, and in accordance with a defined delivery schedule.

2.0 Scope

The contents of this specification apply to 3D Systems suppliers of production items and services currently supplying for equipment such as printers, scanners, etc. and the related materials to support such equipment.

3.0 Quality Systems Requirements

3D Systems encourage suppliers to develop quality systems that provide for continuous improvements and emphasize defect prevention while reducing variation and waste.

At this time, 3D Systems does not require suppliers to obtain ISO 9001 certification but requires suppliers to maintain an equivalent quality system. This approach is to assure the quality of the products, materials and service.

The supplier’s quality system must be implemented to provide defect free (zero) purchased items. 3D Systems expects its suppliers to be passionate in striving for zero defect manufacturing and continuous improvement. Defect reduction, whether it is in manufacturing, administrative or development processes, are critical to waste reduction, high performance and responsiveness.

To achieve zero defects, suppliers are expected to have metrics or key process indicators that measure the effectiveness of their business systems.

4.0 Approved Supplier List

Production purchased items will only be purchased from suppliers on the 3D Systems “Approved Supplier List” (ASL). 3D Systems evaluates and selects suppliers based on their
ability to supply purchased items in accordance with specified requirements, pricing and performance.

Suppliers, who are not currently listed as approved on the ASL, will not be permitted to supply purchased items to 3DS to support production schedules. An unapproved supplier must be approved via the 3DS new supplier qualification process.

Quality / Delivery status is based on the following and monitored using via 3DS metrics for quality and delivery. A supplier will be classified as one of the following in the ASL:

**Preferred:**
Completed 7 step sourcing process and consistent performance

**Approved:**
Grandfather suppliers who may be used for purchase order. Note: If a preferred supplier exists then the preferred supplier will be selected first.

**Restricted:**
Performance is average but unusual circumstances (such as unique technology) allow for a continued business relationship without opportunities for expansion. Note: If a supplier in this category improves performance, it may be moved to approved and eligible for additional business

**Discontinued**
To be removed from the 3DS supplier approval list. Supplier can no longer bid on any new business with 3DS. Business relationship with 3DS is terminated.

**5.0 Supplier Assessments**

Supplier Assessments are integral tool used by 3DS to qualify and maintain suppliers. The goal of supplier assessments are to assure that 3DS selects and uses suppliers that assist 3DS in achieving quality, delivery, responsiveness and cost objectives to allow for a win-win partnership with suppliers.

As necessary, 3D Systems will conduct Quality Systems audits at supplier’s facilities. The goal of the audits is to understand supplier’s capabilities, capacity, production technology, support infrastructure, quality systems and identify continuous improvements opportunities.
Potential suppliers may be audited as part of 3D System’s sourcing qualification process. Suppliers may be sent a Pre-assessment Survey before the audit date. This pre-assessment should be returned to 3D Systems prior to 3D Systems conducting the audit. Following the audit, 3D Systems will forward findings and requests for corrective action. Results of the audit will be used in the sourcing decision for potential suppliers. Current suppliers may be audited if there are ongoing quality problems.

In addition, 3DS requires access to supplier’s sub-suppliers as necessary to resolve issues associated with performance.

**6.0 Technical Review. (TR)**

3D Systems actively uses Technical Reviews to proactively identify potential issues to prevent problems. Technical Reviews are designed to communicate product quality expectations, confirm capacity, discuss technical requirements and verify if suppliers have adequate processes in place. These reviews are expected to be open communication channels that assist both suppliers and 3DS in preparing for development and production launches.

Suppliers are recommended to establish cross-functional teams to support the requirements of Technical Reviews. 3D Systems may conduct a Technical Review at the supplier’s facility, 3DS site or via teleconference calls. This review may include discussions of the supplier’s documentation and process associated with the production of parts for 3D Systems. Such items may include but not limited to the following:

- Design Review / Tolerance & Capability Evaluations
- Process Review (intended process, equipment, capacity, risks, etc.)
- Gage Review (measurement equipment or approach to assure compliance to specifications)
- Assembly Review
- Packaging Review
- Miscellaneous Review
- **Critical Characteristic Inspection (CCI) Review** (Reference section 6.1)

3D Systems will review gaging for inspection and qualification of the parts per the drawing as needed. Suppliers must submit gage R&R studies to 3DS on CCI in the **Production Part Approval Process (PPAP)** (Reference Table A).
Suppliers are required to provide First Article Inspection (FAI) on new parts prior with each shipment to 3DS until the part is approved via a Production Part Approval Process (PPAP), reference section 7.0. FAI data is required during the prototype, pre-production build, etc. phase of New Product Introductions to assure understanding and compliance to specifications are achieved and establish process capability. In some cases, 3DS engineering may require larger samples sizes with capability studies to permit a better understanding of supplier capability versus 3DS system design objectives. When larger samples sizes are required, 3DS Purchasing will notify the supplier.

6.1 3DS specification, 21926, Critical Characteristic Inspections (CCI)
3DS defines CCI features on engineering drawing using the CCI symbol. This specification defines the requirements and expectations to control CCI features. All 3DS suppliers are expected to define and control process parameters as needed to assure compliance to the 3DS specification.

7.0 PPAP Submission Process

Suppliers are required to obtain approval for production items prior to shipment through the PPAP submission process. The purpose of the PPAP submission process is to evaluate the supplier’s capability of producing parts to meets 3D Systems specification and assure that adequate controls and capability are in place to achieve zero defect production.

PPAP submittals shall use equipment, methods, test / inspection equipment, process flow, etc. under normal production conditions to demonstrate the effectiveness and capability of the production system used to manufacture the production items. The supplier will submit samples parts from this PPAP submission process production run for approval by 3D Systems.

PPAP submission due dates will be determined and communicated to the supplier by 3D Systems Purchasing team. The supplier is to assure that PPAP samples are provided to 3DS Quality Assurance prior to shipping production deliveries. NOTE: In the case, the supplier ships prior to PPAP approval, any additional expenses with purchased item return, issue resolution, sorting, etc. will be at the supplier’s expense.

Supplier shall submit PPAP samples for new parts or revised 3DS drawings. Changes introduced by the supplier requiring approval by 3DS include: Sub-supplier, Alternative material, Location, Deviation from approved PPAP process, Alternative Technology, etc.
• A change in construction or material versus a previously approved part or product
• Production from a new or modified tooling (less perishable tooling), dies, molds, patterns, etc., including additional or replacement tooling
• Production from a different site regardless if the equipment, etc. are deemed equivalent.
• Change in sub-contractors for parts, non-equivalent materials or services (i.e. heat treating, plating, painters, etc.) that may affect form, fit, function, durability or performance.
• A new or revised part or design.*
• Correction of discrepancy from a previously submitted part.*

* For these instances and with agreement from Quality Assurance, the PPAP may be completed for the revised or changed characteristics

All new suppliers of a purchased item are to provide a PPAP regardless of PPAP approval history with other suppliers. PPAP approvals are linked directly to the supplier location, part number and part revision. Any deviation from these items requires a complete PPAP.

3DS assigns each part and revision a PPAP level of 1 to 3. Reference below Table A for the requirements associated with each levels. PPAP is a standard phrase used to define part approvals across a variety of industries. The supplier should note that the PPAP levels used by 3DS have been modified to the requirements of 3DS and do not always correlate to other industries.

• If a PPAP level is not defined, then the default level is a Level 1
• 3DS purchased items released prior to 11/30/2015 and do not have a PPAP level defined are grandfathered with a PPAP level 1.
<table>
<thead>
<tr>
<th>Requirement</th>
<th>Minor</th>
<th>Major</th>
<th>Important</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPAP Level 1</td>
<td>X</td>
<td></td>
<td>X</td>
<td>NA</td>
</tr>
<tr>
<td>PPAP Level 2</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>PPAP Level 3</td>
<td></td>
<td></td>
<td>X</td>
<td>NA</td>
</tr>
<tr>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balloon drawing w/ dimensions (FAI)</td>
<td>X</td>
<td></td>
<td>X</td>
<td>NA</td>
</tr>
<tr>
<td>Material Certifications</td>
<td>X</td>
<td></td>
<td>X</td>
<td>NA</td>
</tr>
<tr>
<td>Process Flowchart</td>
<td></td>
<td></td>
<td>X</td>
<td>NA</td>
</tr>
<tr>
<td>Process FMEA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Plan</td>
<td>X</td>
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<td></td>
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</tr>
<tr>
<td>Capability Study (CCI)</td>
<td></td>
<td>X</td>
<td>X</td>
<td>NA</td>
</tr>
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<td>Appearance Approval if applicable</td>
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<td>NA</td>
</tr>
<tr>
<td>Sample Product (6 pieces)</td>
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<td>X</td>
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</tr>
<tr>
<td>Master Sample If applicable</td>
<td></td>
<td></td>
<td>X</td>
<td>NA</td>
</tr>
<tr>
<td>Measurement System Analysis</td>
<td></td>
<td></td>
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<td>NA</td>
</tr>
<tr>
<td>Packaging Approval</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Warrant – Add ROHS / Reach Declaration</td>
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<td>X</td>
<td>X</td>
<td>NA</td>
</tr>
</tbody>
</table>

The below requirements are to be submitted as part of the PPAP submissions, but not limited to:

**Balloon Drawing**

- Each part drawing, along with reference specifications and drawing must be submitted with each PPAP submission.
- Each dimension and note must be ballooned (Numbered) on the drawing/print. This requirement is essential to differentiate the actual dimensions being evaluated versus the dimensional data.

**Dimensional Results**

- The dimensional report shall include the balloon number identification, dimension, the tolerance, the actual results and any relevant comments associated with the information.
- All results not complying with 3DS specifications shall be highlighted.
- A six piece dimensional layout is required for each mold, cavity, die and production line or machine that will produce a part.
- Dimensional results must be provided for all dimensions, notes and other specification on the part drawing.
- The items on the dimensional report must correspond with the item numbers on the ballooned drawing.

**Material Certification**
- Supplier must provide evidence of compliance to material specification via actual material certificates or material performance test results.
- Each PPAP must be accompanied by a Material Certification report.
- Heat treating and surface finishing certifications are required if on the prints. In some cases, process certification may be required to support the PPAP approval process including sub-suppliers.

**Advanced Quality Planning Tools**
- **Process Flowchart**: A block diagram that illustrates the production process flow highlighting process, inspection and test steps.
- **Process Failure Modes and Effects Analysis (PFMEA)**: A risk mitigation tool to quantify and mitigate risk associate with developing a process for manufacturing a purchased item.
- **Control Plan**: A summary of the inspection and test point, sample sizes, frequency of checks and subsequent reaction plans when production items become non-conforming.
- **Checking Aids**

**Appearance Approval & Master Samples**
- Parts with cosmetic surfaces may also require appearance approval reports. These reports typically cover color matching, inclusions, etc.
- Master samples may be required and used to service as reference points associated with pass and fail criteria against future lots. When master samples are required, the supplier and 3DS will develop mutual agreement on acceptability.

**Process Capability**
- All Critical Characteristics inspection (CCI) dimensions must be controlled per Section 6.1.
• Level 3 PPAP’s require capability studies to establish the ability of the process to meet 3DS specifications. In this case, supporting Measurement System Analysis (MSA) must be completed. The MSA is typically called a gage repeatability and reproducibility (R&R) studies.

• Gage R&R must meet the standard gage R&R requirements

Sample Parts

• Suppliers are required to submit samples with each PPAP submission. The standard quantity is 6 pieces. For multiple tool, cavity, etc. scenarios, a 6 piece sample is required for tool, etc. Any issues or exceptions are to be discussed and approved with 3DS Quality Assurance.

• Each sample part must have a tag indicating it is a PPAP sample. The tag should include sample #, part number, revision level, date parts were produced, supplier’s name, and cavity number. (Reference 15.1)

• PPAP special labels must be applied on approved production run parts for the first three shipments. (Reference 15.1)

Packaging

• Packaging must also be approved by 3D Systems using the packaging approval form. Photos or samples may be requested.

Warranty

• This document summarizes the PPAP submittal and also serves as the formal approval to the supplier. Once the PPAP is approved, the warrant will be returned to the supplier with an approval signature from 3DS Quality Assurance.

All related documents, examples, etc. support PPAP may be found at the following web address. Access to this web address must be obtained through the appropriate 3DS Buyer (Purchasing).

https://3dsystems.teamplatform.com/workspaces/64697#tab-overview-s

Suppliers may be able to submit one PPAP for a family of parts. 3D Systems will notify the supplier when this type of submission is acceptable.

Suppliers with an approved PPAP for a purchased item and unacceptable part quality performance may be required to re-submit a PPAP per direction of 3DS.
If a part has been **inactive for more than 2 years or more**, a level 1 PPAP is required prior to shipping parts.

Any items within a PPAP in terms of content or compliance that **fails to meet the expectation** of 3DS drawings, etc. shall either be:
- Corrected and re-submitted by the supplier
- Temporary Deviation for short term issues
- ECO for permanent drawing changes to align the engineering documentation to the supplier’s capabilities.

### 8.0 Deviation

Whenever a purchased item does not conform to 3D Systems specification occurs and lead time does not allow permanent corrective action to be implemented by the supplier prior to shipment, a **Supplier Request for Action (SRA)** must be submitted to and approved by 3D Systems prior to shipping non-conforming material. (Reference Appendix 15.3) This item applies to all purchased items regardless of PPAP approval status. The output of the SRA may be either a temporary deviation, a permanent engineering change order or a rejection that requires to the purchased item to be corrected to 3DS specifications.

3D Systems approval will be based on how the deviation might impact the form, fit and function of the part.

When deviation is approved, the supplier is to provide 3DS corrective action within 15 days addressing the issues.

If permanent engineering change order is not issued from 3DS, then the deviation is only valid for the quantity or time defined on the deviation.

Deviation request must include the details of the non-conformance and number of parts affected.

### 9.0 Engineering Change Order (ECO)

Whenever a supplier wishes to make a permanent change to a part or drawing, a request for an Engineering Change Order (ECO) must be submitted to 3D Systems and approved prior to any changes.
3D Systems Engineers will review and decide if the ECO is warranted. If acceptable, 3D Systems Engineer will make the necessary changes to the drawing and provide communication concerning changes. The supplier will be required to confirm the implementation via an amended PPAP. Any concerns or questions are to be directed to 3DS Quality Assurance.

**10. Problem Resolution**

Upon receipt of a nonconforming purchased items, 3D Systems may issue a Supplier Corrective Action Request (SCAR) based on the quantity or level of nonconformance. Nonconforming purchased items can be found during incoming inspection, audit, assembly or customer returns. Immediate action is needed by the supplier to contain nonconforming material at their facility and 3D Systems’ sites.

Return Material Authorization (RMA) should be provided for purchased items that is defective or considered suspect and needs to be returned to the supplier within 48hrs of request. Upon receipt of the returned material at the supplier’s premises, the supplier is expected to review, analyze and make improvements to prevent defects from future shipments.

Once the supplier provides 3DS with RMA authorization (number), 3DS will automatically deduct the cost of the RMA from the supplier. In the event, the returned parts are found to be good, 3DS purchasing will issue a new purchase order.

3D Systems reserves the right to sort suspect material to avoid production line shut down at the supplier’s expense. Supplier has the right to come and sort material to avoid production line shut down.

In less than 48 hours from notification of the defective parts and **pending Supplier Corrective Action Request (SCAR)** issuance, supplier must:

- Inform 3D Systems of immediate containment actions
- Inform 3D systems of the plan to replace suspect material
- Identify short term corrective action
- Send initial SCAR response in less than 48 hours after receipt from 3D Systems
- Use containment labels to identify (old stock) at the supplier’s facility. See Appendix 15.1.

Within 15 days of being issued a SCAR of the defects supplier must:

- Define and verify the root cause of the defect and escapes
- Determine and implement permanent corrective actions for root cause and escapes.
- Verify and validate permanent corrective actions
• Use special labels for corrective action implemented (Material generated from process improvements) See Special labels

3D Systems will analyze the final SCAR response and provide the supplier with a decision on closure of the SCAR. The SCAR response will be Accepted, Conditional Accepted or Rejected. If SCAR is conditional accepted or rejected, resubmission is required with the discrepancies corrected.

**SCAR Supplier Expectations**

SCAR response must be in the format supplied by 3D Systems, the standard AIAG 8D Corrective Action or equivalent. The 8D Corrective Action process is the basis of the 3D Systems format. The supplier’s response must be equivalent to the 8D method. Below is the list of information required to be included in a SCAR:

• Supplier must complete containment section information
• **Must define root cause analysis** including an explanation of how the purchased items escaped the normal controls. *The method of how the root cause was determined must be clearly shown.* Examples are 5Why’s/1 How, Data Analysis, PFMEA, Six Sigma, etc. Failure to provide this insight will result in the SCAR being rejected.
• Complete corrective action section and provide supporting documentation, studies, evidence.
• Complete preventive action and provide supporting documentation. Describe in details who will do what and how it will be implemented
• Complete effect date starting point when corrective action implemented
• Verification section to measure how effective their corrective action is effective. Are the necessary policies and procedures to prevent reoccurring problems in place? Evaluate whether corrective action can be implemented on similar products or process.

Approval and closure of the SCAR response will be at the discretion of the Quality Engineer, Supplier Quality Engineer and Supply Management cross functional team. All SCAR’s will remain open until problem–solving requirements are met. Parts must pass 3 corrective action shipments with special labels on the containers to be monitored by 3D Systems

**10.1 Containment**

Suppliers are responsible for developing a process to protect 3D Systems from receiving material that does not meet quality requirements and specifications established by 3D Systems.
When containment of nonconforming purchased items is required, suppliers shall perform sorting at 3DS facilities or use a 3rd party sorting service. 3DS can provide a list of 3rd party sorting service. See Appendix 15.2.

3D Systems does not sort or contain products supplied by suppliers at 3DS sites.

10.2 Supplier Development

3D Systems will provide assistance to suppliers having trouble meeting performance levels and specification. 3D Systems will assist in:

- Resolution of critical issues
- Improvement activities
- Improvement capability of potential supplier to gain approved supplier status
- Audit facility to evaluate any process weakness

Whenever 3D Systems applies resources to support the above activities, suppliers are expected to provide resources and support to achieve mutually agreeable improvement goals.

10.3 Supplier Quality Meetings

Poor performing suppliers will be required to actively participate in mandatory meetings or conference calls when their performance drops below acceptable levels or purchased item quality / delivery issues occur.

10.4 Business Hold

Suppliers may be placed on business hold due to financially unstable or severe quality or delivery problems that are unresolved. The supplier will be notified upon being placed on business hold. When place on business hold, the supplier will not be permitted to quote new business.

10.5 Cost Recovery

Suppliers, who do not provide parts to drawing specification, may be charged any of the following costs.
• Sorting material
• Rework
• Customer charges
• Premium freight
• Production downtime
• Scrap
• PPAP submission Process
• Overtime
• Laboratory testing
• Travel
• Warranty cost due to a supplier issue

All costs will be recovered from the supplier and determined in advance by 3D Systems Purchasing. Upon notification of the intent to debit, suppliers will have 10 days to appeal the charges. If there is no response from the supplier, 3D Systems will considered this lack of response as acceptance of the charges.

11.0 Delivery Requirements

Suppliers are required to achieve 100% on-time delivery. On time delivery is a very high priority for 3D Systems due to the impact on inventory levels, ability to execute the production schedule, etc.

On time delivery is defined as 5 days early and zero days late to mutually agreed promise date with 3D Systems Purchasing. If a supplier is unable to deliver product by the required due (promise) date, the supplier owns the responsibility to notify 3D Systems immediately of the commitment miss, the reason for the miss and associated recovery plan.

A formal corrective action may be required by 3D Systems from the supplier to correct the issue(s) to prevent any further delivery issues.

Suppliers will prepare contingency plans to assure 3D Systems requirements in the event of an emergency such as catastrophic events, utility interruption, labor shortage, key equipment failure and shipping, air transportation failures and holidays.

Suppliers must maintain a FIFO system to manage to ensure most current production material is being delivered to 3D Systems.

12. Packaging / Shipping Identification
12.1 Product Identification

- Labeling guidelines are necessary to avoid mixing parts
- All inner packs and other packaging must be labeled with 3D Systems part numbers including any SCAR labels for containment with material due to a quality issue and corrective action implemented after the supplier improved their process to correct the issue.
- No hand written labels on boxes
- Supplier label must use a white label with back numbering / lettering and part number must be large enough to be easily read
- Equal number of pieces in each box on individual boxes with a final label for total quantity.
- Whenever physically possible, individual parts are to be marked with part number, revision and manufacturer’s lot number.

12.2 Packaging Label (barcode format – code 39)

Example of the packaging label

Large containers will have labels placed on front and back of container with no inner packaging.
Large containers with inner packaging will have labels on the front and back of all inner packaging.

<table>
<thead>
<tr>
<th>From:</th>
<th>To:</th>
<th>Master Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC 123 street Rock Hill, SC</td>
<td>3DSystems XXXX Rock Hill</td>
<td></td>
</tr>
<tr>
<td>Supplier #</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part number</td>
<td>Rev Level</td>
<td>Part Description</td>
</tr>
<tr>
<td>Sty</td>
<td>P.O. number</td>
<td></td>
</tr>
<tr>
<td>Lot Number</td>
<td>MFG Date</td>
<td>Ship</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>From: ABC 123 street Rock Hill, SC Supplier #</th>
<th>To: 3DSystems XXXX Rock Hill</th>
<th>Master Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>From: ABC 123 street Rock Hill, SC Supplier #</td>
<td>To: 3DSystems XXXX Rock Hill</td>
<td>Master Label</td>
</tr>
</tbody>
</table>

or 6.5 / 165 mm

or 6.5 / 165 mm

or 4” / 162 mm
Supplier label must have the label content in the above example.

13.0 Incoming Inspection
3DS reserves the right to inspect, test, etc. purchased items. Zero defects are expected to be delivered to 3D Systems from the supplier regardless of whether incoming inspection is performed at a 3DS site. Purchased items are expected to be ready to use without 3DS incurring the additional cost of incoming inspection.

14.0 Nonconforming Material
If product is found to be nonconforming, 3D Systems reserve the right to have material contained / sorted at supplier expense if the supplier cannot be reached.

3DS strives to maintain low inventory levels. However, due to business cycles inventory may be held longer than desired, point in case the supplier is not absolved of the responsibility for parts and material provided, regardless.

15.0 Appendix

15.1 Special Labels

PPAP Label: This label is used when submitting sample parts for approval and should be affixed to all boxes associated with the samples.
Packaging Labels: This label is to be used all production approved material to be shipped to 3DS. Bar code -39- is required.

Supplier Containment Labels (yellow): This label is to be used whenever nonconforming material has been sorted at the supplier’s location and the material is certified by the
supplier as being 100% good. This label is important to prevent additional sorting to be required at 3DS sites.

Supplier Corrective Action Labels (green): This label is to be used after a supplier corrective action request has been completed and material is being produced with the known defect being eliminated.

<table>
<thead>
<tr>
<th>PO #</th>
<th>SCAR Label 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCAR number:</td>
<td>100% Certified for Containment of Material sorted by Supplier</td>
</tr>
<tr>
<td>Add Description of the failure:</td>
<td></td>
</tr>
<tr>
<td>Material check date:</td>
<td></td>
</tr>
<tr>
<td>Material packed date:</td>
<td></td>
</tr>
</tbody>
</table>

Note: Labels are required on all packaging until corrective action is implemented and approved by 3D Systems

<table>
<thead>
<tr>
<th>PO#</th>
<th>SCAR Label 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCAR number:</td>
<td>100% Certified Material after Corrective Action Implemented at the Supplier's process.</td>
</tr>
<tr>
<td>Add Description of the failure:</td>
<td></td>
</tr>
<tr>
<td>Material check date:</td>
<td></td>
</tr>
<tr>
<td>Material packed date:</td>
<td></td>
</tr>
</tbody>
</table>

Note: Labels are required on all packaging until corrective action is closed and approved by 3D Systems
15.2 Third Party Sorting Companies

Approved 3rd party sorting listing

➢ First Call Quality Service
7202 E. 87th Street, Suite 110
Indianapolis, Indiana 46256
1-800-434-8215

➢ Stratosphere Quality
8220 Sherrills Ford Rd
Sherrills Ford, NC 28673
1-877-224-8584

Suppliers can contact other services as needed or use their own workforce for sorting, reworking material that is nonconforming at 3DS. Containment notification is required from the Supplier on the containment start date, and to oversee containment activities and to follow up containment activity until closure.
15.3 Supplier Request for Action

3DS Supplier Request For Action (SRA) – 50052-P15-A

(SECTION TO BE COMPLETED BY SUPPLIER)

SUPPLIER NAME: ________________________________

SUPPLIER ADDRESS: ________________________________

SUPPLIER CONTACT: ________________________________

SUPPLIER PHONE NO.: ________________________________

SUPPLIER FAX NO.: ________________________________

SUPPLIER EMAIL ADDRESS: ________________________________

3DS PART NO.: ________________________________ REVISION: ________________________________

REASON FOR REQUEST:

Request Type:

☐ Process Change ☐ Cost Reduction ☐ Dimensional Change ☐ Equipment Mode

☐ Material Change ☐ Facility ________________________________ ☐ Other, ________________________________

Define Request (Attach Marked Engineering Drawing, if Necessary):

Note: Suppliers are not permitted to ship product until 3DS until a Temporary Deviation or Engineering Change Order is provided by 3DS.

(SECTION TO BE COMPLETED BY 3DS)

☐ Request Rejected ☐ Request Accepted ☐ Temporary Deviation No ________________________________

☐ Engineering Change Notice (ECN) No. ________________________________

(Attach copy of TDCN or ECN)

Customer Approval Required: ☐ No ☐ Yes

(Attach copy of approval for change)

3DS Signatures:

<table>
<thead>
<tr>
<th>Quality</th>
<th>Name</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
</table>

Note: 1. Only 1 signature required for reject.
2. Supplier to include copy SRA documents with each affected lot.
IN WITNESS WHEREOF, the Parties have executed this Agreement to be effective on the Effective Date and the undersigned are duly authorized to execute this Agreement on behalf of Buyer and Supplier.

Acknowledging receipt of 3DS Quality Manual:

3D SYSTEMS, INC.  
By: ______________________  
Name: _____________________  
Title: _______________________  
Date: ______________________

SUPPLIER  
By: ________________________  
Name: ______________________  
Title: ________________________  
Date: ________________________