MAGNA
MAGNA DONNELLY

ACKNOWLEDGEMENT

The Magna Donnelly Supplier Quality Requirements were developed in reference to the Automotive Industry Action Group (AIAG) and ISO 9001:2000/TS16949 requirements and procedures.

Magna Donnelly expects that suppliers will have questions regarding these requirements from time to time over the course of our partnership. Suppliers are encouraged to contact your Magna Donnelly Supplier Quality Assurance representative for clarification of any standards.

Steve Binkowski
Director of Purchasing

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REVISIONS

DATE	BY	REVISION
1/02	**JU**	**- Revised Appendix C, attachments #1 and #3 to reflect new Magna Donnelly DCAR form and associated requirements.** **- Revised section 4 – Problem Resolution** **- Revised APQP Status Report and instructions in Appendix A** **- Revised PPAP Status Report in Appendix A** **- Revised section 2.0, 2.2.1, 2.3.1, 2.5.2.2 and 2.7 of APQP requirements** **- Added 3.2.3 to PPAP section 3** **- Revised section 6 to reflect IASG QS9000 sanctioned interpretation C9**
4/02	**JU**	**- Update Appendix D, SPRS**
7/04	**JU**	**- Section 1 - Added SPRS overview** **Section 2 – revised 2.3.1 and added 2.8-2.11** **Section 3 – revised 3.3.3-3.3.4 and modified PFMEA requirements** **Section 4 – revised for TS16949 and added section 4.5 Controlled Shipping** **Section 6 – revised for TS16949 requirements** **Appendix A - revised all attachments** **Appendix C – MDCAR was DCAR in attachment #1 and 3** **Appendix D – revised for TS16949 requirements and MDCAR terminology**
12/05	**JU**	**- Section 1 - Added web link for SPRS access** **Section 2 – revised 2.0, 2.2, 2.4, 2.6, 2.9, 2.10; deleted 2.11; added 2.12** **Section 3 – revised 3.1; deleted 3.2 and 3.3; added new 3.2** **Section 4 – revised 4.1, 4.2, 4.3.1.5, 4.3.2.3; complete revision to 4.5** **Section 5 – revised 5.3.1 and 5.4.4** **Section 6 – revised all sections and added 6.3.3** **Appendix A - deleted PPAP status sheet, APQP Status Report and APQP instructions; added SECR form and APQP matrix hyperlinks; revised APQP Expectations as attachment #1** **Appendix D - added status ranking criteria** **General – deleted revision record from 1995, 1997**
11/06	**JU**	**- Deleted revision record from October, 2000 revision of this manual.** **Added references to ISO9001/TS16949 requirements** **Section 1 – updated section 1.1, 1.3, 1.6** **Section 2 – added reference to MD Run-at-Rate, deleted Production Readiness Assessment reference; updated terminology in 2.3 and 2.5; revised 2.12 concerning pre-launch control plans** **Section 3 – revised 3.1 to clarify language requirements for PPAP documents** **Section 6 – updated 6.1; added 6.1.1, second party approval guidelines; revised 6.2; revised 6.3.3 for CQI-9 requirements; added section 6.4** **Appendix A - added link to MD Run-at-Rate form; updated terms in APQP Matrix; added Run-at-Rate to expectations in Attachment #1** **Appendix D – revised PPM scoring; updated QSS scoring criteria.**

1.0 Introduction

At Magna Donnelly, we clearly recognize the critical role quality plays in our success. We are, therefore, committed to meet our customer's quality needs and expectations with excellence by pursuing continuous quality and productivity improvements. A large segment of our quality performance is, of course, dependent on you as our supplier.

In this light, quality is a prime consideration for supplier selection and sourcing at Magna Donnelly. Your dedication to quality and strict adherence to Magna Donnelly Supplier Quality Requirements will clearly document your value as a Magna Donnelly supplier.

1.1 Purpose of Supplier Quality Requirements (SQR)

The purpose of this SQR manual is to promote a clear understanding of Magna Donnelly's expectations and requirements for suppliers. This manual contains the Magna Donnelly Customer Specific requirements which need to be integrated into each supplier's Quality Management System along with ISO9001/TS16949 requirements.

1.2 Scope

These standards apply to suppliers of OEM or service production material to Magna Donnelly North American Operations (NAO).

1.3 Expectations

Magna Donnelly suppliers are viewed as being fully responsible for the quality and delivery of their products. Therefore, suppliers must ensure that all materials are produced in conformance to the required standards. Suppliers are expected to:

- Ship zero defects
- Provide timely corrective actions that permanently eliminate the defect in the event of a nonconformance
- Execute flawless launches and obtain Full PPAP Approval each submission
- Deliver the required quantity of product, on-time, with appropriate ASN, paperwork and labels
- Provide exceptional service to each Magna Donnelly division and department
- Provide competitive pricing to win new business
- Remain competitive through continuous improvement of costs during the program
- Provide sustainable ideas for cost reductions
- Provide quotations using the Magna Donnelly RFQ format
- Adhere to the Magna International Terms and Conditions
- Inform ISO9001 and TS16949 certification bodies (e.g. 3rd party registrars) of these requirements prior to certification or re-certification audits so they may be included in the audit process

Additional information concerning delivery requirements is located in the Magna Donnelly Packaging and Shipping Requirements Manual. Additional information concerning commercial expectations is located in the Magna Donnelly Supplier Handbook. These manuals are available at http://www.magnadon.com/suppliers.

1.4 Supplier Involvement (ref. ISO/TS16949 7.3.1)

Magna Donnelly suppliers have an obligation to establish a cross-functional team to manage the product planning process. Suppliers must expect the same performance from

their subcontractors. Magna Donnelly expectations regarding planning for quality are described later in this manual.

1.5 Verification of Requirements

Magna Donnelly reserves the right to audit contracted products and applicable processes/systems associated with those products at the suppliers' premises. Magna Donnelly also reserves the right to allow its customers to audit those same products/processes/systems.

1.6 Supplier Performance Rating System (SPRS) (ref. ISO/TS16949, sect. 8.2)

Magna Donnelly intends to establish and maintain long-term relationships with suppliers who are committed to continuous improvement in quality, cost, delivery and service. This commitment is an expectation of all suppliers who participate in the automotive industry. The Magna Donnelly Supplier Performance Rating System (SPRS) is a means to provide feedback on performance against the expectations described in section 1.3. Suppliers are expected to use this tool to help identify opportunities for continuous improvement and improve customer satisfaction. Therefore, suppliers are expected to incorporate SPRS results into the Measurement, analysis and improvement process of the Quality Management System.

The SPRS system is an internet-based supplier scorecard that is accessed via normal internet explorer software (http://sprs.donnelly.com). A password can be obtained from Magna Donnelly Purchasing following proper qualification as an approved supplier and award of business. SPRS report cards are to be accessed monthly by suppliers to view performance feedback. Historical reports are not archived within Magna Donnelly. Therefore, suppliers wishing to maintain records of performance need to print the report and archive internally as desired. Appendix D in this manual describes the scoring system in more detail. For additional questions concerning SPRS, contact your Magna Donnelly Buyer or Supplier Quality Engineer.

1.7 Additional Resources

For further explanation of the Magna Donnelly Supplier Quality Requirements Manual, contact your Magna Donnelly Supplier Quality Assurance Representative. Please refer to the Automotive Industry Action Group (AIAG) reference documents Failure Mode and Effect Analysis, Advanced Product Quality Planning and Control Plan, Production Part Approval Process, Statistical Process Control, Measurement Systems Analysis and Quality Management Systems for further details (www.aiag.org). Suppliers are expected to have document control systems in place to ensure that the latest released version of the AIAG reference document is being used.

2.0 Advanced Product Quality Planning (APQP)

Product quality begins at design. Therefore, from initial product concept through production and service, the supplier and Magna Donnelly must understand and agree on all applicable quality standards and requirements. Agreement must be reached on all critical quality characteristics, control items, annual layout and validation requirements, check fixtures, packaging requirements, and all other quality related matters. These agreements need to be driven by you, as a supplier for your materials, and documented using the APQP tracking tools listed below.

2.1 APQP Tools

Magna Donnelly requires that suppliers use the advanced quality planning techniques (as they apply) described in the AIAG Advanced Product Quality Planning and Control Plan manual.

2.2 APQP Checklist and Status Reporting (ref. ISO9001/TS16949 7.2.3)

2.2.1 The supplier shall track and communicate program development activities using the Magna Donnelly APQP matrix (see link on Appendix A page or "forms" section of website). Updated APQP Matrix/Gap Analysis reports and supporting evidence shall be submitted to Magna Donnelly Quality Engineer upon request. Program timing requirements will be established by the Magna Donnelly Program Team based on the Magna Donnelly Program Management Process (PMP) and customer requirements. Optional formats may be used if approved by the Magna Donnelly program Quality Engineer.

2.2.2 Customer Forms

Magna Donnelly may request you to use customer forms in addition to the required Magna Donnelly forms.

2.3 Milestone Reviews

2.3.1 Magna Donnelly may choose to perform Milestone Reviews (MSR) of the supplier's APQP process during the program development stages. MSR meetings will consist of a review of the APQP matrix and supporting evidence as described in 2.2.1 above by Magna Donnelly Program Team members. This process may also include a production readiness evaluation such as the Magna Donnelly Run-at-Rate. A link to the Magna Donnelly Run-at-Rate format is provided in Appendix A of this manual. Magna Donnelly may also choose to utilize customer-specified formats based on customer requests such as Chrysler Process Sign-Off, General Motors Run-at-Rate, Honda Are-You-Ready or others.

2.3.2 MSR meetings will be established through your Magna Donnelly program Quality Engineer or Supplier Development Engineer.

2.4 Packaging (ref. ISO9001/TS16949 7.5.5)

2.4.1 Suppliers are required to meet the guidelines established in the Magna Donnelly Packaging and Shipping Requirements manual. Copies of the manual can be obtained from the Magna Donnelly Internet site (www.magnadon.com\suppliers).

2.5 Measuring Devices (ref ISO9001/TS16949 7.5.4 and 7.6)

2.5.1 Suppliers are responsible to supply gauges for their own use to ensure only product that meets design specifications is shipped to Magna Donnelly. All customer-owned gauges and fixtures shall be identified as property of the purchaser per the purchase order terms and conditions. All other gauges and fixtures shall be the supplier's responsibility.

2.5.2 The supplier shall be responsible for the following:

2.5.2.1 Design of the gauge.

2.5.2.2 Acquire gauge design approval from the Magna Donnelly Quality Engineer.

2.5.2.3 Successfully complete a measurement system analysis per the AIAG Measurement Systems Analysis (MSA) Manual. Refer to the MSA Manual for acceptable gauge R&R criteria.

2.5.2.4 Maintain the gauge calibration for the life of the program.

2.5.3 Upon program completion, the supplier shall ensure gauges are properly stored to prevent any damage and are readily available for service requirements.

2.6 Customer-Owned Supplier Tooling (ref ISO9001/TS16949 7.5.4)

2.6.1 All customer-owned tooling shall be identified and maintained per the purchase order terms and conditions for the life of the program.

2.6.2 Upon program completion, the supplier shall ensure tooling is properly stored to prevent any damage and is readily available for service requirements.

2.7 Boundary Samples (ref ISO9001/TS16949 8.3)

When cosmetic issues arise that cannot be addressed by use of the "master samples," the supplier is responsible for establishing approved boundary samples with Magna Donnelly prior to shipping questionable product. PPAP samples shall serve as the “master” for comparison purposes. All “max go” boundary samples require Magna Donnelly Quality Engineering approval prior to implementation. Standards that identify non-conforming conditions which are not to be shipped do not require Magna Donnelly approval.

2.8 FMEA development (ref ISO9001/TS16949 7.3.3)

Magna Donnelly requires suppliers to utilize the latest release version of the AIAG Potential Failure Mode and Effects Analysis reference manual. Please refer to this manual for development guidance, rating criteria and quality objectives.

When the severity of a failure mode is 9 or 10, special attention must be given to ensure that the risk is addressed through existing design actions/controls or process preventive/correction actions(s), regardless of the RPN. Once all severity rankings are lowered, the supplier team should be addressing other failure mode rankings in occurrence, and then detection. Magna Donnelly expects that our suppliers will use the FMEA as a living tool. The FMEA documents should always reflect the latest level as well as the latest relevant actions.

2.9 International Material Data System -IMDS (ref ISO9001/TS16949 7.3.6)

Magna Donnelly has adopted the requirement of reporting all substances that are present in the products that we supply to our customers in the automotive market. As a condition of conducting business with Magna Donnelly, suppliers must also meet this requirement.

In order to implement a pro-active system for meeting this requirement, suppliers are required to provide the appropriate supporting documentation that the information has been entered into the IMDS on-line reporting system. The documentation required will be the ID version number that the IMDS system assigns to each part upon entry. This documentation is required prior to the time of PPAP submission. Failure to provide the ID

version number may result in your PPAP submission being returned without evaluation, given rejected status or given limited approval status. Tooling payment may also be impacted due to failure to comply with IMDS requirements.

For specific timing of submission requirements please contact the appropriate Magna Donnelly quality or purchasing representative for the division that will be purchasing the product. For additional technical assistance on using the IMDS system contact the IMDS Helpdesk at 717-506-1461 or the website at www.mdsystem.com.

2.10 Annual Validation Requirements (ref ISO9001/TS16949 7.5.2)

The supplier is responsible for performing annual layout, performance and material validation for each part number produced based on the Magna Donnelly approved drawing. Extent of the validation will be determined and agreed upon during the APQP process and reflected on the supplier's Control Plan. Validation results will be retained at the supplier's location and available for review by the Magna Donnelly upon request. The supplier must notify the appropriate Magna Donnelly Supplier Quality Engineer, when review of the data shows non-conformances. Contact your Magna Donnelly division Quality Assurance department with any questions concerning annual layout/validation requirements.

2.11 Preventative Maintenance (ref ISO9001/TS16949 7.2.1, 7.5.1)

Preventative maintenance (PM) plays an important role in achieving quality objectives. Identification of safety <MDS> and critical <MDC> characteristics in the PM system will allow you to ensure proper controls are in place to closely monitor the PM process with a focus on these features. Suppliers are required to identify PM process steps that can affect safety or critical characteristics and ensure these steps are controlled. This information should be reflected in the APQP and PM Standard Work documents.

2.12 Control Plan Development (ref ISO9001/TS16949 7.5.1)

Magna Donnelly requires suppliers to utilize the latest version of the Automotive Industry Action Group Advanced Product Quality Planning and Control Plan reference manual. Please refer to this manual for development guidance for your Prototype, Pre-Launch and Production Control Plans.

Suppliers are required to provide the various levels of Control Plans based on the expected program builds. The Control Plans are subject to review and approval by Magna Donnelly. Control Plan requirements are listed below.

Prototype Control Plan - The prototype phase of the product quality planning period is to effectively assess the product design and development for meeting all of the customer's requirements for fit, function, and durability. The focus will be on dimensional, functional (including subcontracted processing) and statistical analysis of all products shipped for the various prototype builds. The intent is to provide a heightened level of data analysis to support the design validation activity. Unless otherwise specified, this includes numbering/sequencing of parts and data for 100% of all product shipped during this phase of the program launch.

Pre-Launch Control Plan - The pre-launch phase of the product quality planning period is to effectively assess the process design and development for meeting all of the customer requirements for fit, function, appearance, and durability. The focus will be on the entire

process stream, with an increased level of inspection and performance testing (including data analysis) put in place to verify the effectiveness of the process to produce zero defects. This increased level of verification is called launch containment at Magna Donnelly. The control items to be managed and reported through the launch containment process need to be agreed upon with your Magna Donnelly program Quality Engineer.

The Pre-launch Control Plan would take effect at the completion of the prototype phase. If there is no prototype phase the pre-launch control plan would be implemented as the initial control plan. The pre-launch control plan remains in place until launch containment has verified effectiveness of the production control system. The duration of this control plan will be determined based on the actual results of the supplier to achieve the expected quality requirements for the product being supplied. Release from the pre-launch control plan can only be authorized by the end user Magna Donnelly Division.

Production Control Plan - This control plan is an extension of the pre-launch control plan incorporating lessons learned from the launch. It defines the inspection and testing systems required to meet Magna Donnelly requirements for production. Transition from the pre-launch to production control plan requires Magna Donnelly approval.

3.0 Sample Submission Production Part Approval Process -PPAP (ref ISO9001/TS16949 7.3.6)

3.1 Procedure

As a Magna Donnelly supplier, you are responsible for performing the inspection and testing to verify conformance to all applicable product requirements. Submission is to be made according to the AIAG Production Part Approval Process (PPAP) manual. Submissions to Magna Donnelly US facilities are to be made in the English language unless specified otherwise by the purchasing division. Submissions to the Monterrey, Mexico division may be made in Spanish or English. Please contact your Magna Donnelly division Quality Engineer with questions concerning PPAP submission status.

You are not authorized to begin production or ship material to Magna Donnelly prior to PPAP approval unless an approved waiver has been granted by the Magna Donnelly division Quality Engineering team.

3.2 Product and Process Changes

All proposed design and process changes, including any changes of or at your supplier site(s), must be submitted to the appropriate Magna Donnelly Quality Engineer for approval prior to implementation using the Supplier Engineering Change Request (SECR) form (see link on Appendix A or “Forms” page in website). Suppliers are not authorized to make product/process changes without SECR approval. Upon receiving SECR approval, PPAP requirements must be agreed with the Magna Donnelly division Quality Engineer. A copy of the approved SECR is to be provided with the PPAP submission.

4.0 Problem Resolution (ref ISO9001/TS16949 8.5.2)

4.1 Introduction

Magna Donnelly suppliers are responsible for providing defect-free product on time and at the specified quantities to Magna Donnelly and ultimately our customers. When quality or delivery issues do occur, the supplier is required to initiate problem-solving and corrective action to resolve the issue and prevent recurrence.

This section covers the Magna Donnelly specific requirements for problem-solving and corrective action reporting. It is designed to guide Magna Donnelly suppliers in the development of a corrective action system that will meet Magna Donnelly's minimum requirements. It is to be used in conjunction with ISO/TS16949 requirements for corrective action

Magna Donnelly requires that a systematic, team-oriented problem-solving method be utilized. The team is required to implement short-term and long-term corrective action plans and verify the effectiveness of the corrective action taken to prevent recurrence using statistical methods. Contact your Magna Donnelly SQE for further assistance in team-oriented problem-solving methods.

4.2 MDCAR Initiation

The supplier will be notified of defective material through a phone call from the division Quality Group and a Magna Donnelly Corrective Action Report (MDCAR) or similar 8D-type reporting tool. The MDCAR is a document issued by Magna Donnelly when purchased material is identified as not meeting the quality requirements. The MDCAR form is located in Appendix C, attachment #1 of this manual. If the MDCAR is provided in Adobe Acrobat or another format that can not be edited, the supplier is to transfer the information onto MS Excel format using attachment #1.

Defective material may be identified at Magna Donnelly during incoming inspection, assembly, or packaging. The material can also be discovered during an audit, validation, at the customer or through warranty returns.

Magna Donnelly will supply all but 4 fields in the header portion of the MDCAR and review it for completeness prior to issuing the MDCAR to the supplier. The supplier completes the Champion, Champion Phone # and Expert Concern Detail sections as part of the initial response and the QS/TS Element as part of the long-term response.

4.3 Supplier Response

Once the supplier has been notified of the nonconforming material issue, the supplier is required to complete the remaining portions of the MDCAR form. **The MDCAR checklist located in Appendix C, attachment #2 should be used.** Strict adherence to the checklist is recommended as it is the predominant tool used at Magna Donnelly to evaluate the supplier response.

4.3.1 **The following items require a written response within a 24-hour period unless approved by Magna Donnelly**.

4.3.1.1 Corrective Action Team established.

4.3.1.2 Identify and initiate a short-term containment plan to contain further nonconforming material from reaching the Magna Donnelly work cell. Reference the MDCAR Checklist, section 3 in Appendix C of this manual.

4.3.1.3 Identify short-term actions with timing to replace nonconforming material with certified material.

4.3.1.4 The containment plan and verification method must be documented by the supplier on the MDCAR and sent back to the issuing Magna Donnelly

division along with any appropriate attachments. All attachments must reference the MDCAR number.

4.3.1.5 Identify all *potential* root causes that resulted in the nonconforming material issue using tools such as fishbone diagrams, 5-why analysis, Is/Is Not comparison and Process FMEAs. Forward this analysis with the MDCAR response (see MDCAR Checklist, section 4.1 in Appendix C of this manual).

4.3.2 The following items require a written response by the Response Deadline field of the MDCAR document unless approved by Magna Donnelly.

4.3.2.1 Corrective Action Team membership update

4.3.2.2 Define and verify the root cause (see MDCAR Checklist, section 4.2). Attachment #2 in Appendix C provides a root cause analysis worksheet which may be used by the problem solving team to help identify the true root cause.

4.3.2.3 Identify and implement permanent corrective action (see MDCAR Checklist, section 5 and 6). Suppliers may be required to identify the initial shipments containing the action using the IPP tag (reference section 5).

4.3.2.4 Verify permanent corrective action using statistical methods (see MDCAR Checklist, section 7).

4.3.2.5 Update all relevant documentation that is affected to standardize corrective actions into the quality system (see MDCAR Checklist, section 8).

4.3.3 Magna Donnelly may require the supplier to implement verification (audit) activities to confirm that corrective actions continue to be effective over a significant time period (30/60/90 days). Verification results are to be documented on the MDCAR when requested (see MDCAR Checklist, section 9).

4.4 Charge Back Policy

4.4.1 Costs associated with supplier part quality issues and PPAP rejection issues that are deemed the supplier's responsibility will be charged back to the supplier.

4.4.2 The supplier may visit Magna Donnelly upon receipt of a MDCAR to review the issue and accept or refute responsibility prior to being charged.

4.4.3 The supplier, if found responsible, will pay the costs associated with the quality issue at the prevailing Magna Donnelly rate (contact your Magna Donnelly Purchasing representative for current rates).

4.5 Controlled Shipping

4.5.1 General

Controlled Shipping is a requirement by Magna Donnelly that a supplier put in place a redundant inspection process to sort for a specific nonconformance, while implementing a root-cause problem solving process. This redundant inspection is in addition to normal

controls and actions implemented via the corrective action requirements in section 4.3.1.2 above. Any additional cost associated with controlled shipping is the responsibility of the supplier. Any deviations to this requirement must be approved by Magna Donnelly.

Magna Donnelly may require the use of a third party contractor to conduct and manage the controlled shipping activity. A third party containment process is generally required when the supplier's own containment process has proven to be ineffective. The third party contractor may be directed by Magna Donnelly. If the third party contractor is selected by the supplier, Magna Donnelly maintains the right of approval for the supplier selected. The data obtained from the third party redundant inspection process as well as any additional audits are critical as both a measure of the effectiveness of the secondary inspection process and the corrective actions taken to eliminate the initial nonconformance. The Controlled Shipping inspection may be required to be performed outside the supplier's facilities at a facility deemed appropriate by Magna Donnelly.

4.5.2 Determination in enacting Controlled Shipping

Magna Donnelly makes the determination whether the supplier can effectively correct the nonconforming material situation through the MDCAR process and isolate Magna Donnelly from the problem. One or several of the following issues may be considered for implementation of Controlled Shipping:

- Repeat, late or insufficient response to MDCARs
- Supplier's current controls are not sufficient to ensure conformance to requirements
- Duration, quantity, and/or severity of the problem
- Internal/External Supplier data
- Major Disruptions and or Downtime
- Quality Problem in the field (i.e. Warranty)
- OEM customer required containments
- Expiration/lapse of third party Quality Management System certification - see section 6 of this manual for QMS certification/compliance requirements

4.5.3 Controlled Shipping Process

The following steps will take place when Magna Donnelly places a supplier in Controlled Shipping:

- Magna Donnelly will notify the supplier that Controlled Shipping is required. An explanation for the requirement and description of the process steps will be reviewed at this time. The required third party provider, if applicable, is also communicated.
- The supplier confirms requirements are understood and provides a plan of action to implement the Controlled Shipping process. Planned reporting mechanisms are also presented at this time by the supplier.
- Magna Donnelly reviews the plan and approves or rejects it. If the plan is rejected, Magna Donnelly provides feedback on adjustments required.
- Upon plan approval, Magna Donnelly provides exit criteria to supplier. The duration of Controlled Shipping will typically be 20 days following implementation of permanent corrective actions as described in section 4.3.2.3 above.

5.0 Initial Parts Production Tags - IPP (ref ISO9001/TS16949 7.5.3)

5.1 The Initial Part Production tag is a tool used to identify changed or special material so Magna Donnelly may have accurate approval and tracking records of any changes that occur to our product.

5.2 The tag must be attached to containers in the first shipment of the changed material. Please contact your manufacturing division Supplier Quality Engineer with questions.

5.3 Creating the IPP tag

5.3.1 Print the master tag from Magna Donnelly website onto 8 ½" x 11" **yellow** papers. Alternative size paper can be used based on box size.

5.4 Information required on tag

5.4.1 Part name as shown on drawing

5.4.2 Part Number: Magna Donnelly part number

5.4.3 Supplier Name

5.4.4 Description of change - document the SECR# and/or MDCAR# if applicable.

5.4.5 Revision Level: Revision level of tagged material

5.4.6 Date: Date of shipment

5.4.7 Magna Donnelly Facility: Magna Donnelly manufacturing division designation

5.5 Attaching IPP tag

5.5.1 Attach tag to each container next to the container label. The tag must be clearly visible.

6.0 Quality System Certification and Compliance Requirements

6.1 Magna Donnelly requires suppliers to implement and maintain a Quality Management System (QMS) which meets the requirements set forth in this manual, with the goal of being compliant to TS 16949:2002. At a minimum, suppliers need to be registered by an accredited third party to the ISO 9001:2000 series standard with documented plans to achieve TS16949 compliance. Suppliers which do not manufacture product such as distributors are not eligible for TS16949 certification. Registration to QS 9000:1998 will continue to be recognized as acceptable through December, 2006.

Suppliers shall include Magna Donnelly in the listing of customers provided to the registrar prior to ISO9001:2000 or TS16949 audits along with access to this manual and performance results in the Magna Donnelly Supplier Performance Rating System. Suppliers shall request the registrar to include Magna Donnelly Customer Specifics in the appendix of the certificate.

6.1.1 Second Party TS16949 compliance approval guidelines – Supplier certification to TS16949 is the preferred method for Magna Donnelly suppliers to demonstrate conformance to the TS16949 technical specification. However, assessment by an

OEM or an OEM approved second party will also be recognized as meeting the compliance requirements for TS16949 above. The organization performing the audit must meet the following requirements:

6.1.1.1 The second party must be TS16949 registered
6.1.1.2 The second party can not be on TS probation
6.1.1.3 The second party must utilize a qualified lead auditor, or qualified internal auditor with evidence of successful completion of training, such as AIAG Internal Auditing for TS16949:2002.
6.1.1.4 The second party must audit the supplier annually and the supplier must maintain records of the audit and any required corrective actions.
6.1.1.5 The duration of the audits must conform to the full application of the Audit Day Requirements table of the "Automotive Certification Scheme for ISO/TS16949:2002" manual.
6.1.1.6 Any of the ISO/TS16949:2002 accredited Registrars (Certification Bodies) may be utilized as an OEM approved second party.

6.2 Suppliers are required to upload copies of QMS certificates on the Magna Donnelly Supplier Connection (MDSC) supplier communication portal (https://dsc.magnadon.com). Letters of recommendation for certification may also be posted upon receipt from the registrar while delivery of the actual certificate is pending. Suppliers currently certified to ISO 9001:2000 or QS 9000 shall document the project plan to achieve TS16949:2002 compliance and upload the latest version on MDSC. Contact your Purchasing Supplier Development Engineer with questions concerning how to upload certificates. Suppliers choosing to demonstrate compliance through second party audit results (see 6.1.1 above) shall contact their Magna Donnelly Supplier Development Engineer to review what portions of the second party audit shall be posted in MDSC.

6.3 Original Equipment Manufacturers (OEM) Approval List (ref ISO9001/TS16949 7.4.1)

6.3.1 Magna Donnelly suppliers are required to use Magna Donnelly's customer approved material and Contractor lists whenever applicable. Typical OEM approved supplier lists for Magna Donnelly products include, but are not limited to, suppliers providing heat treat services, plating services, paint or painting services, resin and glass. Review all Magna Donnelly and OEM specifications carefully on your drawing and purchase contract to identify required use of OEM approved contractors. Contact your Magna Donnelly Buyer with any questions on material selection. If required, Magna Donnelly will assist suppliers in the OEM approval process.

6.3.2 Suppliers may also be impacted by OEM Customer Specific requirements listed in TS16949 as these requirements are applicable throughout the supply chain. Customer Specifics can be located through the internet at: http://www.iaob.org.

6.3.3 Special Process Assessments (ref ISO9001/TS16949 7.3.5, 7.4.1, 8.2.2)
6.3.3.1 Suppliers and subcontractors providing heat treat services to products supplied to Magna Donnelly which are used in Daimler Chrysler, Ford or General Motors products shall demonstrate compliance to *CQI-9 Special Process: Heat Treat System Assessment (HTSA)* published by AIAG. All heat treat processes shall be assessed annually using the HTSA. All "not satisfactory" and "needs immediate action" results must be addressed for root cause and corrective action. The corrective actions must include risk containment to immediately protect Magna Donnelly and our customers.

Long term actions shall be completed within 90 days unless approved by your Magna Donnelly Supplier Quality Engineer. Records of results and actions taken shall be made available to Magna Donnelly through posting the results on MD Supplier Connection. Contact your Magna Donnelly SQE upon completion of results and any required corrective actions.

6.3.3.2 Suppliers and subcontractors providing heat treat services to products supplied to Magna Donnelly which are used in Ford products shall also include conformance to Ford Motor Company Manufacturing Standard W-HTX in the CQI-9 assessment. Assessments using the Ford Heat Treat System Survey Guidelines are acceptable until October 1, 2007. To reduce the risk of embrittlement, heat-treated steel components used in Ford products are required to conform to Ford material specification WSS-M99A3-A. Contact your Magna Donnelly Buyer or Supplier Quality Engineer during the Request For Quote and APQP process for any questions concerning use of approved heat treat and plating suppliers and applicability of WSS-M99A3-A.

6.4 Record Retention Requirements (ref ISO9001/TS16949 4.2.4)

6.4.1 Production part approvals, tooling records, purchase orders and amendments shall be maintained for the length of time that the part (or family of parts) is active for production and service requirements plus one calendar year unless specified otherwise by the Magna Donnelly Division. This requirement includes purchase orders for Magna Donnelly or Magna Donnelly customer-owned tooling.

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

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

APPENDIX A

1. Click here for a hyperlink to the APQP Matrix APQP Matrix
2. Click here for a hyperlink to the Supplier Engineering Change Request (SECR) form SECR Form
3. Click here for a hyperlink to the Magna Donnelly Run-at-Rate form Run-at-Rate Form

APQP ELEMENT EXPECTATIONS

The following section describes Magna Donnelly expectations for each of the APQP elements found on the Advanced Product Quality Planning (APQP) Matrix.

1. Design Failure Mode and Effects Analysis

- Suppliers with Design Responsibility must create product specific DFMEA
- Others should request Magna Donnelly DFMEA & evaluate their products.
- Evaluation should include failure mode analysis, input to design controls, agreement with action plans & timing.
- Review & Acceptance should be documented utilizing AIAG DFMEA Checklist (or equivalent).

2. Design Reviews

- Suppliers must provide evidence of design review being conducted with Magna Donnelly (MD) Launch Team personnel
- Design Issues must be documented in some form of issues list tracking ownership & completion.
- Review & Acceptance of design should be documented utilizing AIAG A-2 Checklist (or equivalent).

3. Design Verification Plan

- Evidence of agreement/approval from MD must be provided for:
  - Performance Validation Plan
  - Functional Validation Plan
  - Dimensional Validation Plan
  - Consideration of Measurement System Analysis for prototype and production
    - MD approval

4. Master Timing Plan

- Master Timing Plan Minimum Requirements:
  - Prototype Build Dates, Quantities, & Material Required Date at MD (MRD)
  - Pre-Production Build Dates, Quantities, & MRD
  - Production SOP Build Dates, Quantities, & MRD
  - Tool Timing
  - Equipment Timing
  - Dimensional Validation
  - Functional Validation
  - Performance Validation
  - Associate Training
  - Sub-Supplier PPAP Timing
  - PPAP Submission detailing Key Milestones such as Appearance Approval, etc.

5. Facilities, Tools, and Gauges

- Self-explanatory on matrix
- Refer to AIAG APQP Manual Checklists

6. Prototype Build Control Plan

- Includes Hand Assembly Operations
- Product Fit/Function Validation
- Product Layout
- See AIAG APQP Manual Appendix A Checklist

7. Prototype Builds

- All Magna Donnelly prototype material required dates (MRD) will be met with the correct level parts, customer specified data, and Magna Donnelly approval for any nonconformance.

8. Design Verification Testing

- Design testing completed per DVP&R (item 3)
- All design deficiencies identified are updated in DFMEA, corrected, and retested

9. Prototype Part Layout and MDS/MDC Ppk

- Include preliminary critical characteristic designation
- Include surrogate capability data for tolerance
- Product Fit/Function Validation prior to shipment
- Product Layout to occur prior to shipment
- Advanced notification & agreement of product not meeting specification prior to shipment

10.	**Drawings and Specifications**	• Suppliers will work with Magna Donnelly to ensure engineering specification tests, and product validation test requirements are documented in time to support pre-launch control plan development. • Suppliers will coordinate with Magna Donnelly the need to use Magna Donnelly's customer approved source lists.
11.	**Team Feasibility Commitment**	• Team Feasibility Commitment has been reviewed by team and signed off as approved to current design level for all Milestone Reviews
12.	**Manufacturing Process Flow Chart**	• Process Flow Chart used to develop PFMEA and Control Plan. • AIAG checklist A-5 or equivalent initiated and open issues identified with actions • Launch containment is addressed in flow.
13.	**Process Failure Mode and Effects Analysis**	• PFMEA is Process Failure Driven, not Product Failure Driven • PFMEA approved by Magna Donnelly. • AIAG checklist A-7 or equivalent utilized in conjunction with AIAG FMEA manual • Packaging, labeling and shipping are included in analysis.
14.	**Measurement Systems Evaluation**	• Magna Donnelly must be given the opportunity to review and concur with the gauge and test equipment plans and actual study results • Utilization of AIAG Measurement Systems Analysis Reference Manual for guidance on utilizing statistical techniques to develop and qualify measurement systems.
15.	**Pre-Launch Control Plan**	• Pre-launch control plan approved by MD (also referred to as pre-production control plan) • Launch containment is documented in plan • AIAG checklist A-8 or equivalent is utilized
16.	**Production Ramp-up Schedule**	• The supplier will define their own Ramp up schedule to support the Magna Donnelly Production Ramp-up Schedule. • Supplier trained in use of Magna Donnelly Supplier Connection system prior to SOP
17.	**Packaging Specifications**	• Packaging requirements will be agreed to by the supplier and the Magna Donnelly division • Includes prototype packaging • Production packaging approved via MD Packaging Declaration form
18.	**Production Control Plan**	• Production control plan approved by MD • Launch containment is documented in plan if required • AIAG checklist A-8 or equivalent is utilized • Supplier has audited implementation of control plan in production environment
19.	**Production Trial Run**	• PPAP run complete with production process, tooling and equipment. • Problems identified are quickly addressed with corrective actions • Scrap rate and cycle time 100% to plan.
20.	**Production Part Layout**	• Part layout requirements agreed with MD in advance - number of pieces, dimensions, etc. • Dimensional results approved by MD • Out of Tolerance Items - actions to correct items should be complete prior to PPAP
21.	**Launch Readiness Review Meeting**	• Launch readiness reviews are conducted with MD to review status of program and evidence to support ratings in APQP matrix. Run-at-Rate acceptable prior to SOP.
22.	**Preliminary Process Capability Study**	• PpK studies complete and meet PPAP requirements. Containment plans are in place and documented on the control plan for unstable processes or PpK < 1.67
23.	**Production Validation Testing**	• All dimensional, material, functional, and reliability tests must be completed prior to production part approval. If not, appropriate action plans and Magna Donnelly approvals are required.
24.	**Boundary Samples**	• The Boundary Samples will be signed off by Magna Donnelly.
25.	**Production Part Approval**	• All items of the AIAG *Production Part Approval Process* manual must be completed and the required documentation provided to Magna Donnelly with the Part Submission Warrant. • All Results Must be ballooned to drawing, whether assembly or sub-component • Type of device utilized to obtain data needs to be identified • Provide evidence of service provider certification for layout and lab if external site used • Include copy of specifications in PPAP submission • Include evidence of sub-supplier PPAP approvals • Additional information may be required that is MD facility-specific. Contact your MD Quality Engineer in advance for additional requirements
26.	**Production Part Delivery at MRD**	• Production shipping schedules established to support MD requirements • Delivery and frequency method agreed with MD
27	**IMDS Data Entered into**	• Suppliers are required to sign in to the IMDS system and log the information for the part.

System	See section 2.9 of this manual for more information on IMDS.

APPENDIX B

The form shown in this appendix is for viewing purposes only.
Actual form can be downloaded from the “Forms” link in this website.

!!!!SAMPLE ONLY - FORM AVAILABLE UNDER FORMS TAB IN WEBSITE

INITIAL PARTS PRODUCTION

MAGNA DONNELLY PART NAME:

PART NUMBER:

SUPPLIER NAME:

DESCRIPTION OF CHANGE:

DRAWING REVISION LEVEL:

DATE:

MAGNA DONNELLY FACILITY:

MAGNA DONNELLY MAT. HANDLERS:

Default Location Incoming Inspection

REV 5/20/97

APPENDIX C

The forms shown in this appendix are for viewing purposes only.
Actual forms can be downloaded from the “Forms” link in this website.

DCAR Page 1 of 2

Magna Donnelly CORRECTIVE ACTION REPORT

Corrective Actions are required until all customers and internal requirements are met.

If a Critical Customer Concern Check Box ☐
Start Concern number below with "CC"
"CC" MDCARs are concerns causing
- High Customer Dissatisfaction (Causing the assembly line to stop, rejection of a shipment, recurring concerns, poor delivery ratings, etc.
- Product Recall
- Customer or Consumer Legal Action
- Exceptional Warranty Expense and/or Rework

Date:	**MDCAR Status:** Page 1 of2	
Company:		
Copies To:	**Part Name:**	**Concern No.:**
	MD Part #:	**Cust Concern #:**
	Customer Part #:	**When Found:**
	Customer:	**Date Opened:**
	Cust. Location	**Initiated By:**
Defect Source:	**Supplier:**	**Resp. Dept.:**
Defect Type:	**Program:**	**Issued By:**
Reason Code:	**Product:**	**Champion:**
QS/TS Element:	**Zone:**	**Champion Phone#:**
Prior Concern No.:		
Team Members:		

CUSTOMER INITIAL DEFECT DETAILS:

EXPERT CONCERN DETAILS/PROBLEM STATEMENT:

SHORT-TERM CONTAINMENT:

1. **DATE:** **WHO:**
2. **DATE:** **WHO:**
3. **DATE:** **WHO:**

VERIFICATION METHOD:

1.
2.
3.

Containment PPM: **WHO:**

PRIMARY ROOT CAUSE

DATE: **WHO:**

HOW WAS ROOT CAUSE VERIFIED:

DATE: **WHO:**

SECONDARY ROOT CAUSE:

DATE: **WHO:**

HOW WAS ROOT CAUSE VERIFIED:

DATE: **WHO:**

WARRANTY CONCERN:

Magna Magna Donnelly CORRECTIVE ACTION REPORT

Corrective Actions are required until all customers and internal requirements are met.

If a Critical Customer Concern Check Box 0

Start Concern number below with "CC"

"CC" MDCARs are concerns causing

- High Customer Dissatisfaction (Causing the assembly line to stop, rejection of a shipment, recurring concerns, poor delivery ratings, etc.
- Product Recall
- Customer or Consumer Legal Action
- Exceptional Warranty Expense and/or Rework

PERMANENT CORRECTIVE OR PREVENTIVE ACTION

MISTAKE PROOF CONSIDERED IN ACTION PLAN:

CORRECTIVE ACTIONS: **Concern No.:**

1. **DUE DATE:** **WHO:** **ACTUAL DATE:**
2. **DUE DATE:** **WHO:** **ACTUAL DATE:**
3. **DUE DATE:** **WHO:** **ACTUAL DATE:**

VERIFY EFFECTIVENESS

1. **DUE DATE:** **WHO:** **ACTUAL DATE:**

Verification Results:

2. **DUE DATE:** **WHO:** **ACTUAL DATE:**

Verification Results:

3. **DUE DATE:** **WHO:** **ACTUAL DATE:**

Verification Results:

PREVENT RECURRENCE:

1. **DUE DATE:** **WHO:** **ACTUAL DATE:**
2. **DUE DATE:** **WHO:** **ACTUAL DATE:**
3. **DUE DATE:** **WHO:** **ACTUAL DATE:**

GLOBAL EFFECTIVENESS: **DUE DATE:** **WHO:** **ACTUAL DATE:**

TOTAL SUSPECT	RETURNED	SCRAPPED	REWORKED	APPROVED	RMR#

No. CONTAINERS: **SHIPPER#:**

DISPOSITION:

RESPOND TO: **PHONE:** **FAX:** **DATE CLOSED:**

RESP. DEADLINE:

RESP. RECEIVED: **RESPONSE DEADLINE EXTENSION:**

FIRST TIME STATUS:

VERIFICATIONS	Initial Verification		30 Day Verification		60 Day Verification		90 Day Verification	
Date/Who								
Results								

OPERATIONS PLAN APPROVAL REQUIRED, AT A MINIMUM, FOR CC/PPC MDCARs		CLOSURE APPROVAL ON GLOBAL EFFECTIVENESS FOR CC/PPC MDCARs	
Quality Manager:	Date:	VP of Global Quality or Designate:	Date:
Quality Engineer:	Date:		

Revision: 29NOV01

GUIDELINES FOR ROOT CAUSE ANALYSIS

Use the Root Cause Analysis Worksheet to help determine root cause of problem.

SECTION A: Problem Definition/Analysis (5W2H)

Use 5W2H to provide as much information as possible.

WHO
- What part or item are you having a problem with?
- Model and type; area affected.

WHAT
- What is wrong with it?
- Symptom of problem; use illustrations to clarify.

WHEN
- When was the problem first found?
- When since then has the problem recurred (is there a pattern forming)?
- Date, time, etc.

WHERE
- Where on the part or car is the trouble located?
- Where was the part or car located when you found the problem?
- Location of occurrence; market, in-house.

WHY
- Why is it a problem?
- Content of complaint.

HOW
- How was the problem found?
- Visual inspection, customer's complaint, etc.

HOW MANY
- How many parts or units have this problem?
- Is the problem getting better, worse, or staying the same.

Provide information about general condition of problem parts/processes:

- What related parts could also be having this problem, but for some reason are not at this time?
- What other problems could this part have, but right now, does not have?
- When else could this problem have been found?
- What other patterns could have been seen, but were not seen at this time?
- Is there any other place that the problem could be found on the part?
- Are there other places that could have reported this problem, but have not at this time?
- How else could it have been found, but was not?
- What percent of the parts or unit could have this trouble?
- What other types of trends could this have?
- Use illustrations to clarify the problem as much as possible.

SECTION B: Root Cause Analysis Tools

5 Whys

- Repeatedly ask yourself “Why” more than 5 times until you come up with a root cause for both hard and soft side. Hard side is to ask why the problem occurred. Soft side is to ask why the product was delivered to the next customer.

Cause and Effect Diagram

- Make sure that all possible causes have been identified.
- Use 4Ms (man, machine, method, material) and illustrations as necessary to prevent any from being left out.
- End causes (smallest bone) should be made clear to determine if concrete action can be taken.
- Write a “Problem Summary” encompassing original problem to smallest bone.
- Are causes in systematic order?
- Is there a relationship between the problem and the big, medium, small, and smallest bones?
- Make sure all causes are related to the problem.
- Are there causes included that are vague in meaning?
- Causes that came up through brainstorming can be interpreted in many different ways.
- Make sure that everyone has the same understanding of each cause.
- Identify causes having established standards from those without established standards.
- Prioritize causes for analysis and corrective action.
- Pick out key causes first and then work down toward minor ones.

ROOT CAUSE ANALYSIS WORKSHEET

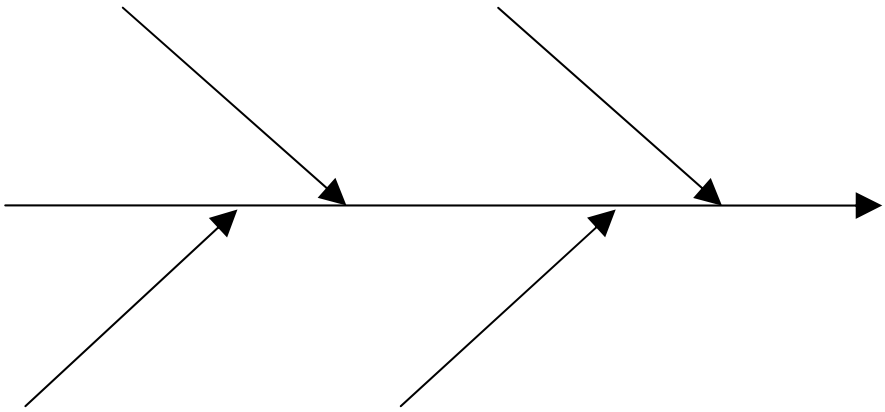
!!!!SAMPLE ONLY - FORM AVAILABLE UNDER FORMS TAB IN WEBSITE

A. PROBLEM DEFINITION/ANALYSIS (5W2H):

B. ROOT CAUSE ANALYSIS

OCCURRENCE (Hard Side)	NONDETECTION (Soft Side)
1. Why:	1. Why:
2. Why:	2. Why:
3. Why:	3. Why:
4. Why:	4. Why:
5. Why:	5. Why:

ROOT CAUSE ANALYSIS DIAGRAM:



Supplier Quality Assurance

Defect Corrective or Preventive Action (MDCAR/MDPAR) Response/Evaluation Checklist

!!!!SAMPLE ONLY - FORM AVAILABLE UNDER FORMS TAB IN WEBSITE

Part #_____Name _____Date _____
Supplier _____
MDCAR / MDPAR Number _____

NOTE: All Sections shown in *italics* must be responded to with the initial response (i.e. within 24 hours).

YES	NA	NO	DOCUMENTATION RESPONSE EVALUATION
			SECTION 1 – HEADER
☐		☐	*1.1 The response is provided on Magna Donnelly form, concern number is present. All attachments submitted with the response must have the Magna Donnelly concern number referenced on them.*
☐		☐	*1.2 If the response is on the suppliers standard form, the Magna Donnelly "Concern Number" must be referenced / shown in the header information and all attachments, and at a minimum the supplier form must include all sections as shown on the Magna Donnelly form* *NOTE: Supplier must respond with a "YES" to either Item 1.1 or Item 1.2 or the response will be rejected.*
☐		☐	*1.3 The response identifies a champion leading the investigation, including the person's name, job title and phone number.*
☐		☐	*1.4 All team members name(s) and job title(s) listed. NOTE: Based on the defect description, verify that the supplier is utilizing a cross-functional team approach.*
			SECTION 2 – CUSTOMER INITIAL DEFECT DETAILS
☐		☐	*2.1 Magna Donnelly documented "CUSTOMER INITIAL DEFECT DETAILS" statement is shown on the form. This statement represents the Magna Donnelly initiators educated interpretation of the problem.*
☐		☐	*2.2 Supplier documented "EXPERT CONCERN DETAIL/PROBLEM STATEMENT" is shown on the form – supplier modified defect description to support their internal investigation.*
			SECTION 3 – SHORT TERM CONTAINMENT
☐		☐	*3.1 Containment response issued by supplier and received by Magna Donnelly issuing division within 24 hours.*
			3.2 Containment activities / response to include, at a minimum:
☐	☐	☐ REJ	*a) Product in transit from the supplier or at Magna Donnelly Distribution Center, including "Hold / Reject" areas – may include product Magna Donnelly has already shipped or at the customer(s). Identify the date and whom the activity was assigned to. List quantity contained / suspect quantity found.*
☐	☐	☐ REJ	*b) Product in process, being produced or in finished goods at the supplier, or stored at an off-site warehouse. Also, verify any product in a "Hold / Engineering" area that may contain the same defect. This investigation would also include any "family" parts that could contain the same problem (produced on the same process, but a different color, grade, configuration, etc.) Identify the date and whom the activity was assigned to. List quantity contained / suspect quantity found.*
☐	☐	☐ REJ	*c) Product at, going to or returning from a sub-supplier. Identify the date and whom the activity was assigned to. List quantity of product contained / suspect quantity found.*
			NOTE: Additional minimum containment actions: *1) Certify all shipments until corrective action(s) have been implemented and verified to prevent the recurrence.* 2) Green "X" (or obvious identifier that is clearly recognizable) identify all bar code labels indicating that the product has been certified. ***THE SUPPLIER MUST ADDRESS THE FOLLOWING CONCERNS IN THEIR RESPONSE***
☐		☐ REJ	*3.3 For the appropriate containment activity (below), the supplier is to identify the verification method(s) to be used.* *a) If 100% of all product reflects the concern, can an interim standard be implemented that does not compromise the fit, form, function or appearance of the end assembly? Comment:*
			b) Can product be sorted / reworked? Comment: *1) If the product is to be reworked, the default verification will be to the Control Plan* *2) If the product is to be sorted, the default verification will be to the specific failure*
			c) Can problem be immediately corrected to eliminate the issue for subsequent production? Comment::
			d) Can a poke-yoke be implemented at the supplier / Magna Donnelly to prevent exposure to Magna Donnelly customer(s)? Comment: *e) Other? (Provide detail on specific containment activity.)*

YES	NA	NO	DOCUMENTATION RESPONSE EVALUATION
☐		☐ REJ	*3.4 Using the "quantity contained / suspect quantity found" data from Section 3.2 – "a" through "c", provide the actual Parts Per Million (PPM) calculation for each of the containment activities* ***NOTE: In Sections 3.2.a, b and c, and 3.4, for data that is not finalized for submission to meet the Initial Response deadline (24 hours), the supplier will respond with actual dates when the information will be forwarded to Magna Donnelly.***
			SECTION 4 – ROOT CAUSE(S)
			NOTE: Root cause must address the "Customer Initial Defect Details" and the "Expert Concern Details / Problem Statement" identified on the MDCAR (see Section #2).
☐		☐	*4.1 Potential Root Cause(s) – Initial evaluation of the source point or system root cause that contributed to the failure must be included with the initial response. The initial analysis will identify numerous potential root causes through the application of the basic problem solving tools (5 whys/Cause & Effect/Is – Is Not/ Etc.)* ***NOTE: With the initial 24-hour submission, the supplier is to list all potential root causes in the "Primary Root Cause" section. This field will also be used for the final response root cause.***
			4.2 Root Cause(s) – The result will be the identification of the true root cause(s). This could result in several core documented responses.
☐		☐ REJ	a) Supplier details a fact based response to the "CUSTOMER INITIAL DEFECT DETAILS" and/or "EXPERT CONCERN DETAILS / PROBLEM STATEMENT"
☐		☐ REJ	1) **Primary Root Cause :** Point of failure **process or design** root cause. Enter the "date" this root cause(s) was determined, and "who" is responsible to ensure all root cause analysis activities are completed.
☐		☐ REJ	2) **Secondary Root Cause:** Identify what allowed the defect to be shipped. Enter the "date" this root cause(s) was determined, and "who" is responsible to ensure all root cause analysis activities are completed.
☐		☐	3) Document the details of the specific quality system element (identified in the Header information). Input this response in the "Secondary Root Cause" field. Enter the "date" this activity occurred and "who" ensured this activity was completed
☐		☐	4) The documented ability to turn the problem off and on again. Input this response in the "Secondary Root Cause" field. Enter the "date" this activity occurred and "who" ensured this activity was completed
☐		☐	4.3 For "Warranty Concerns", supplier is to enter "NO" unless directed by the issuing Magna Donnelly representative.
			SECTION 5 – MISTAKE PROOFING
☐		☐ REJ	5.1 Provide a list of "mistake proofing" options that were considered based on the identified product non-conformance. For those not implemented, provide the rationale on why they were not pursued.
			SECTION 6 – CORRECTIVE ACTION
☐		☐ REJ	6.1 The correct response must have a documented corrective action plan for all identified actual root causes shown in the previous steps. NOTE: The corrective action(s) must eliminate the root cause(s).
☐		☐ REJ	6.2 The corrective action must address the condition(s) that resulted in the failure, including: a) Primary root cause point of failure - process or design
☐		☐ REJ	b) Secondary root cause failure to contain the defect
☐		☐ REJ	6.3 The corrective action(s) must identify date(s) when permanent actions are 100% implemented.
			SECTION 7 – VERIFY EFFECTIVENESS
☐		☐ REJ	7.1 The correct response must identify the documented form or method of verification, who is responsible, the due date and actual dates completed.
☐		☐	7.2 The verification of effectiveness shall include data gathered to validate the problem resolution and corrective action(s). The data to be submitted should include proofs such as X-Bar and R Charts, Cpk analysis, P-Charts, Inspection Reports, etc.
☐		☐	7.3 The data to be submitted shall include a significant time period to be agreed to by Magna Donnelly SQA (dependent of frequency / duration of production runs) ,with evidence that the issue has not occurred again.
			NOTE: Based on the successful verification, Magna Donnelly SQA will advise supplier on discontinuation of containment and certification.

YES	NA	NO	DOCUMENTATION RESPONSE EVALUATION
			SECTION 8 – PREVENT RECURRENCE
☐		☐ REJ	8.1 The correct response will identify the documents that are (will be) updated, the person(s) responsible, the due date(s) and the actual completion date(s).
			8.2 Response may include updates of the system documents to support the institutionalization of the corrective actions. Documents to be updated include, but not limited to:
☐		☐	a) Potential Failure Mode and Effects Analysis (PFMEA)
☐		☐	b) Control Plan
☐		☐	c) Process Flow Diagram
☐		☐	d) Work / Operator Instructions
☐		☐	e) Quality System Procedures
☐		☐ REJ	8.3 **Global Effectiveness:** Supplier repeats this activity on common parts / processes and sister plants to prevent similar failures from occurring. Submit detailed information on common Magna Donnelly parts and actions to be taken. If it is identified that common parts / processes are to be excluded from this activity, please provide the rationale for exclusion.
			SECTION 9 – INITIAL / LONG TERM VERIFICATION
☐		☐ REJ	9.1 Initial verification – Provide documented evidence (from a person independent of the team that investigated the problem) that there was an audit of the MDCAR/MDPAR, and the actual system is consistent with the documented response.
☐	☐	☐	9.2 30 / 60 / 90 DAY VERIFICATION – Based on Magna Donnelly direction, the supplier will be notified if additional verification is required, and the means on how that verification is accomplished and communicated. This activity may be requested on “CC” DCARs but is recommended for all Magna Donnelly MDCARs .

Rev 7/1/04

APPENDIX D

Supplier Performance Rating System

Introduction

Magna Donnelly intends to establish and maintain long-term relationships with suppliers who are committed to continuous improvement in quality, cost, delivery and service. This commitment is an expectation of all suppliers who participate in the automotive industry. Those suppliers who embrace this philosophy will have the opportunity to enter into long-term agreements with Magna Donnelly. We believe evidence of this commitment to a continuous improvement philosophy includes; TS16949, and/or ISO-9000 certification, proactive supply-chain management, daily or multi-day deliveries, productivity improvements and frequent cost-savings proposals. In turn, Magna Donnelly will deal honestly with our suppliers, strive to listen to our suppliers concerns, communicate our requirements and provide our suppliers with the appropriate tools to perform at world-class levels.

Purpose

The Magna Donnelly Corporation Supplier Performance Rating System (SPRS) is a means to help communicate our expectations to the supply base. Suppliers are expected to use this tool to help identify opportunities for continuous improvement in the areas of quality, cost, delivery and service. Internally, these measures provide valuable data to assist Magna Donnelly Purchasing in sourcing decisions.

Scope

The scope includes production suppliers to Magna Donnelly NAO production facilities. The system provides data by Magna Donnelly plant as well as a roll-up of all reporting Magna Donnelly facilities.

Each Section can score a possible 100 points. The grand total will be a weighted average of the four sections. Scoring criteria are defined below.

Elements

Quality Section - The Quality Rating section includes rating criteria in four specific areas: PPM Performance, MDCAR Performance, PPAP Performance, and Quality System Status

1. **PPM Performance (40 Points)** – This sub-section is split into 2 categories: Performance against a Purchase Statistic Group 6-month average and performance against the Supply Base Goal.

   A. A Purchase Statistic Group (PSG) is a commodity-type classification used at Magna Donnelly to group similar parts and processes of purchased material. The PSG points are awarded based on 6-month rolling PPM performance better than or worse than the supply base 6-month average for the statistics group. Each supplier starts with a baseline of 20 points. The points are adjusted up or down based on performance against the PSG 6-month PPM for the period. The formula used to calculate the percentages listed below are as follows:

   If supplier's 6-month PPM is less than 6-month ave: percentage = [(6-month ave/actual) – 1]*100
   If supplier's 6-month PPM is greater than 6-month ave: percentage = [1-(actual/6-month ave)]*100

   Performance against PSG 6-month ave. Scoring Criteria – 20 pts possible

   100% of PSG 6-month ave. or better = +20 pts (40 total)
   Example: 6-month ave. =100 PPM, 6-month act. PPM is 50 or less
   51-99% better than PSG 6-month ave. = +15 pts (35 total)
   Example: 6-month ave. =100 PPM, actual PPM is 51-66
   26-50% better than PSG 6-month ave = +10 pts (30 total)
   Example: 6-month ave. =100 PPM, actual PPM is 67-79
   11-25% of PSG 6-month ave. or better = +5 pts

Example: 6-month ave. =100 PPM, achieved PPM is 80-90
0-10% better than PSG 6-month ave. = 0 pts (20 total)
Example: 6-month ave. =100 PPM, actual PPM is 91-100
1-10% worse than PSG 6-month ave = -10 pts (10 total)
Example: 6-month ave. =100 PPM, actual PPM is 101-110
11-25% worse than PSG 6-month ave = -15 pts (5 total)
Example: 6-month ave. =100 PPM, actual PPM is 111-125
26-50% worse than PSG 6-month ave = -20 pts (0 total)
Example: 6-month ave. =100 PPM, actual PPM is 126-150
51-99% worse than PSG 6-month ave = -25 pts (-5 points total)
Example: 6-month ave. =100 PPM, actual PPM is 151-199
100% + worse than PSG 6-month ave = -30 pts (-10 points total)
Example: 6-month ave. =100 PPM, actual PPM is 200 or more

Note: if a supplier sells material in more than one PSG, the scoring will be done against the PSG with the greatest volume in terms of units received at Magna Donnelly for the 6 months.

Note: Supplier performance less than 200 PPM will not receive negative points even if below PSG average

B. The Supply Base goal is common for all suppliers and reflects the Magna Donnelly expectation of 10 PPM to achieve full credit for points. The supplier's rolling 6-month PPM is used for comparison to the criteria listed below.

Supply Base Goal Scoring Criteria – 20 pts possible
0-10 PPM = 20 pts
11-50 PPM = 15 pts
51-100 PPM = 10 pts
101-200 PPM = 0 pts
Greater than 200 PPM = 0 pts

2. **MDCAR Performance (20 points)** – This sub-section rates the ability of the supplier to respond to quality defects and permanently eliminate them from future occurrences. It is split into 2 categories: On-Time Percent and Critical Quality Issues.

The On-Time Percent measures the due date on the MDCAR against the actual date the long-term MDCAR response is received and approved. The long-term response must have the root cause identified and corrective action plan with due dates and responsibilities documented. An extension of the due date may be requested through the division SQA contact if appropriate.
Critical Quality issues measure quality problems affecting Magna Donnelly's customer satisfaction as well as repeat occurrences of previous issues. If a supplier MDCAR is driven by a complaint from Magna Donnelly's customer, it will be reflected on the MDCAR form in the Customer Concern # field. If the MDCAR is a repeat issue it will be reflected in the Prior Issue No. field.

For more information on the Magna Donnelly MDCAR system see Section 4 and appendix C of this manual.

MDCAR Scoring Criteria

Timeliness (On-Time %) – 20 pts possible
100% On-Time Response Rate = 20 pts
75-99% On-Time Rate = 10 pts
Less than 75% On-Time Rate = 0 pts

Additional deductions for Critical Quality Occurrences:

MDCAR issued for Magna Donnelly Customer Complaint = minus 10 pts per occurrence
Repeat MDCAR = minus 5 pts per occurrence

3. **PPAP Performance (20 points)–** This sub-section rates the suppliers ability to submit a defect-free PPAP to Magna Donnelly. The rating evaluates all PPAP submissions for the previous 12-month period. If no PPAP submissions have been made the default is 20 pts.

   For more information on Magna Donnelly PPAP requirements see the Magna Donnelly Supplier Quality Requirements Manual.

   PPAP Scoring Criteria

   100% PPAP Submissions Approved – 20 pts
   Each Limited Approval –3 pt deduction
   Each Rejection –5 pt deduction

4. **Quality System Status (20 points)–** This section rates the current quality system status for the supplier. The rating is assigned by the SDE responsible for the commodity. It is an "overall" rating and therefore does not have a monthly calculation. The rating is based on supplier compliance to TS16949 and ISO9000 requirements coupled with acceptable quality performance in products supplied to Magna Donnelly facilities. Evidence of Quality Management System certifications and plans are to be posted on the Magna Donnelly Supplier Connection (MDSC) supplier portal in the "certifications" section.

   Quality System Status Scoring Criteria

   Magna Donnelly Approved Quality System – 20 pts
   - Supplier is TS16949 registered or ISO9001:2000 registered by an accredited 3rd party and plans are on-track to be compliant to TS16949:2002

   Magna Donnelly Provisional Approval – 10 pts
   - Supplier is ISO9001:2000 registered but missing TS16949:2002 compliance plans or plans are not followed. Performance levels are acceptable in SPRS Quality section on a consistent basis.

   Unapproved Quality System – 0 pts
   - Supplier has no plan for ISO9001:2000 certification and TS16949:2002 compliance.

Delivery Section - The Delivery Rating section includes rating criteria in two specific areas: Critical Delivery Occurrences, and Paperwork Defects. Each supplier starts the month with a total of 100 points. Points are deducted for each occurrence described below.

1. **Critical Delivery Occurrence** – This sub-section gives the PICS department at Magna Donnelly an ability to enter in a critical event such as a line stoppage situation or customer short ship due to a supplier delivery problem. Critical Delivery Occurrences are entered into the system by the PICS department of the Magna Donnelly user division.

   Critical Delivery Occurrence Scoring Criteria
   Each occurrence = 10 point deduction from score

2. **Paperwork Defects** – This sub-section rates the suppliers ability to submit defect-free delivery paperwork to Magna Donnelly (labels, shippers, etc.). The Receiving Department at the Magna Donnelly user division completes the defect data input.

Please see the Magna Donnelly Corporation NAO Supplier Handbook and Magna Donnelly Packaging and Shipping Requirements Manual for more information on delivery requirements.

Paperwork Defects Scoring Criteria

Each occurrence = 5 point deduction from score

Service Section (100 pts possible)- The Service rating section provides feedback to the supplier concerning their level of service to Magna Donnelly. The Commodity Buyer in Purchasing will gather input from appropriate resources within Magna Donnelly and compile an overall rating. Engineering/Design support, technology innovation, responsiveness to requests and accounting issues will be considered in this area.

Service Scoring Criteria
Excellent -100 pts
Above Average -75 pts
Average - 50 pts
Below Average - 25 pts
Poor - 0 pts

Commercial Section - The Commercial rating section provides feedback to the supplier concerning participation and support in meeting Magna Donnelly's cost reduction requirements. The Commodity Buyer in Purchasing provides the rating.

Commercial Scoring Criteria
Exceeds Expectations -100 pts
Meets Expectations -75 pts
Below Expectations - 50 pts
No Participation - 0 pts

Summary Score

The SPRS system calculates an overall score based on the following weighting scale:

Quality	40%
Delivery	20%
Commercial	20%
Service	20%

Example:

Quality rating =	90 pts
Delivery rating =	85 pts
Commercial rating =	100 pts
Service rating =	50 pts
Total score =	(90*.4)+(85*.2)+(100*.2)+(50*.2) = 36.0+17.0+20.0+10.0= 83

Reports

All supplier data is combined on one report card. This report is available to suppliers via the Internet. The report may be scrolled in its entirety or a "point-and-click" approach can be used to quickly view information on a particular topic. Back-up data is also available by Magna Donnelly division for the Quality and Delivery section. The Supplier Report Card also provides a ranking showing how the supplier's performance rates against other Magna Donnelly suppliers.

Rank in Purchase Statistics Group – Displays rating against other suppliers in the same PSG based on Total Score.
Overall Rank – Displays rating against all NAO suppliers based on Total Score.

The report card will also display the Supplier Status for each supplier. This status is a long-term view of performance and is based on the following:

- 12-month average Quality score
- 12-month average Delivery score
- most recent Commercial score
- most recent Service score

The status categories for Magna Donnelly's Approved Supplier List are as follows:

Supplier Status	Long-Term Score Range	Result
Preferred	100 - 90	Supplier is a preferred supplier for new business (within commodity)
Approved	89 - 80	Supplier is approved for new business opportunities
Probationary	79 – 70	Sourcing opportunities are limited based on reasons for status. Effectiveness and suitability of supplier systems should be analyzed for root cause(s) and corrective action. Improvement plans may be required for review with Magna Donnelly.
New Business Hold	Less than 70	Supplier is not eligible for new business without Senior Management review at Magna Donnelly. Corrective action plans should be reviewed with Magna Donnelly Management on a pro-active basis to maintain the business relationship.

Contact your Commodity Buyer to identify opportunities that would allow your organization to be awarded an upgraded supplier status.

Security

Suppliers are provided with a log-in password to allow access into the Magna Donnelly SPRS system. Passwords may be obtained through the NAO Purchasing Department.