

Scope

Design Molded Plastics is a thermoplastic injection molding company, with secondary finishing operations and the designing of molds used in production, at 8220 Bavaria Rd., Macedonia, Ohio; with warehousing, offices, shipping and receiving with an innovation center located nearby at 8272 Bavaria Rd., Macedonia, Ohio.

Quality Policy

Design Molded Plastics is committed to providing solutions for our customers. This is accomplished by a committed management leadership team and empowered employees, using state of the art machinery and processes, continual improvement, with an emphasis on product safety. We understand our customer's needs and expectations and manufacture products that consistently exceed them.

Environmental Policy

We are committed to Complying with all applicable environmental laws, regulations and other requirements. Design Molded Plastics will emphasize the prevention of pollution, the minimization of waste, and the conservation of natural resources. We have a framework for setting and reviewing environmental objectives and targets. We are committed to communicating our policy to our associates and our community. We are committed to continual improvement.

Introduction

This manual is designed to provide suppliers to Design Molded Plastics specific instructions and guidance for providing equipment and materials that meet the requirements of Design Molded Plastics in all aspects of our business.

The Materials Manager is responsible to provide copies and/or notify suppliers that the Supplier Manual is available via the Design Molded Plastics web site, www.designmolded.com.

Any questions about this manual or the purchasing requirements should be directed to the Materials Manager at Design Molded Plastics.

Supplier Control and Development

Design Molded Plastics strives to have a partnership with our suppliers that promote cooperation and performance from all parties. Our success at meeting our customer's needs and expectations is directly dependent upon our relationship with our suppliers. Design Molded Plastics intent is to develop our suppliers to help us meet our customer's needs and expectations and help our suppliers develop their systems. Suppliers are expected to work towards IATF 16949 compliance.

Requirements for Suppliers to Design Molded Plastics

○ **100% on time delivery is required.**

Our customers expect Design Molded Plastics to deliver on-time every time. In order to do this our suppliers must meet the delivery schedule. On-time is defined as 2 days before the delivery date and 3 days after. Any delivery outside the described window is considered late delivery. Design Molded Plastics tracks supplier delivery performance for all suppliers. Late deliveries will be evaluated by the Management of Design Molded Plastics to determine if there is a Risk to our customers. Management will then determine if any action is needed to be taken to ensure that supplier deliveries will be on-time.

Suppliers are required to notify the Materials Manager at Design Molded Plastics, via email, as soon as it is known that a delivery will be late.

○ **Production Part Approval Process**

All suppliers of production materials must provide a PPAP Level 3 prior to the first shipment of the purchased production materials including bulk materials. Design Molded Plastics will review the PPAP and, if acceptable, return the signed Part Submission Warrant. On receipt of the signed Part Submission Warrant you are authorized to send the first shipment as scheduled.

The PPAP book is available through AIAG.ORG. The book explains what is required and the format to be used. If you find you need assistance with meeting this requirement contact the Quality Manager at Design Molded Plastics. Any changes to operations described in the submitted PPAP or the agreed upon process must be approved prior to use for manufacture and shipment to Design Molded Plastics.

○ **Production Part Approval Process cont.**

The types of changes:

- Alternate materials
- New tooling/ Major refurbishment/ Modified tooling
- New sources for sub-contracted parts, materials or services
- Process changes for method of manufacture
- Production from tooling and equipment transferred to a different plant or location.

Notices of process changes are to be submitted in revised PPAP in advance of implementation to the Quality Manager of Design Molded Plastics for approval.

○ **Reaction plan**

Suppliers must provide a copy of the documented process/product Reaction Plan to Design Molded Plastics Quality Manager for approval with submission of PPAP.

○ **Traceability**

Suppliers must maintain traceability of material to the manufactured lot, material, date, and process. Traceability information must be provided with each lot.

○ **Certification**

Suppliers to Design Molded Plastics must be ISO 9001 at a minimum. Third party certification is preferred but second party audits for compliance are acceptable if the Design Molded Plastics customer authorizes. Acceptable second party audits can be a documented audit from one of your customers or an outside second party such as a registrar that does compliance audits. Suppliers must submit the audit and the results to the Quality Manager at Design Molded Plastics.

Design Molded Plastics is required by our customers to develop suppliers to meet IATF 16949. The IATF 16949 Clause “8.4.2.3 Supplier quality management system development” explains the requirement placed on Design Molded Plastics. We request that you have a plan for compliance to IATF 16949 and can show progress to the plan on an annual basis.

Calibration suppliers must be certified to ISO/IEC 17025. The calibration must include, with the gauge, Certification that includes accuracy, uncertainty, and NIST traceability. Calibration reports describing actual readings and identifying any out-of-tolerance condition are required to accompany the gauge.

Suppliers who supply new gauges to Design Molded Plastics may be distributors and are not subject to certification requirements. The gauge supplied must be accompanied with Certification that includes accuracy, uncertainty, and NIST traceability. All suppliers may be subject to on-site auditing by Design Molded Plastics to determine if the supplier's system meets the requirements to provide consistently conforming product. Issues with production material quality or delivery will be evaluated by Design Molded Plastics for Risk and appropriate action taken. The action may include on-site audit, additional reporting, sanctions, or re-sourcing.

○ System Certification

All suppliers must submit their latest System Certification to the Design Molded Plastics Materials Manager Sue Kahley at SKahley@Designmolded.com. Suppliers are responsible for sending the new certification when the system is recertified and notifying Design Molded Plastics if certification is withdrawn for any reason.

○ Critical Characteristics and Special Characteristics

The supplier is required to carefully review any print or additional information provided to ensure that critical and special characteristics are appropriately addressed and due care is performed to ensure conformance. When a critical/special characteristic applies to the supplier's product you will be reminded on the Design Molded Plastics purchase documents. The reminder does not relieve the supplier of the responsibility to identify special characteristics and address them appropriately. Shipping labels must identify that the product has a C/C or and S/C.

Customer Critical Characteristics are those product requirements (dimensions, performance tests) or process parameters that can affect compliance with government regulations or safe vehicle product function. These are identified on the print: Ford: CC *Critical Characteristic*, Chrysler: <S> (Shield), and GM: <S/C> *Safety Compliance*. ZF Lenksysteme (A) Each manufacture may identify their specific special characteristic in a different way.

Customer Special Characteristics are those product features that affect subsequent operations, product function, or customer satisfaction. Special Characteristics are established by the customer engineer, quality representative, and supplier personnel from a review of the Design and Process FMEAs. These are identified on the print: Ford: SC (no symbol) *Significant Characteristic*, Chrysler <D> (*Key Characteristic*), and GM: <F/F> (*Fit/Function*). ZF Lenksysteme (FK- Function Critical) (PK- Process Critical)

○ Material Certifications and SDS Requirements

Material Certifications and Safety Data Sheets (SDS) are required for all materials. Suppliers are to email these documents to the DMP Materials Manager prior to each shipment of materials. This requirement applies to all production materials and chemicals.

○ **Bulk Materials**

Suppliers of bulk materials must provide a PPAP Level 3 appropriate for bulk materials as described in the latest revision of the AIAG PPAP manual. The PPAP must be sent prior to the first shipment for approval by Design Molded Plastics' Quality manager.

PPAPs for bulk materials require a full chemical/physical analysis and documented results, including date manufactured. Small compounded lots that are less than 200 pounds require, at a minimum, complete chemical/physical analysis of the bulk materials used to compound the material and the percentage of each incorporated into the compound, i.e. the formula.

○ **Supplier Requirements for Indirect Materials**

Indirect materials are those items which have a direct effect on the product and its conformity but are not a part of the product. These items include molds, gauges, fixtures and equipment.

Mold suppliers must provide a documented dimensional inspection of the molded part to prove the mold and identify the critical characteristics, including any C/Cs or S/Cs on the print. Molds must be packaged and secured for shipment to prevent damage or deterioration. Design Molded Plastics reserves the right to verify and validate before full payment.

Mold suppliers must provide an email progress report to Design Molded Plastics Engineering every 2 weeks until job completion. If late delivery is expected the supplier is required to notify engineering immediately so that Design Molded Plastics can notify our customer or make other arrangements.

Gauge fixtures supplied to Design Molded Plastics must have full dimensional and performance inspection documented and provided to Design Molded Plastics Quality Manager. NIST traceable calibration certification is required and must be provided to Design Molded Plastics. Gauges and fixtures must be appropriately packaged and secured to prevent damage or deterioration. Design Molded Plastics reserves the right to withhold full payment until the gauge or fixture is verified and validated.

Equipment supplied to Design Molded Plastics must meet all agreed upon requirements. Design Molded Plastics reserves the right to withhold full payment until the equipment is verified and validated. Equipment must be packaged, secured and shipped in a manner to prevent damage or deterioration.

○ **Conflicts**

When conflicts occur between this manual and the purchase documents please bring it to the attention of the Design Molded Plastics Materials Manager for resolution.

If conflicts exist between this document and the Purchasing Terms and Conditions the Purchasing Terms and Conditions takes precedence.

Contact Information

Design Molded Plastics
8220 Bavaria Road
Macedonia, OH 44056

Phone 330-963-4400
Fax 330-963-4300

Quality
Jose Scharon Ph. Ext. 120
Quality@Designmolded.com

Purchasing
Sue Kahley Ph. Ext. 131
SKahley@Designmolded.com

Engineering
Doug Martin Ph. Ext. 121
DMartin@Designmolded.com