Supplier Quality Manual

Contents

Introduction

Purpose
The purpose of this Supplier Quality Manual (SQM) is to define and describe the necessary quality, performance and other business requirements for suppliers to Hawk Plastics. This manual is to ensure compliance and to develop practices that will ensure continuous improvement.

Hawk Plastics- Quality Policy
Hawk Plastics is committed to meeting and/or exceeding our customers' expectation, including 100% on-time delivery and quality products by utilizing technology and continual improvements as suggested by our managers and employees.

'It is the policy of HAWK PLASTICS LTD. for continuous pursuit of Excellence in the Quality and Productivity of the Products we manufacture.'

TOTAL CUSTOMER SATISFACTION will be achieved by constantly striving towards:
100% On Time Delivery
100% Defect Free Product
and a Continuous Improvement Process involving every employee, supplier and customer of HAWK PLASTICS LTD.

Scope
The SQM requirements stated in this manual are applicable to all suppliers of raw materials, components and services incorporated into Hawk Plastics. This procedure covers Hawk's expectations of its suppliers that provide production materials and parts as well as a mechanism to provide delivery and quality performance feedback to those suppliers.

Supplier Relationship
Hawk Plastics recognizes that our supply base shares a critical role in our ability to meet our customer's requirements. Your commitment to provide quality products and services is essential to our mutual success. Our goals can only be realized by developing relationships with suppliers that promote continuous improvement. Suppliers must understand the requirements of our customers who require parts at a zero defect level. Hawk Plastics suppliers will be developed, evaluated, and monitored with a goal of QS Section 1 compliance as their fundamental quality system. All quality records and related documents must be maintained and accessible to Hawk Plastics and its customers. Hawk Plastics expects this directive to be passed down to your suppliers to achieve quality continuity throughout the product.

Objectives
Hawk Plastics is a mold injection leader in providing quality and reliable products to automotive industries on time. In order to continue serving the customers better it is largely depending on supplier's quality and delivery performances.
The following objectives shall be met in the supplier chain:

- 100% on time delivery
- Suppliers are committed to working toward "0"parts per million (PPM)
- Continual improvement on performances
- Reduction in cost
- Environmentally friendly processes

Responsibility

The Purchasing Manager is responsible for the implementation and maintenance of the procedure defined in the document. The plant Quality Manager and Quality Engineer are responsible for ensuring that our suppliers are following the guidelines provided in this document.

Supplier Contacts

The following two pages are to be filled out and sent back to Hawk Plastics with all the key contacts and their information to contact them. This is crucial to the approval process; and it allows Hawk to build the proper relationships with the suppliers.

Acceptance Conformance

Review Hawk's supplier quality manual and understand the required policies and procedures in order to meet customer (Hawk) expectations. Please fill this form with pertinent information and send it back to Hawk's Quality Team through email or mail within 20 working days after receiving the Supplier Quality Manual (SQM).

The acceptance conformance letter is to confirm that the supplier shall meet Hawk's requirements stated in the supplier manual unless a signed off agreement waiver by Hawk's upper management.

Acceptance Conformance Sheet

Supplier Company name: ____________________

Supplier Address: ____________________

City: ____________________

State / Prov. ____________________

Zip: ____________________

Phone: ____________________

Email: ____________________

Fax: ____________________

Supplier Representative's Name ____________________

Cell: ____________________

Website: ____________________

Signature: ____________________

Date: ____________________

Please fill out and return this page to:

Hawk Plastics Ltd.
Attn: Quality Manager
5295 Burke Drive
Windsor, Ontario
adhindsa@hawkplastics.com
PH: 519-737-1452 ext.253
Fax: 519-737-2687

Supplier Contact Information Form

Supplier Name: ______________________ Supplier Rep Name: _____________________

Date: ______________________________ Signature: ______________________________

Supplier Contacts Information Form					
Title	Name	Phone #	Cell #	Fax #	Email Address
Plant Manager					
Quality Manager					
Sales Manager					
Operations Manager					
Purchasing Manager					
Shipping Manager					
Customer Service Rep					
24 Hour Contact Person (1)					
24 Hour Contact Person (2)					
IMDS Contact					
Other contacts list below					

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Definitions

A. PPM (Parts per Million)

Each supplier to Hawk Plastics has the goal of "0" PPM.
PPM is given to the supplier any time a non-conforming material and or a component has been found at Hawk Plastics.

B. PPAP (Production Part Approval Process)

As required, suppliers are to submit and have an approved Level III / IV (PPAP). Review the most recent AIAG PPAP manual for instructions and requirements. Contact Hawk Plastics QE for assistance.
There are 2 different PPAP Approvals issued by Hawk Plastics:

a. Interim Approval

Allows the supplier to ship parts for mass production only. Tooling is not paid for under this level of approval.

b. Final PPAP Approval

Final approval is granted once all customer driven PPAP criteria are met in full. Final approval is documented through sign off on the supplier's provided PSW. At this approval level, the supplier can request payment for any tooling costs owed to them.

C. Traceability

The ability to track the finished good produced back to the specific raw material inputs, from receiving through delivery to the customer.

D. Lot

When parts are produced under a constant condition, a group of parts to be produced during one shift is regarded as a "complete lot". But when the conditions change during one shift, each group of parts produced under a constant condition is regarded as a "complete lot".

E. Certificate of Conformity or Certificate of Analysis

All C of A and/or Material specification sheets are required to be emailed to Hawk Plastic's Receiving Department and QE prior to shipment, for each new lot of material. These sheets are also expected to be attached to each shipment to be verified by Hawk Plastic's Receiving Inspection Department. Each C of A must include the OEM Specification, with min/max values (see example below) and material testing based on below chart:

Required Material Properties								
Min. Test Result Required	Material Type							
	Polypro	Filled Poly Pro	ABS	Nylon	Filled Nylons	Acetal	Filled Acetal	TPO/TPE
Melt Flow Or Viscosity	x	x	x	x	x	x	x	x
Flexural Modulus or Tensile Strength	x	x	x	x	x	x	x	x
Density	x	x	x	x	x	x	x	x
Izod Impact	x	x	x	x	x	x	x	x
Ash Filler Content		x			x		x	
Hardness Rockwell								x
Mold Shrinkage				x	x			

Test Parameter	Test Value D.A.M. 50% RH	GM Specification GMP.PA66.015	Ford Specification WSK-M4D706 - A	Chrysler Specification MS-DB-41 CPN 1826 (ASTM D6779 PA0161Z1Z2)	Test Method
Tensile Strength	59 MPa	55 MPa min	56 MPa min	52 MPa min.	ISO 527:2012
Tensile Modulus	1,705 MPa	--	--	1,700 MPa min.	ISO 527:2012
Flexural Modulus*	2,178 MPa	1,650 MPa min	1,850 MPa min	--	ISO 178:2010
Notched Izod Impact @ 23°C**	16 kJ/m²	9 kJ/m² min	12 kJ/m² min	--	ISO180/1A:2000
Notched Charpy Impact @ 23°C**!	18 kJ/m²	--	--	9 kJ/m² min.	ISO 179/1eA:2010
Specific Gravity	1.12	1.07 – 1.12	1.08 – 1.12	1.08 – 1.12	ISO 1183:2012
Mold Shrinkage***	1.2 %	1.2 – 1.4 %	--	--	ISO 294-4:2001
Melt Flow Rate @270°C/2.16kg***	33 g/10 min	30 – 50 g/10 min	--	--	ASTM D3835:2008
Moisture Content ⁴	0.10 %	0.20 % max.	0.20 % max	--	ISO 960:1988

**Supplier shall submit Flammability testing annually to Hawk Plastics Ltd.*

F. Nonconforming Material

Defined as any product that falls short of the agreed upon standards, characteristics or specifications between Hawk and the Supplier.

G. Clean Point

This is the point in which the supplier verifies that only good product is in the system and that all Non-conforming product has been reviewed and removed from the system.

H. RMA (Return Material Authorization)

A code/number is given by the supplier that references their authorization for Hawk to return defective/unusable product to their facility at the suppliers expense (i.e. RMA# 1095)

I. Prototype Part

A part made with prototype or initial production tooling and equipment. This sample may be used for evaluations of the part and assembly performance.

J. Production Part

This part is made off of production level tooling, in a production environment, by production members at the latest Engineering level, and has an approved Level III PPAP.

K. PSW (Part Submission Warrant)

Contains pertinent part and program information to the latest revision. This document will be signed by Hawk's responsible personnel with granted Interim Approval or Final Approval.

L. Process Flow Chart

A graphic representation of every step from receiving to shipment of the part. Each step has its own unique numerical identifier (i.e. 1, 2, 3, 4). Numerical order must correlate to PFMEA and Process Control Plan.

M. PFMEA (Process Failure Mode Effects Analysis)

ALL possible Failure Modes that could happen at EACH step of the process and corrective action for it. (All customer complaints must be added to the PFMEA since it is a living document) Each step has its own unique numerical identifier (i.e. 1, 2, 3, 4). Numerical order must correlate to Process Flow Chart and PFMEA. See AIAG FMEA manual for instructions. Contact Hawk QE for assistance.

N. Process Control Plan

A graphic representation that maps out your manufacturing process from time of raw material receipt to shipment to the end customer. Includes inspection criteria at each step of the process that are in place to control the PFMEA's. Each step has its own unique numerical identifier (i.e. 1, 2, 3, 4). Numerical order must correlate to Process Flow Chart and PFMEA.

Supplier Sourcing

Supplier sourcing and selection is a functional activity of the Hawk Plastics Purchasing Manager. Before selecting a supplier, Hawk Plastics will provide the SQM as a guide for a new potential supplier to understand the customer expectations and the necessary requirements to accomplish it. The supplier shall not be approved for sourcing unless agreed upon on the terms and conditions of SQM. For existing suppliers within Hawk Plastics' supplier chain, the supplier performance score card and overall performance shall be the key for any sourcing activities. All approved suppliers shall hold an acceptable quality regulatory system certification (i.e. ISO 9001:2015, IATF16949, ISO 14001:2015- Environmental Management System) with the goal of 3rd Party IATF16949 Certification and ISO14001:2015. The Purchasing Manager has the final authority over the sourcing decisions and addition of the suppliers to the approved suppliers bidding list.

The Purchasing and Quality Managers will evaluate the submitted information and visit the supplier to conduct an On-Site or Self-Assessment by supplier. See the On-site Supplier Evaluation, as a separately attached file. A satisfactory evaluation of the documentation requirements will result in the supplier's addition to Hawk Plastics Approved Supplier List. It is the responsibility of the supplier to update Hawk Plastics with any changes in the documentation.

Hawk Plastics expects all the suppliers to maintain a third party regulatory registration; however, it reserves the right to perform quality system audits to evaluate under the following circumstances.

- To assist and help suppliers to improve repeated serious problems that interrupted Hawk's daily activities.
- Part of supplier sourcing and selection activities

Suppliers must be able to accommodate a site visit upon short notice.
Accommodations must be made in as little as 24 hours

As an approved supplier to Hawk Plastics, all suppliers are expected to strive to build upon the **Objectives (reference p.3).** Hawk Plastics is committed to monitoring supplier performance, assisting in development and taking necessary action according to supplier performance.

Supplier Quality System Requirements

Listed below are the 20 elements listed within ISO/TS 16949, clause titles. Hawk Plastics expects all the suppliers to comply with the below listed clause (Ref: AIAG Edition to ISO/TS 16949) and in addition where applicable. Hawk Plastics requires its own supplemental requirements which may include additional forms and procedures.

Management responsibility

The procedure defines the process for defining the suppliers' executive management commitment to the development and implementation of the quality management system. This procedure applies to the suppliers' management personnel.

Management Commitment

Executive Management determines the quality objectives needed to provide evidence that the quality system is implemented and is continually improving its effectiveness through management reviews.

Management has identified:

- The process (including outsourcing) and their application,
- The sequence and interaction,
- The criteria and methods used to ensure effectiveness,
- The availability of resources and information,
- The appropriate monitoring, measurement and analysis,

- Actions needed to achieve planned results and continual improvement of these procedures.
- The quality system is continually audited for conformance to the quality standard.

Management Quality Policy
The quality policy is communicated throughout the company with the emphasis on enhancing customer satisfaction and expectations.

Each supplier is encouraged and committed to continually improving all processes and services to help maintain Hawk Plastics as a leader in converting raw materials into quality products for not only the automotive industry but for other industries alike.

In order to meet all Hawk Plastics goals the supplier will ensure the following objectives:
- Develop a Quality System based on the **ISO9001:2015/IATF16949**
- Standards to promote continual progress
- Improvement and problem prevention
- Provide Hawk Plastics with the ***highest quality products*** and services.
- Provide those products and services ***on time.***
- Provide Hawk Plastics with the ***best pricing*** and value through using the best technology available.
- Provide ***open communication*** with Hawk Plastics to meet our customer's needs.
- Develop relationships with Hawk Plastics and other suppliers that will ***improve quality*** in product usage and in purchased materials.
- Provide a system of employee involvement ***teamwork,*** motivation and training.

Management Quality Objectives
Quality objectives are determined by Management to meet customer requirements and are measurable.

Management reviews are held and discussions are documented with actions taken, person(s) responsible and the results of these actions. This information is communicated throughout the company through team meetings, electronic and/or bulletin boards.

These are reviewed at a minimum annually to determine continuing effectiveness. When changes to the system are made, top management ensures the integrity of the system is maintained.

Management Responsibility and Authority
A member of management, as identified on the Organization Chart, is approved to be the Management Representative with the responsibility and authority to:
- Ensure the processes for the QMS are established, implemented and maintained.
- Have the responsibility and the authority to promote awareness of customer requirements
- Personnel, including Account Managers, CSR's and Quality Managers are designated Customer Representatives to ensure all Hawk Plastics requirements are met.
- Responsibilities and authority is identified in the Responsibility and Authority Matrix and specific job descriptions.
- The performance of the system is reported to Management for review by department managers.

Quality System

Resin and Colorant Suppliers shall meet ISO9001:2015 standards. Component Supplier shall meet ISO9001:2015 or IATF 16949:2016 standards. In addition to the requirements specified on ISO9001:2015 and IATF 16949:2016 standards, the supplier shall provide the list of documents to Hawk Plastics for **Pre-Production Part Approval (PPAP)** approval process. Some documents are applicable for prototype parts.

Contract Review

Supplier shall meet ISO9001:2015 standards. The supplier shall be responsible of signing the Hawk Plastics' **Team Feasibility Letter** stating that they are accepting the required feasibility requirements if they are applicable to the particular commodity.

Document and Data Control

Supplier shall meet ISO9001:2015 standards.

This procedure ensures documents required for the effective operation of our quality management system and to control our processes are complete, accurate, and distributed to the appropriate location under the control of an Electronic Document Management System (EDMS).

This procedure applies to the preparation, approval, issue, revision, and recall of all such documents, including, but not limited to:

- Engineering (prints)
- Tool and fixture design drawings (CAD or manual):
- Quality manuals, procedures, work instructions, inspection instructions and any other document identified.
- Records used for data gathering.

New or Revised Original Documents

Proposed revisions are routed through the person in charge of forms. After review and approval, the form is revised and the old revisions are destroyed.

Purchasing

Supplier shall meet ISO9001:2015 standards. In addition, **Supplier Performance** is evaluated by Hawk Plastics Quality Management on quarterly basis and distributed to individual suppliers via email quarterly. The supplier shall be responsible for communicating Hawk Plastics SQM policy to their supplier chain unless a written waiver provided by Hawk Plastics Purchasing team.

Purchase Orders

Suppliers must receive a purchase order prior to performing any work or service for all tooling, services or material for which Hawk Plastics will be invoiced **- Purchase Orders** for materials, parts, components and tooling. In the event of an emergency, a purchase requisition may be used as a temporary substitution for a hard copy purchase order.

Purchase Part Tooling

Prior to being issued a purchase order for tooling, suppliers must provide Hawk Plastics with the following information:

- Complete description of each tool
- Daily capacity of each tool
- Expected life of the tool
- Tool build timing
- Tool build quotation
- Tool price

Cost Changes

If the supplier requests a price decrease/increase, Hawk Plastics requires the following:

- **Decrease:** The supplier completes a new quotation to Hawk Plastics Purchasing. Hawk Plastics Purchasing will update the existing purchase order.
- **Increase:** The supplier must notify Hawk Plastics Purchasing in writing a minimum of 60 days prior to the requested effective date. Suppliers must meet with Hawk Plastics Purchasing to discuss the price change and cost justification.
- If the increase is approved, Hawk Plastics Purchasing will update the Purchase Order. Any and all increases are subject to re-quoting the product with another supplier.

Physical Inventories

Suppliers are required to take physical inventories and furnish reports as requested.

Product Identification and Traceability

Supplier shall meet AIAG Edition to ISO9001:2015 standards for all Product Identification, Packaging, Labeling and Traceability.

This procedure identifies the methods used for identification of product and the traceability of material in the product realization process. This procedure applies to all materials in the product realization process, from receiving through delivery to the customer, including installation if required. Traceability is defined as the ability to trace the history, application, or location of a product through identification at specified intervals.

Suppliers need to include the lot numbers which include raw material lot used and any other components. Product is handled, packaged, protected and stored in a manner that preserves the product during all the phases of production and delivery to Hawk Plastics.

Suppliers will segregate any identified nonconforming materials from the normal product flow, if applicable prior to shipments to Hawk Plastics.

Hawk Plastics will inspect products that complete process requirements and stamp all containers with QA stamp indicating product has passed all inspections per QA instructions. Product that does not meet inspection requirements are identified and follow the Nonconforming procedure.
The supplier will be notified of the nonconformance issue and will be asked to take action accordingly.

Process Control

Supplier shall meet ISO9001:2015 standards. In addition, Hawk Plastics requires all suppliers to have start up (initial) process capability for PPAP submission and for ongoing process capability. Supplier shall submit the Process out of Control Reaction Plan during PPAP submission.

Inspection and Testing

Supplier shall meet ISO9001:2015 standards.

The supplier’s procedure defines an effective inspection system and the degree of acceptance to ensure that products meet specified requirements. This procedure applies to materials and components that are used to create our products and service. Inspection and measuring is defined as all devices used to inspect, examine, test or gage conformance of a product and Test Equipment or process with regard to one or more characteristics or attributes. Nonconformance is defined as product or material which does not conform to customer requirements or specifications.

Incoming material is verified to purchase order verifications. Material received is logged and stored until inspection. Incoming material is inspected for conformance to quality requirements and results are recorded. If material and documentation are conforming, it is labelled by QA as per incoming inspection procedure. If a nonconformance is found, it is handled per supplier's procedure for nonconforming materials. All material validated by supplier's Certificates of Conformity or Certificate of Analysis is reviewed for conformance.

Release for Urgent Production Purpose
A Quality Technician may release material for urgent production purposes prior to verification under positive identification and recall. Material is identified as such.

In Process Inspection
At each stage of the production process, material is inspected for conformance to requirements as defined by work instructions derived by the quality planning process.

Final Inspection and Test
Ensures all inspections and tests, as specified by work instructions, have been carried out and were successfully passed. When concession is received in writing by the customer, product may be released prior to completion of planned inspection activities.

Reject Nonconforming Material
Upon detection of suspect and/or nonconformance, generates a nonconformance record that describes the reason for rejection and determines the quantity of nonconforming material. The nonconforming material is labeled in a visually apparent way, segregated from conforming material.

Review Nonconforming Material Report
Nonconformance records are reviewed for completeness and any necessary comments are added. A determination is made if a formal corrective action should be initiated. If containment activities are required, delegation for this action may be assigned.

Take Permanent Corrective Action
A corrective action team may be assembled and assigned the task of determining the root cause of the nonconformance and recommend action for correcting the cause. Recommended action is returned for approval. Once approved, permanent corrective action is initiated.

Inspection and Test Records
All inspection and test records are maintained according to the document control procedure and the Records Matrix.

Control of Inspection, Measuring and Test Equipment

Supplier shall meet ISO9001:2015 standards.

This defines the maintenance of inspection, measuring, and test equipment in a known state of accuracy as verified by calibration records. This procedure applies to inspection, measuring, and test equipment used to control production processes and accept or reject product. A system is established including procedures and instructions necessary to maintain calibration of equipment, facilities, and materials, including hardware and software, to a national standard or the basis used for the calibration.

Control of Non-Conforming Product

Supplier shall meet ISO9001:2015 standards.

In addition, the suppliers are solely responsible for any non-conforming products to be contained, sorted or reworked and replaced to Hawk Plastics in a timely manner. Any non-conforming supplied products found at Hawk Plastics will be contained and costs associated with that will be charged back to the supplier. The charge back hourly rate for containing products at Hawk Plastics facility will be $60.00 per hour. Any non-conforming material products found and cannot be contained will be returned to supplier and the associated costs for those products, material, delivery and the administrative cost of $250.00 will be charged to the supplier for Hawk's efforts in initiating a **Supplier Quality Problem (SQP).** Refer to **Appendix F .** A Return Materials Authorization (RMA) number will be requested from suppliers for those associated costs.

Under no circumstances shall the supplier ship non-conforming material to Hawk Plastics. The supplier is responsible for the immediate notification to Hawk Plastics if it is known or suspected that non-conforming materials have been inadvertently shipped.

- If the supplier suspects nonconforming material may have been shipped to Hawk, the supplier must: (a) Contact Hawk's Supplier Quality Engineer to report suspect shipment – (b) Contain the defect both at their facility and at Hawk – (c) Provide Hawk with a formal 8D within 14 calendar days.
- In the event of a late SQP response late charges may apply.
- No SQP will be issued to the supplier and no defects will be added to their PPM so long as no nonconforming material has been processed by Hawk and all items under first bullet have been addressed.

Hawk Plastics reserves the right to request a 3rd Party sort of nonconforming product/finished goods if necessary, at the supplier's expense. Any activity that requires Hawk Plastics to stop the supplier's parts/material from going straight to production can initiate 3rd party sorting requirements. A sort will continue until a clean point has been established by the supplier. All costs associated with a sort are solely the responsibility of the supplier. Three (3) 100% certified shipments will be required, without defect, to finalize containment. Each container/box included in the certified shipments shall be labeled. If able, the supplier has the option to immediately replace the defective product with 100% certified stock and return the defective product to their facility at their expense for sort. This cannot jeopardize Hawk's delivery to their customer.

Corrective and Preventive Action

Supplier shall meet ISO9001:2015 standards.

This procedure describes the process for the identification and resolution of nonconformances and actions taken to prevent recurrence. The responsibility for investigation of causes of actual or potential non-conformances and implementation of corrective actions, and effective closure of the non-conformances are identified.

The supplier is responsible for documenting the corrective action required when:

- a customer requires corrective action for late deliveries;
- a nonconformance report is generated;
- a formal customer rejection is received;
- a significant problem impacting the Quality System occurs;
- a vendor delivery/quality performance becomes an issue;
- a significant incident of downtime or scrap occurs.

When a Supplier Concern Notice (SQP) is initiated, the supplier shall respond within 24 hours for short term Corrective Action/Containment and long term Corrective Actions within 14 calendar days, unless otherwise directed by Hawk Plastics. In the event of SQP being issued, supplier corrective action reports shall include, where applicable, a modification to the PFMEA and Process Control Plan. Hawk Plastics will notify supplier via phone/fax or email when a defect is discovered at Hawk Plastics.

The Quality Engineer is responsible to verify that the containment actions are appropriate, communicate containment activities, via e-mail/postings/verbal, to appropriate Hawk Plastics departments and may issue a corrective action report.

Internal Quality Audits

Supplier shall meet ISO9001:2015 standards.

Prototype Part/Material Submission

Suppliers are responsible of meeting all the requirements requested by Hawk Plastics for Prototype and Production parts. Hawk will provide any instructions or documents needed for the submission process. Supplier shall communicate their action plan on all prototype and production parts. Hawk will provide the supplier written approval of all accepted parts. Supplier shall submit samples upon request by Hawk. All samples shall meet fit, form and function as requested by Hawk Plastics and emulate final production parts.

Production Part/Material submission (PPAP)

Supplier shall provide all the required documentation and get Hawk's approval prior to mass production shipments. The required listed documents shall be sent to Hawk's Quality department for an evaluation and approval. The supplier will receive the Part Submission Warrant (PSW) back with approval or conditionally approval or rejected. If PSW is rejected or conditionally approved then the supplier shall correct the problem and resubmit at the end of interim approval.

A formal approval process is required by Hawk Plastics to substantiate the supplier's understanding of the applicable specification and ensure the process has the potential to produce product to meet these requirements. All Hawk suppliers are expected to conform to all instructions and guidelines listed in the AIAG **Production Part Approval Process Manual the Fourth Edition (PPAP).** The level of submission required will be level 3, unless a request for a partial PPAP is authorized by Hawk Plastics.

Unless otherwise specified by Hawk, the PPAP samples will be taken from a production run of 300 parts per minimum. In cases where a significant or critical characteristic is defined on a Hawk Plastics or customer drawing, initial capability studies are required for all PPAP submissions. Products that cannot demonstrate process stability and capability will require 100% inspection prior to shipment. (Reference AIAG Statistical Process Control Manual) For production, the supplier is expected to maintain a capability index for a stable process.

In those instances where a significant or critical characteristic is not designated on customer drawing, Hawk reserves the right to negotiate a process characteristic(s) requiring Statistical Process Control (SPC) maintenance to be performed. All suppliers must have the ability to submit verification of conformance for special characteristics upon request. Special characteristics are product characteristics in which the anticipated variation will significantly affect the fit, form, or function of the product. Suppliers are required to perform design validation/production verification, and complete inspection layout annually.

All PPAP documentation should be submitted to the attention of the **Quality Manager at the Hawk Plastics 5295 Burke Drive, Windsor ON, N9A 6J3** or via email

Product, Process, Equipment, Tooling, Transportation/Packaging and Location Change
All suppliers must submit written notification, no less than 90 days prior to implementing a product, process, equipment, tooling, transportation/packaging or location change from approved PPAP. Hawk Plastics may, upon review of the notification, request additional information, samples, product or other customer specific requirements, including a new PPAP.

Part Submission Warrant Statement (PSW)

The **Part Warrant Statement (PSW)** is required whenever material or part is to be submitted for prototype or production intent. In addition, a new submission is required whenever a material or part goes through revision. A separate warrant shall be completed on every part number. PSW has to be filled with pertinent information to the latest engineering revision. Refer to the AIAG, PPAP manual for filling the PSW with the latest revision**. See Appendix H.**

Material Test Results

The **Material Test(s)** shall be performed to the required material specification by an accredited laboratory. All tests required by design record and related specifications. The test results shall clearly state with required testing parameters and actual physical resulted number. Also each testing criteria must state they are actually meeting the required specifications by indicating “pass or fail”. All the test results shall be legible and typed (hand written results are not acceptable) on an actual tested facility letterhead including third party test facility (accredited facility).

Appearance Approval Report (AAR)

The supplier shall submit the Appearance Approval Report (AAR) form if a material or component is required in order to meet the visible characteristics such as color, gloss, grain, texture etc. Supplier shall complete the AAR form and submit along with PSW for approval (refer to AIAG manual) for every part or material required.

Performance Test Results

Supplier shall submit performance test results if it is required on customer specification. If the supplier cannot perform the required tests, then supplier shall assign the tests to be performed from a qualified source. The results from the qualified source shall be legible and typed (hand written results are not acceptable) on an actual tested facility letterhead including third party test facility (accredited facility). Refer to the AIAG manual for the format of the performance test results sheet.

Dimensional Results

Supplier shall perform a dimensional inspection on all specified dimensions, characteristics and specification called out on the Design Record and Control Plan. If the supplier produces parts with multiple cavities then supplier shall perform dimensional inspection on each cavity. Refer to the AIAG manual for the format of the performance test results sheet.

Process Flow Chart

The supplier shall have a process flow diagram in an organization-specified format that clearly describes the production process steps and sequences for the product or material being manufactured. Refer to the AIAG Advanced Product Quality Planning and Control Plan Manual.

Process Failure Mode Effective Analysis

The supplier shall develop a **Process Failure Mode Effects Analysis (PFMEA)** for prototype or production parts/material in accordance with customer specifications and requirements. The PFMEA steps and sequences shall match the process flow chart and control plan. Refer to the AIAG Process Failure Mode Effective Analysis.

Process Control Plan

The supplier shall develop a Control Plan for prototype or production parts/material in accordance with and compliant to customer specifications and requirements. The Control Plan process steps and sequences shall match the process flow chart and FMEA. Refer to the AIAG Advanced Product Quality Planning and Control Plan Manual.

Schedules

It is imperative that Hawk Plastics receives 100% of our scheduled shipments on the date which they are due and in the quantity ordered. If a shipment will not be received on time or in the specified quantity, it is critical that the supplier contacts a Hawk Plastics representative in a timely manner.
Suppliers are provided a material release date. Hawk cannot accept unscheduled material or over/under shipments. Either condition could warrant a delay of invoice payment or a return of shipment at the supplier's expense. Any deviation from the exact release date will be noted in the Supplier's Performance Evaluation could result into a SQP.

Handling, Storage, Packaging, Preservation, Transportation and Delivery

Supplier shall meet ISO9001:2015 standards.

The Hawk Plastics Purchase Order determines freight responsibility. Hawk Plastics will specify the carrier on inbound freight if terms are stated FOB origin via a routing instruction sheet. Any deviation from the specified carrier without written consent from the respective Hawk Plastics Material Manager or Buyer will result in an Supplier Quality Problem (SQP) being issued and any additional charges being deducted from the supplier's account. Premium freight will be the responsibility of the supplier unless the respective Hawk Plastics Material Manager issues an authorization in writing to ship at Hawk's expense. Suppliers are required to maintain records of premium freight that is incurred to ensure that Hawk Plastics receives its product on the required date. Hawk Plastics may, on an annual basis, formally request these records.

Packaging Requirements

In order to receive high quality parts/material at Hawk Plastics the supplier shall follow the listed guidance for containerization and packaging. Suppliers are requested to submit cost quotations for packaging/containerization to Hawk's purchasing dept. Once the packaging proposal is approved by Hawk, then it is the supplier's responsibility to purchase and provide packaging through the entire program. When any changes on packaging are to be made, the changes shall be proposed to Hawk and approved.

Suppliers are responsible for ensuring a contingency plan for packaging in case of emergency and shall be submitted along with initial packaging proposal. It is supplier responsibility for the back-up packaging performance and the integrity of the parts.
Pallets or skids accommodating raw materials or packaged parts have to comply with AIAG standard dimensions.

- All pallets must have four-way entries only.
- Pallet sizes should be either 48"x 45" or 42"x27".
- The maximum height per loaded pallet shall not exceed 46" including the height of the pallet.

- Containers should have sufficient stability to withstand tiered heights of 100” during transit or a “DO NOT STACK” sticker must be applied.
- Containers, Boxes or Raw materials cannot be put more than 108” high.
- All fork openings shall be 18”- 24” center to center, to accommodate the fork lift spread.
- All Pallets have to have load 4-way fork ability.
- The minimum fork clearance between top and bottom deck boards to be 3.5”.
- The maximum weight per container shall not exceed 40 lbs.
- The maximum weight per pallet shall not exceed 2400 lbs.
- Products shall be secured to pallets by using shrink-wrap, banding, or other stabilizing techniques.
- A Master label must be placed outside the shrink wrap in order to identify the contents. Labeling should conform to AIAG Edition to ISO9001:2015 standards.
- Containers, Boxes or Raw materials are not allowed to hang outside the pallets.
- Part counts shall not vary and containers are to be completely filled unless authorized in writing by the respective Hawk Materials Manager.
- Ergonomics must be considered as part of the packaging design.
- Containers should be designed to allow unit handling and must conform to all government and transportation rules and regulations.
- Expendable container systems should be designed for use within reasonable, foreseeable environmental conditions.

Labeling Requirements

Packing slip must accompany each shipment with the following criteria:

- Part Number
- Quantity
- Purchase Order
- Supplier Code
- Description
- Lot Number
- Serial Number
- Date Shipped
- Method of shipping
- Trucking Company
- Must meet Automotive Industry Action Group (AIAG) Requirement

Incoming materials are to be identified by the supplier with a bar coded identification label only. The following are the requirements for labeling and identification of containers shipped to Hawk Plastics. All labels shall comply with the Quality Assurance Guideline for Shipping Labels and Other Bar Code Applications (Linear Code 39) AIAG B-8. Methods to facilitate attached and removal of labels shall be considered in the container design. Flat surfaces, holding pockets, and other attachment techniques should be established. Labels shall be located in a manner that promotes easy identification. All cartons must be facing outward on each pallet to insure clear visibility of all labels on the pallet.
Each carton should be clearly labeled with the following information:

- Part Number
- Quantity
- Purchase Order
- Supplier Code
- Description
- Lot Number
- Serial Number

- Date Shipped

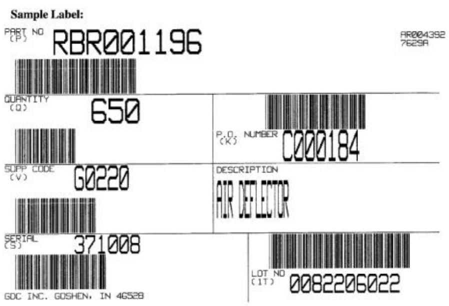
In addition, like products on a skid may also have a Master Label. Failure to comply with labeling instructions will be noted on the Supplier Performance Rating. In addition, lack of either bar code labels or information required on the label could result in delayed payment to the supplier. A new supplier must send an example label to the specific plant Quality or Materials Manager for approval.

Hawk Barcode Label Requirements

Product shipped in a carton must have a “container” label affixed to each carton. Product such as rolls that are shrink-wrapped to a pallet would require one label affixed to the shrink wrap, but indicating the total quantity on the pallet.

Individual rolls are to be identified with a core label indicating, at least, part number, description and length or quantity.

Sample Container Label Requirements:



Part Number (Max Length 12)

- The Hawk Plastics part number must appear in human readable print and in Code 39 barcode.
- The letter “P” must be included in the code 39 barcode as the Data Identifier. Barcode should not exceed 0.5” in height and be at a minimum 0.25” from any lines.

Quantity (Max Length 6)

- The quantity of product, based on unit of measure ordered, must appear in human readable print and in Code 39 barcode.
- The letter “Q” must be included in the code 39 barcode as the Data Identifier. Barcode should not exceed 0.5” in height and be at a minimum 0.25” from any lines.

Purchase Order (Max Length 8)

- The Purchase Order must appear in human readable print and in Code 39 barcode.
- The letter “K” must be included in the code 39 barcode as the Data Identifier. Barcode should not exceed 0.5” in height and be at a minimum 0.25” from any lines.
- Supplier Code (Max Length 5)
- The Hawk Plastics assigned Supplier Code must appear in human readable print and in Code 39 barcode.
- The letter “V” must be included in the code 39 barcode as the Data Identifier. Barcode should not exceed 0.5” in height and be at a minimum 0.25” from any lines.

Description (Max Length 20 per line)

- One or two line description of the contents.

Lot Number (Max Length 10)

- The Supplier’s Lot Number must appear in human readable print and in Code 39 barcode.

- The characters “1T” must be included in the code 39 barcode as the Data Identifier. Barcode should not exceed 0.5” in height and be at a minimum 0.25” from any lines.

Serial Number (Max Length 10)

- The Supplier’s Serial Number must appear in human readable print and in Code 39 barcode.
- The character “S” must be included in the code 39 barcode as the Data Identifier for a simple container label. Barcode should not exceed 0.5” in height and be at a minimum 0.25” from any lines.
- Serial Numbers cannot be repeated within a calendar year.

Sample Master Label

Product that is drop-shipped by the semi-trailer will require an additional label in addition to each container being labeled. This label, called a Master label, will allow us to receive the product into inventory, without having to unload the truck to scan each individual container. To allow traceability a Master label will be required for each part number and lot number on the trailer.

Part Number (Max Length 12)

- The Hawk Plastics part number must appear in human readable print and in Code 39 barcode.
- The letter “P” must be included in the code 39 barcode as the Data Identifier. Barcode should not exceed 0.5” in height and be at a minimum 0.25” from any lines.

Quantity (Max Length 6)

- The quantity of product, based on unit of measure ordered, must appear in human readable print and in Code 39 barcode.
- The letter “Q” must be included in the code 39 barcode as the Data Identifier. Barcode should not exceed 0.5” in height and be at a minimum 0.25” from any lines.

Purchase Order (Max Length 8)

- The Purchase Order must appear in human readable print and in Code 39 barcode.
- The letter “K” must be included in the code 39 barcode as the Data Identifier. Barcode should not exceed 0.5” in height and be at a minimum 0.25” from any lines.

Supplier Code (Max Length 5)

- The Hawk Plastics assigned Supplier Code must appear in human readable print and in Code 39 barcode.
- The letter “V” must be included in the code 39 barcode as the Data Identifier. Barcode should not exceed 0.5” in height and be at a minimum 0.25” from any lines.

Description (Max Length 20 per line)

- One or two line description of the contents.

Lot Number (Max Length 10)

- The Supplier's Lot Number must appear in human readable print and in Code 39 barcode.
- The characters "1T" must be included in the code 39 barcode as the Data Identifier. Barcode should not exceed 0.5" in height and be at a minimum 0.25" from any lines.

Serial Number (Max Length 10)

- The Supplier's Serial Number must appear in human readable print and in Code 39 barcode.
- The character "M" must be included in the code 39 barcode as the Data Identifier for a Master Label. Barcode should not exceed 0.5" in height and be at a minimum 0.25" from any lines.
- Serial Numbers cannot be repeated within a calendar year.

Government, Safety, & Environmental Regulations

All Hawk Plastics suppliers must participate in the **International Material Data System (IMDS).** The IMDS is a global system that ensures environmental regulations on products manufactured for the automotive industry. For Supplier submittal, please use location **I.D # 17966 for Hawk Plastics**.

In the event that a non-automotive supplier is directed for use, then the supplier must provide adequate information in regards to the product composition to Hawk Plastics for IMDS to be submitted accurately. Per IMDS regulations, there must be at least two substances specified, with no more than 10% reported as "Misc. Not To Declare."

All purchased materials used in part manufacture shall satisfy current governmental and safety constraints on restricted, toxic, and hazardous materials; as well as environmental, electrical, and electromagnetic considerations applicable to the country of manufacture and sale.
At a minimum, Safety Data Sheets (SDS) must accompany the first shipment of each new calendar year for each product.
Suppliers must comply with government safety constraints on restricted, toxic, and hazardous materials; as well as environmental or electrical considerations will be required. Failure to submit this additional documentation of compliance to Hawk Plastics with PPAP could result in a rejection.

Early Containments and Certifications

During new product launch suppliers are required to do an early containment in order to have a flawless launch. It is the supplier's responsibility to do an early containment for first three months period unless otherwise approved by Hawk. All the materials during this period going under early containment shall be certified with special identification stickers placed on the product containers.

Supplier Performance Evaluation Score Card

The supplier shall be responsible for shipping high quality products on time and without defect. The supplier will be evaluated on their performance by Hawk Plastics on quarterly basis. The supplier performance scorecard will be distributed quarterly to each supplier. Hawk Plastics' sourcing team shall use this tool to evaluate the sourcing possibilities. Suppliers are responsible for reviewing the scorecard and must act upon according to their ratings. Hawk Plastics expects all suppliers to seek to attain the PPM criteria of "0".

This concludes the Hawk Plastics Supplier Quality Manual. If there are any questions, please contact the following:

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Revision History

Revision	Date	Description	Approved By
0	23 June 2018	Initial Release	Derek Druer
1	5 November 2018	Update to IATF standard	Agnes Mazza
2	25 Mar 2019	Update section for Certificate of Conformity	Agnes Mazza
3	23 Mar 2020	Update contact information for Hawk Plastics	Colleen Major
4	Jan 8 2021	Update contact information for Hawk Plastics	Colleen Major
5	March 9 2022	Update contact information for Hawk Plastics	Arshdeep Dhindsa
6	May 21, 2025	Update contact information for Hawk Plastics	Monique Struhar