

Admiral Tool Livonia Division		SUPPLIER REQUIREMENTS AND GUIDELINES		
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SUPPLIER HANDBOOK

Introduction

This Supplier Handbook is intended to communicate Admiral Tool & Mfg. requirements to all production material suppliers.

All suppliers to Admiral Tool & Mfg. will be required, as a minimum, to have their quality systems registered to ISO9001: 2000. Admiral Tool & Mfg. would also encourage their suppliers to pursue a goal of compliance to the ISO/TS 16949 standard though it may not be a specific requirement to be registered. Suppliers of outside calibration services are required to be ISO/IEC 17025 accredited.

This document does not outline all of the quality system requirements to which a supplier must comply. Further requirements can be found in the most current edition of the ISO/TS 16949 manual.

Suppliers are expected to implement, maintain and continuously improve on all the requirements contained herein or referred to in this document. Conformance may be evaluated in accordance to Admiral Tool Supplier Assessment procedures or those required as part of Customer Specific Requirements.

As of this publication, this handbook is current and accurate. However we can expect revisions and additions due to continuous improvements and the dynamics of the business activity. Updates to this manual are maintained on our web site, www.admiral-liv.net. Suppliers are encouraged to visit this site periodically to review any changes that may have occurred. Hard copies of this manual are considered non-controlled documents and should be identified as such.

Admiral Tool Management Team

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Element 4

Quality Management System

Suppliers shall have a procedure to assure compliance to 4.2.3c & d. This can be accomplished during the annual PPAP re-submission.

Element 5

Management Responsibility

Suppliers may be asked to share internal quality and/or operational performance measurable (QOS), at a minimum, to demonstrate compliance to the requirement of the quality objectives (5.4.1). The performance measurable should include process monitoring, i.e. FTTP, FTC etc...

Element 6

Resource management

Suppliers may also be required to provide a plant layout (6.3.1), of the process flow that is used to manufacture product that is supplied to Admiral Tool & Mfg.

Suppliers shall also have available upon request for review, a documented contingency plan for the product supplied as stated in 6.3.2.

Element 7

Product Realization

Change Control (7.1.4)

As defined in section 7.1.4, all changes to product or process must be validated prior to permanently implementing the change. The sample size used to validate the compliance of the change shall be determined through mutual agreement with the customer.

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Customer-Designated Special Characteristics (7.2.1.1)

Suppliers shall demonstrate conformity to designated characteristics identified by the customer. Documentation in the form of SPC and/or capability studies may be requested to show evidence of conformity. Where dimensional requirements cannot be shown to be in statistical conformance, suppliers are required to implement an inspection process that will minimize the delivery of non-conforming product and provide documentation with the results of the inspection with each delivery of the product.

Production Part Approval Process (7.3.6.3)

The following requirements expand those of 7.3.6.3.

The requirements for part approval are outlined in the AIAG PPAP manual while Admiral Tool's guidelines are outlined in this manual.

Admiral Tool must, per TS 16949 customer specific requirements, have available, annual PPAP documents including layouts for all product supplied including sub-components. Admiral Tool does not require it's suppliers to submit annual PPAP documents for product supplied, however, this information must be maintained and available within twenty-four hours of request should Admiral Tool or their customer wish to review the information.

Master samples are required with the PPAP package unless otherwise specified. The quantity will vary depending on the commodity being submitted. Suppliers should contact the Admiral Tool PPAP coordinator to determine their requirement prior to submission.

Admiral Tool's QA Department will review the PPAP packages to ensure compliance. If the PPAP is not compliant the supplier will be notified.

PPAP submission will be required for any of the following:

- 01) Any new part / product or process
- 02) Correction of a discrepancy on a previously submitted part
- 03) Product modified by an engineering change due to design, specifications materials
- 04) Use of another optional construction or material then used in the previously approved part
- 05) Production from new or modified tools (except perishable tools)
- 06) Production following refurbishment or rearrangement of existing tooling or equipment
- 07) Production following any change in process or method of manufacture
- 08) Production from tooling and equipment transferred to a different plant location or from

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an additional location

- 09) Change of source for subcontractor parts, materials or services
- 10) Production re-released after the tooling has been inactive for volume production for twelve months or more.
- 11) As deemed necessary by Admiral Tool (Suppliers will be informed about the PPAP requirements by Admiral Tool's QA)

Refer to the requirements list of the current AIAG PPAP Manual for what documentation is to be submitted for Level 3 PPAP as it applies to the product being supplied.

If unsure about the PPAP level requirements, contact Admiral Tool Quality Assurance

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Materials Reporting (IMDS)

(Note: IMDS submission and approval is required prior to any PPAP approvals.)

Due to Automotive customer requirements and government regulations, such as the European Union's End of Life Directive (ELV), Admiral Tool & Mfg Co. is required to provide and submit complete disclosure of all materials and substances contained in our products utilizing the International Material Data System (IMDS – www.mdsystem.com). In order for Admiral Tool & Mfg Co. to fulfill these strict requirements, complete and accurate disclosure of all materials and substances provided to Admiral Tool & Mfg Co. from our Suppliers is required.

Supplier Responsibilities

Please provide the following information for each part that your company supplies to Admiral Tool & Mfg Co.:

1. Part Data: Admiral Tool & Mfg Co. Part Number, Description, Weight (Note: If you supply items such as Bulk Wire, Bulk Hoses, Tape, etc. please provide the weight in terms of weight / length. If you are a material supplier please go to 3. c.)
2. Sub-Component Data (if applicable): Description of each sub-component used in your part, quantity of each sub-component used, and the weight of each sub-component.
3. Material Data:
 - a. Provide the name of each material used in the part or each sub-component. When naming materials avoid abbreviations whenever possible and also avoid starting a description with numbers.
Examples: Incorrect Name = Corrected Name
SAE 1010 = Steel, SAE 1010
PA66 = Plastic Polyamide 66, ISO 1043
UV-BC 76R = Ultra-Violet Base Coat Lacquer 76R
PTFE = Adhesive PTFE
EPDM = EPDM Elastomer ISO 1629
 - b. Provide weight or % of each material used in the part or sub-component. Note: Remember that some parts may be made of more than one material; for example: Steel 1010 and Nickel Plating.
 - c. Provide the name of the supplier of the material (if the material is a non-metal).
4. Chemical Data:
 - a. Provide the complete chemical breakdown of each material (100% disclosure); detailing the CAS# and % of each chemical.
 - b. The composition of the material must represent the composition of the material after processing. Therefore, do not include ingredients such as solvents or water, as they will evaporate during application.
 - c. Using Miscellaneous as an ingredient is discouraged. However, it may be used, but not more than 10%.
 - d. If Miscellaneous is used as an ingredient, the following statement must be included in the remarks section of the material: "This material does not contain any restricted or reportable substances according to the ILRS, GMW3059, Ford RSL, Toyota SoC and Chrysler DCX CS-9003, other than those specifically identified."

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Purchasing (7.4)

(Supplier Requirements)

As a means of ensuring purchased product meets all purchase requirements, Admiral Tool & Mfg, along with our customer, reserve the right to visit a supplier facility to view and evaluate any and all processes that are used to produce said purchased product. This may include all aspects of the process including, but not limited to, Line Speed Demonstrations.

Suppliers are required to provide Material Safety Data Sheets (MSDS) for all chemicals delivered to Admiral Tool & Mfg with every first shipment or as requested.

Material containing or manufactured with Ozone Depleting Substances (ODS), Cadmium, or Hexavalent Chrome shall not be supplied or submitted to Admiral Tool & Mfg unless directed by the end customer. All dangerous goods must meet governmental regulations required for transportation, handling, storage and control of these products.

Purchasing Information (7.4.2)

Suppliers of tooling and/or gauging may be required to submit all drawings to Admiral Tool & Mfg. for approval before final design is started and once completed; drawings with appropriate detailing (i.e. measurement points, BOM for perishable items, drawings for inserts or other details, maintenance requirements etc...) may be required with the product. Tooling run-offs and sign-offs may also be required. Suppliers of gauging shall provide drawings that will be used for dimensional verification of the gauge and GR&R studies. Admiral Tool & Mfg reserves the right to have at least one designee participate in the GR&R process.

Supplier Monitoring (7.4.3.2)

Supplier performance will be monitored and reviewed on a quarterly basis using a Supplier Score Card system. Specific information detailing the scoring categories and method of scoring can be found in the Supplier Rating Manual found at the web site www.admiral-liv.net.

Customer Property (7.5.4)

The supplier shall be responsible for the identification, verification, protection and safeguard of customer property provided for the use with the product supplied. This includes returnable packaging. If any property is found to be unsuitable for use, the supplier must inform the customer and maintain records of the discrepancies found.

Control of monitoring and measuring devices (7.6)

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7.6 – The scheduled interval for calibration or verification of any measurement device listed on the Control Plan shall not exceed a maximum of one calendar year and shall be submitted annually with the PPAP requirements of 7.3.6.3.

Admiral Tool & Mfg requires statistical studies (R&R's), at a maximum not exceed one calendar year and shall be submitted annually with the PPAP requirements of 7.3.6.3.

Element 8

Measurement, analysis and improvement

8.1.1 – Statistical tools and/or methods shall be identified for each process used to manufacture product supplied to Admiral Tool & Mfg. and be included in the control plan(s).

8.1.2 – The Statistical concepts selected from requirement 8.1.1 shall at a minimum, be in conformance with the AIAG manual Statistical Process Control. Both, supplier and Admiral Tool shall agree to frequency of data collection and characteristics.

8.2.2 – All suppliers shall comply with the requirements of this element and all its sub-sections (.1 through .5). Evidence of compliance (copies of Internal Audits) shall be made available to Admiral Tool upon request and are subject to on-site verification.

8.2.3.1 – Corrective action plans for characteristics of statistical study that do not demonstrate capability or show unstableness, shall be reviewed with Admiral Tool prior to implementation. Containment and 100% inspection of product not meeting any requirement is mandatory and results of inspection shall be available for review by Admiral Tool when requested.

8.3 – Product suspect of dimensional non-conformance but thought to be functional shall not be shipped to Admiral Tool without prior written authorization. Failure to obtain this authorization will result in the entire shipment being quarantined and verified at the supplier's expense. This verification will be internal at Admiral Tool's facility or outsourced to a third party. The issuance of a Quality Reject (QR) will also be levied for the non-compliance.

8.5 – Non-conforming product delivered to Admiral Tool will be recorded as either a Quality Notice

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(QN) or a Quality Rejection (QR) depending on the severity of the non-conformance and it's impact on daily operations. This decision is at the discretion of the Quality Manager. If the non-conformance warrants a QR, an 8D corrective action report is required and must be submitted within twenty-four (24) hours completed through the containment step, typically D3. Final root cause determination and permanent corrective action shall be submitted within two (2) weeks from issue of the QR. If root cause is not able to be determined within this time period, the 8D must be updated to reflect that actions taken to identify root cause. This process shall continue every two weeks until root cause and permanent corrective actions and verification of such actions have occurred.