Supplier Quality Assurance Requirements

(ISO 9001:2015, IATF16949:2016, AS9100D Section 8.4)

Revision History

Revision	Date	DCN No	Comments	Approved
1	Dec 2008	-	Initial Issue	AH
2	July 2009	-	Criteria for service performance defined	AH
3	Feb 2013	21	Addition of AS9100C related requirements	AH
4	Nov 2017	DCN 41	Update to reflect new standard requirements	AD
5	Feb 2018	DCN 55	Updates made to better define sub-supplier controls	AW
6	Feb 2019	DCN 103	Premium Freight and Line stops added	AD

1.0 PURPOSE

1.1 It is the policy of Formaplex Ltd to fully co-operate with suppliers with the aim to assist and encourage them to achieve a high level of performance in quality, cost and delivery.

1.2 Supplier performance shall be monitored to identify those that perform well and those that perform less well.

1.3 Non-conformances will adversely affect Vendor Performance Ratings. Suppliers shall apply this document in full and avoid submitting non-conformances where possible.

1.4 Any deviations to these requirements should be submitted to Formaplex Quality in order to assess any effect on Supplier Status. See Section 13 for more information.

2.0. SCOPE

1.1 This document details the minimum quality management organisation and system requirements expected by Formaplex of its suppliers, sub-contractors and Stockist/Distributors. As Formaplex operates primarily within the increasingly demanding aerospace and automotive sectors, suppliers are expected to be accredited to ISO9001:2015 as a minimum with IATF16949:2016, AS9100D or AS9120D as a preference. Formaplex will work with suppliers to achieve IATF16949:2016.

1.2 The standards defined in the document are mandatory and supplement the quality requirements and conditions of the purchase order. In the event of conflict between the requirements of this document and the purchase order, the purchase order requirements shall prevail, unless otherwise agreed with Formaplex Quality or the Purchasing Manager in writing.

3.0 Quality System

3.1 (i) The Supplier shall provide and maintain an effective Quality Management/Inspection organisation that is compliant with this document.

(ii) It is the Supplier's responsibility to inform Formaplex of any changes to third party accreditation including lapse, withdrawal or changes of accreditation body or scope of approval and to flow these down to lower tier suppliers.

3.2 Formaplex accepts national and international standards for quality management organisation as meeting requirement for approved supplier status. Typically, ISO9001:2015, AS9100D, AS9120D or IATF16949:2016. To be considered for automotive or aerospace work supplier's accreditation body must be approved by a UKAS accredited body.

3.3 The Supplier's Quality Assurance Representative should be directly responsible to a senior executive of the company who is independent of production.

3.4 The Supplier shall carry out inspection of all products and services before submitting them to Formaplex and will certify that all such products and services conform to the requirements of the purchase order. When specified the Supplier shall submit a PPAP to level 3 for Automotive Parts.

3.5 The Supplier shall ensure personnel performing the work have the necessary competence to complete the task and also maintain appropriate training and qualification processes in accordance with their Quality Management System.

3.6 Where contractually agreed, Process Control must be established for features on the specifications where key characteristics are identified. The relevant data must be made available on request.

3.7 Documentation and records necessary to demonstrate compliance with the requirements of the purchase order will be maintained and made available for auditing by Formaplex or our customer upon request at reasonable times.

3.8 Stockist and Distributors shall include the following records as part of their Quality Management System where applicable:

i) Manufacturer, distributor, test and inspection reports;
ii) Original Certificates of Conformity with mill certificates where applicable;
iii) Non-Conformance, Concession and corrective action records;
iv) Lot Traceability records;
v) Environmental or shelf life condition records.

3.9 All documentation must remain legible and readily identifiable.

3.10 The Supplier's Quality Representative must have access to all purchase order requirements, drawings, specifications and other related documentation necessary to fulfil their duties.

3.11 The Supplier shall ensure that their working conditions and environment are controlled as appropriate in respect to cleanliness, temperature, humidity, ventilation, lighting, space, noise and air pollution.

4.0 Evaluation

4.1 Formaplex approved suppliers will be continuously monitored to assess their ongoing suitability by measurement of quality, delivery and service performance. Surveillance audits will be implemented when considered appropriate with adequate notice given.

Minimum expected performance targets are:

Material Stockists and Services.

Max allowed: 1 instance of non-conformance per quarter, no repeat instances in 4 quarters

Component Manufacture, supply

Quality< 500 PPM or 0.05% defective
Delivery 90% On time, each late day incurs a 10% penalty minimum score 50% 1 grace day permitted to allow for booking delays at Formaplex.

Service 95% Response to quotes 2 days max
Response to technical queries 2 days max
Resolution of disputes, acknowledged 1 day, closed out 21 days
General response to requests for information

4.2. Suppliers performance will be advised. If suppliers fall below requirements the Supplier will be notified. Approval may be suspended or withdrawn if performance is not improved within an agreed time-scale.

Suppliers will be graded by their overall score thus and preference will be given to A & B grades when placing orders:

Grade A: 95-100%
Grade B: 90-94.99%
Grade C: 70-89.99%
Grade D: <70

4.3 Notwithstanding the above, the supplier is responsible for ensuring the conditions of approval granted by Formaplex continues to be satisfied and inform Formaplex Quality of any changes.

4.4 Suppliers must inform Formaplex of any Premium Freight costs.

4.5 If any line stops at customers, are suppliers fault, they will be added to the Supplier Performance Matrix. (Cost may occur)

5.0 Access

5.1 The Supplier will permit reasonable access to his company premises for Formaplex Quality, Purchasing and Customers if necessary to:

(i) discuss the terms and conditions of the Purchase Order with the Quality representative;
(ii) conduct periodic audit and assessment of products, the approved Quality System and supporting activities;
(iii) source inspections and delegated responsibility assessments;
(iv) Agree corrective action plans following a reported non conformance.

5.2 The performance of these duties does not relieve the suppliers of their contractual obligations or responsibilities.

6.0 Sub-Contracting/ Supplier Control

6.1 The Supplier will not change in part, or as a whole, any product, process or service without the written approval of Formaplex.

6.2. Formaplex reserve the right to evaluate and audit any 2nd line sub-contractor/ supplier. Any such action will not relieve the Supplier of their responsibility to ensure the quality of any product or service obtained.

6.3 The Supplier shall ensure all the requirements of this document, associated documents and applicable statutory, regulatory, product and process characteristics are cascaded down the supply chain to and inclusive of point of manufacture.

6.4 The Supplier will maintain methods of qualifying and approving suppliers and measuring supplier performance.

6.5 The Supplier will maintain records of all “on receipt” inspections and Approval Certificates covering materials and supplies.

6.6 Any Supplier who is a stockist/distributor will be responsible for the quality of all products purchased from manufacturers, and must define the necessary actions to take when dealing with manufacturers that do not meet requirements. The stockist/distributor shall also prevent the purchase of counterfeit/suspect/unapproved product.

7.0 Raw Material Segregation & Preservation of Product

7.1. The Supplier will provide secure facilities, preferably a bonded area, to ensure material is not used until inspected or otherwise verified as conforming to specification. A clear distinction is required between material in quarantine and material accepted for use and waiting issue.

7.2. Materials will be controlled in such a manner to prevent to loss of batch traceability and incorrect issue throughout the supply chain.

7.3 Where material is procured or made specifically for Formaplex orders, positive steps shall be taken to ensure the designated material and only that material is used on the order.

7.4 Materials will be stored and protected in such a manner to prevent damage, deterioration, loss of identification and traceability at all times.

7.5 The Supplier shall preserve the conformity of product during internal processing and delivery to the intended destination. Preservation shall include where applicable but is not limited to:

(i) Cleaning;
(ii) Prevention, detection and removal of foreign objects;
(iii) Special handling for sensitive products;
(iv) Marking/labelling including safety warnings;
(v) Shelf life control and stock rotation;
(vi) Special handling for hazardous materials.

8.0 Traceability

8.1. All raw material obtained by the Supplier to meet an order, and all parts incorporated into assemblies which are subsequently supplied to Formaplex, must be traceable to the manufacturing source and identifiable to the manufactured item.

8.2 Traceability must be maintained through all stages of the Supplier's manufacturing process, including the maintenance of inspection and test records.

8.3 The Supplier will maintain the identification of the configuration of the product in order to identify any differences between the actual configuration and the agreed configuration.

8.4 The Supplier must be able to retrieve a sequential record of its production, including manufacture, inspection/testing for any Formaplex product.

8.5 In the event of a process being sub-contracted, traceability to the 2nd tier and inspection/test records must be maintained.

8.6 The stockist/distributor processes shall include methods for:

(i) Maintaining the manufacturer's identification and batch/lot traceability;
(ii) The ability to identify trace products manufactured from the same batch of raw material or from the same manufacturing batch;
(iii) The ability to trace the product to the ultimate destination (delivery, scrap).

8.7 It is important that purchase orders are clear and concise. The order should be raised in accordance with Formaplex's Quality Management System. The receiver shall check the order not only satisfies the needs of Formaplex but also those of the customer. Customer information must be flowed down in full and where necessary customer specifications must be provided.

9.0 Tooling, Gauging, Measuring Equipment Control

9.1 All Formaplex supplied tooling becomes the responsibility of the Supplier whilst in their possession. The equipment must be maintained in a serviceable condition and subjected to an appropriate calibration process where applicable.

9.2 All Formaplex supplied tooling must be returned when requested.

9.3. All gauging and measuring equipment must be uniquely identified and calibrated. A sequential record of calibration activities must be maintained that include the results of each calibration activity. Calibration should be traceable to national standards.

9.4 Personal equipment used to verify products supplied to Formaplex must be controlled as stated in para 9.3.

9.5 Where calibration status becomes unclear, equipment shall be withdrawn from use until such time as status is verified.

9.6 The Supplier must ensure that environmental conditions are suitable for all calibrations, inspections, measurements and tests being carried out on site.

10.0 Design

10.1 The Supplier shall develop and implement procedures to control and verify design activities. These procedures shall ensure the product meets the requirements of the specification and/ or Purchase Order.

10.2 This requirement applies to all design tasks and products including hardware and software.

10.3 Design changes to Formaplex products are not permitted unless agreed in writing.

11.0 Verification of Product

11.1 Product must be verified with equipment suitable for the task and accuracy must be commensurate with the tolerance requirements of the part being inspected.

11.2 An inspected part must be identified with a number commensurate to the inspection report it relates to.

11.3 All dimensions affected by the supplier must be accounted for on the inspection report.

11.4 Specific formats for submission of samples may be required from time to time. For aerospace products Suppliers may be asked to inspect, report and present parts in accordance with AS9102. For automotive products, a PPAP submission may be required. Where PPAP is specified it will typically be at Level 3, Formaplex are happy to discuss other levels with the Supplier on a part by part basis. These requirements will be a condition of the purchase order. At minimum it is expected the following will be included:

PFMEA
Control plan
IMDS submission evidence
Full Dimensional report on 5 parts covering all dimensions and notations
(Capability Study of 25 parts if SC's/CC's specified PPk 1.67)
PSW
Customer Specific requirements, must be adhered to when specified by Formaplex.

12.0 Non-Conforming Product

12.1 The Supplier must have a procedure for the control of non-conforming items which must include provision for:

(i) Identification of non-conforming products or parts;
(ii) Segregation of such material or parts from acceptable items;
(iii) Documentation defining the nature of the defect and what remedial/corrective action has been authorised and undertaken. The document must clearly identify the defective item(s) by part and serial/batch number;
(iv) Periodic review of product non-conformity;
(v) Evidence that appropriate action has been take to prevent recurrence;
(vi) Timely reporting of delivered non-conforming product.

12.2 The stockist/distributor must ensure with the manufacturer where necessary that supplies are not similarly affected by a non-conformance and shall inform Formaplex immediately of any non-conforming products already delivered. The stockist will be responsible for the withdrawal of products from stock that is suspected as non-compliant.

12.3 Suppliers are required to acknowledge NCR's and initiate containment within 24 hours and close out NCR's within 21 days. Failure to do so will affect supplier vendor rating.

13.0 Production Permit and Concession Application

13.1 Formaplex policy is to restrict non-conforming parts and hence discourage the submission of Production Permits and Concession Applications for non-conforming materials.

13.2 Such submissions may be rejected and any accepted may have an adverse effect on Vendor Rating.

Where necessary requests for permission to deviate from the purchase order, drawing or specification requirements in advance of manufacture (Production Permit) and request to use or release items that do not conforms to order, drawing or specification (Concession) are to be made in writing, and authority given by Formaplex Quality prior to manufacture or delivery.

13.3 Please request a concession form and annotate incoming paperwork with the number of the concession/production permit.

14.0 Delegated Inspection

14.1 Suppliers may be granted Delegated Inspection Status allowing the supply of product directly to the Formaplex line or to that of our customers. Granting of this status will be dependent on the Supplier's performance and the agreement of our customers where applicable. Suppliers will be notified if delegated status is available and informed of the mandatory conditions required to achievement and continuity.

15.0 Records

15.1 Records associated with Aerospace contracts shall be retained for a period of 30 years and be available on request or within 7 days.

15.2 Records associated with Automotive contracts shall be retained for a period of 15 years and be available on request or within 7 days.