



BUILDING PARTNERSHIPS WITH OUR SUPPLIERS

Supplier Quality Manual

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Preface

This manual has been created to assist our suppliers in understanding the purchasing expectations and quality requirements for products supplied to Trans-Matic (TM). The manual is also a tool to assist Trans-Matic in complying with the IATF 16949 and to develop our suppliers in order to meet our mission.

The Trans-Matic Mission.

Trans-Matic strives to be a leading global supplier of essential precision deep drawn metal components and value added solutions.

In order for Trans-Matic to maintain compliance to the IATF 16949 requirements, suppliers to TM must achieve certification by an accredited certification body to a current version of the ISO 9001 Quality Management System (at minimum). When circumstances dictate, the requirements and expectations of this manual may be extended to comply with specific customer requirements.

Through implementation and adherence to the standards stated herein, TM looks forward to a long and mutually beneficial relationship with our suppliers.

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SECTION 1: Introduction

1.1 Scope

This manual has been developed to communicate the operating principles, general expectations, requirements, and procedures of Trans-Matic. Adherence to the guidelines described in this manual is required by all Trans-Matic suppliers. Acceptance of any and/or all purchase orders constitutes acceptance and commitment on behalf of the recipient to comply with this manual's content. This manual is provided as a supplement to, and does not replace or alter any purchase agreement, the general purchase conditions or requirements included in applicable engineering drawings, specifications and other contractual documents. This manual describes the minimum requirements and expectations for which the supplier has responsibility. Further requirements may be applicable depending on Trans-Matic end customer requirements. However, system improvements that exceed the requirements specified within this manual are always encouraged.

1.2 Purpose

Building partnerships with our suppliers.

Trans-Matic strives to build beneficial, productive relationships with our suppliers. Our customers expect quality products and services, at a fair price, and on-time, every time. We hope our suppliers will work to meet these requirements as well. Our competitive environment demands zero defects and 100% on-time delivery as the standard, not just the goal. We hold ourselves to these high standards and require our supply base to meet the same objectives.

1.3 Application

The expectations and requirements described in this manual apply to all suppliers of prototype and serial production products. Suppliers must meet all applicable requirements specified herein. Trans-Matic highly recommends the use of all standard AIAG core tools (APQP, PPAP, FMEA, MSA and SPC) and CQI special process requirements as the basis for all process and product quality assurance.

1.4 Implementation

Suppliers are responsible for the development, documentation, implementation, and maintenance of an ISO 9001 Quality Management System according to the latest revision (at minimum). Suppliers are encouraged to become certified to the quality management system standard IATF 16949, and the environmental management system ISO 14001. When circumstances dictate, additional requirements to this manual may be required to comply with Trans-Matic specific customer requirements.

SECTION2: Trans-Matic Expectations

2.1 Engineering / Technical Support

Trans-Matic is dedicated to the manufacture of the highest quality products. In order for this objective to be achieved, all suppliers should offer engineering and technical support to Trans-Matic when said support is requested.

2.2 Manufacture Capability / Capacity / Location

Suppliers are expected to have the resources necessary (people, property, facilities, equipment, and materials) to supply the products required to accommodate Trans-Matic project and production schedules.

2.3 Consistent Quality

Zero-defect products are expected from suppliers to Trans-Matic. Any deviation from this may result in rejection and return of the product to the supplier with subsequent charges attached. The supplier is expected to reduce any ongoing fault rates by half year by year. Payment by Trans-Matic shall not constitute acceptance. Even after acceptance of a shipment, Trans-Matic reserves the right to return any material that proves to be defective for full credit. Defective material shall be returned at the supplier's expense and their account debited accordingly. Additional charges for sorting, administrative fees and other related costs (extra transport, end customer charges, etc) may also be added.

2.4 Cooperative Management Attitude

Trans-Matic expects our supplier's top management to share our commitment to meet or exceed our customer's quality expectations through continuous improvements. It is also expected that the entire supplier organization will give their full support to the relationship that exists between our companies and demonstrate flexibility in assisting Trans-Matic in meeting all of our customer's requirements. The Supplier is required to maintain a Trans-Matic plant contact, who can be readily available to assist in solving problems when needed.

2.5 Rights of Verification of Products/Processes

Trans-Matic reserves the right to verify the products and manufacturing processes at the supplier's premises by Trans-Matic representatives, our customer and/or their customer. This can be done by different kinds of audits and the supplier will be notified in advance.

2.6 Contingency Planning

The supplier will conduct a risk assessment of their operations that support Trans-Matic production facilities, quality requirements, and delivery schedules. Each assessment should consider, at a minimum, the impact arising from:

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| -Natural disasters | -Information loss – including data breach |
| -Utility disruptions | -Fire |
| -Geo-political hazards | -Intellectual property claims |
| -Supply chain disruptions | -Personnel concerns |
| -Facility or system issues | -Equipment problems |

The supplier will prepare contingency plans to ensure continued operations at Trans-Matic. In case of a risk to Trans-Matic, the supplier must communicate their action plan within 24 hours. The contingency plans will be provided to Trans-Matic upon request.

SECTION 3: Supplier Selection and Monitoring

3.1 Supplier Assessment and Selection

Trans-Matic supply base shall consist of organizations supportive of our business needs. Trans-Matic utilizes controlled methods through which suppliers are evaluated, selected, developed and monitored. Criteria for assessment, selection, and for placement on Trans-Matic's Approved Suppliers List is based on the supplier's abilities to meet and/or exceed minimum quality and purchasing requirements and expectations.

3.2 Supplier monitoring

Trans-Matic will monitor supplier's performance based on, but not limited to the following areas:

- Quality Performance
- QMS Compliance (ISO 9001:2015, IATF 16949)
- Delivery Performance
- Service Performance
- Claim Performance
- Certificate of Compliance (CoC) Performance
- Labeling

The supplier will continuously be monitored. If performance does not meet agreed upon targets, a Performance Improvement Plan may be initiated. This monitoring is closely tied to the promotion / demotion of the supplier's approval status. A supplier's failure to fulfill Trans-Matic performance requirements can result in, but is not limited to, new business hold &/or phase-out.

3.3 Gifts, Meals and Entertainment

Trans-Matic prides itself on building strong relationships with suppliers and other business associates. At times, and where allowed by law, it may be appropriate to exchange modest gifts, meals, or entertainment. Such items must be lawful, ethical, modest in value, and for a legitimate business purpose. In addition, all gifts, meals, and entertainment are subject to a thorough internal review and approval process.

3.4 Cost Recovery for Nonconforming Products

The supplier shall absorb any costs associated with nonconforming product as received or processed through Trans-Matic. These costs shall include, but not be limited to: premium freight (inbound and outbound), scrap, returned material, labor (sorting, rework, repair, teardown, overtime, downtime, etc.), testing beyond normal requirements, customer communications, liaison visits, customs fees, and related customer charge-backs. Supplier approval / dispute response to chargeback requests from Trans-Matic is required within two (2) business days of notice. Any supplier disputes must be accompanied by factual reasons that the charge-back or portions thereof, are not the supplier's responsibility. Lack of timely response may result in supplier chargeback.

SECTION 4: Quality Requirements

4.1 Quality Management System

Our suppliers are required to be certified to the latest revision of ISO 9001 Quality Management System by an accredited 3rd party registration body. A current copy of this certification is to be made available to Trans-Matic upon request. Suppliers are encouraged to implement an IATF 16949 Automotive Quality Management System. Suppliers Quality System shall be formally documented, implemented and maintained to ensure that supplier's products conform to the identified purchase specifications, engineering or material specifications and/or contract requirements. The system shall be defined and documented in the supplier's own Quality Manual. This manual shall be made available to Trans-Matic for review upon request.

4.2 Product Quality

Suppliers are fully responsible for the quality of their products including their sub-suppliers. All suppliers are responsible for providing products that meet all Trans-Matic requirements, specifications, and drawings as identified on the purchase order and that the products are free from defects.

4.3 Quality Planning

All suppliers are required to complete a PPAP on all projects (new or changed parts) according to the provided time schedule, and report on the activities as requested. Any change in the time schedule needs to be approved by Trans-Matic. This process will be followed up by the Trans-Matic responsible Supplier Quality Engineer or designee.

4.4 Production Part Approval Process (PPAP)

The PPAP with all requested documentation and samples shall be available or submitted on the agreed date. This documentation shall show that all requirements specified in our drawings and specifications are fulfilled.

Trans-Matic reserves the right to inspect these samples for conformance and will return a signed Warrant indicating whether it is approved to produce parts for serial production purposes. Shipping of serial production material is only allowed with an approved PSW (Part Submission Warrant).

4.5 Serial Production Ramp up Inspection

At the Start of Production (SOP) the Supplier is required to implement an enhanced inspection plan. This inspection plan shall continue until quality performance has been validated. Inspection plan must contain all key characteristics defined on the drawing as a minimum requirement.

4.6 Annual PPAP Re-Validations

Whenever Trans-Matic is required to submit a PPAP to its customers, all supplier PPAP documentation must not be more than one year old. All PPAP's over one year old shall be updated upon the request of Trans-Matic.

4.7 Continuous Improvements and Statistical Process Control (SPC)

Continuous improvements in the quality of products and/or manufacturing processes are important to be a supplier to Trans-Matic. The supplier should maintain documented evidence of continuous improvement for review upon request by Trans-Matic's representative. Statistical data shall be provided as identified on the respective engineering drawing, applicable specifications or standards, and/or the purchase order.

Critical Characteristics:

Designated critical characteristics shall be subject to continuous ongoing Statistical Process Control. Other characteristics may be called out for initial or continuous ongoing SPC control. Capability Studies and Statistical Process Control shall be performed in accordance with the rules defined in the latest edition of the AIAG PPAP and SPC manuals

Initial Capability:

Products are taken from pre-production at the manufacturing location(s) and analyzed statistically. Parts from each unique production process e.g. duplicate assembly line and/or work cell, each position of a multiple cavity die, mold or pattern, shall be measured and representative parts tested. Initial capability study requirements for critical dimensions are a minimum 1.67 Ppk & a Pp of 2.0. For non-critical dimensions a minimum Ppk of 1.33 required.

On-going Control:

For critical or agreed characteristics where the process can be adjusted during the production run, SPC will be used to control the process output. Unless otherwise specified, Trans-Matic requirement on serial production capability is minimum of 1.33 Cpk. In the event of noncompliance with the capability requirements, the supplier is required to perform 100% sorting (visual sorting is not accepted) and/or to implement a mechanical Poka-Yoke on the corresponding characteristics until the agreed action plan is completed and the capability results fully comply with the requirements. These actions (100% sorting or addition of mechanical Poka-Yoke) will have to be fully documented in the Control Plan and the process FMEA.

4.8 Process Records

Process records shall be maintained and be available to Trans-Matic upon request. All records shall be retained for a minimum of 3 years after the end of production unless otherwise specified to meet TM customer requirements.

4.9 Non-Conforming Product Control

If a supplier detects non-conforming product prior to shipment to Trans-Matic, the supplier must immediately determine the extent of the problem and take action to correct the problem. If suspect material has been shipped, the supplier must notify all Trans-Matic receiving locations and implement all necessary actions to prevent the material being used in production.

Any rework or repairs to suspect material must be conducted in a controlled manner that assures that the reworked or repaired product meets Trans-Matic specifications. Written instructions should detail the rework or repair, the reinspection of reworked product and the return of this product to normal production flow.

A formal interim approval request that includes deviation and corrective action information from the supplier must be sent to Trans-Matic, and an approval must be received from the user plant before any reworked material is shipped to Trans-Matic.

If a supplier's parts are found to be defective the supplier will be notified by Trans-Matic personnel to provide immediate containment and support to resolve the problem using an 8D report and Root Cause Analysis tools.

The supplier is responsible to address containment of the problem at their facility, parts in transit, and parts in Trans-Matic stock.

If Trans-Matic must sort supplier's suspect parts in order to keep production supplied with defect-free materials, the Supplier will be charged for the sorting cost. This charge may be applied to both components and finished assemblies in which the components are used. If a supplier defect causes Trans-Matic's finished product to be reworked or scrapped, all charges incurred will be the responsibility of the supplier. All other related costs will be charged to the supplier including eventual costs from Trans-Matic customer.

A copy of the vendor complaint will be distributed to the supplier when defective material has been found, initial response with initial containment must be completed and returned within 24 hours, and long-term actions must be defined and reported within 7 calendar days unless otherwise agreed. The supplier is expected to implement all necessary actions to close the 8D within 30 calendar days unless otherwise agreed. The supplier will be notified if any aspect of the 8D report is not acceptable and will be required to resubmit the updated report in a timely fashion.

For suppliers with chronic or repetitive quality issues, Trans-Matic reserves the right to impose additional containment measures (at supplier expense) to ensure conforming product is received at Trans-Matic plants.

Control Shipping Level 1 (CSL1) containment:

The supplier is required to perform a 100% certification of all products prior to shipment through an additional, off-line inspection process. This measure would be in addition to any existing controls and containment measures previously implemented. This level is imposed on suppliers who have failed to contain or correct quality issues effectively, and immediately.

Control Shipping Level 2 (CSL2) containment:

The supplier is required to subcontract a third-party product certification contractor to independently 100% certify all products prior to shipment to Trans-Matic. This level is imposed on suppliers who fail to contain or correct quality issues through the Level 1 Containment program.

In addition, Trans-Matic reserves the right to notify third party Quality System registrars of quality system failure if open quality issues are not resolved by this time. The supplier will be notified prior to this action being taken.

4.10 Supplier Request for Change Approval

No changes to the product, process (including production location) or sub-supplier are allowed without written Trans-Matic approval. The supplier must send a notification specifying the change to Trans-Matic. Trans-Matic will then investigate the possibility to implement the change and will inform the supplier when a decision has been made. A PPAP re-validation of the part and process will be requested if the change is accepted.

4.11 Special Processes

If required during the APQP process suppliers shall comply with the requested AIAG standards related to special processes, for example:

CQI-9 Special Process: Heat Treat System Assessment

CQI-11 Special Process: Plating System Assessment

CQI-12 Special Process: Coating System Assessment

4.12 Material Safety Data Sheet

The Globally Harmonized System (GHS) is an international approach to hazard communication, providing agreed criteria for classification of chemical hazards, and a standardized approach to label elements and safety data sheets. A material safety data sheet in accordance with GHS guideline must be sent by the supplier to the receiving plant before delivery of any chemicals used in production processes.

4.13 Product Traceability

All Suppliers to Trans-Matic must have an identification system that distinguishes one lot/batch/part from another when shipping finished product. Each lot/batch/part of material should be clearly identified on the product (where applicable) according to the part drawing or as agreed if not specified on the drawing, and on the product packaging. The traceability system must comply with the FIFO (First In - First Out) principles for incoming and outgoing material.

4.14 Tools & Gauges Labeling

All Tools and Gauges, property of Trans-Matic, or belonging to Trans-Matic on the behalf of Trans-Matic Customers, must be properly labeled by the supplier according to requirements.

4.15 Product Packaging, Labeling & Storage

Suppliers shall establish, document and maintain procedures for handling, storage and delivery of product. Suppliers must also conform to any specific requirements documented on the Trans-Matic website, purchase order &/or drawing / engineering specification.

Handling & Storage: The supplier shall utilize methods of handling & storage that prevent damage or deterioration before, during, and after the manufacturing process.

Delivery: The supplier shall arrange for the protection of product quality subsequent to manufacture. This protection shall include delivery to destination. The supplier is responsible to design and utilize packaging which is most cost effective and ensures that when the product reaches Trans-Matic it is conforming and "fit for use", regardless of F.O.B. terms, (with the exception of blatant carrier damage and / or neglect). Suppliers are responsible to ship finished product to Trans-Matic on a FIFO basis.

Suppliers shall notify Trans-Matic Production Control and Purchasing representatives in advance of any planned shutdowns or extended downtime that will affect shipment schedules. This notice shall be communicated as far in advance as necessary to provide sufficient time for the supplier to produce and ship inventory to cover the downtime period.

Suppliers are required to ship on time per Trans-Matic release schedules and quantities. Over shipments may be rejected and returned at the supplier's expense, short shipments may require expedited shipments at the supplier's expense. Additionally, packing slips must accurately reflect the Trans-Matic purchase order number, part number, revision level, and quantity shipped. Discrepancies may result in customs issues where Trans-Matic is moving the material across borders for production. Such incidents may result in a supplier chargeback to recover any related costs to Trans-Matic.

Barcode Container Shipping Label requirements: It is the responsibility of the supplier to provide barcoded container shipping labels that meet Trans-Matic requirements. Failure to comply with these requirements may result in rejection of the shipment.