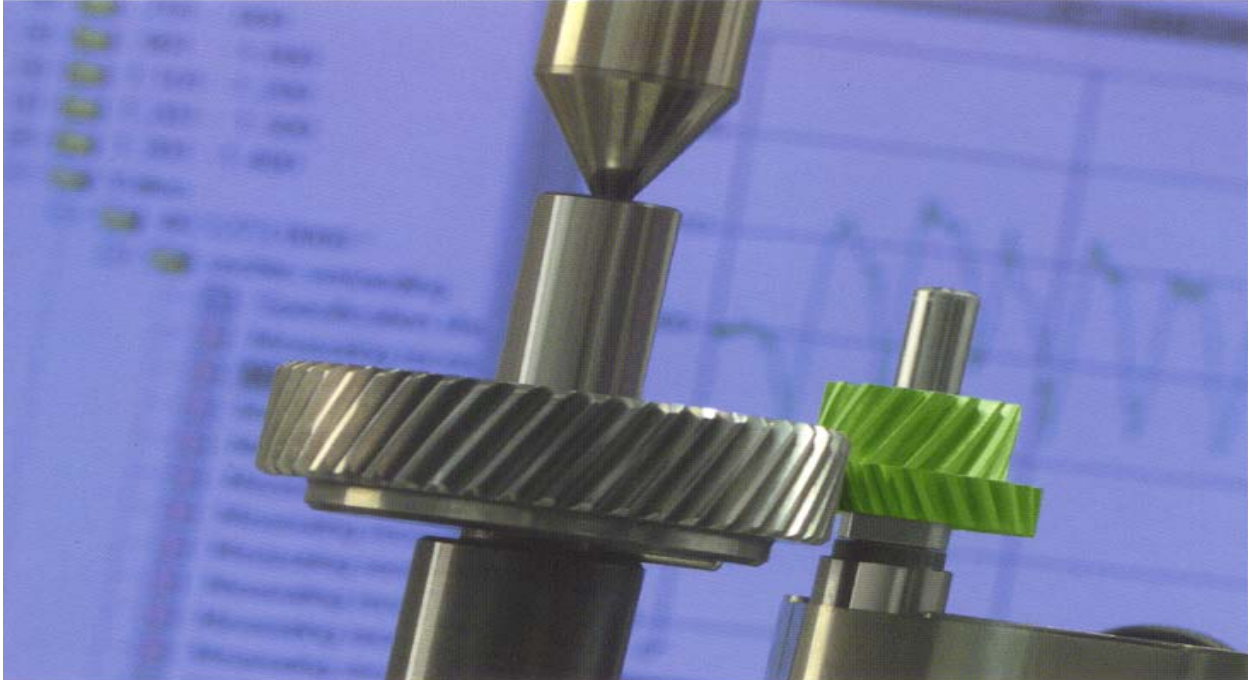


Doc #: G01-0010-09	Rev: 1.5.1	forteq ⁺ swiss precision global dedication
Title: Supplier Quality Manual		
Author: B. Oeing-Hanhoff		
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forteq Group

Supplier Quality Manual




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TABLE OF CONTENTS

1	Scope
----------	--------------

2	Quality System Requirements
----------	------------------------------------

3	Additional Requirements
----------	--------------------------------

- 3.1 Supplier Requested Changes
- 3.2 Non-Conforming Product / Complaint / CSL1 / CSL2
- 3.3 Production Part Approval Process (PPAP)
- 3.4 Delivery and Packaging
- 3.5 General Requirements
- 3.6 Supplier without third Party Certification


4	Supplier Performance Rating System
----------	---

5	Contact / General Information
----------	--------------------------------------

6	Approval and Revision History
----------	--------------------------------------

7	Annexes
----------	----------------

- 7.1 General Supply and Purchase Conditions (see www.forteq-group.com Downloads)
- 7.2 Attachments:

Doc #: G01-0010-09	Rev: 1.5.1	
Title: Supplier Quality Manual		
Author: B. Oeing-Hanhoff		
Effective Date: 01 October 2015		

1 Scope

The forteq Group Supplier Quality Manual (fG-SQM) defines the Quality System Requirements, Additional Requirements and the Supplier Rating System for all of its major Suppliers.


2 Quality System Requirements

forteq requires all of its major suppliers to be third party certified to ISO 9001 (latest edition) at a minimum. forteq highly encourages all of its suppliers to become third party certified to ISO/TS 16949, if applicable. A deviation from this general rule has to be agreed upon by forteq quality management and a waiver can be granted only under special conditions. If a Supplier has no accreditation or no plan to achieve the ISO 9001 or ISO/TS 16949 accreditation, the Supplier shall abide by the additional requirements identified in this document.

A certification against the environmental norm ISO14001 or EMAS (all latest editions) is recommended, but not a pre-requisition to be awarded. It shall be noted that a preference is given to certified suppliers, if the other awarding conditions are also met by these capable suppliers.

An initial supplier audit (acc. ISO/TS, VDA 6.3 or forteq questionnaire) should be carried out by forteq or a forteq representative despite of an ISO certification, if feasible, and should be verified latest after 3 years. Failing in achieving an acceptable supplier rating (at the beginning or during the ongoing supply period) and not meeting the related agreed corrective actions within the defined escalation process, also requires an onsite supplier audit by a forteq auditor. If the necessary improvements and the required product/service quality cannot be met within the given timeline, the supplier may be phased out as a final step.

A consistent, documented traceability of all parts, materials, specifications or services must be guaranteed by the Supplier throughout his complete manufacturing process and his own supply chain. All relevant documents must be maintained for at least 15 years (as per OEM requirements). It is expected that the supplier implements the same quality agreements with his suppliers, as determined in this document or as requested by forteq's customers.

Doc #: G01-0010-09	Rev: 1.5.1	
Title: Supplier Quality Manual		
Author: B. Oeing-Hanhoff		
Effective Date: 01 October 2015		

3 Additional Requirements

3.1 Requested Changes (Supplier or forteq)

The Supplier must review all proposed changes (i.e. part, process, design, ...) with forteq Production Engineering and Quality Management prior to implementation. An upfront written approval from forteq's engineering group and Quality Management is mandatory before any implementation activities can start. Any changes, Supplier initiated or forteq requested, requires as default a Level 3 PPAP submission (including [final] customers specific requirements) after implementation, unless an alternate level is agreed upon in writing between the Supplier and forteq Quality Management or this is not applicable due to the kind of services rendered. Depending on the kind of services rendered, other documented agreements may be applicable. An EPC (Early Production Containment) plan has to be submitted as part of the related documentation (if applicable).

3.2 Non-Conforming Product / Complaints / CSL1 / CSL2

forte q expects from his suppliers to deliver "zero defect" in all their materials, parts and services. forteq or Supplier discovered Non-Conforming (NC) Product will result in a formal Complaint (8 D) and a Corrective Action Request (CAR). As a first action to prevent faulty products from being delivered to forteq all affected on-site products have to be contained and the responsible forteq quality representative has to be informed immediately (by phone and in writing) about the affected parts already delivered or in transit (part no. / batch no. / delivery date).


The Supplier is required to respond with an 8D and basic Corrective / Preventive Action Plan (CAPA) within 24 hours of the complaint notification. The 24 hour response must detail the Supplier's immediate containment activities. Depending on the severeness of the incident CSL1 or even CSL2 can be implemented by the responsible SQM. By doing so, also the exit criteria have to be agreed and documented.

The Supplier is required to submit a detailed CAPA plan latest within 10 business days of the complaint notice. A weekly progress report must be submitted to the issuer of the complaint within forteq (normally the responsible SQM), until the CAPA is closed.

The Supplier is expected to close the CAPA within 30 days of the complaint notice. All CAPA's identified on the 8D should be implemented and verified effective within this 30 day window (or any other date agreed upon in writing with the leading forteq quality management).

Rev 1.5.1

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Doc #: G01-0010-09	Rev: 1.5.1	
Title: Supplier Quality Manual		
Author: B. Oeing-Hanhoff		
Effective Date: 01 October 2015		

forteq personnel also will be entitled to investigate the complaint and its circumstances at supplier's premises. Supplier shall grant access to the respective production area and shall support forteq personnel in this comprehensive examination free of charge. Failing to submit the CAPA on time or to support forteq in minimizing the possible damage in due course will entitle forteq to reimburse all costs accrued due to this incident and to terminate the existing orders and contracts concerning the parts, assemblies or services affected, without any further commitments to the supplier.

All internal costs incurred by forteq (sorting - CSL1), scrap of components, assemblies, material, potential rework, special freights, production downtime, additional set-up charges, additional travel expenses, etc.), which are related to the complaint, that is found to be the responsibility of the Supplier, will be charged back to the Supplier. External costs incurred by forteq (third party containment - CSL2 - , sorting, rework and scrap at forteq's Customer facility, potential Customer administrative fees, and all other related Customer complaint costs i.e. line stops, lawsuits, recalls etc.) which are related to the complaint that is found to be the responsibility of the Supplier will be charged back to the Supplier. In case no clear responsibility can be determined an amicable agreement shall be strived for. A potential arbitration will be based on the local laws and regulation of the ordering forteq site.

Supplier also shall support forteq in resolving any claim which may involve both parties to minimize the possible impact of such an occurrence.

forteq standard administrative costs will be charged back to the Supplier with each complaint. Administrative costs will be as specified in separate documents (T&C) per individual site.

There will be a surcharge of 100% for any repeated issue (issue has occurred previously – previous complaint) for the administrative costs.


Controlled Shipping Level 1 (CSL 1)

The supplier's quality manager will be notified that they are at CSL1 and shall:

- In 24 hours implement a control post away from the process, the affected characteristic must be 100% inspected.
- Develop an inspection plan for the characteristic to be inspected.
- Develop and train operators conforming to the inspection plan.
- Create a visual standard with acceptance limits.
- Submit an action plan within 48 hours informing forteq about the actions, timelines and responsibilities.

Rev 1.5.1

Master Document Located in Document Control Library
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Doc #: G01-0010-09	Rev: 1.5.1	
Title: Supplier Quality Manual		
Author: B. Oeing-Hanhoff		
Effective Date: 01 October 2015		

- All material inspected must be identified with a marking agreed with forteq Quality.
- The packages sent to forteq must be identified / marked with the label "Controlled Shipping", advising what characteristics are under inspection.
- The control post must be kept for 30 days after the actions implementation.
- The supplier must send evidence of training and the implementation of a control center to forteq, as well as the results of the selected material.

Controlled Shipping Level 2 (CSL 2)

- If Controlled Shipping Level 1 has not been effective in containment, or recurrence of the non-compliance occurs, the supplier will be placed on Controlled Shipping Level 2, the plant manager and the quality manager of the supplier will be notified.
- In addition to the activities described for Level 1, the supplier must hire (at his own costs) a third party company approved and designated by forteq for re-inspection of the material, released by the control post in Level 1, at the suppliers plant
- The control post of the supplier and of the external service provider must be kept for 60 days after the implementation of this action.


3.3 Production Part Approval Process (PPAP)

forte q requires its Automotive related Suppliers to adhere to the AIAG (Automotive Industry Action Group) PPAP Manual (latest edition). A Level 3 PPAP is the default PPAP for engineered components unless an alternate level is agreed upon in writing from forteq Quality Management. Here also the compliance with the applicable directives such as, but not limited to: 2000/53/EC End of Life Vehicles; 76/769/EEC Restriction of dangerous substance including all amendments, REACH, RoHS, ... must be certified.

Bulk material PPAP submissions are to include Part Submission Warrant (PSW) and the Bulk Materials Checklist, Material Safety Data Sheet (MSDS), if applicable, and the Supplier's Quality System certificate at a minimum, unless different documents are agreed upon in writing from forteq Quality Management.

Rev 1.5.1

Master Document Located in Document Control Library
Controlled Copy if printed and this Statement is RED, Otherwise Non-Controlled

Doc #: G01-0010-09	Rev: 1.5.1	
Title: Supplier Quality Manual		
Author: B. Oeing-Hanhoff		
Effective Date: 01 October 2015		

For (repeated) orders of plastic resin material, a certificate (CoA) stating the product name, the type, the lot or batch number, the relevant physical property values (as agreed with the receiving forteq site or stated in the purchase order, including actual, min. and max. values) as a minimum information will be accepted, other data (testing, product related) may be added on behalf of forteq's customers requests. The relevant properties have to be agreed upfront (before first commercial order). This applies also for the non-automotive related suppliers.

For metal inserts the same requirements apply as above plus the necessary material certificates and testing according to the upfront agreed standards and other potential end-customer requirements (i.e. : salt spray tests, material analysis and declaration concerning conflict minerals – Dodd Frank Act,)

Other requirements may be applicable and will be stated in the purchase orders of the individual forteq site.

Individual regulations and requirements which are overruling respective parts of this document may be agreed upon with the individual supplier. These have to be approved by the local Q-Management at the receiving site AND the Q-Management on Group Level.

3.4 Delivery and Packaging

100% on-time delivery of the ordered quantities (in the agreed quality and packaging, with all agreed labeling and documents) is required.


Packaging or labeling changes are not allowed without formal written approval by forteq quality and an approved PPAP submission to validate the packaging change.

The Supplier is required to pay any expedite fees as a result of short shipments, late shipments, wrong shipments or to replace defective product at forteq or its customers.

3.5 General Requirements

Contingency Plan

The supplier shall prepare contingency plans to satisfy forteq requirements in the event of an emergency such as utility interruptions, labor shortages, key equipment failure and field returns.

Doc #: G01-0010-09	Rev: 1.5.1	
Title: Supplier Quality Manual		
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Effective Date: 01 October 2015		

3.6 Supplier without third Party Certification

Suppliers without a third party certification according to ISO 9001 or ISO/TS 16949 (and ISO 14001) may be awarded, if there is a technical necessity to do so, under the condition that the specific supplier has undergone the following procedure:

- Evaluation (audit) of the quality / business systems the chosen supplier is using with a focus on change control and traceability.
- An initial audit has been carried out by the ordering organization or by another qualified auditor (internal, external) on behalf of forteq (according to forteq's supplier evaluation and approval template or VDA 6.3) prior to placing an order.

The audit has to be approved by the (local) forteq quality management. After a successful audit the supplier will be listed as "Approved" and can be awarded by all forteq sites. A yearly re-assessment will be necessary.

4 Supplier Performance Rating System

Supplier performance is evaluated as a minimum once a year. A quarterly evaluation by forteq Logistic / Purchasing is strived for. Supplier Score Cards are reported (at a minimum) annually to each major Supplier. Supplier performance will additionally be reported, if the Supplier falls into "Probation". When a Supplier is notified of "Probation" status, the Supplier must submit a CAPA plan in an 8D format within 10 working days of notice to explain how he intends to improve his performance to at least reach the "Qualified" status again within a reasonable time frame (details > see Chapter 3.2). During this period special delivery preconditions apply which are set by the responsible Q-Department at the receiving forteq site.

The Supplier Performance Rating is based on a total of 100 points. Points are derived from 6 categories of performance: Quality, Incident, Delivery, Quantity, EMS, Price performance. A score between 85 and 100 results in a "Preferred" status for the Supplier. A score between 60 and 84 results in a "Qualified" status for the supplier. A score of less than 60 results in a "Probation" status for the Supplier. The performance is measured throughout a calendar year.


The 6 categories are measured and weighted as follows:

Quality (45 point potential)

Quality = (# conforming Deliveries / # of Deliveries) x 45 points
 [Alt: Quality = (# conforming Products / # of Products) x 45s points]

Rev 1.5.1

Master Document Located in Document Control Library
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Doc #: G01-0010-09	Rev: 1.5.1	
Title: Supplier Quality Manual		
Author: B. Oeing-Hanhoff		
Effective Date: 01 October 2015		

Severe Incident (10 point potential)

Incident = a delivery of nonconforming products or services led to a delayed delivery to forteq's customer or causing mayor problems at the final customer.
no occurrence during the evaluation period = "10" points, >= 1 incident "0" points

Delivery (15 point potential)

Delivery = (# of On-Time Deliveries / # of Deliveries) x 15 points

Quantity (5 point potential)

Quantity = (# Correct Quantity Deliveries / # of Deliveries) x 5 points

EMS

EMS = EMS system is established and maintained = "5" points / otherwise "0"

Price


Price = forteq's price reduction expectations are met:
(as agreed in separate agreement > min. 3% / annum) 3% = 20 points
(or on a pro rata basis)

Performance Rating= Quality + Incident + Delivery + Quantity + EMS + Price

Preferred Status = Supplier Rating of 85 – 100

Qualified Status = Supplier Rating of 60 – 84

Probation Status = Supplier Rating <= 60

Doc #: G01-0010-09	Rev: 1.5.1	
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5 Contact / General Information

forteq Group's head office is located at the following address:

forteq Nidau AG
 Ipsachstrasse 14
 CH-2560 Nidau

Phone, Fax, and E-Mail information:

Phone: +41 32 3327332
 Fax: +41 32 3327333
 E-Mail: quality@forteq-group.com

For detailed contact information concerning the ordering site and the local contact person (Logistics Manager, Quality Manager, SQM), please refer to the order form.

This supplier quality manual and the referenced documents are valid for all forteq subsidiaries or / and other companies where forteq owns more than 50% of its shares. Local additions based on local requirements or local laws may be added by the ordering sites as separate Annexes to the Supply Agreement or the Purchase Order (to be listed in P.O.). The General Supply and Purchase Conditions or any other Amendments of the ordering site are considered an inherent part of this document. All other local attachments to the SQM or the P.O. are also considered binding documents, when the purchasing contract is signed / accepted by the Supplier.


6 Approval and Revision History

Approval

Name	Title	Date
Dr. B. Reinmann	COO	01.10.2015
Name	Title	Date
B. Oeing-Hanhoff	CTO / TQM	01.10.2015

Rev 1.5.1

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Doc #: G01-0010-09	Rev: 1.5.1	
Title: Supplier Quality Manual		
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Revision & Review Summary

Rev	Change Description
1.0	Initial release (02.03.2009)
1.1	Chapter 4: Rating adjusted (14.08.2009)
1.2	Wording revised for clarification (21.12.2010)
1.3	Document revised: EMS, Supplier Performance Rating (19.12.2011)
1.4	Supplier Rating amended, Quality System requirements (10.02.2012)
1.5	Revised considering new customer or standard / norm requirements (01.10.2015)

Rev 1.5.1

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