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TRATON Customer Requirements

Quality assurance agreement for purchased parts & Organisations

Foreword

This Commercial Vehicle Standard (CVS) contains fully harmonised requirement specifications of the brands (legal entities) MAN Truck & Bus SE (hereafter MAN) and Scania CV AB (hereafter Scania), which are congruent to fulfil technical requirements of both brands. Any review of this standard shall only be done in agreement with both brands.

In this CVS, all non-company standards are referred as international standards (e.g.: ISO, EN). These international standards are available as national edition at the respective national standardisation organisation (e.g.: DIN ISO, SS-ISO, DIN EN, SS-EN).

Legal notice

Make sure that you have the latest version of this standard. Latest version is the electronic issue distributed by the respective Standardisation organisations and if applicable the respective supplier portal.

Technical responsible MAN Truck & Bus SE: Approved by BQ – René Bérouti Area specialist BQS – Marco Bock	**Standardization MAN Truck & Bus SE:** Head of Standardization department EHOS – Frank Jürgens Standardisation engineer EHOS – Christoph Raabe	Continuation page 1 to 27 Replacement for: CVS10 2020-03
Technical responsible Scania CV AB: Approved by SQ – Andreas Fabó Area specialist SNA – Lina Frödell	**Corporate Standards Scania CV AB:** Head of Corporate Standards YDRC – Viktoria Alstig Standardisation engineer YDRC – Michaela Bundschuh	Distribution: This commercial vehicle standard is distributed at MAN Truck & Bus SE, Scania CV AB and VW Caminhões Õnibus internally and also externally to relevant suppliers via supplier portals of the involved brands.
Technical responsible VW Caminhões Õnibus: Approved by QSP – Rodrigo Lemos		

Contents

Changes from previous issue

The changes in this CVS10 are based on the revision of Formel Q Konkret. Changes in the structure of Formel Q Konkret are adopted which resulted in an over-all revision of the CVS10.

Due to many changes, the changes are NOT shaded or marked in another way and suppliers are expected to read the entire CVS.

Scope

This standard contains Customer requirements, which are more specific to the commercial vehicles area, different or are in addition to what is stated in the reference documents. The document is following the Volkswagen Formel Q Konkret document structure. Chapters and sections stated in the Formel Q Konkret are marked with an *.

Be aware that this standard only contains product quality-related requirements and that other documents define Customer requirements for other business areas and functions.

The order of precedence in the reference documents is:

1. TRATON Customer Requirements CVS10
2. VW Formel Q series
3. IATF16949 (includes ISO 9001)

The first two documents can be found on VW ONE. KBP (Konzern Business Platform) www.vwgroupsupply.com.

The CVS10 can be found:
Information > Divisions > Quality Assurance > Brand Specific Information
the VW Formel Q series can be found:
Information > Divisions> Quality Assurance > Formel Q

This standard CVS10 is additionally distributed internally and via the respective supplier portals of the involved brands.

MAN:
The terms and conditions laid down below are prior to the MAN “Purchasing Conditions for Production Materials and Spare Parts for Commercial Vehicles”.

0 General provisions*[1]

Following IATF16949 terminology the Suppliers delivering to the OEM are called Organisations and tier 2 – n are defined as Suppliers.

The OEM is the Customer receiving the purchased items.

When applicable, the specific brand for which the requirement is valid will be stated. When no brands are stated, it is a common requirement or the requirement stated in Formel Q applies.

The English document is the genuine and jointly developed version, which is approved by MAN Truck & Bus SE, Scania CV AB and VW Caminhões e Ônibus.

For more terms and abbreviations see chapter 5 *Terms and Abbreviations.*

0.1 Additional reference documents

- Applicable laws and regulations
- AIAG Automotive Core Tools (PPAP, APQP, etc.)

Organisations shall always comply with the latest versions of brand-specific standards (including e.g. technical standards). In order to receive information about all standards updates, Organisations shall subscribe to the newsletter of the respective brand-specific supplier portals.

[1] Chapters and sections marked with a * are the same compared to the Formel Q Konkret document.

MAN Truck & Bus SE (MAN):
Standard M 3335 applies for change management of technical standards.

Scania CV AB (Scania):
Updates of standards leading to product and/or process changes shall be handled for Scania contracted articles, via the Supplier Change Request (SCR) routine by submitting the issue in the eSCR module of the eQ2 application.

MAN and Scania product standards can be found on the respective brand portals.

Portal for Technical Documentation (PTD) for MAN: www.ptd.man.eu

Scania Supplier Portal (SSP) for Scania: https://supplier.scania.com

ONE.Portal for VW C&O: www.vwgroupsupply.com

Other MAN and VW Caminhões e Ônibus (VW C&O) technical documents for the respective product, such as works standards, installation drawings/assembly drawings, MAN component requirement specifications, etc. can be found on the MAN and VW C&O portal links mentioned above.

Note: A list of normative references is added in chapter 6 *Normative references.*

1 Request, offer preparation and general requirements*

1.1 Offer prerequisites*

The Organisation is expected to comply with all applicable legislation currently in force in the respective countries and, if required, provide proof of this to the concerned TRATON brand(s). Concerned TRATON brands shall be informed immediately if there is any deviation from this, e.g. loss of permits or loss of certification.

If the Request for Quotation (RFQ) seems to be missing information in the enclosed documentation, then the Organisation has to request complementary information from the Purchaser.

By submitting a tender/quotation to a brand of the TRATON group, the Organisation acknowledges having read, understood and agreed to comply with all requirements and demands set forth in this CVS10.

In the part price offer, all quality assurance activities and measures needed to reach for zero defects in manufacturing and deliveries (see reference documents) are to be included.

1.1.1 Documentation*

See Formel Q Konkret. No additional Q requirements in regard to Formel Q.

1.1.2 Correspondence and contact person*

All communication shall be submitted in English. Contact persons at Organisations shall be able to communicate with the Customer in English both verbally and in writing. Other languages might be accepted when allowed by the Customer.

1.1.3 IT systems*

Supplier portals are important tools for communication and information sharing. They allow access to Customer standards and manuals and they are the portals from which WEB-based applications such like eQ2 can be reached. Organisations shall arrange access for enough

qualified staff members to the communication platforms, to secure that Customer's requirements regarding response times and availability can be fulfilled.

To assure the actuality of information and contact persons and their access in the supplier portals and the eQ2 application, a documented validation routine has to be carried out by the Organisation after relevant staff changes but at least two times per year. A documented carryover routine for the administrators functions (portal and eQ2) is mandatory.

1.1.4 Compliance with environmental, material, statutory and regulatory regulations*

1.1.4.1 Restricted substances in delivered parts and components

Organisations are responsible, and shall have a documented routine, for monitoring the changes in the list of substances (GADSL-Global Automotive Declarable Substance List).

The Organisations are responsible for collecting Material Data Sheet (MDS) declarations from Suppliers even when Customer assigned parts are involved.

1.1.4.2 Reporting of part material composition

MAN:
The corresponding IMDS standard is M 3212 and MAN 239. The VW standards mentioned in chapter 1.1.4 are not applicable for MAN.

Scania:
A submission of the latest accepted MDS by the Customer is required with each PPAP/ PQA request. The Part Material Composition shall be reported into IMDS by the Organisations after the serial order was received and latest 4 weeks prior to the PPAP submission date. Corresponding IMDS standard is STD4352 including STDs referred to. The VW standards mentioned in chapter 1.1.4 are not applicable for Scania.

VW C&O:
The corresponding IMDS standard is according to VDA 2 Chapter 8.

1.1.5 Use of recycled material*

See Formel Q Konkret. No additional Q requirements in regard to Formel Q.

1.1.6 Requirements for supplier compliance with ESD regulations*

MAN: VW 80132 not applicable. The relevant MAN standard is M 3431

Scania: VW 80132 not applicable. This is included and followed up in Scania Product Specifications.

1.1.7 Cybersecurity management*

See Formel Q Konkret. No additional Q requirements in regard to Formel Q.

1.2 Request documents*

All quotations submitted by Organisations shall include at least the following items:

- D-U-N-S® Number (mandatory) of the Organisation and the Customers Organisation/creditor no. (Scania or MAN depending RFQ request and when available)
- Manufacturing location (D-U-N-S® Number) and IMDS company ID.

- Manufacturing concept description (e.g. type of process, flow chart, factory layout, preliminary control plan, material requirements
- Quality Assurance time plan (incl. testing & method)
- Weeks needed between published PPA/PPAP order to submission date of completed PPA/PPAP sampling
- For Scania and common sourcing projects: Supplier selection for special processes with Scania's "Customer approved sources form" (automatically provided with each RFQ)
- Compliance statement CVS10 (attached to this CVS10 and automatically provided with each RFQ)
- For MAN and common sourcing projects MAN's "Consolidated checklist" (automatically provided with each RFQ)

The above stated are minimum requirements. More information may be required upon request from the Customer.

- For Organisations of low-volumes (e.g. for special applications, customised truck & bus solutions and industrial & marine engines), the existing requirements can be adapted as per the product and process in agreement with the quality Organisation of the sourcing TRATON brand.

1.2.1 Supplier's duty to obtain information*

See Formel Q Konkret. No additional Q requirements in regard to Formel Q.

1.2.2 Test equipment and gauges*

See Formel Q Konkret. No additional Q requirements in regard to Formel Q.

1.3 Supplier concept development*

See Formel Q Konkret. No additional Q requirements in regard to Formel Q.

1.3.1 Selecting sub-suppliers*

See Formel Q Konkret. No additional Q requirements in regard to Formel Q.

1.3.2 Logistics and packaging concept*

See Formel Q Konkret. No additional Q requirements in regard to Formel Q.

1.4 Quality framework agreement*

All Organisations developing or supplying automotive parts (for production, spare, service and/or remanufactured) which can be certified, shall be third party certified with IATF 16949. The certifications shall apply for all Organisation's manufacturing sites supplying direct or indirect to any TRATON involved brand.

Non-manufacturing Organisations, such as distributors, agents and traders or manufacturing Organisations supplying parts for special applications, e.g. customised truck & bus solutions and industrial & marine engines shall be third-party certified with ISO 9001 by an accredited third-party certification body.

Non-automotive Organisations and their Suppliers in the supply chain shall have certificates from the, for the Organisation relevant QMS certification bodies (relevancy to be judged by the Customer).

1.4.1 Responsibility in the supply chain*

See Formel Q Konkret. No additional Q requirements in regard to Formel Q.

1.4.2 Transparency in the supply chain*

See Formel Q Konkret. No additional Q requirements in regard to Formel Q.

1.4.3 Access to business and plant premises of sub-suppliers*

See Formel Q Konkret. No additional Q requirements in regard to Formel Q.

1.4.4 Special requirements

Requirements on special processes and products are valid for Scania designed parts. The requirements apply also for MAN designed parts in case of common sourcing projects.

Scania has defined a number of processes especially important for the quality of the end product. With reference to section 1.2 “Request documents*” and Scania’s “Customer approved sources form”, Organisations and Suppliers of certain products or processes, is subject to a special approval process.

The processes and requirements for special processes are defined in Scania standard STD4584.

1.4.5 Record retention

Quality performance records (for example control charts, inspection and test results) shall be kept for the current year plus two calendar years.

Records of internal quality system audits, product audits, layout inspection (also called “requalification”) and functional testing and management review shall be kept for the current year plus two calendar years.

1.5 External service providers*

See Formel Q Konkret. No additional Q requirements in regard to Formel Q.

2 Quality criteria for award of contract*

2.1 Elements of assessment criteria*

See Formel Q Konkret. No additional Q requirements in regard to Formel Q.

Scania:
Formel Q Capability Software is not valid for Scania

2.2 Safeguarding measures in conjunction with award of contract*

See Formel Q Konkret. No additional Q requirements in regard to Formel Q.

2.3 Concept Responsibility Agreement*

See Formel Q Konkret. No additional Q requirements in regard to Formel Q.

VW C&O:
Items related to field problems will be analysed on each case with Quality and Technical Assistance Team.

3 Cooperation with suppliers during the product emergence process*

Depending which TRATON brand places the purchasing order, following part approval routines are accepted:

MAN and VW C&O:
VDA publications “Quality Management in the Automotive Industry”.

Scania:
IATF Automotive Core Tools, Formel Q New Parts Integral (QPNI) is not valid.

3.1 New parts integral qualification program*

3.1.1 MAN

QPN Integral is orientated around the MAN product development process (MAN PEP) milestones. This is similar in structure to VW PEP but contains commercial vehicles-specific details.

3.1.2 Scania

APQP (Advanced Product Quality Planning) shall be used by the Organisations for the introduction of new parts or components, as well as part modifications and process changes. The plan shall be according to the principles defined in the APQP Manual.

3.2 Quality planning*

3.2.1 Part history

A part history shall be maintained, beginning with the initial production run for the pre-production phase. All part modifications, sampling notes, approvals and optimisation measures shall be recorded therein.

3.2.2 Project follow up

In the ePPAP module of the eQ2 system the Customer defines activities (milestones) for which the Organisation is obliged to set planned finish dates. This is requested so that Organisation’s progress can be followed in APQP/MLA and PPA/PPAP preparations. When performances in the project are below expectations and delays occur, the Organisation shall report a recovery plan to the designated Customer project leader in order to fulfil the agreed PPA/PPAP delivery date.

3.3 Production process and product release (PPF)*

3.3.1 Components requiring certification*

MAN: LiOn is not used for MAN. China Certificates (e.g. CCC) and Factory Inspection Reports are to be uploaded in eQ2 in the course of PPAP.
Updates of China certificates (e.g. CCC) and Factory Inspection Reports are to be sent to ccc@man.eu immediately.

Scania: LiOn is not used for Scania. China certificates (e.g. CCC) are requirements for Development Process and included in Scania Product Specifications.

3.3.2 Part approval

All samples requested, and needed for the PPA/PPAP approval process, shall be delivered free of charge.

The Organisation shall provide all samples, including the required proof and documents, which are needed for any approval free-of-charge and deliver them carriage free. This can also include C-samples for grain, C-samples for mock up (Meisterbock)/Matching/AAR/Cubing. The precise scope of the documents, as well as the type and number of sample parts can be found in the initial sample order or in the “sampling documentation” checklist.

Appearance Approval shall be attained, where required, according to the brand-specific standards. Parts (new and carry-over) submitted for evaluation (in repeated loops when needed) and to be used as Master Sample (kept on Organisations site), are a part of the part approval work.

BeOn system is used by VW C&O only and not used by MAN/Scania. For MAN/ Scania PPAP documentation, Part Submission Warrant (PSW) and supporting data as referred to from the order and/or requested in ePPAP, shall be submitted in the ePPAP module of the eQ2 application, reachable from Customers portal. The issues to be submitted are specified.

MDS is a crucial aspect of the approval process. With reference to section 1.1.4.2 “Reporting of part material composition” the Organisation is expected to submit the MDS in due time.

3.3.2.1 Part weight

The part weight shall be submitted in the ePPAP module of eQ2 or documented in the initial sampling documents depending applicable routine and shall correspond with the weight reported in the IMDS system.

3.3.3 MAN

In the case of non-metallic materials, proof of inspection results shall be deemed sufficient on the basis of the material identification characteristics agreed within the scope of the material approval as per MAN 239 and the acceptance limits in accordance with the material identification sheet.

Generally, for parts that are surface treated, an untreated part shall be supplied for initial sampling.

3.3.3.1 Elements of sampling process

Definition of the submission documents is performed based on VDA Volume 2 and as per MAN-specific criteria. The Organisation is provided with a copy of the sampling documents checklist at the sampling planning stage or, at the very latest, by the ePPAP case published by MAN.

The proof required for catalogue parts, which are elements of the product, shall be agreed with MAN.

The technical approvals defined by MAN in MAN 239 are analogous to Volkswagen AG’s prototype permit obligation (“Baumustergenehmigungspflicht”). Where appropriate, it may be necessary to obtain the following approval and append the documentation:

- material approval for non-metallic materials (TUC approval, MAN Nuremberg)
- surface treatment (TUC approval, MAN Nuremberg)
- development approval of the C sample priority parts/RGA-A parts
- MAN design (design approval)

- approval of highly stressed engine components as per M 3458
- model approval by the relevant authority
- if necessary, deviation approval

3.3.3.2 Results of the sampling process

If the Organisation is not able to meet individual deadlines, quality targets or other requirements specified in sampling plan, this information shall be passed on to MAN in written form as soon as possible, i.e. definitely before delivery of the sample parts.

In the event of unavoidable deviations, the Organisation shall first obtain a special release in writing from MAN. The completed special release, signed off by MAN, shall be added to the PPA documentation.

Additional effort on MAN side for incomplete or rejected PPAs without prior consent will be charged.

3.3.4 Scania

3.3.4.1 PPAP approval, submission level 4

PPAP shall be used for the part approval prior to Organisation's production and deliveries commence to Scania according to the AIAG PPAP manual 4th edition.

The complete PPAP file shall at all times reflect the actual production process.

The complete PPAP file, supporting data and relevant master samples shall be retained at the Organisation.

3.3.4.2 Significant Production Run

A Significant Production Run (SPR) shall be carried out according to the PPAP manual 4th edition. The size of the significant production run shall be 1 to 8 hours continuous production of minimum 300 pieces, unless otherwise agreed upon with the designated SQM. Scania shall be informed with a 2 weeks prior notice of the production run date to allow attendance.

One hundred percent inspection shall apply for 'very' low volume components and parts. (See also Appendix H – Truck Industry – Specific Requirements – Significant Production Run - of the PPAP manual 4th edition).

See the PPAP manual 4th edition, section 2.2.11.3 "Acceptance Criteria for Initial Study" regarding required Index level Cpk >=1.67.

In the case of Special Characteristics where no capability level can be demonstrated, 100% inspection is required. (See VDA 6.3 P6.2.3)

The SPR report shall be available on request by the designated SQM.

3.3.4.3 Run at Rate

The purpose of the Run at Rate is to verify that the approved production process can continuously produce parts/components that meet the Scania quality and technical requirements at the planned full production rate (see STD4250 "Run at Rate").

The Run at Rate can be done after PPAP. Scania may require that the Run at Rate is performed in combination with Significant Production Run.

The Run at Rate shall be performed when requested by Purchasing departments, Supplier Quality and/or Capacity Management.

3.3.4.4 Master sample

The Organisation shall establish a documented procedure to define the controls needed for the identification, storage, protection, retrieval, retention and disposition of master samples.

The Organisation shall retain master samples, originating from the significant production run related to the PPAP of all delivered products, unless otherwise agreed in writing with the designated SQM.

See also PPAP manual 4th edition, section 2.2.15 “Master Sample”.

3.3.5 Part release

When the submitted documentation and (possible) samples are reviewed and checked, the Customer will take a decision if the part is qualified to be released.

Deliveries to Production Units and/or Spare Parts warehouses without a Customer approved part release (PPA/PPAP) are not allowed.

3.4 Software*

MAN: See Formel Q Konkret. No additional Q requirements in regard to Formel Q.

Scania: Requirements for Development processes, documentation and methods for Software including Functional Safety and Cyber Security are included in Scania Product Specifications.

4 Quality measures during series production*

4.1 Ongoing assurance of process capability*

See Formel Q. No additional Q requirements in regard to Formel Q.

4.1.1 Tool management*

MAN:
Standard MAN 239 and M 3666 applies.

Scania:
The Supplier Change Request (SCR) routine shall be used including a submission of the issue in the eSCR module of eQ2. This to make a timely assessment of the tooling by Customer experts possible.

4.2 Product safety and product liability*

See Formel Q Konkret. No additional Q requirements in regard to Formel Q.

4.3 Products requiring documentation and special verification*

See Formel Q Konkret. No additional Q requirements in regard to Formel Q.

4.3.1 D/TLD verification*

The Organisation should, in close cooperation with the Customers representative, establish additional Special Characteristics based on FMEA, which are sensitive to the Organisation’s process (and product when design responsible) and can affect safety, environment, fit, form, function or appearance. See IATF16949 Annex A.2 Control Plan – Product control or VDA 6.3.

MAN: During the product and process development procedure, characteristics that are critical to safety, authorities, function (especially breakdown relevant) and other important Q-characteristics shall be defined. All those important/critical characteristics are to be included in the control plans. This is particularly relevant for parts marked by MAN as S/D/P parts (cf. M 3010, all parts).

Scania: Customer designated Special Characteristics are marked:

- <C> Critical and <M> Major, according to STD3944 “Classification of Requirements - COR”.
- <L> Regulated characteristics according to STD4178 “Regulated characteristics”.

It shall be noted that Scania uses <L> marking rules that differ from <C> and <M> marking rules. See Scania STD4178 and STD3944 for clarification

4.3.1.1 Labelling of technical documentation*

See Formel Q Konkret. No additional Q requirements in regard to Formel Q.

4.3.1.2 Self-audit – products requiring documentation (D/TLD self-audit)*

See Formel Q Konkret. No additional Q requirements in regard to Formel Q.

4.3.1.3 Product group specification / product selection*

See Formel Q Konkret. No additional Q requirements in regard to Formel Q.

4.3.1.4 Assessment of individual questions / audit results*

See Formel Q Konkret. No additional Q requirements in regard to Formel Q.

4.3.1.5 Audit report / action plan*

See Formel Q Konkret. No additional Q requirements in regard to Formel Q.

4.3.2 Verification – chemical products*

The Chemical Compliance Assessment is to be carried out on a supplier basis, not individually for each chemical product or substance. The VW standard VW 50156 is not applicable for MAN and Scania.

4.3.2.1 Chemical Compliance Assessment (CCA)*

Carrying out a CCA is only relevant for those suppliers who deliver chemical products/ substances in a form that changes their physical state, e.g. when their aggregate state are liquid, gaseous or particulate and whose form can be changed during customers use. The CCA is only to be sent on customers request.

4.4 Identification and management of problems*

As part of the Organisation’s responsibility to maintain quality, the Organisation shall advise, or take action, to prevent the quality of the deliveries being impaired during transport or by corrosion.

When parts are sensitive to aging (e.g. corrosion), an extra check is demanded before delivery to the Customer.

The product quality after production shut downs (e.g. holiday breaks, vacation periods, etc.) should be secured with extra quality checks when starting production again at Organisations. The routine shall be documented.

4.4.1 Complaints management*

See Formel Q Konkret. No additional Q requirements in regard to Formel Q

4.4.1.1 0km complaints*

4.4.1.1.1 Inspection and notification obligations/notice of defects

MAN: Immediately after receipt of the delivery, insofar as this is feasible in the orderly course of business, MAN shall check whether the goods correspond to the quantity and type ordered, and whether there are any externally visible signs of transport damage or other identifiable defects. If MAN finds any damage or defects during the aforementioned checks, it shall notify the Organisation of this immediately. If a defect is discovered later, MAN shall also report this immediately.

Scania: The inspection and notification obligations at the transition point of risk are described in the Scania standards STD4172 Scania Logistics Manual.

4.4.1.1.2 Measures to be taken

In the event that the Customer files a complaint, it is required that containment measures and remedial measures are to be implemented and documented immediately. For every cause of failure a remedial measure shall be defined, scheduled, implemented and its effectiveness checked. Included are any measures necessary at the respective Suppliers in the supply chain to avoid recurrence.

The Customer shall provide the Organisation with sample(s) of defective goods, when requested (and possible), all relevant information and what the demands are. The Organisation must conduct an examination of the defect parts in the expected time window and feedback the result without delay.

The rejected part(s) will be sent back to the Organisation (when possible). The Customer and the Organisation can agree upon a different procedure, like scrapping the parts by the Customer.

VDA’s volume 4 problem solving method 8D is expected to be used for problem solving. The filled out 8D document can be uploaded, as supporting document, into the eQuality report when issued (eQuality module is a part of the eQ2 application). A template can be provided by the Customer. However, a filled out 8D template does not replace the requirement to fill out the eQuality form with all required details.

Any sorting and reworking required shall generally be performed by the Organisation or by a sorting company agreed with the Customer and commissioned by the Organisation. Unavoidable immediate measures to ensure the continuation of production can be taken by the Customer and charged to the Organisation. The Organisation will be informed of such measures as soon as possible.

4.4.1.1.3 Complaint report

The eQuality complaint report has to be continuously updated to reflect the actual status in the problem-solving process.

4.4.1.1.4 Further details for the handling of product quality deviations from Organisations

Scania:

See Scania standard STD4457 “Handling of Product Quality Deviations from Suppliers

VW C&O:
The VW C&O complaints shall be followed by KPM–Halle system.

4.4.1.2 Reworking and sorting activities*

See Formel Q Konkret. No additional Q requirements in regard to Formel Q.

4.4.1.3 Field complaints*

4.4.1.3.1 Analysis of defective parts

The analysis of defect parts is essential for the allocation of the responsibility and the associated share of costs of the Organisation. The customer will determine together with the Organisation the procedure for defective part analysis, like the number of parts to be analysed, the creation of samples, the focus on reference markets or which party performs the examination. If the Organisation does the analysis on its own, it shall perform the examination according to accepted standards.

4.4.1.3.2 Return of defective field parts

The return of defective parts is only possible where the corresponding parts are still available in the (dealer) workshops or at the Customer. In all other cases, the Organisation shall retain the defective parts accumulated from the time of the request.

4.4.1.3.3 Disposal of defective field parts

MAN:
Following approval by MAN – at the earliest after 90 days – any defective parts held by the Organisation are to be disposed of properly in accordance with the country-specific regulations (in Germany according to the Recycling Management and Waste Law) by the Organisation itself or by specialist waste disposal companies commissioned by the Organisation. At the request of MAN, evidence of any disposal carried out shall be provided at any time. If the Organisation has recognised parts as defective, these shall become the Organisation's property. Approval from MAN is not required for disposal of these parts. Following the legal duty of field data observation the Organisation shall bear the costs incurred in connection with the defective part analysis itself.

4.4.1.3.4 Costs

The handling of claims due to complaints is described in section 4.9 “Handling of warranty claims and special situations”.

4.4.1.4 Analysis parts with export or transport restrictions*

See Formel Q Konkret. No additional Q requirements in regard to Formel Q.

4.4.1.5 Sonderfreigabe/Exemption from requirement

In exceptional cases, i.e. to maintain, or start, the production, a request can be submitted for a special release of parts not fulfilling all requirements. The request form can be found at www.vwgroupsupply.com. The Customer reserves the right to charge the Organisation with a fee for handling the request to allow deliveries of parts not fulfilling all requirements if the organisation has caused the deviation request. Shipments to the Customer are only allowed with an approved allowance in writing and when material boxes are properly marked according to the instructions published on the supplier portals.

In cases such as these, the Organisation shall plan and execute remedial measures. The assembly of parts/components by Customers that do not fulfil all requirements, should be limited to the coverage of the period until parts are available that do fulfil all requirements.

Reworked parts shall fulfil all specifications and requirements.

MAN:
Following the instructions on the request form, the request for a “Sonderfreigabe” has to be addressed to MAN Quality department which can be found on ONE.KBP.

Scania:
The request form for an “Exemption From Requirement (EFR)” shall be addressed to the responsible purchaser for the part which can be found on SSP.

4.4.2 Early warning system*

See Formel Q Konkret. No additional Q requirements in regard to Formel Q.

4.4.3 Obligation to conduct own field observation*

See Formel Q Konkret. No additional Q requirements in regard to Formel Q

4.5 Continuous improvement process (KVP)*

See Formel Q Konkret. No additional Q requirements in regard to Formel Q.

4.6 Change management*

Scania:

All intended changes by Organisations to a product and/or process, used to produce the ordered parts, shall be submitted to Scania according to the Scania SCR (Supplier Change Request) procedure.

The SCR shall be accepted (Yes or Yes, On condition) and the PPAP should be updated and approved by Scania in the ePPAP system before deliveries to Scania commence.

See section 3 of the PPAP manual 4th edition “Customer notification and submission requirements”.

Quality Assurance measures taken by the Organisations after discrepancies reported in eQuality, are exempted from the SCR routine if the approval for the corrective action plan was given in the eQuality claim report.

To secure traceability and PPAP, the SCR routine includes changes affecting Organisations actual MDS report and product/process changes related with new versions of Scania Standards.

The request shall be submitted in the eSCR module of the eQ2 application, accessible via the Scania Supplier Portal.

4.7 Layout Inspection*

See Formel Q Konkret. No additional Q requirements in regard to Formel Q.

4.8 Lessons Learned*

See Formel Q Konkret. No additional Q requirements in regard to Formel Q.

4.9 Handling of warranty claims and special situations*

Scania:
If the Organisation and the Customer have entered into a “General Supply Contract” including the “SCANIA Terms of Purchase for Production Material (Automotive Parts)” (hereinafter collectively referred to as “GSC”), the provision(s) in the GSC governing warranty claims and special situations shall, in case of conflict, take precedence over the provision(s) in section 4.9 of CVS10. For avoidance of doubt, if the Organisation and the Customer have not entered into a GSC including the “SCANIA Terms of Purchase for Production Material (Automotive Parts)”, the provision(s) stated in CVS10 concerning warranty claims and special situations in section 4.9 of CVS10 shall apply.

VW C&O:
See Formel Q Konkret. No additional Q requirements in regard to Formel Q.

4.9.1 General remark

The terms and conditions laid down below govern the processing and settlement of defect rectification costs. The aim is to simplify the processing of claims relating to liability for defects and to thus lower the analysis and logistics costs incurred. Claims resulting from product liability law, tort, actions performed without due authority and/or indemnification between joint and several debtors shall remain unaffected.

The contribution of the Organisation regarding the share to bear for the recovery costs will be determined from case to case by a team of experts on the basis of the principles laid down in section 4.9 “Handling of warranty claims and special situations”.

0km complaints:

0km complaints are carried out by the issuing production unit(s) and after sales warehouse(s).

Field claims:

MAN:
The recourse team located in the central group quality department is responsible for setting up and presenting field claims to the Organisation.

Scania:
The Supplier Recovery Coordinator at Purchasing Supplier Quality is responsible to coordinate the work and presents the claim letter to the Organisation in regard to field claims.

4.9.2 Liability of the Organisation

The Organisation shall warrant that the parts it delivers are free of defects at the transfer of risk.

The Organisation is thus e.g. liable for defects that are due to shortcomings in the design, materials and/or manufacture of goods supplied, and for defects in them caused by deviations from agreed specifications. The Organisation’s liability for defects in goods supplied shall not include defects that are due to materials, design information or technical specifications received from the Customer, or to incorrect assembly or disassembly or faulty installation, storage, handling, use or repair by the Customer or the end Customer.

4.9.3 Warranty period

The warranty period is 24 months and ends 36 months after the delivery was made. The respective warranty period shall begin

- upon first registration of the vehicles in the case of parts for initial equipment,
- upon installation in a vehicle/unit in the case of spare parts,

- upon commissioning in the case of installation in engines that are not used for road vehicles (ships, power units etc.).

4.9.4 Calculation of the Organisation's share of costs

Based on the results of the examination, the Organisation's share of costs is calculated.

Field parts:

For reasons of effectiveness and reduction of costs, the Organisation and the Customer may also use the results of the defective parts analysis to jointly determine the factor with which further similar defects shall be invoiced.

4.9.5 Costs to be reimbursed

The Customer will strive to keep costs due to defective parts delivered by the Organisation as low as possible. The Organisation might make own suggestions about how to handle the rectification of defective parts in order to keep the costs as low as possible.

In addition to statutory claims, the Organisation shall reimburse the Customer as follows.

0km Complaints:

The Organisation shall compensate the Customer for all and any costs, losses or damage incurred or suffered by the Customer, e.g.:

- the purchase price (material A-price),
- costs for repair and/or replacement of the defective goods (e.g. removal and installations costs),
- identification costs (costs of locating the affected parts, e.g. in warehouses or service),
- processing costs (costs incurred in addition to identification costs until detection of the defect, e.g. machining),
- landing costs of the replacement goods,
- administration costs,
- logistics and handling costs

Further costs that might occur shall be announced to the supplier and be agreed jointly.

Field claims:

The following costs are in general to be reimbursed:

- the purchase price (material A-price),
- additional costs 100% of the purchase price (material A-Price). By the additional costs all logistics and handling costs are covered,
- removal and installation costs: Average value of the time (composed of all defect parts cases within the relevant settlement period) x actual hourly wage rate of the executing organisation. The hourly wage rates will be reviewed and adjusted as appropriate to the beginning of each calendar year.

Further costs that might occur shall be announced to the supplier and be agreed jointly.

0km Complaints and field claims:

In addition the Organisation shall reimburse the customer for any additional damage that the Customer might claim compensation for, e.g. consequential losses for which it or its sub-contractors is/are responsible.

The costs for the return of defective parts shall in general be borne by the Organisation by taking into account its legal duty of field data observation.

In general the costs for analysis of defective parts shall be borne by each party itself.

If the repair of the defect part requires no replacement of the part (e.g. adjustment work), the expenses incurred for the rectification of the defect and for the purposes of the subsequent service shall be borne by the Organisation. In case of a defect within a piece of software delivered by or via the Organisation, the costs shall be handled in the same way as for a defect without parts replacement.

4.9.6 Billing of costs due to defective parts

0km complaints:
The Customer will claim the costs due to defective parts from case to case. The Customer shall provide the Organisation with the relevant data to comprehend the costs, which arise from the defective parts, and the cost calculation. The Organisation shall inform the Customer immediately in writing (within 5 days via the eInvoice system, which is a module within eQ2 application), about objections against the claimed costs.

VW C&O: The costs resulting from quality failure at 0km are computed and entered into the KPM System through the Inspection Reports. Debits are charged by the Supplier Debit System.

Field claims:
The Customer will claim the defect rectification costs regularly. The Customer and the Organisation can arrange the frequency on a case by case basis if needed. The Customer shall provide the Organisation with the relevant data to comprehend the costs, which arise from the defective parts, and the cost calculation.

4.9.7 Serial complaints and recall actions on road safety reasons

Serial complaints and/or recall actions on road safety grounds bear the risk of high costs. As soon as the Customer believes there to be a serial complaint that is the result of a defect on parts delivered by the Organisation, the Customer shall inform the Organisation of this as quickly and as detailed as possible. The costs shall be agreed with the Organisation on a case-by-case basis and a mutual agreement shall be concluded.

MAN:
A serial defect exists if MAN and the Organisation, on the basis of the defect symptoms and the cause of a defect that has occurred, jointly determine that this defect can occur in all supplied parts or in a certain proportion of the supplied series (e.g. batch or production lot).

Notwithstanding this, a serial defect shall exist if the same defect is found during the useful life of the vehicle/unit within the warranted mileage or service life (normally in the component specification) in at least

- 10% of secondary parts,
- 5% of functional parts,
- 3% safety and engine parts,

of all supplied parts or a certain part of series production (e.g. batch or production lot). The definition of secondary, functional and safety parts can be found in MAN 239. If restriction to a batch or production lot is not possible, the defect rate shall be calculated on the basis of all similar defects as regards defect symptoms and/or cause that are determined within a maximum period of 24 months before detection of the similar defects. The basis for calculation shall be the quantity of all parts delivered in 24 months before the last incoming goods delivery

(total of similar defects/delivery quantity in 24 months before last incoming goods delivery x 100%).

Contrary to the warranty period stated in 4.9.3, the warranty period for serial defects is 48 months and ends 60 months after the delivery was made.

4.10 Technical Supplier Reviews*

See Formel Q Konkret. No additional Q requirements in regard to Formel Q.

4.11 Critical Supplier program*

See Formel Q Konkret. No additional Q requirements in regard to Formel Q.

5 Terms and Abbreviations*

AAR	Appearance Approval Report
APQP	Advanced Product Quality Planning”
BeON	Bemusterung OnLine
Common sourcing	Sourcing for more than one brand
EFR	Exemption From Requirement
eQ2	Web-based B2B tool consisting of various functional modules like ePPAP, eQuality, eInvoice
eSCR/SCR	(electronic) Supplier Change Request
IMDS	International Material Data System
KPM-Halle	Konzern Problem Management for Parts
M xxx/MAN xxxx	Company standard of MAN
MAN	MAN Truck and Bus SE (whole group including for example MAN South Africa)
MAN T&B KSW	MAN Truck & Bus SE Customer special request
MDS	Material Data Sheet
MLA	Maturity Level Assurance
ONE.KPB	Volkswagen Konzern Business Platform
PEP	Product creation process
PPA	Production process and product approval
PPAP	Production Part Approval Process
PQA	Proof Of Quality Assurance
PSW	Part Submission Warrant
PTD	MAN Portal for Technical Documentation
QPN Integral/QPNI	Formel Q New Parts Integral
RFQ	Request for quotation
RGA (MLA)	Reifegradabsicherung (Maturity assurance process)
Scania	Scania CV AB (Whole Scania group including for example Scania Latin America)
SQA	Supplier Quality Assurance (MAN)
SQM	Supplier Quality Manager (Scania)
SSP	Scania Supplier Portal
STDxxx	Company Standard xxx of Scania
TRATON	TRATON SE
TUC	Code for identity sheet of the Nuremberg material technology, division chemistry
VDA	Verband der Automobilindustrie (Association of the Automotive Industry)
VW C&O	Volkswagen Caminhões e Ônibus

6 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

Document designation	Title
APQP Manual 2nd edition	Advanced Product Quality Planning Manual
AIAG Automotive Core Tools	PPAP, APQP, FMEA (AIAG/VDA), MSA, SPC
IATF16949	Quality Management Systems requirements for automotive production and relevant service parts Organisations
ISO 9001	Quality Management System
MAN 239	General terms of delivery for purchased parts, Applicable standards and guidelines
M 3010 (all parts)	Process for compliance with regulations and safety provisions for MAN products
M 3018	Corrosion protection and coating systems for purchased parts, Truck and Bus
M 3212	Requirements for material data sheets in the International Material Data System (IMDS)
M 3335	Provision of company standards for external users, Process instruction
M 3431	Guideline to Prevent Damage to Electronic Systems by Electrostatic Discharge (ESD)
M 3458	Highly stressed engine components with special release process and qualification inspection requirements, Component group-specific qualification requirements inspections
M 3666	Labelling of tools, auxiliary tools, test equipment and gauges, General requirements (nameplate)
PPAP 4th Edition	Production Part Approval Process
STD3868	Scania Customer Requirements
STD3944	Classification of requirements - COR
STD4172 (all parts)	Scania Logistical manual
STD4178	Regulated characteristics
STD4250	Run at Rate
STD4319	Accelerated corrosion test - Atmospheric corrosion
STD4352	Reporting of Substances and Material Composition of Product-Related Parts to IMDS
STD4400	Prohibited and restricted substances in Scania Products
STD4457	Handling of Product Quality Deviations from Suppliers
STD4530	Additional requirements for wiring harness Suppliers
STD4584	Requirements for Special Processes
VDA Volume 2	Production process and product approval (PPA)

Document designation	Title
VDA Volume 4	Quality Assurance in the Process Landscape
VDA Volume 6.3	Process Audit
VW Formel Q series	Quality Management Agreement Between the Companies of the Volkswagen Group and its Suppliers

Annex A (normative) Compliance Statement to CVS10

Note: The original matrix to fill-in can be found in the Quotation system STAR. Some cells can contain additional information.

Compliance Statement regarding Customer Requirements TRATON CVS10 release date 2022-03		
For procurement enquiry :	**Date:**	
Global / Forward Sourcing No. :	**D-U-N-S®:**	
	Supplier Name:	
Updated by (name / function):	Y	when setting Y cell turns to green
	N	when setting N cell turns to red
General compliance statement to all regulations in CVS10		when setting Y here, all cells turn to green
Requirements (Headlines from CVS10)	**Compliant? mark with Y or N**	**Supplier comments when not compliant**
Scope		
0 General Terms		
0.1 Additional reference documents*		
1 Request, offer preparation and general requirements*		
1.1 Offer prerequisites*		
1.1.1 Documentation*		
1.1.2 Correspondence and contact person*		
1.1.3 IT systems*		
1.1.4 Compliance with environmental, material, statutory and regulatory regulations*		
1.1.4.1 Restricted substances in delivered parts and components		
1.1.4.2 Reporting of part material composition		
1.1.5 Use of recycled material*		
1.1.6 Requirements for supplier compliance with ESD regulations*		
1.1.7 Cybersecurity management*		
1.2 Request documents*		
1.2.1 Supplier's duty to obtain information*		
1.2.2 Test equipment and gauges*		
1.3 Supplier concept development*		
1.3.1 Selecting sub-suppliers*		
1.3.2 Logistics and packaging concept*		
1.4 Quality framework agreement*		
1.4.1 Responsibility in the supply chain*		
1.4.2 Transparency in the supply chain*		
1.4.3 Record retention		
1.4.4 Special requirements		
1.4.5 Record retention		
1.5 External service providers*		
2 Quality criteria for award of contract*		
2.1 Elements of assessment criteria*		
2.2 Safeguarding measures in conjunction with award of contract*		
2.3 Concept Responsibility Agreement*		
3 Cooperation with suppliers during the product emergence process*		
3.1 New parts integral qualification program*		
3.1.1 MAN		
3.1.2 Scania		
3.2 Quality planning*		
3.2.1 Part history		
3.2.2 Project follow up		
3.3 Production process and product release (PPF)*		
3.3.1 Components requiring certification*		
3.3.2 Part approval		
3.3.2.1 Part weight		
3.3.3 MAN		
3.3.3.1 Elements of sampling process		
3.3.3.2 Results of the sampling process		
3.3.4 Scania		
3.3.4.1 PPAP approval, submission level 4		
3.3.4.2 Significant production run		
3.3.4.3 Run at Rate		
3.3.4.4 Master sample		
3.3.5 Part release		
3.4 Software*		
4 Quality measures during series production*		
4.1 Ongoing assurance of process capability*		
4.1.1 Tool management*		
4.2 Product safety and product liability*		
4.3 Products requiring documentation and special verification*		
4.3.1 D/TLD verification*		
4.3.1.1 Labelling of technical documentation*		
4.3.1.2 Self-audit – products requiring documentation (D/TLD self-audit)*		
4.3.1.3 Product group specification / product selection*		
4.3.1.4 Assessment of individual questions / audit results*		
4.3.1.5 Audit report / action plan*		
4.3.2 Verification – chemical products*		
4.3.2.1 Chemical Compliance Assessment (CCA)*		
4.4 Identification and management of problems*		
4.4.1 Complaints management*		
4.4.1.1 0km complaints*		
4.4.1.1.1 Inspection and notification obligations / notice of defects		
4.4.1.1.2 Measures to be taken		
4.4.1.1.3 Complaint report		
4.4.1.1.4 Further details for the handling of product quality deviations from organisations		
4.4.1.2 Reworking and sorting activities*		
4.4.1.3 Field complaints*		
4.4.1.3.1 Analysis of defective parts		
4.4.1.3.2 Return of defective field parts		
4.4.1.3.3 Disposal of defective field parts		
4.4.1.3.4 Costs		
4.4.1.4 Analysis parts with export or transport restrictions*		
4.4.1.5 Sonderfreigabe / Exemption from requirement		
4.4.2 Early warning system*		
4.4.3 Obligation to conduct own field observation*		
4.5 Continuous improvement process (KVP)*		
4.6 Change management*		
4.7 Layout inspection*		
4.8 Lessons learned*		
4.9 Handling of warranty claims and special situations*		
4.9.1 General remark		
4.9.2 Liability of the organisation		
4.9.3 Warranty period		
4.9.4 Calculation of the organisation's share of costs		
4.9.5 Costs to be reimbursed		
4.9.6 Billing of costs due to defective parts		
4.9.7 Serial complaints and recall actions on road safety reasons		
4.10 Technical supplier reviews*		
4.11 Critical supplier program*		

Annex B (normative) Customer Approved Sources Form

Note: The original form can be found in the Quotation system STAR.

Customer Approved Sources Form

1. To be sent in with quotations when it concerns Scania sourced and designed parts or MAN designed for common sourcing (see CVS10)
2. If nominated and when order received, immediately after acceptance of the received PPAP request, the Customer Approved Sources Form provided with the quotation is to be uploaded at Scania section 17 Records of Compliance.
3. Only after written approval of the designated SQM/QMP, this Customer Approved Source Form is allowed to be replaced with a new issue (in the PPAP). The written approval from the SQM/QMP shall be uploaded with the updated version.

Global / Forward Sourcing Nr.:		Supplier DUNS number:	Issue number:
Scania Supplier No.:	Supplier name:	Part No.:	Part description:

Surface treatment (Scania STD4310)

☐ *) Not applicable
☐ In-house surface treatment
☐ External surface treatment
Name and location of sub-contractors (List Scania approved sub-contractors is published on Scania Supplier Portal)

Verification of corrosion resistance according to:
STD4113 Organic surface treatment / STD 4165 Flake coatings and electrolytic zinc coatings/
STD4446 Anodised aluminium

Corrosion test to be verified on:
☐ Specific part
☐ Similar part in part family (STD4310 4.7 – Part family) *Enter part no.....*

Heat treatment (Scania STD4259)

☐ Not applicable
☐ Heat treatment agreement signed
If no signed agreement
☐ In-house heat treatment
☐ External heat treatment
Name of external company/ies

Steel works (Scania STD4273)

☐ Not applicable
☐ Steel supplier agreement signed
If no signed agreement
☐ In-house steel work
☐ External steel work
Name of external company/ies

Forgings (Scania STD4150)

☐ Not applicable
☐ In-house forging
☐ External forging
Name of external company/ies:

Ductile iron casting (Scania STD4477)
☐ Not applicable ☐ In-house casting ☐ External casting Name of external company/ies:
Shot peening of Scania designed parts (Scania STD4451)
☐ Not applicable ☐ In-house shot peening ☐ External shot peening Name of external company/ies:
Additional Requirements for Suppliers of Gears and Shafts (Scania STD4567)
☐ Not applicable ☐ In-house machining ☐ External machining Name of external company/ies:
Additional comments

Supplier signature (Quality Mgr or similar)	Date:
	Email address:
Clarification of signature (name):	Telephone number

*) Double left click the input box and mark Default value "Checked" instead of "Not checked" when applicable