

VDA | Verband der
Automobilindustrie

6

Quality Management in the Automobile Industry

Product Audit

Part 5

Guidelines



Qualitäts Management Center
im Verband der Automobilindustrie

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Product Audit

Guidelines

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Translations

This document will also appear in other languages. Please contact the VDA-QMC for the latest position.

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Oberursel, August 2008

Verband der Automobilindustrie e.V. (VDA)

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1 Preface

Since the appearance of the first edition in April 1998 conditions for manufacturers and suppliers to the automobile industry have changed markedly. Automobile-specific requirements laid down in standards with international validity, such as ISO/TS 16949, now form the basis for quality management in the automobile industry.

From the experience gained with the introduction of the ISO/TS requirements it has been seen that the difference between the terms "product audit" and "requalification check" is open to interpretation. This present volume sets out a recommendation in differentiating between the terms.

The new edition is based on the requirements of ISO 19011 : "Guidelines for Quality and/or environment management systems auditing".

Unlike the first edition, this current volume does not contain concrete examples. Instead, a code of practice has been created for the management of product audit programs, which will enable companies to develop their own systems to suit their particular products.

Meanwhile, the quality of products is ensured by the consistent implementation of preventive quality planning methods. The task of a product audit is therefore not merely to ensure quality but also to provide proof of compliance.

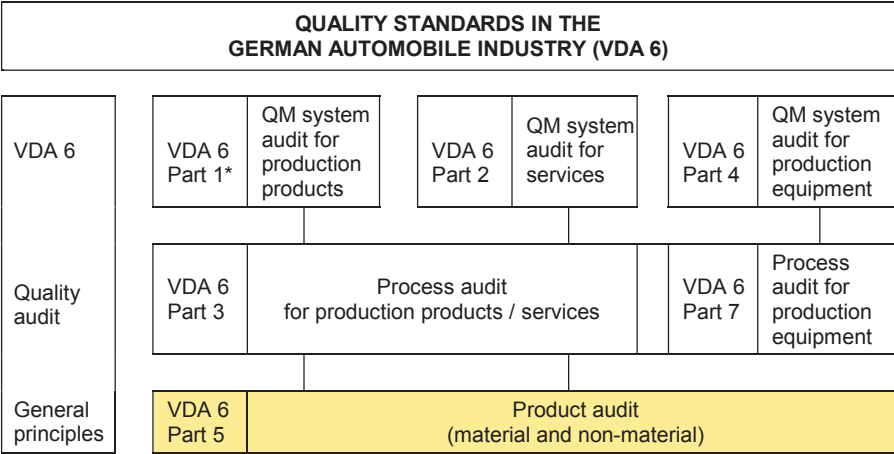
More stringent customer demands, safety requirements, legal regulations and the ever-increasing use of electronic components and software lead to greater product complexity.

The expectations of end-users can no longer be contained merely in specifications. Vehicle manufacturers and suppliers to the automobile industry are expected to identify these product characteristics on their own responsibility and to reproduce them in their products. This focus must also be borne in mind when carrying out products audits.

As part of the process chain the product audit should illustrate the quality level of the products manufactured in-house and outside.

This 2nd edition of VDA Volume 6.5 : "Product Audit" replaces the 1st edition.

A production process consists of a series of many individual processes. It must take into account a range of rational and economic aspects in order to achieve the optimum in terms of quality, price and delivery. To ensure this, the VDA has issued a code of practice for quality standards in the automobile industry, as follows :



(VDA 6) Code of practice for quality standards in the automobile industry

2 Objective and area of application

The product audit serves as a management tool for the independent evaluation of products from the customers' viewpoint and to provide assurance against liability claims arising from deficiencies in products and property. It also indicates the potential for continuous improvement.

In a product audit the specified characteristics of the product are checked (e.g., conformance with the parts list; product dimensions; materials; functionality; reliability; packaging; identification) and known customer expectations in a specified condition (e.g., packed; the product as new; after use; etc.).

Product audits can be carried out at any stage in the manufacturing process :

- on semi-finished or finished items from an individual process
- on components (e.g., a bolt, hose, crankcase, etc.)
- on assemblies such as a control unit, injection pump, auxiliary heater, motor, transmission, bodywork
- on the complete vehicle

A product audit is not intended as :

- a repetition of in-production inspection operations
- a means of direct process control
- general proof of the effectiveness of a quality management system

An important requirement for carrying out systematic and independent product audits is the presence of an appropriate organisational structure.

This code of practice describes the area of application of a product audit and gives suggestions for the management of an audit program. Essential audit activities are explained, together with requirements covering auditors.

A product audit highlights main areas for criticism and illustrates quality trends. It is sometimes possible to trace back to weaknesses in the system or process, paving the way for further audits such as process and system audits.

The product audit has only a limited amount in common with other product checks and inspection. The degree to which a product audit differs from other checks is set out in Table 1, as follows :

	Product audit Covered by the requirements of ISO/TS 16949 and VDA 6.1	In-process checks (e.g., monitoring process parameters, SPC, tensile strength, torques, etc...)	Requalification checks Covered by the requirements of ISO/TS 16949, Section 8.2.4.1
Purpose	The purpose of a product audit can be : <ul style="list-style-type: none"> to identify the potential for improvements to play the role of the customer, (internal & external) regarding the finished product to take account of items relevant to the customer (e.g., consider feedback from the field) to prove reliability requirements to prove the interplay of product characteristics (function check) to demonstrate characteristics not checked in the production control plan¹⁾ to demonstrate product characteristics which may influence customer satisfaction to demonstrate product characteristics checked via equivalents in in-process checks²⁾ to demonstrate packing and labelling 	Process control	To demonstrate compliance with the customer's specifications
Frequency of execution	To the internal audit program and as required	<ul style="list-style-type: none"> to the production control plan based on the production order 	<ul style="list-style-type: none"> to the production control plan Repeated periodically, generally at longer intervals
Documentation / evaluating results	Test/inspection results Audit report Part of the management review	To the production control plan	To the production control plan Requalification document
Contents	An evaluation of product quality to an internal requirement which at least covers customer requirements	Part of the contract with the customer	Part of the contract with the customer

¹⁾ The production control plan does not check all the product characteristics, either because there is no call for this in an FMEA, or because no economically acceptable checking method is available

²⁾ For example, volumetric flow is a characteristic checked in production by a pressure equivalent

Table 1 : Difference between a product audit and other checks

3 Carrying out a product audit

The following schematic shows the individual stages of a product audit. The status in each case is indicated in the following Sections of this document.

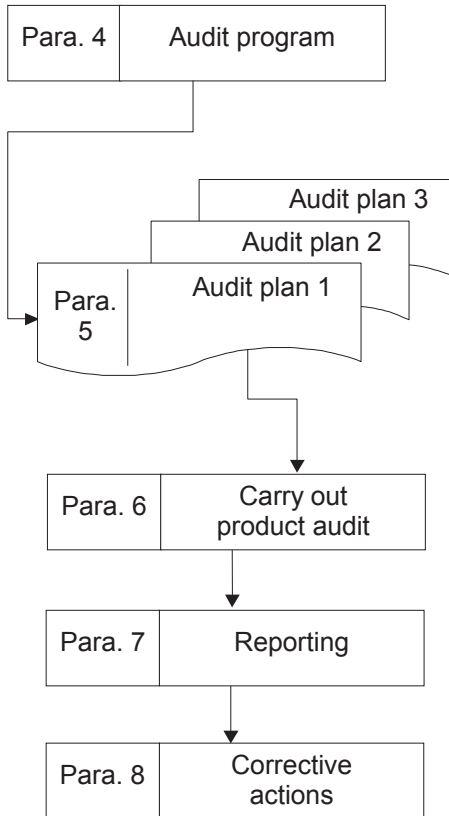
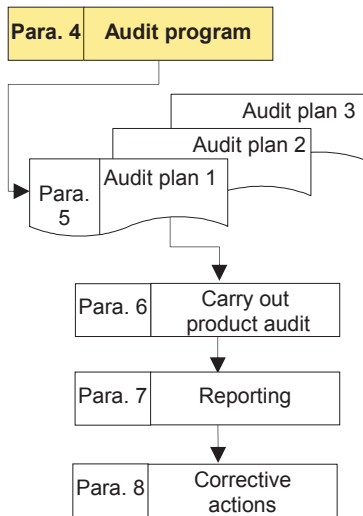


Fig. 1 : Overview of the sequence of a product audit

4 Audit program



The audit program for product audits contains all the activities required in terms of planning, organisation and execution, so that the planned audits can be carried out efficiently and effectively within the specified time period. This also includes the provision of personnel and checking/inspection resources.

Responsibility for the audit program lies with the person responsible for quality management.

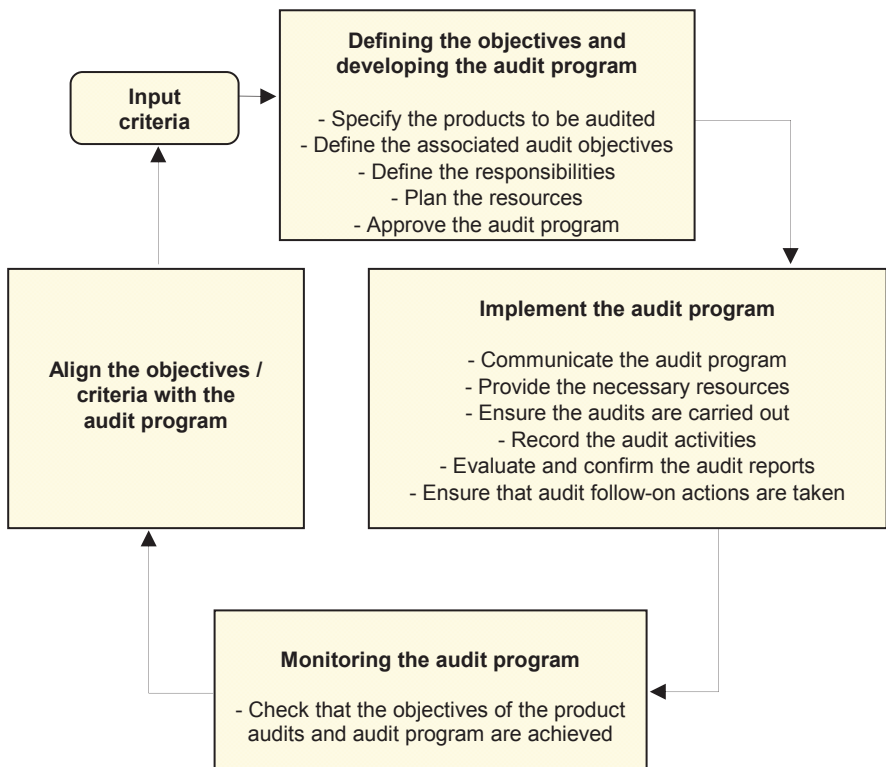


Fig. 2 : Process sequence for managing an audit program

Audit program : Annual planning

issued by / date ::

Product groups	Product description	Part No(s)	Responsible for the product	Aim of the audit	Resources required	Responsible	Target date	Reference documents
Customer's end-product (e.g., complete vehicle)	"V" series	YP140x	Jones	Check the comfort functions in the vehicle following large-scale software up-date. Issue level D to instruction B13	3 vehicles, 8 man-days in R&D and Quality	Brown	28 Feb.	Summary of customer satisfaction survey of previous year
Sub-assemblies (e.g., transmission unit)	1,6 TD 77 kW	L1234; L1280; L1281	White	Confirm the required long-term durability	5 units 8 man-days in test lab, 800 hrs on AP test-rig	Williams	15 Jan.	test instruction DAHBA 1
	2,0 TD 90 kW	M5678	Davies	Check customers' complaints re excessive noise under full load and identify the cause	2 units 2 man-days in test lab, 2 days in noise chamber 2 days on MAP mobile test-rig	Stuart	30. Mai	Customer satisfaction report IBT 15, Technical press report M5678AA
	3-speed gearbox	6G0 123 A...L	Scott	Audit carried out during full production	6 units each month 2 auditors EOL test-rig, 3 hrs per month in audit room in building 2	Danaher	Continuous	Internal audit plan for gear-boxes
Individual components (e.g., bearing bushes)	RA 12 mm series	12124-12254	Smith	Check compliance with durability requirements & drawing dimensions	30 parts 4 man-days in test lab, 100 hrs on test-rig 2 10 hrs on CMM	Hill	30. Apr	Specification ref. DH12, Drawing
....								

Table 2: Practical assistance - example of an audit program

Supplier companies will need to modify the structure to suit their own products – e.g., the customer's end-product, sub-assemblies and individual components.

4.1 Input criteria

The following general input criteria are to be considered and may be expanded to include others:

- Customers' requirements (specified)
- Customers' expectations recognized by the company, which have an important part to play in customer satisfaction (not specified)
- Internal specifications
- Complaints/rejects from internal and external customers (e.g., early failures; guarantee data, field data)
- Information from risk assessments (e.g., FMEAs)
- Results of customer satisfaction surveys and test reports
- Conclusions and actions from previous product audits
- Legal regulations and checks required by law
- Features of strategic importance; possible risks for the organisation.

In addition there are in-house conditions and circumstances which are to be taken into consideration during planning, such as :

- Changes in machinery and facilities
- Changes in personnel; deputies; shifts
- Transfer of production; changes of suppliers
- Deviations which are concealed or difficult to detect
- Technical features of the product (complexity)
- Product variants
- Batch size (large runs; small runs; one-offs)
- Production lines (varied production procedures)
- Non-capable manufacturing and measurement processes

4.2 Layout inspection

The compliance of a product with the customer's specifications is demonstrated by a requalification check (cf. ISO/TS 16949). The checks and tests involved in this are set out in the production control plan. If this requalification certification is required in association with the product audit, the checks and tests involved must be integrated in the audit program.

4.3 Special CoP (conformity of production) checks

As a basic rule a manufacturer must ensure that his products conform with legal requirements. Using CoP checks, proof can be provided for approval purposes.

Monitoring is required of all components which a vehicle manufacturer produces himself, or for which he has his own component approvals. Further CoP checks are described in the approval legislation or are specified by public authority regulations.

4.4 Stipulations regarding the audit program

Taking the sum of knowledge available and based on the audit program, the products to be audited and the associated objectives are derived for the product audits. A matrix can be used to support this process, such as the example in Table 3. To simplify matters, product families can be drawn up from the full range of products manufactured.

By classifying the various criteria, audit results can be achieved in a targeted manner and repeat testing can be avoided.

Financial risks		Internal quality		New or modified process; change of supplier		New technology		Non-capable processes, high measurement uncertainty; defects difficult to detect or hidden		Compl. points count for planning	Checks required by law		Requalification check required as production control plan		Product audit	Characteristics to be checked
Evaluation 1,3,9	Info	Evaluation 1,3,9	Info	Evaluation 1,3,9	Info	Evaluation 1,3,9	Info	Evaluation 1,3,9	Info		Y/N	Info	Y/N	Info	Yes / No	Info
3		1	12 ppm	1		1		1		26	N		Y	Life test	Yes	Confirm long-term resistance
1		1	0 ppm	1		1		1		18	N		N		No	
9	High volume	1	25 ppm	3	New bearing suppliers	9	New engine concept; new materials in valve drive	1		60	N		N		Yes	Noise generated under full load
3	High-value product; low quantities	3		9	Completely new line for assembly, processing and at suppliers	1		9	Inter-action of hardware & software for comfort functions difficult to check in production	76	N		N		Yes	Comfort functions in passenger compartment after software up-date
3		9	3% scrap	3	New processing centre	9	New patent	1		52	N		N		Yes	Durability requirements and drawing dimensions

Product portfolio				Strategic importance		Customers' complaints (internal & external)		Feedback from field/under guarantee; results of customer satisfaction surveys		Information from risk assessments (e.g., FMEAs)		VDA audit results		Special customer expectations (specified/not specified)		Financial risks	
Product groups	Product description	Part No(s).	Responsible for the product	Evaluation 1,3,9	Info	Evaluation 1,3,9	Info	Evaluation 1,3,9	Info	Evaluation 1,3,9	Info	Evaluation 1,3,9	Info	Evaluation 1,3,9	Info	Evaluation 1,3,9	Info
Equipment	1,6 TD 77kW	L1234; L1280; L1281;	Smith	3	Standard product	3	Some items conceded for goodwill	1	Insignificant	3	Average risks	3	Slight problem with spares	3	Quiet operation; noise pattern	3	
	1,9 T FDQI	M1050	Jones	1	Expiring model	1	Not significant	1	Not significant	3	Average risks	1	No complaints	3	Quiet operation; noise pattern	1	
	2,0 TD 90 kW	M5678	White	9	Quantity carrier	9	Complaint re running noise; usage	9	Complaint re running noise; usage	3	Average risks	1	No complaints	3	Quiet operation; noise pattern	9	High volume
Complete vehicles	"Y" series	YP14xx	Davies	9	Image carrier	3	Error codes in memory	3	Comfort functions criticized	9	Software conversion identified as problematic	9	No audit carried out yet	9	Customer expects optimum subjective quality	3	High-value product; low quantities
BA bearing bushes	RA 12 mm series	12124-12254	Scott	9	1st application of new generation	1	Not significant	1	None as yet	3	Average risks	9	No audit carried out yet	1		3	
.....																

Table. 3 : Example of a decision-making matrix for setting out the audit program

In this example, all the input criteria are evaluated on an equal basis and are then prioritized by adding up the evaluation figures. The evaluation can be adapted to suit individual companies and additional input criteria can be included.

Considering this example, the following conclusions can be drawn for the audit program :

- For the 1.6 TD 77kW unit an audit is included in the audit program only for requalification to the production control plan
- No audit is planned for the 1.9 FDQI in the planning period
- Product audits are planned for further products.

The objectives for the relevant product audits derived from the input criteria (e.g., check the subjective quality of the passenger compartment"; "Demonstrate the required noise level for unit XYZ when in operation"; or ...) should be used as input data when drawing up the audit plans, the selection of auditors and deciding on the extent of the audit, etc.

4.5 Extent of an audit program

In addition to the input criteria, the following should also be specified in the audit program :

- Selected products from the overall product portfolio
- The objectives and extent of the audit as part of the audit plan
- Responsibilities (e.g., who draws up the audit plan)
- Resources (e.g., test/inspection equipment; auditors)
- Timing/ frequency of the audit
- Reporting system and recipients of the reports

4.6 Audit program resources

An integral part of the audit program is the specifying of the resources required, such as :

- the products to be audited
- the auditors carrying out the audit (qualifications to be defined if appropriate)
- the rooms, checking equipment and checking/test facilities

The various factors must be prioritized to meet company-specific requirements and must be documented.

4.7 Implementing the audit program

The following are to be ensured when implementing an audit program :

- Approval of the audit program by the responsible authority
- The departments affected must be informed
- Coordination and time-planning of audits
- The necessary resources must be made available
- The audit must be carried out to the audit program
- Records of the audit activities must be monitored
- Evaluation and confirmation of audit reports
- Distribution of the audit reports
- Execution of follow-up actions from audits; controlling.

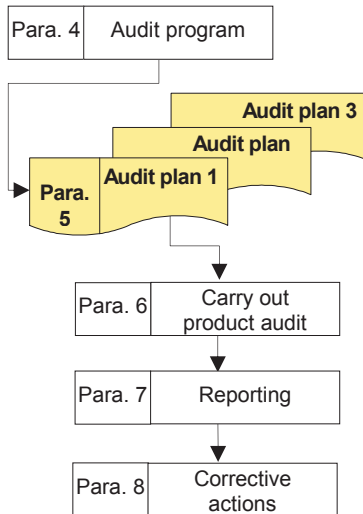
4.8 Monitoring and evaluating the audit program

The implementation of the audit program must be monitored at reasonable intervals and reported to the responsible authorities.

An evaluation of the audit program should, for example, take the following into account :

- Results and trends
- Conformance with procedures
- Up-coming requirements and expectations from internal and external customers
- Audit program records
- Alternative or new audit practices
- Equality of performance of different audit teams under comparable conditions
- Evaluation of compliance with input criteria such as customer satisfaction, etc.

Where evaluations from audit programs reveal deviations from the company's requirements, these must lead to corrective and preventive actions and the continuous improvement of the audit program.



The audit plan generated from the audit program describes all the activities and resources required for carrying out a product audit, together with the timing and the number of random samples to be taken. Within the framework of the test/inspection planning it is also specified which checking method and equipment are to be used to check the product characteristics.

Responsibility for drawing up the audit plan lies with the audit planner.

5.1 Characteristics to be checked and specifications

The audit program sets out the characteristics to be checked. These are specified more closely in the audit plan, for example in terms of:

- materials
- dimensions
- appearance, odour and tactile feedback ("feel")
- functionality (electrical/mechanical)
- ruggedness of the software
- packaging

Further characteristics to be considered within the framework of reliability or life/endurance tests are, for example :

- corrosion resistance
- reaction to temperature
- static and dynamic performance

Requirements regarding characteristics to be checked are set out in current technical documents, as listed below, and must be taken into account in the audit plan:

- Drawings and other documents
- Customer requirements profile
- Delivery agreements (regulations covering packing and markings)
- Production control plan; production sequence plans Process descriptions
- Test/inspection specifications
- Completed FMEAs,
- Standards
- Legal regulations

5.2 Checking methods / equipment and random sample size

Appropriate and capable measurement and checking facilities must be used when carrying out product audits. If possible these facilities should not be those used for checking standard production. In this way it is possible to identify unsuitable and insecure equipment.

Where qualitative checks are to be carried out, lists of defects and limit samples should be used, following agreement with the customer. To ensure constant and reliable standards for the evaluation, a regular alignment check of the lists and samples should be carried out.

The random sample size varies, depending on the checking method used, the product and peripheral conditions. Consideration must be given to production volumes, the production processes and their complexity, statistical security and legal requirements.

5.3 Requirements for taking parts & their identification

5.3.1 Taking parts

Samples of the parts to be audited are taken in accordance with the audit program. If this is not specified, parts are taken at random. The parts taken must have undergone successfully the planned checks and tests in the process (e.g., intermediate checks; assembly progress checks or end-of-line checks) and therefore be in a condition where they can be forwarded and made ready for shipment.

5.3.2 Identifying parts

The parts which have been taken must be clearly identified so that they are securely removed from the normal production operations and so that the various measurement values taken can be allocated to the audited products. Logistics operations must be taken into account.

5.3.3 Transporting and packing parts

Parts must be protected against damage during the audit and transport (e.g., against corrosion, EMC, mechanical damage). Transporting the parts must not influence the characteristics to be checked.

5.3.4 Returning parts for use

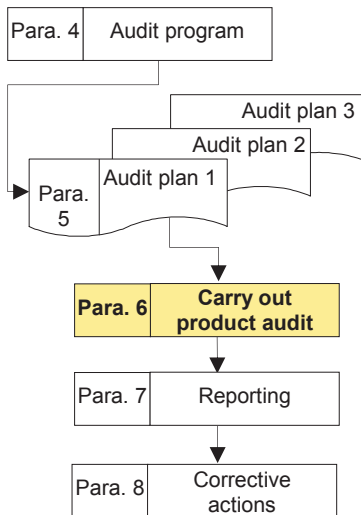
In principle it is possible to return audited products for use, provided their characteristics are the same as those of new parts. The products must be returned to their original condition before they were taken for checks (e.g., corrosion protection; specified packaging). It must be ensured that the parts do not deviate from the approved/released product. Defective parts must be dealt with in accordance with internal regulations.

5.4 Reference documents

When carrying out a product audit, reference is made to all the technical documents in which details of the quality requirements are specified. In detail, these may include the following :

- Drawings
- Specifications
- FMEAs
- Production sequence plans; process descriptions
- Test specifications
- Lists of defects
- Limit samples and listings
- Requirements covering the evaluation methods
- Evaluation / quality standards
- Material data sheets
- Approved production deviations (special approvals)
- Records of customers' expectations
- Standards
- Legal regulations (e.g., national legislation)
- Grading of defects, if appropriate (for example, into major and minor defects) with evaluations
- Delivery agreements
- Regulations covering the use of reference documents and the classification of defects (see Section 7.1: "Notes on classifying deviations and their evaluation").

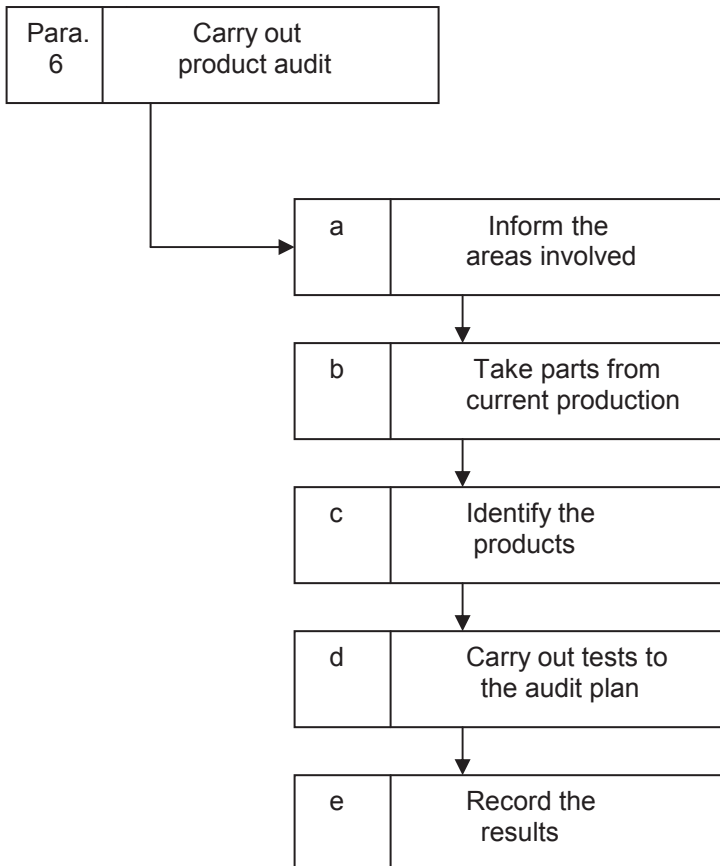
6 Carrying out product audits



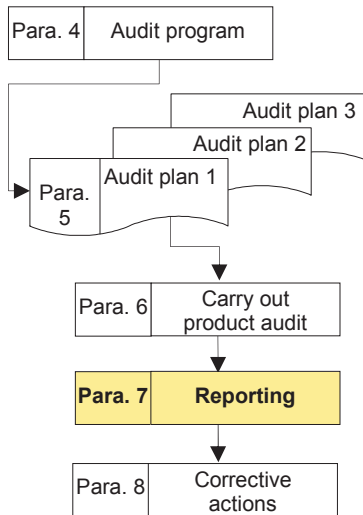
Product audits are carried out in accordance with the requirements set out in the audit plan, by specially trained auditors (see Section 9 : "Qualification of the audit planner and auditors"). When an audit takes place, the departments involved are advised at short notice that products will be removed, so that the production figures can be changed accordingly.

If the audit is being carried out for a specific reason (for example, a complaint or reject) the batch from which the parts are taken can be held until the audit is completed.

If problems are found with regard to safety-relevant characteristics, immediate action must be taken as soon as the problem is detected (see Section 8.1 : "Immediate actions").



Fig, 3 : Sequence for carrying out a product audit



The results of an audit must be recorded in a report. Deviations must be described in a standardised, easily understood manner and weighted if appropriate in terms of their seriousness. The audit report must contain all the information required in order to determine metrics for evaluating product quality.

This documentation is used to set out corrective actions to secure the product and to achieve product improvements. The audit report must be distributed to the relevant responsible authorities and archived in accordance with regulations which have been laid down.

Evaluating the results of product audits will vary from one company to another, and will also depend on the product and its application. The important point is that the method of evaluation remains the same over a long period of time to ensure comparability in the long term.

Individual reports

Individual reports contain the audit result of an individual check. The result is available promptly.

An individual report contains records regarding :

- Compliance or non-compliance of the product characteristics
- Type of problem and its location
- Significance of the complaint (e.g., minor; medium; severe)

The classified and weighted results of the product audit can be condensed into quality metrics in order to permit comparative evaluations.

Examples of this are :

- Totalling of points regarding complaints
- Determining ratios (complaints per number of check characteristics)
- Quality classifications

Management reports

Management reports provide a complete overview covering several product audits, carried out, for example, at different times or with regard to specific areas of particular concern. The quality metrics should be displayed together with the specified target requirements.

7.1 Notes on classifying deviations and their evaluation

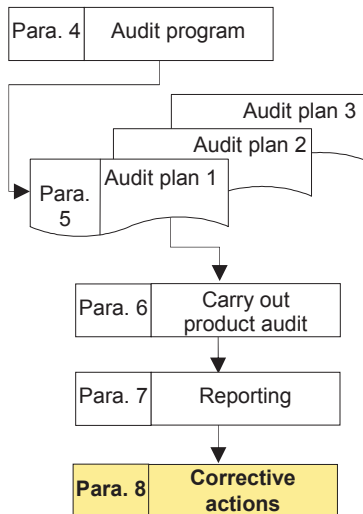
In order to structure different levels of complaints it is recommended that grades of complaints classifications be used. In an audit, therefore, any deviations detected can be allocated to a defined classification (major and minor defects).

The following standpoints can be taken into account when evaluating the seriousness of deviations :

- The customer's standpoint : probability of detection (to what degree is it relevant to the customer ?)
- The technical standpoint : deviation from technical requirements (requirements specification; drawings; function descriptions)

Examples of complaints classifications :

- Major defect A
- Major defect B
- Minor defect C



If deviations are detected, corrective actions must be carried out on the test sample and, if necessary, on products manufactured in full production.

The corrective actions must be directed toward eliminating the causes of the deviations which have been detected. In this connection the influences on the product must be analysed. The action plan must be drawn up by the person responsible.

When deciding on corrective actions, it is essential to involve the functional departments of the company which must cooperate in eliminating the causes of the deviations which have been detected. The procedures for processing the corrective actions arising from product audits must be set out in the definition of product audits in the company's quality management system.

These procedures should take account of the following aspects, for example:

- Reaction to non-compliance with legal requirements
- Processing methods, depending on the severity (quality) of the deviation
- Processing methods, depending on the frequency) of the deviation
- Speed of reaction
- Analysis actions to determine the cause(s)
- Responsibility for generating, carrying out and monitoring the corrective actions
- Procedure for evaluating the effectiveness of the corrective actions
- If necessary, details of timings and completion dates
- Formulae or software to support the correction processes
- Distribution list for action reports, the duty to provide information and archiving periods.

The results obtained from a product audit are an indicator of the level of product quality. The evaluation procedures laid down by the individual company for the product audit ensure that these results are included in the audit report.

8.1 Immediate actions

Depending on the severity of the deviation (e.g., non-compliance with legal requirements or functional problems) immediate actions may be necessary, including the quarantining of parts with accompanying action.

8.2 Knowledge transfer

It has proven effective for the results of product audits to be applied to :

- comparable products
- new product generations

The experience obtained is included in product and process specifications. The terms "Lessons learned" and "Frontloading" are used to describe how this kind of experience is already being used.

9 Qualifications of the audit planner and auditors

9.1 Audit planner

The task of the audit planner is to implement strategic requirements and peripheral conditions from the audit program in operative audit plans. This is essential in order to plan the optimum use of existing and necessary resources.

In order to draw up the audit plan, therefore, an integrated understanding of the above points is essential, as well as appropriate experience regarding the product process and test/inspection methods.

The audit planners' knowledge of the products to be audited, as well as the customers' requirements and expectations, must be built up and maintained by relevant training.

9.2 Auditors

In drawing up the audit plan, specific requirements are also laid down regarding the product auditor.

Auditors with a requirements profile tailored to the individual audit program are required to carry out product audits. The qualification of the auditors must be directed toward fulfilling this requirement profile.

The following requirements must be borne in mind when selecting product auditors:

Qualification	Examples
Training	<ul style="list-style-type: none"> - Training in a specific technical trade or profession
Specific technical requirements	<ul style="list-style-type: none"> - Experience in manufacturing - Knowledge of product, production and process - Use of the audited product - Test/inspection technology - Measurement technology - Principles of statistics - Basic terms used in quality methods - Experience in product audits - Knowledge of complaints from the field and customers' expectations of the product - Drawing up reports - Evaluation of products based on product-specific requirements (evaluations standards) - Knowledge of foreign languages (if necessary)
Personal qualities	<ul style="list-style-type: none"> - Abilities outside the technical sphere (e.g., social abilities) - The ability to make objective decisions - Physical suitability – e.g., eye test - Personal reliability

Table 4: Example of product auditor qualifications

It must be possible to check the qualifications of the product auditors who have been appointed, by reference to relevant certification (for example, qualifications matrix, certificates of participation in training courses, etc.).

The qualification of auditors must be maintained and extended by regular up-dating, particularly with regard to customers' requirements and expectations in respect of the product to be evaluated.

Within the framework of qualification it is also necessary to carry out a regular comparison between product auditors. This is particularly important where the company has several production locations manufacturing comparable products. In such circumstances attention must be paid to the use of defect listings and defect classifications.

10 Reference documents

This VDA volume takes account of the requirements set out in the following documents:

- ISO 9000:2005 : "Quality management systems – Fundamentals and vocabulary"
- ISO 9001:2000: "Quality management systems - Requirements".
- VDA 6.1: "QM System audit".
- ISO/TS 16949:2002: "Quality systems – automotive suppliers – particular requirements for the application of ISO 9001:2000".
- ISO 19011: Guidelines for quality and/or environmental management systems auditing".

11 Technical terms and abbreviations

Product [as defined in EN ISO 9000]

The result of a manufacturing process (3.4.1).

As a restriction regarding the standard 9000:2005 this volume deals only with products in the following product categories:

- Hardware (e.g., a crank-shaft; a populated printed circuit board or seating system)
- Software (e.g., for a control unit or navigation system)
- Technical process products (e.g., lubricants)

A product (e.g., a complete vehicle) can also contain a combination of the parts listed above.

Audit [as defined in EN ISO 9000]

A systematic, independent and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which the audit criteria are fulfilled.

Audit customer [as defined in ISO 19011]

Audit client organisation or person requesting an audit (3.1).

Auditor [as defined in ISO 19011]

A person with the competence (3.14) to conduct an audit (3.1).

Audit team [as defined in ISO 19011]

One or more auditors (3.8) conducting an audit (3.1).

Audit program [as defined in ISO 19011]

An audit program includes all the activities required for the planning, organisation and execution of product audits. It covers a set of one or more audits planned for a specific time frame and directed towards a specific purpose (see Section 4 : "Audit program").

Audit plan [as defined in ISO 19011]

Description of the activities and arrangements for an audit (3.1)

CoP

CoP is the abbreviation for "Conformity of Production" – that is the compliance of production with legal requirements.

Quality management in the automobile industry

The current position regarding VDA publications covering quality management in the automobile industry (QAI) is shown in the Internet under <http://www.vda-qmc.de>.

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