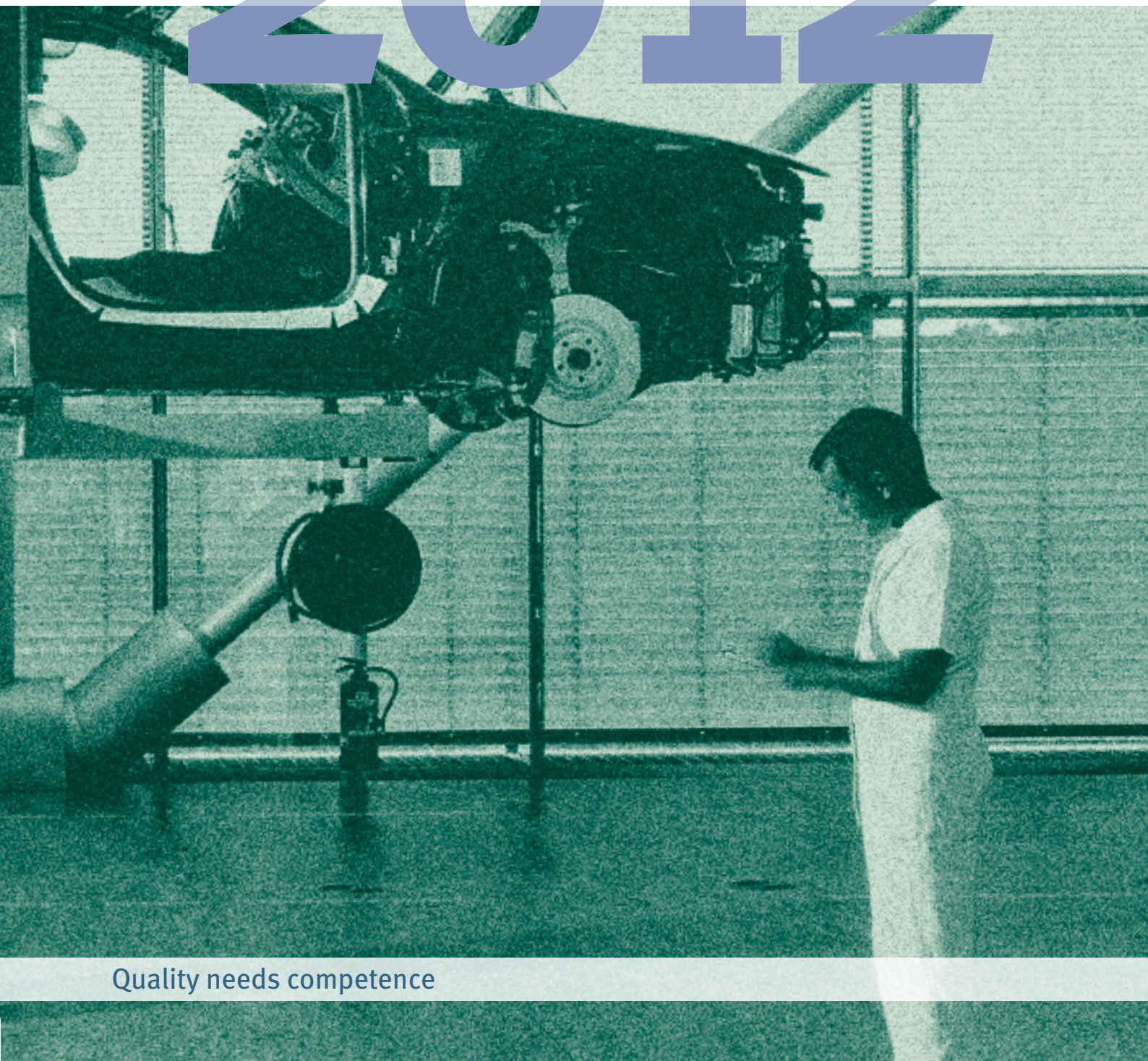
VDA QMC

Qualitäts Management Center
im Verband der Automobilindustrie

VDA | Verband der Automobilindustrie

2012

Quality Management Training and Professional Development



Quality needs competence

Dear customers and all those interested, dear friends of the VDA QMC!

You will have noticed it at first touch: Our training brochure has undergone a change. This year, we have once again optimized the quality of the paper and thus significantly improved the look and feel of this publication. The subject of quality permeates all our areas!

For this reason, we can also present content-related improvements and innovations fort he year 2012. We have added several new one-week trainings to our range, so that you can complete a whole series of qualifications in a time and cost-efficient manner in one go. In addition to our VDA 6.3 weekly seminar, we now offer the ISO/TS 1st/2nd party Auditor qualification in only five days. Also, our basic QM Representative qualification and the further qualification as VDA Quality Manager and Internal Auditor are available in one six-day course. All our weekly seminars are rounded off by an attractive fringe program tailored to the regional specialties of the respective seminar hotels.

Furthermore, we have the matching seminar for the new VDA volume 2 in our program, and we have adapted our FMEA training to the new publication “Special Characteristics”. In addition, and due to frequent demand, we shall offer training on the subject of VDA volume 16, surface design for automobiles, in 2012.

Our new practical training for VDA volume 5, the ideal supplement to the theory presented in our current training “VDA 5- inspection process suitability”, is a special treat. Participants can use high-quality measurement instruments – from standard to special equipment - to determine heights and diameters, shape deviations, and identify improvement actions. True to our motto “from practice for practice”!

We are confident you will find the right qualification for you or your personnel within our comprehensive range of trainings. We are at your disposal for questions, wishes or suggestions. Just contact us, we are happy to advise you!

With best wishes from Berlin

Heinz-Günter Plegniere
Director VDA QMC

Reinhard Hagen
Director Qualification and Further Training

Qualifications in Quality Management
Automotive-Specific
Practice-Oriented

Since 1 August 1997, the Quality Management Center (QMC) has been available to German automotive manufacturers and their suppliers.

The tasks and services provided by the QMC are as varied as the issues in automotive quality management we deal with everyday. The spectrum ranges from the development of systems and methods to the design of the future of Quality Management Systems in the automotive industry.

These developments and the orientation of the QMC are controlled by the QM Committee with the support of the Strategy Group.

All automotive manufacturers as well as a large number of automotive suppliers are represented in this committee by their QM Managers; the VDA QMC is represented by its Director and the VDA itself by a Managing Director.

The great advantage of VDA QMC further training is that the subject matter, previously developed in working groups and published in the VDA bodies of rules, is imparted to automotive industry personnel in sector-specific quality management trainings by qualified instructors from the working groups.

The training and professional development team would like to use this opportunity to say Thank You to the following organizations, which are represented in the QM Committee and/or in the VDA QMC Strategy Group:

BMW · Ford · GKN Sinter Metals · Johnson Controls

Huf · WCW automotive · Volkswagen · Harman/Becker Automotive Systems

VDA Verband der Automobilindustrie

Opel · brose Technik für Automobile · MAN · Knorr-Bremse

Daimler · Benteler · ZF · ThyssenKrupp Steel

Audi · Modine · Webasto Feel the drive · LuK INA FAG Schaeffler Gruppe

Bosch · Porsche · umicore · Continental

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Open Trainings
VDA trainings throughout Germany

We attach utmost importance to customer orientation.

For this reason, you can find us in several locations throughout Germany. Our trainings take place in selected hotels, where friendly personnel will be available on location throughout your training to take care of all your needs. A select and varied lunch menu, ample snack breaks and unlimited drinks are available during training and are included in the price. Furthermore, you will also profit from special rates for rooms in our partner hotels.

Thanks to the cooperation between VDA and Deutsche Bahn you can travel in comfort and safety to your training venue. Your special return ticket costs 99.- € in second class and 159.- € in first class*.

After you have registered for training with us, our E-mail confirmation will be accompanied by the Deutsche Bahn service number and keyword for booking your train journey.

The conference rooms in our selected hotels are modern and filled with light, creating an optimum atmosphere for our trainings. In groups of comfortable size, you will be acquiring knowledge from practice for practice, and can engage actively in group exercises. Our highly qualified instructors mainly have a background in prestigious organizations and impart their well-founded specialist knowledge for the advancement of your quality management – no matter whether you belong to a large or small organization, whether your are a producer or supplier. Furthermore, we school all our instructors in methodical and social competence. To a large extent, the training subject matter has also been developed by our instructors in the VDA QMC working groups. You can find summarized information on our instructors beginning on page 128.

Info
Phone: +49 30 897842-252

Registration
E-Mail: seminare@vda-qmc.de

** Book at least 3 days in advance. Prices tied to a certain train, offer limited. Exchange and refund before 1st day of validity 15 €, excluded from 1st day of validity. For an additional charge of 20 € (from Jan 01, 2012: 30 €) completely flexible tickets (not tied to a certain train) are available.*

In-House Training
VDA Training directly in your Organization

Of course we can provide all our trainings as customized, affordable in-house trainings in your organization. Our offer is valid worldwide, and also, additionally to the subjects listed in this program, for further individual automotive-specific issues.

In-house trainings are an interesting offer for your organization, especially from an economic viewpoint. With at least 6 participants, significant savings are possible compared to participation in open trainings.

Your advantages at a glance:

+ **Optimum time and cost control:** No working hours lost, as there are no additional travel times; no travel or hotel costs for participants.

+ **Flexible scheduling:** Dates are scheduled to your wishes, rapid and flexible implementation of your in-house training.

+ **Efficient transfer into practice:** Your specific issues and day-to-day challenges can be taken into account and solutions can be applied directly.

+ **Individually designed qualification action:** You determine contents and duration of the training in order to meet the needs of your employees.

+ **Uniform qualification:** A group of employees are qualified to a uniform level of knowledge at the same time.

+ **Strengthening of internal cooperation:** Improvement of acceptance, communication and team spirit among employees through cross-departmental groups of participants.

We are happy to advise you and prepare an individual offer according to your wishes.

We will try to take your preferences for any of our instructors into account. You can find summarized information on our instructors beginning on page 128.

Phone: +49 30 897842-251
E-Mail: inhouse@vda-qmc.de

Know-how Transfer into Practice
Implementation of automotive-specific standards

We have set ourselves the task of providing you with VDA expert competence as optimally and actively as possible. So it is our primary interest to supplement our service offers with methods and techniques that holistically take your needs as customers into account. In addition to our training services, you can now make use of highly qualified on-site support.

We offer you individual support from practice for practice. Our instructors, competent experts from automotive industry, guide and advise you. Let them support you in implementing the lessons learned. Of course we take your preferences into account in selecting the instructors, in order to guarantee neutrality and necessary prerequisites for an atmosphere of mutual trust.

If you are interested or have any questions, please do not hesitate to contact us.

E-Learning
VDA Trainings online

Time is in tight supply nowadays. Flexibility is in demand.

For this reason, there are more and more E-learning services offered on the education market. These are computer-based learning programs that are flexible in time and space and do not require direct contact with an instructor.

For several years now we also have been offering web-based E-learning, and we are continually extending our portfolio. We make a point of only offering subjects for E-learning that contain basic knowledge one can learn on one's own. Complex subjects, where the instructor's practical experience is indispensable for transferring knowledge, will also in future be taught as classroom training. With this so-called "blended learning" we can combine the flexibility of electronic forms of learning with the practical and social aspects of traditional classroom trainings in optimum fashion.

Thus, we started off by turning our training "Quality Management Basics" into an E-learning concept. This basic knowledge is an absolute must for any beginner in quality management, and even experienced quality managers can use this program to refresh their knowledge. With "Maturity Level Assurance for New Parts", we can offer you a further basic course. Here you learn about the concept for cooperation and communication for joint quality management in the supply chain. This E-Learning course is now also available in English.

A demo version of our e-learning trainings is available at www.vda-qmc-learning.de.

ID 1015
"Quality Management Basics"

This basic knowledge is a must for every quality management beginner and also offers new information for experienced quality managers (see page 21).

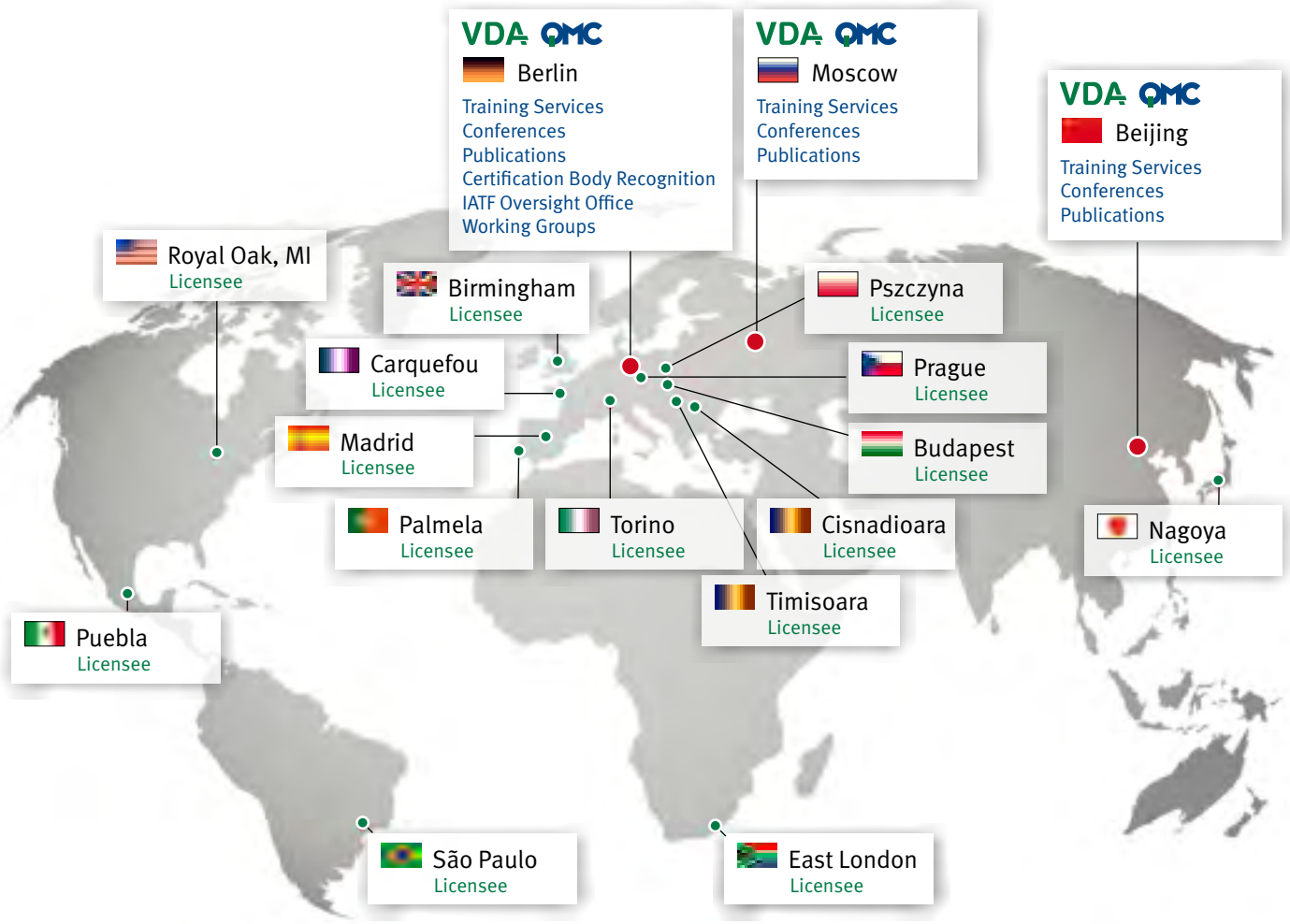
ID 2703
"Maturity Level Assurance for New Parts"

Have the lights turned green? Learn about the concept for cooperation and communication for joint quality management in the supply chain (see page 111).

Licensed Partners
VDA Trainings in the Worldwide Network

We also carry out our events abroad in cooperation with selected partners. Since last year we have signed on several new prestigious providers, so that licensed VDA trainings are now also conducted in France, Italy, Great Britain and the USA.

In this way, we qualify to ISO/TS 16949, VDA 6.3 and other quality issues with the support of the following organizations in these countries:



Our worldwide network of partners is subject to continual review by VDA QMC which guarantees the same high level of quality the VDA QMC offers. Thanks to our partners, we can offer you VDA trainings in the respective national language, with qualified instructors at customary prices in the region you need.

For example, VDA and ISO/TS trainings requested by our customers in many regions of the world have been carried out successfully where so far there are no existing partnerships, such as in Argentina, Iran, Korea, Malaysia, Turkey and Morocco. Of course, here too, participants receive a VDA QMC certificate of participation and/or VDA QMC certificate.

We are happy to provide you personally with further information about our cooperation partners and to help you get in touch with the relevant contacts.

VDA QMC Quality Management Center (Peking) Co., Ltd.
Beijing, China
www.vdachina.com.cn

OOO "VDA-QMC Rus"
Moscow, Russia
www.vda-qmc-russland.ru

ANFIA Service S.r.l.
Torino, Italy
www.anfia.it

bfk management consulting
Timisoara, Romania
www.bfk.ro

Central Japan Industries Association (Chu San Ren)
Nagoya, Japan
www.chusanren.or.jp

Czech Society for Quality
Prague, Czech Republic
www.csq.cz

Encona (PTY) Ltd.
East London, South Africa
www.encona.co.za

Encona Engineering & Consulting Agency
Royal Oak, MI, USA
www.encona-usa.com

Euro-Symbiose
Carquefou, France
www.euro-symbiose.fr

IQA – Instituto da Qualidade Automotiva
São Paulo, Brasil
www.iqa.org.br

OPCO Operational Consulting
Palmela, Portugal
www.operational.pt

QFD Engineering Consulting Office Ltd.
Budapest, Hungary
www.qfd.hu

sc Werner Seeger Qualitätsmanagement Romania s.r.l.
Cisnadioara/Michelsberg, Romania
www.seeger-quality.ro

SERNAUTO
Spanish Association of equipments and Components for the automotive industry
Madrid, Spain
www.sernauto.es

SMMT
Birmingham, UK
www.smmt.co.uk

Team Prevent
Pszczyna, Poland
www.teamprevent.pl

VOLKSWAGEN Instituto
Puebla, Mexico
www.volkswageninstituto.com

You will find a list of all licensed partners in Germany and abroad on our homepage www.vda-qmc.de.

Training and Professional Development for 1st/2nd/3rd Party Auditors

VDA Quality Manager and internal auditor

ISO/TS 16949

VDA 6.x

VDA Quality Manager and Internal Auditor (Basic Qualification)

+ Module I: Quality Management Basics
+ E-Learning: Quality Management Basics
+ Module II: Automotive-specific Processes, Methods and Tools
+ Examination Day for VDA QM Representative
+ One-week Training: VDA QM Representative Qualificatio
+ Module III: Measuring, Assessing and Improving
+ Module IV: Auditor in the Automotive Industry
+ Examination Day for VDA Quality Manager and Internal Auditor
+ One-week Training: Further Qualification for VDA Quality Manager and Internal Auditor

VDA Quality Manager and Internal Auditor (Basic Qualification)

VDA Quality Manager and Internal Auditor (Basic Qualification)

Qualification Program with Certificate: VDA Quality Manager and Internal Auditor

Module I*: 3 days
Fundamentals of Quality Managements

* Certificates/documents of other training organizations may be recognized

E-Learning:
Fundamentals of Quality Managements

Module II: 3 days
Automotive Specific Processes, Methods and Tools

optional — **Examination Day with Certificate:**
QM-Representative

Module III: 3 days
Measuring, Evaluating, Improving

Module IV: 3 days
Auditor in the Automotive Industry

Examination Day with Certificate:
VDA-Quality Manager and Internal Auditor

One-week Training
Qualification for
VDA QM Representative

One-week Training
Further Qualification for
VDA Quality Manager
and Internal Auditor

Quality managers in the automotive branch develop the QM system process in their own operational spheres or with suppliers according to the requirements of the automotive industry. They are able to interpret the standards of the automotive industry corporate specific and implement them in terms of an efficient management system.

Internal auditors are familiar with the fundamentals of the QM system and the auditing process. This is the basis of the qualification as 1st/2nd party ISO/TS 16949 and VDA 6.x auditor.

All courses in this program build upon each other and, after successfully passing the examination, lead to a qualified degree with certificate.

The five modules can also be booked individually or as a compact one-week training.

The separate Modules I to IV conclude with a certificate of participation and qualify for the examination day for VDA Quality Manager and Internal Auditor.

ID 1010 Module I: Quality Management Basics
ID 1015 E-Learning

Automotive industry requirements are rising continuously. Customer requirements are becoming more and more specific due to increasing product complexity of the products. In addition to excellent quality, the conformance to continuously changing customer needs is an important prerequisite to be able to hold one's own on the market. Customer specific processes are important prerequisites for this.

Objective
In this course you will learn about the structure and further development of management systems in the automotive branch taking customer-specific requirements into consideration. You will learn to optimize the QM system and the continuous workflows in your company in order to contribute to quality-oriented corporate change.

Target audience
Automotive industry specialists and executives in quality management who would like to assess the internal QM system or that of suppliers (1st/2nd party audits); project leaders and staff members involved in improvement projects.

Contents
+ Introduction to quality management
+ Process organization and management
+ Structure and contents of the ISO 9000 and ISO/TS 16949 standards
+ Introduction to and further development of a management system
+ Documentation of a management system
+ Internal audits
+ Product safety and liability

Prerequisites for participation
Technical and/or managerial training, experience in the automotive industry.

Qualification certificate
At the end of the course you will receive a VDA participation certificate.

Duration
3 days

ID 1015 E-Learning

Duration
Duration varies according to your previous knowledge, your speed of learning and the number of completed learning units.

Note
The access code is valid for four weeks after first log-in and then expires automatically.

ID 1020
Module II: Automotive Specific Processes, Methods and Tools

After having acquired the fundamentals of quality management in the first course, this course will deal with the customer specific orientation of the QM system as well as the selection and application of quality and automotive specific methods and tools.

Objective
To achieve a comprehensive overview of a successful method selection. The fields of application of established quality tools will be discussed in order to quickly and systematically find solutions for existing and future problems.

Target audience
All specialists who would like to further develop their own sphere of action and/or with suppliers through the use of automotive specific standards and systematic methods.

Contents
+ Quality management in practice
+ Management system assessment
+ Process management
+ Quality assurance in the automotive industry – specific requirements – VDA volumes
+ QM tools and methods
+ Improvement process

Prerequisites for participation
Technical and/or managerial training, experience in the automotive industry.

Qualification certificate
At the end of the course you will receive a VDA participation certificate.

Duration
3 days

ID 1021
Examination Day for QM Representative

Target audience
Participants from Modules I to II

Prerequisites for participation
+ At least two years of professional experience, one of which with QM-related tasks in the automotive industry
+ Participation in at least 2 system audits in the automotive industry
+ Completion of Modules I to II of the basic training for VDA Quality Manager and Internal Auditor

Qualification Certificate
After passing the written and oral tests you will receive a VDA certificate with registered numbering as well as a corresponding auditor card and database entry. For the card we need a digital passport photograph in JPEG format in advance.

Duration
1 day

✓ CERTIFICATE ✓ LICENSE VDA-QM REPRESENTATIVE ✓ DATABASE ENTRY

NEW

ID 1022

One-week Training – Qualification for VDA QM Representative

This offer is specifically for people who want to qualify for QM representative within the shortest possible time. In our selected hotels, the participants can concentrate in peace on the subject over six consecutive days and take the respective exam.

Target audience

Automotive industry specialists and executives in quality management who would like to assess the internal QM system or that of suppliers (1st/2nd party audits); project leaders and staff members involved in improvement projects, as well as all experts who want to further develop their sphere of influence and/or of their suppliers by the implementation of automotive standards and systematic methods.

Contents

Module I: Quality Management Basics

Automotive industry requirements are rising continuously. Customer requirements are becoming more and more specific due to increasing product complexity of the products. In addition to excellent quality, the conformance to continuously changing customer needs is an important prerequisite to be able to hold one's own on the market. Customer specific processes are important prerequisites for this.

Objective

In Module I you will learn about the structure and further development of management systems in the automotive branch taking customer-specific requirements into consideration. You will learn to optimize the QM system and the continuous workflows in your company in order to contribute to quality-oriented corporate change.

Focus areas

+ Introduction to quality management
+ Process organization and management
+ Structure and contents of the ISO 9000 and ISO/TS 16949 standards
+ Introduction to and further development of a management system
+ Documentation of a management system
+ Internal audits
+ Product safety and liability

Module II: Automotive Specific Processes, Methods and Tools

After having acquired the fundamentals of quality management in the first course, this course will deal with the customer specific orientation of the QM system as well as the selection and application of quality and automotive specific methods and tools.

Objective

To achieve a comprehensive overview of a successful method selection. The fields of application of established quality tools will be discussed in order to quickly and systematically find solutions for existing and future problems.

Target audience

All specialists who would like to further develop their own sphere of action and/or with suppliers through the use of automotive specific standards and systematic methods.

Contents

+ Quality management in practice
+ Management system assessment
+ Process management
+ Quality assurance in the automotive industry – specific requirements – VDA volumes
+ QM tools and methods
+ Improvement process

Examination day for VDA QM Representative
The examination for VDA QM Representative is divided into two parts: a written exam and an oral exam. After passing the written and oral tests you will receive a VDA certificate, a VDA QM Representative card and VDA QMC database entry. For the card we need a digital passport photograph in JPEG format in advance.

Prerequisites for participation
+ Technical or business management education, automotive experience
+ At least two years of professional experience, one of which with QM-related tasks in the automotive industry
+ Participation in at least 2 system audits in the automotive industry

Duration
6 days

ID 1030
Module III: Measuring, Evaluating and Improving

You will improve your knowledge of statistics in order to analyze and evaluate results based on substantiated facts. You will get to know common statistical methods and learn to be able to estimate their application possibilities.

Objective
Ways in which processes can be oriented and assessed in terms of effectiveness and efficiency will be demonstrated here. Furthermore, this qualification enables you to make decisions on the basis of statistical data.

Target audience
Specialists in all fields, quality specialists and representatives, staff members from improvement teams.

Contents
+ Statistical methods in the company
+ Fundamentals for the use of statistical methods
+ Economic process design and control
+ Control of production processes using quality control charts
+ Test process suitability
+ Analysis of data for improvement

Prerequisites for participation
Technical and/or business management training, experience in the automotive industry.

Qualification certificate
At the end of the course you will receive a VDA participation certificate.

Note
Please bring a pocket calculator with statistical functions and a notebook, in order to work on the exercises.

Duration
3 days

ID 1040
Module IV: Auditor in the Automotive Industry

You are familiar with the procedure for process oriented procedure for the planning and conducting internal and/or supplier audits and the requirements of ISO 19011. You are able to plan, carry out and assess management systems appropriately using the automotive specific approach. You use the PDCA approach for this. You are proficient in negotiation techniques and can motivate audit partners.

Objective
To be able to prepare and effectively implement internal audits (1st/2nd party audits) in a process and customer-focused way. Knowledge of methods of assessment and reporting. Proficiency in the fundamentals of negotiation. With this qualification you will be able to prepare and manage audit programs, to plan and carry out internal and supplier audits, and to assess audit findings. You will learn negotiation techniques that you will be able to use profitably in audits.

Target audience
Specialists in all fields, quality specialists and representatives, staff members from improvement teams.

Contents
+ Fundamentals of audits
+ Certification and accreditation methods
+ Qualification criteria for auditors (ISO 19011)
+ Negotiation techniques

Prerequisites for participation
Technical and/or managerial training, personal characteristics according to ISO 19011 (Section 7.2)

Entry prerequisites for Module IV and the exam day
+ At least two years of professional experience, one of which with QM-related tasks in the automotive industry
+ Participation in at least 2 system audits in the automotive industry

Qualification certificate
At the end of the course you will receive a VDA participation certificate.

Duration
3 days

NEW

ID 1045

One-week Training: Further Qualification for VDA Quality Manager and Internal Auditor

This one-week training is the optimum supplement for all successful participants of the one-week training "Qualification for VDA QM Representative". The six training days in our idyllic conference hotels make for concentrated learning and lead to the exam for VDA Quality Manager.

Target audience
Participants of Module I and II, and/or participants of the one-week training "Qualification for VDA QM Representative"

Contents

Module III: Measuring, Evaluating and Improving
You will improve your knowledge of statistics in order to analyze and evaluate results based on substantiated facts. You will get to know common statistical methods and learn to be able to estimate their application possibilities.

Ways in which processes can be oriented and assessed in terms of effectiveness and efficiency will be demonstrated here. Furthermore, this qualification enables you to make decisions on the basis of statistical data.

Focus areas
+ Statistical methods in the company
+ Fundamentals for the use of statistical methods
+ Economic process design and control
+ Control of production processes using quality control charts
+ Test process suitability
+ Analysis of data for improvement

Module IV: Auditor in the Automotive Industry
You are familiar with the procedure for process oriented procedure for the planning and conducting internal and/or supplier audits and the requirements of ISO 19011. You are able to plan, carry out and assess management systems appropriately using the automotive specific approach. You use the PDCA approach for this. You are proficient in negotiation techniques and can motivate audit partners.

Objective
To be able to prepare and effectively implement internal audits (1st/2nd party audits) in a process and customer-focused way. Knowledge of methods of assessment and reporting. Proficiency in the fundamentals of negotiation. With this qualification you will be able to prepare and manage audit programs, to plan and carry out internal and supplier audits, and to assess audit findings. You will learn negotiation techniques that you will be able to use profitably in audits.

Focus areas
+ Fundamentals of audits
+ Certification and accreditation methods
+ Qualification criteria for auditors (ISO 19011)
+ Negotiation techniques

Examination day for VDA QM Representative and Internal Auditor
The examination for VDA QM Representative is divided into two parts: a written exam and an oral exam. After passing the written and oral tests you will receive a VDA certificate, an auditor card and VDA QMC database entry. For the card we need a digital passport photograph in JPEG format in advance.

Prerequisites for participation
+ Technical or business management education, automotive experience, personal characteristics according to ISO 19011 (clause 7.2)
+ At least two years of professional experience, one of which with QM-related tasks in the automotive industry
+ Participation in at least 2 system audits in the automotive industry
+ Completion of Module I and II of the basic qualification for VDA Quality Manager and Internal Auditor or one-week training “Qualification for VDA QM Representative”

Note
Please bring: a pocket calculator with statistical functions, a notebook and your training documents from Module I and II as well as the literature provided to you.

Duration
6 days

✓ CERTIFICATE ✓ AUDITOR CARD ✓ DATABASE ENTRY

ID 1050
Examination Day for the VDA Quality Manager and Internal Auditor

Target audience
Participants from Modules I to IV

Prerequisites for participation
+ At least two years of professional experience, one of which with QM-related tasks in the automotive industry
+ Participation in at least 2 system audits in the automotive industry.
+ Completion of Modules I to IV of the basis training to VDA Quality Manager and Internal Auditor.

Qualification Certificate
After passing the written and oral tests you will receive a VDA certificate with a registered number as well as a corresponding auditor card and database entry. For the card we need a digital passport photograph in JPEG format in advance.

Note
For the exam, please bring a pocket calculator with statistical functions, your training documents and the literature provided to you.

Duration
1 day

ISO/TS 16949

+ Qualification for Prospective 1st/2nd Party ISO/TS 16949 Auditors

+ Examination Preparation for Prospective 1st/2nd Party ISO/TS 16949 Auditors – Core Tools and Certification Requirements

+ Examination Day for 1st/2nd Party ISO/TS 16949 Auditor

+ One-week Training: Qualification for 1st/2nd Party ISO/TS 16949 Auditor

+ Re-qualification for 1st/2nd Party ISO/TS 16949 Auditors

+ Qualification for 3rd Party ISO/TS 16949 Auditor

+ Forderungen der ISO/TS 16949: Workshop für Führungskräfte

+ Implementing ISO/TS 16949 in your own Organization: Practical Planning and Approach

+ ISO/TS 16949 Basics

+ VDA Standard “Compilation of QM System Requirements based on ISO/TS 16949”

1st/2nd Party Auditors of ISO/TS 16949

Initial Qualification

Prerequisites for Training

Demonstrable knowledge of ISO 9001
At least 3 internal system audits or 6 audit days in the last 2 years
At least 2 years professional experience in the automotive industry

Qualifikation course (ID 1104)

optional: Examination preparation (ID 1100)
Core Tools and certification requirements

Examination day (ID 1105)

Certificate + Auditor Card + Database Entry

Re-Qualification

At least 6 internal system audits in the last 3 years	At least 3 internal system audits in the last 3 years	< 3 internal system audits in the last 3 years
2 day training Re-Qualification (ID 1110)		3 day training Qualification (ID 1104)

optional: Examination preparation (ID 1100)
Core Tools and certification requirements

Examination day (ID 1105)

Certificate + Auditor Card + Database Entry

ID 1104
Qualification Course for (prospective) 1st/2nd Party Auditors of ISO/TS 16949 (Training)

Target audience
QM employees/representatives or internal/external system auditors with audit experience in the automotive industry and knowledge of ISO 9001.

Contents
+ Communication of the requirements of ISO/TS 16949 based on the knowledge of ISO 9001
+ Consolidation of the methods that are designated by the IATF for process-oriented auditing of ISO/TS 16949
+ Communication of contents, methods and procedure with which 3rd party auditors of ISO/TS 16949 are qualified in order to facilitate communication on site.

The alternation between information and group and case study work makes it possible to expand and apply the knowledge in suitable learning steps.

Course Prerequisites
+ Experience with preparing and conducting audits is recommended.
+ Knowledge of ISO 9001 is required.

Features
In order to reduce the theoretical load of the course, we will send you the participant documents and IATF literature (ISO/TS 16949 – Technical Specification, Rules and IATF Auditor Guidance) in time for your personal preparation. Please bring the finished documents to the qualification course.

Qualification certificate
At the end of the course you will receive a VDA participation certificate. If you attend this original VDA qualification course in full, you can apply for the participation in the VDA examination day for 1st/2nd party auditors of ISO/TS 16949.

Duration
3 days

ID 1100
Examination Preparation for (prospective) 1st/2nd Party Auditors of ISO/TS 16949 – Core Tools and Certification Requirements (Rules)

A noticeable number of examinees answer questions about MSA, SPC, FMEA and the Rules incorrectly. These subjects are only marginally dealt with in the courses. However, they are a prerequisite for the examination. There is also the fact that especially prospective auditors have trouble handling multiple-choice questions.

Furthermore, knowledge about the Core Tools is essential for practical experience in order to enable an effective execution of audits.

For a consolidating introduction as well as exercises in auditing Core Tools of the automotive industry, we recommend attending this preparation course before the exam so that you can practice and consolidate all the acquired knowledge.

Target audience
Prospective ISO/TS 1st/2nd party auditors

Contents
The focus is on topics relevant to the exam in connection with Core Tools and certification requirements. For the certification requirements, the procedures in stage 1 and stage 2 audits are focused on. The participants receive an overview of essential aspects of the use of Core Tools and are brought up to date on the relevant guidelines. The participants are able to recognize weak points in the use of automotive-specific methods and evaluate their effects.

Prerequisites for participation
+ Knowledge of the ISO quality standards
+ Knowledge of automotive-specific methods

Qualification certificate
At the end of the course you will receive a VDA participation certificate.

Duration
2 days

ID 1105
Examination Day for 1st/2nd Party Auditors of ISO/TS 16949

The examination day for the certification of 1st/2nd party auditors of ISO/TS 16949 offers participants a qualification level comparable to 3rd party auditors. This original certificate is issued exclusively by IATF representatives of VDA QMC or one of our accredited licensed partners. The subjects of the examination cover the contents dealt with in the course, ISO/TS 16949 requirements, and in special cases manufacturer-specific requirements.

Target audience
Prospective 1st/2nd party auditors of ISO/TS 16949 that have taken part in the qualification course and existing 1st/2nd party auditors that have taken part in the re-qualification course.

Course Prerequisites
Admission to the examination day takes place after successful assessment of your application. The necessary application 1105 can be found on our homepage, www.vda-qmc.de under “Training and Professional Development”/“Application Forms”.

+ Provable knowledge of ISO 9001
+ At least 3 internal system audits or 6 audit days in the last 2 years
+ At least 2 years professional experience in the automotive industry

Participation in a VDA qualification course for 1st/2nd party auditors of ISO/TS 16949 is also a prerequisite for admission to the examination.

Please Note! On your registration please indicate which VDA qualification courses for 1st/2nd party auditors of ISO/TS 16949 you have already completed!

Please also note the overview on page 32.

Qualification certificate
After passing the written and oral examinations you will receive a VDA certificate with registered numbering as well as the corresponding auditor card and database entry. For the card we need a digital passport photograph in JPEG format in advance.

Duration
1 day

✓ CERTIFICATE ✓ AUDITOR CARD ✓ DATABASE ENTRY

NEW

ID 1120

One-week Training: Qualification for 1st/2nd Party ISO/TS 16949 Auditor

APPLICATION REQUIRED

This one-week training enables you to achieve qualification for 1st/2nd party ISO/TS 16949 auditor within five days. The quiet and relaxed atmosphere of the selected conference hotels creates the best possible ambience for optimum preparation for the examination.

Target audience

QM employees/representatives or internal/external system auditors with audit experience in the automotive industry and knowledge of ISO 9001.

Contents

Qualification training

+ Communication of the requirements of ISO/TS 16949 based on the knowledge of ISO 9001
+ Consolidation of the methods that are designated by the IATF for process-oriented auditing of ISO/TS 16949
+ Communication of contents, methods and procedure with which 3rd party auditors of ISO/TS 16949 are qualified in order to facilitate communication on site.

The alternation between information and group and case study work makes it possible to expand and apply the knowledge in suitable learning steps.

Examination preparation

A noticeable number of examinees answer questions about MSA, SPC, FMEA and the Rules incorrectly. These subjects are only marginally dealt with in the courses. However, they are a prerequisite for the examination. There is also the fact that especially prospective auditors have trouble handling multiple-choice questions. Furthermore, knowledge about the Core Tools is essential for practical experience in order to enable an effective execution of audits.

For a consolidating introduction as well as exercises in auditing Core Tools of the automotive industry, we recommend attending this preparation course before the exam so that you can practice and consolidate all the acquired knowledge.

Focus areas

+ Topics relevant to the exam in connection with Core Tools and certification requirements, especially procedures in stage 1 and stage 2 audits
+ Overview of essential aspects of the use of Core Tools and update on the relevant guidelines
+ Discussion of weak points in the use of automotive-specific methods and their effects.

Examination Day
The examination day for the certification of 1st/2nd party auditors of ISO/TS 16949 offers participants a qualification level comparable to 3rd party auditors. This original certificate is issued exclusively by IATF representatives of VDA QMC or one of our accredited licensed partners. The subjects of the examination cover the contents dealt with in the course, ISO/TS 16949 requirements, and in special cases manufacturer-specific requirements.

After passing the written and oral examinations you will receive a VDA certificate with registered numbering as well as the corresponding auditor card and database entry. For the card we need a digital passport photograph in JPEG format in advance.

Course Prerequisites
Admission to the examination day takes place after successful assessment of your application. The necessary application 1105 can be found on our homepage, www.vda-qmc.de under “Training and Professional Development”/“Application Forms”.

+ Experience preparing and conducting audits is useful
+ Knowledge of ISO 9001 required
+ Knowledge of automotive-specific methods
+ Evidence of IDO 9001 knowledge
+ At least 3 internal system audits or 6 audit days in the last 2 years
+ At least 2 years professional experience in the automotive industry

Features
In order to reduce the theoretical load of the course, we will send you the participant documents and IATF literature (ISO/TS 16949 – Technical Specification, Rules and IATF Auditor Guidance) in time for your personal preparation. Please bring the finished documents to the qualification course.

Duration
5 days

✓ CERTIFICATE ✓ AUDITOR CARD ✓ DATABASE ENTRY

ID 1110
Re-Qualification of 1st/2nd Party Auditors of ISO/TS 16949

Auditors face challenges daily in their auditing practice and must be able to react flexibly to changes in certification requirements and company management. Equally the basic conditions specified by the certification requirements and regulations as well as findings from best practice examples are constantly changing. 1st/2nd party auditors are required to re-qualify every 3 years to maintain the certificate ISO/TS 16949.

The competence of 1st/2nd party auditors is also decisive for the implementation of the special requirements of ISO/TS 16949 and in each case must be adjusted to current status. The competencies of the auditors play a decisive role in the orientation and evaluation of one's own QM system as well as throughout the supply chain.

Re-qualification serves to update the knowledge and skills of the auditors according to current standards. Key aspects are the process approach for audits by means of examples, special requirements of the automotive industry, and suggestions on the competence criteria for auditors. Knowledge is consolidated by means of several case studies. The dialogue with colleagues from other organizations creates synergy effects.

Target audience
1st/2nd party auditors according to ISO/TS 16949 of the automotive manufacturer and supplier industry. In this way auditors can be sure that they are up-to-date on the latest developments and that they fulfill the prerequisites for re-qualification.

Contents
+ Process approach for auditors
+ Key aspects of automotive-specific requirements
+ New rules for achieving IATF recognition
+ Competence criteria for auditors according to ISO 19011
+ Exercises using case studies

Course Prerequisites
VDA certificate for 1st/2nd party auditor ISO/TS 16949 and appropriate proof of conducted audits. Please also note the overview on page 32.

Admission to this course is granted after successful assessment of your application. The necessary application 1110 can be found on our homepage www.vda-qmc.de under "Training and Professional Development"/"Application Forms".

In individual cases the participation on the examination day may be necessary.

Features
In order to reduce the theoretical load of the course, we will send you the participant documents and IATF literature (ISO/TS 16949 – Technical Specification, Rules and IATF Auditor Guidance) in time for your personal preparation. Please bring the finished documents to the qualification course.

Qualification certificate
After fulfillment of the prerequisites and successful participation, you will receive a VDA certificate with registered numbering as well as the corresponding auditor card and the database entry. For the card we need a digital passport photograph in JPEG format in advance.

Duration
2 days

ID 1102
Qualification as 3rd Party ISO/TS 16949 Auditor – Three-day qualification course with exam on day four

Admission requirements
Admission for this course can only be requested by an IATF recognized certification body. For details, see the qualification criteria for ISO/TS 16949 3rd party auditors according to the certification requirements. These recognized certification bodies have additional up-to-date information available.

Prerequisites for participation
Admission to this course is granted after positive review of your application. You can download the form from our homepage www.vda-qmc.de under: “Training and Professional Development”/“Application Forms”.

Please hand in your application via your certification body.

Applicants should make sure to send in complete documentation in order to avoid delays in registration. Review of completeness rests with the certification bodies.

Qualification certification
After passing the written and oral tests you will receive a VDA certificate with registered numbering as well as a corresponding auditor card and IATF database entry. For the card we need a digital passport photograph in JPEG format in advance. This certificate provides evidence of your qualification as 3rd party auditor for ISO/TS 16949 on the basis of the IATF requirements.

Duration
4 days

ID 1106
ISO/TS 16949 Requirements: Workshop for Executives

More than ever, executives are required to delegate responsibility and decision competencies efficiently and nevertheless to be adequately informed about company processes and developments, without at the same time being an expert in every field of work.

Target audience
Executives that are not auditors. Responsible persons from all sectors such as production, development, purchasing etc.

Contents
+ Impart an overview of ISO/TS 16949 requirements
+ Expert answers to participants' questions by the IATF Oversight representative of VDA QMC

Prerequisites for participation
None

Qualification certificate
At the end of the course you will receive a VDA participation certificate.

Duration
1 day

ID 1107
Implementation of ISO/TS 16949 in your Organization: Practical Planning and Procedure

Your company is preparing for certification according to ISO/TS 16949 and is dealing with questions of content and strategic procedure. At the same time you want to prepare your employees from operational business practically for the complete certification process and communicate to them how to live by it.

Target audience
Employees of automotive suppliers who are involved in planning and procedure for implementation of ISO/TS 16949 in their own organization.

Contents
+ Planning and procedure in ISO/TS 16949 implementation
+ Stumbling blocks in the certification process – the right documentation
+ Learning to understand and implement the catalogue of requirements
+ Practical exercises for the core elements of ISO/TS 16949
+ Readiness review and process orientation
+ VDA specialists answer your questions

Prerequisites for participation
None

Qualification certificate
At the end of the course you will receive a VDA participation certificate.

Duration
2 days

ID 1111
ISO/TS 16949 Basics

ISO/TS 16949 (Quality Management Systems – Particular requirements for the application of ISO 9001:2008 for automotive production and relevant service part organizations) is the standard for automotive quality management systems accepted worldwide.

Apart from the general and unspecific requirements of ISO 9001 for QM systems, ISO/TS 16949 defines the additional and/or supplementary automotive requirements. ISO/TS 16949 certification is one of the basic preconditions for acceptance among the ranks of automotive suppliers, or the relevant supply chain.

This training provides the basics for sufficient information on applicability, content and implementation of ISO/TS 16949.

Target audience
All interested personnel from the areas sales, purchasing, development, production and logistics

Content
+ Overview over relevant automotive bodies of rules
+ Structure and content of ISO/TS 16949
+ Scope of ISO/TS 16949, definitions and terms
+ Customer-specific requirements supplementary to ISO/TS 16949
+ Basic requirements for ISO/TS 16949 certification procedure

Prerequisites for participation
None

Qualification certificate
At the end of the course you will receive a VDA participation certificate.

Duration
1 day

ID 1112

VDA Standard “Development of Customer-specific QM System Requirements on the Basis of ISO/TS 16949”

ISO/TS 16949 (Quality Management Systems – Particular requirements for the application of ISO 9001:2008 for automotive production and relevant service part organizations) is the standard for automotive quality management systems accepted worldwide.

The increasing number of documents and non-standard structure of customer requirements related to ISO/TS 16949 confronts the whole supply chain with different and increasingly complex as well as resource-intensive tasks.

This training aims to establish clarity in creating an organization’s own supplementary requirements ISO/TS 16949. The VDA standard “Development of Customer-specific QM System Requirements on the Basis of ISO/TS 16949” provides the necessary basis. Furthermore, solutions for applicability and interpretation of individual content of the VDA volume are presented.

Target audience
Quality managers, quality engineers, purchasing personnel with quality-relevant tasks, supplier management personnel and all interested automotive personnel.

Contents
+ Overview over relevant automotive bodies of rules
+ Overview over customer-specific requirements in connection with ISO/TS 16949
+ Structure and content of the VDA standard
+ Systematic and procedure to implement the VDA standard
+ Consolidation of the issues with practical examples and group exercises

Prerequisites for participation
+ Familiarity with ISO/TS 16949 basic requirements
+ Experience and knowledge of handling OEM-specific requirements (especially Volkswagen AG, BMW AG and Daimler AG)
+ General basic knowledge on content of the VDA volumes is advantageous
+ Participation in VDA training “ISO/TS 16949 Basics” is recommended

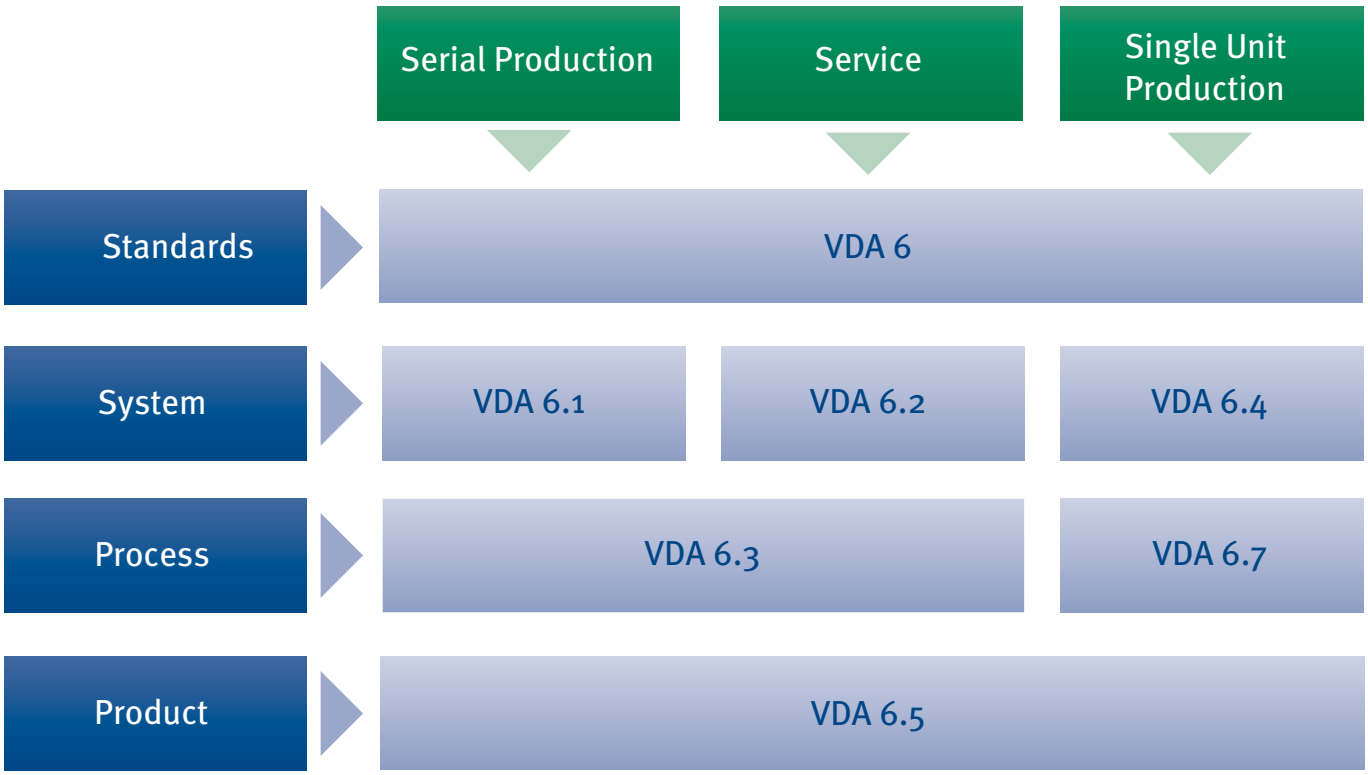
Qualification certificate
At the end of the course you will receive a VDA participation certificate.

Duration
1 day

Audit Standards VDA 6.x

+ VDA 6: Basics for Quality Audits
+ Qualification for 1st/2nd/3rd party Auditor VDA 6.1
+ Qualification for 1st/2nd/3rd party Auditor VDA 6.2
+ Qualification for Process Auditor VDA 6.3
+ Qualification for 1st/2nd/3rd party Auditor VDA 6.4
+ Qualification for Product Auditor VDA 6.5
+ Qualification for Process Auditor Unit Production and Job Shop Production VDA 6.7
+ Re- Qualification for 2nd/3rd party Auditors VDA 6.1, VDA 6.2 and VDA 6.4

Audit Standards VDA 6.x



ID 1200
VDA 6: Basics for Quality Audits
Certification requirements for VDA 6.1, VDA 6.2 and VDA 6.4

VDA volume 6 is the basis for all system audits according to the VDA bodies of rules VDA 6.1, 6.2 and 6.4. Based on the requirements of ISO 17021 and ISO 19011, especially the advanced requirements for 2nd and 3rd party audits are described. The compliance with these requirements is mandatory for Certification Bodies.

Target audience
Veto representatives, certification auditors and staff members of Certification Bodies involved in the certification process, executives, quality representatives and employees of organizations who would like to acquire an overview over certification according to VDA 6.1, 6.2 or 6.4 or are planning certification.

Contents
The training begins with an introduction to the bodies of rules VDA 6.1, VDA 6.2 and VDA 6.4, as basic knowledge of these standards is necessary for the application of VDA 6. In the second part, the contents of VDA volume 6 are presented. The focus is on the bodies of rules, certification process, calculation of audit days, nonconformity management, as well as auditor qualification. The explanations of the contents are supplemented by examples.

Prerequisites for participation
Participants should be familiar with the VDA 6.x guidelines.

Qualification certificate
At the end of the course you will receive a VDA participation certificate.

Duration
1 day

ID 1201
Qualification for 1st/2nd/3rd Party Auditor VDA 6.1 (Training)

Knowledge about a product and its quality is helpful in certifying or auditing and evaluating a QM system. The interactions between product, process and system can lead to sector-specific adjustment of the QM system. VDA volume 6.1 connects the ISO 9000 family to the requirements of the automotive industry. The further development of the family of standards and of the industry-specific knowledge is concisely described.

Target audience
Participants from automotive industry, vehicle and component manufacturers responsible for conducting QM system audits in their own organization and of implementing additional international QM requirements and making sure they are effective.

Contents
The introduction to the six U-elements, the Z1 element “corporate strategy” and the P-elements (contract review, development of products and processes as well as procurement) with detailed information about every element and the corresponding questions with requirements and commentary. There is also the commentary to DIN EN ISO 9001. The lectures and discussions form an introduction to working with case studies, as to points, fulfillment degree, classification and appropriateness.

Prerequisites for participation
The exact prerequisites can be found in the current edition of VDA volume 6.

Participation in the course is a prerequisite for the participation in the exam for 2nd/3rd party auditor according to VDA 6.1.

Qualification certificate
For prospective 1st party auditors
+ After finishing the complete training course and passing the written test you will receive a qualification certificate.

For prospective 2nd/3rd party auditors
+ Prospective 2nd/3rd party auditors have to successfully complete the corresponding exam day. After passing the written and oral tests you will receive a VDA certificate with registered numbering as well as a corresponding auditor card and database entry. For this card we need a digital passport photo in JPEG format in advance.

Duration
3 days

ID 1202
Examination Day for 2nd/3rd Party Auditors VDA 6.1

Prerequisites for participation
Admission to this course takes place after successful assessment of your registration form. The necessary form 1202 can be found on our homepage www.vda-qmc.de under “Training and Professional Development”/“Application Forms”.

The exact admission prerequisites can be found in the current edition of VDA volume 6.

Participation in the “Qualification for 1st/2nd/3rd Party Auditor VDA 6.1” is necessary.

Features
The registration for the examination day can only be completed by the management of an organization (for 2nd party auditors) or by a certification body (for 3rd party auditors).

Qualification certificate
After passing the written and oral tests you will receive a VDA certificate with registered numbering as well as a corresponding auditor card and VDA QMC database entry. For this card we need a digital passport photo in JPEG format in advance.

Duration
1 day

ID 1301
Qualification for 1st/2nd/3rd Party Auditors VDA 6.2 (Training)

The VDA 6.2 standard builds upon the ISO 9001 and fulfills a requirement similar to ISO/TS 16949 for the service providers of the automotive industry.

Target audience
Trained auditors of the automotive industry with knowledge of ISO 9001 and experience in the service industry; 1st/2nd/3rd party auditors; QM experts; employees and executives from the entire automotive industry (such as car dealers, parts and sales centers, spare part and accessory dealers, logistics providers, consulting engineers and other service companies)

Contents
In this training you get to know the structure and architecture of VDA 6.2 as well as the process model and evaluation. Furthermore, the connection to ISO/TS 16949 and possible OEM requirements for service providers are addressed. The contents are consolidated with case studies and group work.

Prerequisites for participation
The exact prerequisites can be found in the current VDA volume 6.

Qualification certificate
for prospective 1st party auditors
+ After finishing the complete training course and passing the written test you will receive a qualification certificate.

for prospective 2nd/3rd party auditors
+ Prospective 2nd/3rd party auditors have to successfully complete the corresponding exam day. After passing the written and oral tests you will receive a VDA certificate with registered numbering as well as a corresponding auditor card and database entry. For this card we need a digital passport photo in JPEG format in advance.

Duration
3 days

ID 1302
Examination Day for 2nd/3rd Party Auditors VDA 6.2

Prerequisites for participation
Admission to this course takes place after successful assessment of your registration form. The necessary form 1302 can be found on our homepage www.vda-qmc.de under “Training and Professional Development”/“Application Forms”.

The exact admission prerequisites can be found in the current edition of VDA volume 6.

Participation in the seminar “Qualification for QM System Auditor for Service Providers VDA 6.2”.

Features
The registration for the examination day can only be completed by the management of an organization (for 2nd party auditors) or by a certification body (for 3rd party auditors).

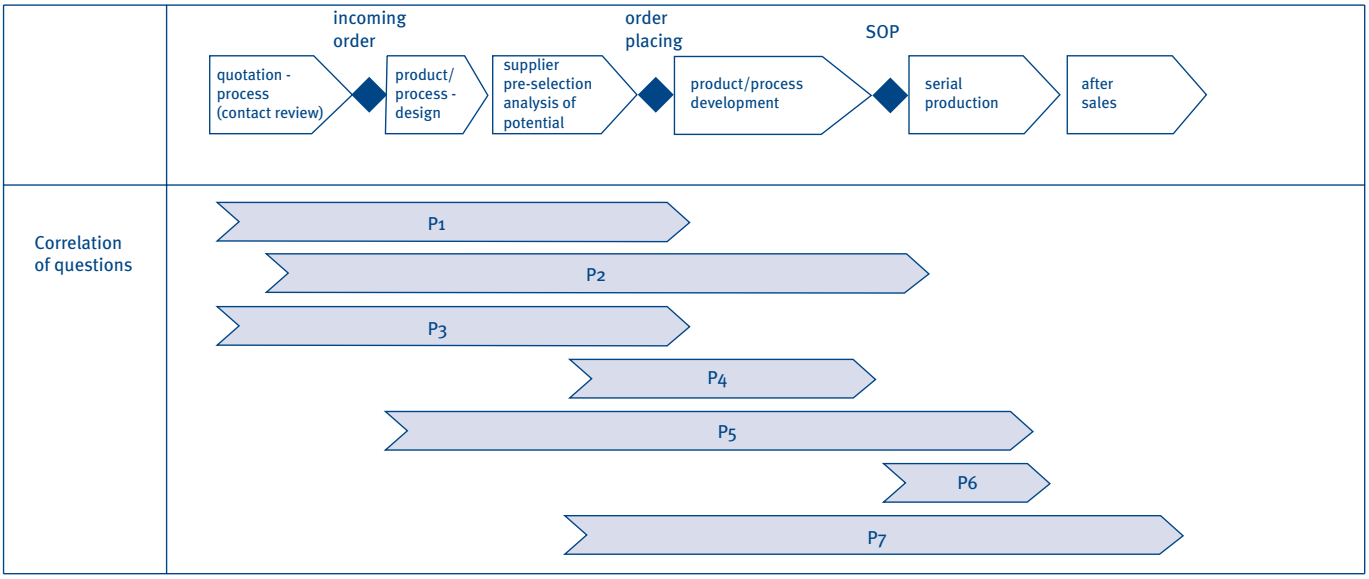
Qualification certificate
After passing the written and oral tests you will receive a VDA certificate with registered numbering as well as a corresponding auditor card and VDA QMC database entry. For this card we need a digital passport photo in JPEG format in advance.

Duration
1 day

Qualification as Process Auditor According to VDA 6.3 (2nd completely revised edition 2010)

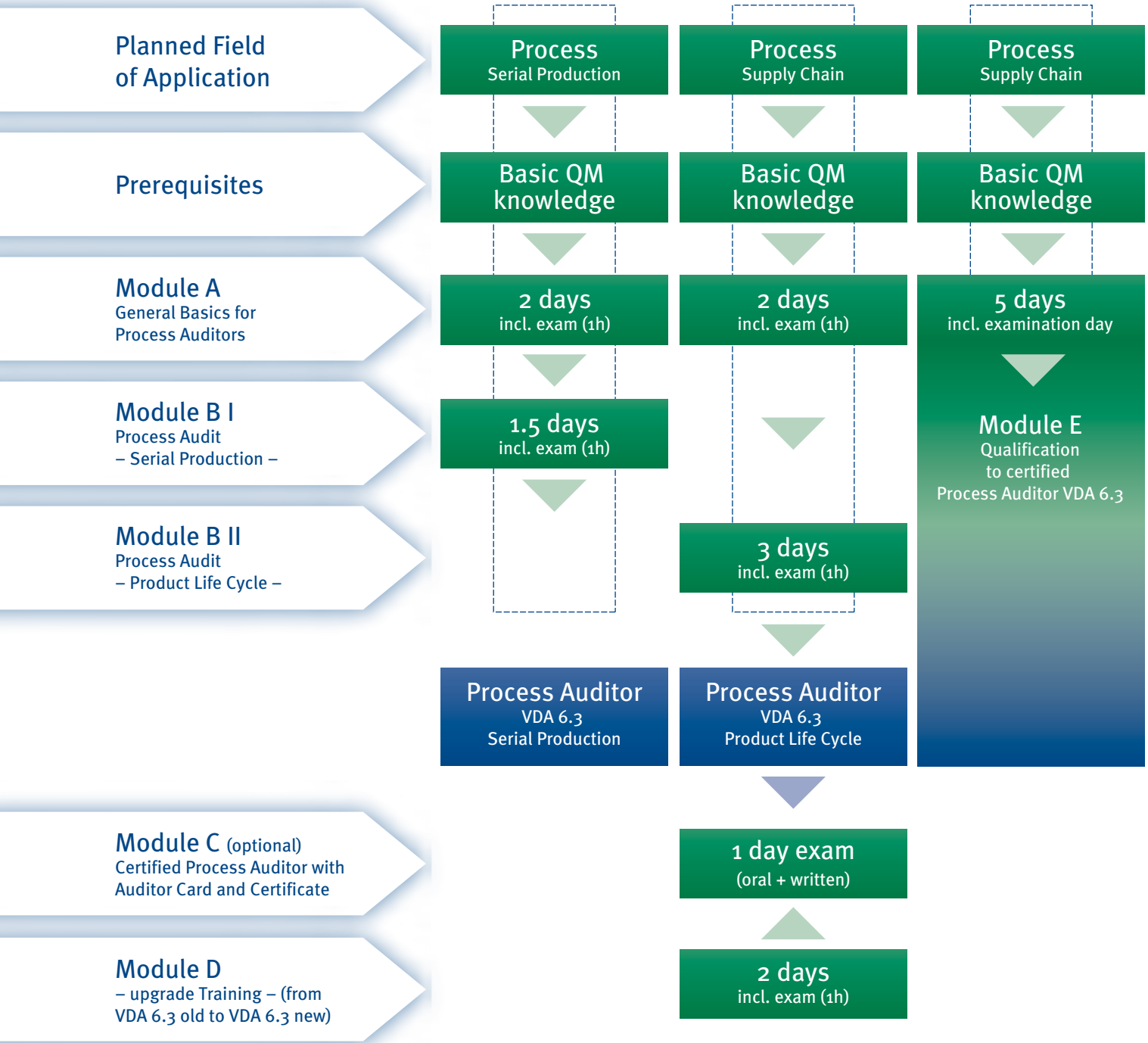
In 2010, the established audit standard VDA 6.3 (1998 edition) was completely revised by the VDA working group 6.3. The new volume takes into account the changes in ISO 9001 and in the current customer-specific automotive requirements.

The objectives were reorganization, focusing and adjustment of the process audit to the new requirements. Here it is necessary to analyze business processes in the supply chain, in product development and manufacturing processes so that weaknesses in the workflow processes and their interfaces can be detected and correction action and opportunities for improvement can be determined. At the same time, the previous standard questionnaire serves as the basis for the revision of the former VDA 6.3 (1998 edition).



P1: Analysis of potential
P2: Project management
P3: Planning of product and process design and development
P4: Realization of product and process design and development
P5: Supplier management
P6: Process analysis/production
P7: Customer service, customer satisfaction, service

Qualification matrix for VDA 6.3 process auditor



Forum for exchange of experiences (questions, suggestions, discussions) on the subject of VDA 6 part 3, edition June 2010 Optional download of answer tool

In the Internet, our forum for the current training courses on VDA 6.3 is open to all participants. After successful registration, you can also download the current versions of the Excel evaluation tool for process audits and potential analysis in English and German. With this forum, we want to do justice to the importance of this standard, provide the opportunity to contribute to it and enable requirement and user-adequate further development. You can have discussions with experts and ask questions about application and interpretation.

From your contributions, we will generate SI's and FAQ's, and make them available directly on our cover page in the Internet.

Register here for the forum:
www.vda-qmc.de/forum/vda-qmc-forum-registrierung/

After review of your registration (participation in training) you will receive an E-mail with the password. So don't forget to enter your training number when you register (e. g. 1402/12-01). You will find this number on your feedback note.

With this forum we hope to provide you with added value for your trainings, and we wish you lively and valuable discussions.

ID 1402
Module A – General Basics for Process Auditors VDA 6.3

On the basis of the process approach in ISO 9001 which underlies ISO/TS 16949 and the respective customer requirements, this 2-day training teaches you the basics for process auditors according to VDA 6.3.

The introduction to the basics of auditing techniques includes general requirements, methods, principles and risk analysis.

These general basics enable you to understand correlations and apply and implement the necessary sequences correctly.

The following focus areas are included, and are discussed using practical examples:

+ Quality systems, application and benefit for process audits (ISO 9001; ISO/TS 16949)
+ Quality management methods (production part approval, control plan, quality plan, risk analyses (FMEA, problem solving processes etc.)
+ Risk analysis with “Turtle” analysis
+ Communication, ethics and code of conduct
+ Customer requirements and their interpretation (VDA requirements, customer-specific requirements etc.)
+ Steps of the process-approach audit (from preparation to completion)
+ Evaluation rules and evaluation

These training steps lead you through the basic requirements and enable you to apply a holistic approach in automotive industry.

Prerequisites for participation
QM basic knowledge, professional experience in automotive industry

Qualification certificate
After successful completion of the training (at least 80% attendance) and after passing the test, you will receive a qualification certificate.

Duration
2 days

ID 1407
Module BI – Process Audit VDA 6.3 – Serial Production

On the basis of the process approach ISO 9001 underlying ISO 16949 and the respective customer requirements, this 1½-day training teaches you the application of the VDA 6.3 questionnaire in serial production P5–P7 on the basis of interpretations and practical examples.

We aim to enable you to apply process audits throughout the production chain, including aftersales, to identify risks and determine potential.

The following focus areas are included and discussed using practical examples:

+ Audit preparation
+ Application of the respective questionnaires
+ Supplementation of the questionnaire with respective preparation
+ Customer requirements and their interpretation (VDA requirements, customer specific requirements (CSR etc.)
+ Evaluation rules and evaluation in serial production
+ Documentation and completion

These insights are applied to correction, stabilization and optimization of processes and are developed in the exercises and examples.

Qualification certificate
After successful completion of the training (at least 80% attendance) and after passing the test, you will receive a qualification certificate.

Duration
1½ days

ID 1405
Module BII – Process Audit VDA 6.3 – Product Life Cycle

On the basis of the process approach ISO 9001 underlying ISO 16949 and the respective customer requirements, this 3-day training teaches you the application of the VDA 6.3 questionnaire throughout the supply chain P1–P7 on the basis of interpretations and practical examples.

We aim to enable you to apply process audits throughout the supply chain to identify risks and determine potential.

The following focus areas are included and discussed using practical examples:

+ Audit preparation
+ Application of the respective questionnaire P1–P7 including potential analysis
+ Supplementation of the questionnaire with respective preparation
+ Customer requirements and their interpretation (VDA requirements, customer specific requirements (CSR) etc.)
+ Evaluation rules and evaluation in the product life cycle
+ Documentation and completion

These insights are applied to correction, stabilization and optimization of processes and developed in the exercises and examples. The objective is to ensure a sound evaluation.

Qualification certificate
After successful completion of the training (at least 80% attendance) and after passing the test, you will receive a qualification certificate.

Duration
3 days

ID 1408
Module C – Examination Day for Certified Process Auditor VDA 6.3 (optional)

Target audience
Process auditors VDA 6.3 in product life cycle

Prerequisites for participation
Admission to this course takes place after successful assessment of your registration form. The necessary form 1408 can be found on our homepage www.vda-qmc.de under “Training and Professional Development”/“Application Forms”.

Evidence of successful completion of Module A and Module B II or Module D is required for the admission to the examination.

Qualification certificate
After passing the written and oral exams you will receive a VDA certificate with registered numbering as well as a corresponding auditor card and VDA QMC database entry. For this card we need a digital passport photo in JPEG format in advance.

Duration
1 day

ID 1409
Module D – Upgrade Training VDA 6.3 (from VDA 6.3 old to VDA 6.3 new)

This training deals with the changes to VDA 6.3 old (1998 edition) regarding generic approach, potential analysis evaluation, parts of the audit process, evaluation guideline, knowledge store, as well as changes in the questionnaire P1–P7.

Target audience
Process auditors VDA 6.3 (old)

Prerequisites for participation
Admission to this course takes place after successful assessment of your registration form. The necessary form 1409 can be found on our homepage www.vda-qmc.de under “Training and Professional Development”/“Application Forms”.

Prerequisite for admission to upgrade training: training certificate VDA 6.3 (old) and confirmation by employer that auditing VDA 6.3 constitutes a significant part of the applicant’s job.

Qualification certificate
After completion of the training (at least 80% attendance) and after passing the exam, you will receive a VDA qualification certificate.

Duration
2 days

ID 1410
Module E – Qualification as Process Auditor VDA 6.3 in the Product Life Cycle with certified examination

This offer is designed for people who want to achieve qualification as a certified process auditor VDA 6.3 within the shortest time possible.

In the pleasant environment of the conference hotel you can acquire the necessary knowledge and take the exam in 5 days.

Content

Module A – General Basics for Process Auditors VDA 6.3

On the basis of the process approach ISO 9001 underlying ISO 16949 and the respective customer requirements, this training teaches you the basics for process auditors VDA 6.3.

The introduction to auditing techniques includes general requirements, methods, principles and risk analysis.

These fundamentals enable you to apply correctly and deploy the correlations and necessary steps.

The following focus areas are included, and are discussed using practical examples:

+ Quality systems, application and benefit for process audits (ISO 9001; ISO/TS 16949)
+ Quality management methods (production part approval, control plan, quality plan, risk analyses such as FMEA, problem solving processes etc.)
+ Risk analysis with “Turtle” analysis
+ Communication, ethics and code of conduct
+ Customer requirements and their interpretation (VDA requirements, specific customer requirements etc.)
+ Steps of the process-approach audit (from preparation to completion)
+ Evaluation rules and evaluation

These training steps lead you through the basic requirements and enable you to apply a holistic approach in automotive industry.

Module BII – Process Audit VDA 6.3 – Product Life Cycle

On the basis of the process approach ISO 9001 underlying ISO 16949 and the respective customer requirements, this part of the training teaches you to apply the VDA 6.3 questionnaire throughout the supply chain P1–P7 with the aid of interpretations and practical examples.

We aim to enable you to use the process audit to identify prospective risks and potentials throughout the supply chain.

The following focus areas are included, and are discussed using practical examples:

+ Audit preparation
+ Application of the relevant questionnaire P1–P7 incl. potential analysis
+ Supplementing the questionnaire by relevant preparation
+ Customer requirements and their interpretation (VDA requirements, specific customer requirements (CSR) etc.)
+ Evaluation rules and evaluation in the product life cycle
+ Documentation and completion

These insights are applied to correction, stabilization and optimization of processes and developed in the exercises and examples. The aim is to ensure robust evaluation.

Module C – Examination Day for Certified Process Auditor VDA 6.3
The VDA 6.3 process auditor examination is in two parts: a written and an oral exam. After passing the complete exam, you will receive a VDA certificate, the auditor card and an entry in the VDA QMC database. For this card we need a digital passport photo in JPEG format in advance.

Prerequisites for participation
Basic QM knowledge and professional experience in automotive industry

Duration
5 days

ID 1411
Module F – Workshop: Exchange of Experiences for Process Auditors VDA 6.3

This workshop gives you the opportunity to exchange your experiences from day to day practice and to further develop your application skills.

After successfully completing your qualification as process auditor VDA 6.3, you will in practice now and again be confronted with audit situations in which you may be uncertain about how to handle the suitable evaluation of requirements or other details. This workshop affords the opportunity to discuss such situations with other participants and to determine correct and false solutions together with the team of experts. This helps the participants to feel confident in application and inspires them to further personal development.

The workshop is facilitated by an instructor who has significant practical experience. Determined solutions are documented and published as SI if necessary.

Target audience
Internal/external process auditors

Note
Number of participants 8 to max. 15

Duration
1 day

ID 1511
Qualification as 1st/2nd/3rd Party Auditor VDA 6.4 (Training)

VDA volume 6.4 contains the ISO 9001 requirements and is structured in a way to clearly portray the further or concrete automotive requirements.
Process-oriented inspection and analysis of organizations on the basis of the process model of international automotive industry. To analyze business processes so that the weaknesses in the system of workflows, especially at the interfaces, can be identified and improvement potential can be demonstrated.

Target audience
Auditors, QM personnel and executives from the production goods sector who want to qualify as VDA Internal Auditors.

Contents
+ Exercises familiarize you with the current QM system requirements for production goods manufacturers
+ Analyze customer-oriented processes, Octopus model
+ Work out VDA process model (similar to IATF)
+ Differentiate process characteristics, subdivide processes, merge process chains
+ Use the turtle model as a method for risk evaluation
+ Process-approach evaluation (VDA points scheme, standard processes)
+ Exchange experiences from practice
+ Focus areas: individual production (shop fabrication) and VDA 6.4 requirements going beyond ISO 9001

Prerequisites for participation
ISO 9001 knowledge as well as basic knowledge of FMEA, SPC and MSA required.

Features
This training consists of two connected parts: Significant contents of VDA 6.4 and process approach in analysis, risk assessment and evaluation.

Qualification certificate
After completing this training and passing the written test you will be awarded a VDA qualification certificate “1st Party Auditor”.

Duration
3 days

ID 1512
Examination Day 2nd/3rd party Auditor VDA 6.4

Prerequisites for participation
Admission to this course takes place after successful assessment of your registration form. The necessary form 1409 can be found on our homepage www.vda-qmc.de under “Training and Professional Development”/“Application Forms”.

The exact prerequisites can be found in the current edition of VDA volume 6.

Participation in the training “Qualification for 1st/2nd/3rd party Auditor VDA 6.4” is required.

Features
Registration for the course only by management of your organization (for 2nd party auditors) or by your certification body (for 3rd party auditors).

Qualification certificate
After passing the written and oral exams you will receive a VDA certificate with registered numbering as well as a corresponding auditor card and VDA QMC database entry. For this card we need a digital passport photo in JPEG format in advance.

Duration of examination
1 day

ID 1601
Qualification as Product Auditor VDA 6.5 – Product audits according to VDA 6.5 – Management of Product Audit Programs

Increased customer demands, safety requirements, statutory regulations as well as the increased use of electronic components and software lead to ever more complex products.

End customer expectations can no longer be identified only in specifications. The automotive manufacturers and supply industry are required to identify these product characteristics on their own responsibility and transform them into products. This focus must also be taken into account when conducting product audits.

Meanwhile, product quality is assured by the consistent implementation of the methods for preventive quality planning. Thus, a product audit has not only quality assurance objectives but also plays a role in providing evidence.

In the process chain, the product audit demonstrates the quality level of the internally/externally manufactured products.

This training “Management of Product Audit Programs” shows participants how to conduct product audits efficiently from an efficient and economical point of view.

Target audience
People who plan and/or conduct product audits in their organization.

Content
+ Product audit basics
+ Product audit sequence and audit program
+ Audit planning
+ Conducting product audits
+ Reporting
+ Corrective action
+ Qualification requirements

Prerequisites for participation
None, knowledge about product audits recommended

Qualification certificate
At the end of the course you will receive a VDA participation certificate.

Duration
1 day

ID 1701
Qualification as Process Auditor for Unit Production and Job Shop Production VDA 6.7

Customer requirements can best be fulfilled when process audits are carried out for the sectors of unit production and job shop production.

After successfully completing this seminar you will be able to analyze complex workflows as well as identify weak points and their causes: you will feel comfortable in the monitoring of initiated improvement actions and will be able to evaluate their effectiveness. You will achieve stable processes and reduce failure costs and waste by identifying deficits and improvement potentials (as well as by the reviewing the effect of improvement actions).

Target audience
Process optimizers, auditors

Contents
+ Significance and area of application of the process audit according to VDA 6.7
+ Communication of the interrelationships between system, process and product audits
+ Creation of a joint understanding and a coordinated procedure when using this management instrument with production and test equipment suppliers as well as automotive industry

Prerequisites for participation
Specific knowledge of VDA 6.4 as well as of process orientation according to the IATF model is advantageous.

Important! All participants are required to bring an appropriate workflow from their own organization (order/project) with them to the seminar. At the beginning of the seminar the participants will select two different workflows in consultation with the instructor. In group work and role plays auditing will be exemplarily practiced with these workflows.

Qualification certificate
After completion of this seminar and after passing the test, we acknowledge the successful participation with a VDA qualification certificate “Process Auditor VDA 6.7”

Duration
2 days

ID 1800
Requalification for 2nd/3rd party Auditors VDA 6.1, VDA 6.2 and VDA 6.4

VDA QMC has determined the requirements for management systems in the standards VDA 6.1 “QM System Audit for Part Manufacturer-Series”, VDA 6.2 “QM System Audit Services” and VDA 6.4 “QM System Audit Production Equipment”.

These standards, in connection with VDA 6 “Quality Audit Basics” describe the approach fort he certification of QM systems by VDA QMC accredited certification bodies. The condition for awarding certificates is that the accredited auditors evaluate the requirements defined in the standards during the audits. The aim of this requalification training is to introduce the current requirements to the auditors and/or refresh their knowledge.

Target audience
2nd and 3rd party Auditors who can provide evidence of valid qualification according to VDA 6.1 or VDA 6.2 or VDA 6.4 and want to apply for an extension.

Content
This training presents the current editions of VDA 6, 6.1, 6.2 and 6.4. The main focus is on the process approach to audit planning and the application of the Turtle model for process evaluation according to VDA. Furthermore, the participants are provided with an overview over the supplementary VDA volumes (current status and new publications).

Prerequisites for participation
None

Qualification certificate
After completing the training you will receive a VDA participation certificate.

Note
Minimum number of participants: 10

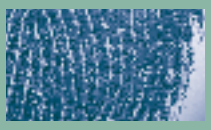
Duration
1 day

II. Automotive-Specific Qualification for Management, Specialists and Project Managers

Management Systems

QM Methods and Tools in Use

Joint Quality Management in the Supply Chain



Qualification Programs in Cooperation

Management Systems

+ Contractual and Product Liability in the Automotive Value Chain
+ Documentation and Archiving according to VDA 1
+ Error Culture and Leadership (inhouse only)
+ Lecture on Error Culture and Leadership (inhouse only)
+ Process Management
+ Environmental Management Basics according to DIN EN ISO 14001

ID 2203
Contractual and Product Liability in the Automotive Value Chain

Successful certification according to VDA 6.1 (QM system audit) requires an organization to be familiar with the basics of contractual and product liability. Personnel in the organization must be aware of the effects of nonconforming product, as relevant to their tasks. The consequences of product liability for the organization must be basically known to personnel. Contractual and product liability is not only based on continually changing legislation but also on jurisdiction, ignoring which can have grave consequences. Especially within the framework of compliance requirements for the automotive value added chain personnel must be familiar with the basics of legal business activities.

We want to enable you after this training to successfully implement the basics of contractual and product liability in your field of work.

Target audience
(Prospective) executives and personnel from all areas of the organization (development, planning, production, quality assurance, sales, customer service, management) with technical and commercial training.

Content
+ Current legal basis of product liability
+ Contractual liability in the automotive value chain
+ Penal product liability
+ Quality assurance agreements
+ Compliance requirements in the value chain
+ US product liability basics
+ Assessment and avoidance of product liability risks
+ Additional information on legal issues and case examples

Prerequisites for participation
None

Qualification certificate
At the end of the course you will receive a VDA participation certificate.

Duration
2 days

ID 2208
Documentation and Archiving according to VDA 1

For various reasons (auditing, recalls, product liability, legal and statutory requirements, etc) a company will want to or have to maintain documented evidence that its quality management system works and that only products that conform to all requirements are produced. The requirements for such a system for documentation and archiving are described in VDA volume 1. This VDA volume was comprehensively revised in 2007. This revision was guided by the following objectives:

+ Paring down of the volume by concentrating on the essentials
+ Specification and clarification through the use of examples
+ Avoiding ambiguous words such as could, should, etc.
+ Instead of using complete legal texts only references to the originals are made
+ Ensuring internationality by taking international standards into account
+ Checking of previous terms and definitions
+ Consideration of IT developments in terms of electronic archiving and signature

As to the reasons for documentation and archiving, this 3rd edition focuses on documentation and archiving in the case of critical characteristics. In this way, the archiving scope for the conformance to legal requirements is reduced to the necessary and therefore the use of the guidelines is simplified. All of the documents discussed in VDA volume 1 play a primary role in the quality management of a company. For technical documentation please refer to the VDI 4500 guideline.

Target audience
Internal and external auditors, staff members from QM and IT departments with documentation and archiving responsibilities.

Contents
+ Communication of the essential contents of VDA volume 1
+ Reference to relevant parts of the VDI 4500 guideline
+ State of technology for electronic archiving and signature

Prerequisites for participation
+ Recommendation: ISO 9001 Basic Course
+ Professional experience in the automotive industry

Qualification Certificate
At the end of the course you will receive a VDA participation certificate

Duration
1 day

ID 2220
Error Culture and Leadership (in-house only)

Many organizations find themselves in a dilemma. In most organizations, significant effort is put into preventing errors, but on the other hand the same organizations have more or less large areas devoted to eliminating and overcoming errors. Statistically spoken, they have already reached a very low error level, which can only be maintained or even further reduced with inordinate expenditure of technical effort. Often, apart from a few "slumps" there are usually a large number of virtually individual errors.

This training shows that, in the end, almost all errors are caused by human failure. Their effects on the organization depend on the prevalent error culture and management's mindset in shaping this culture.

Starting from different results in experimental psychology (such as, e. g., the paradoxical influence of lower error expectation by stringent prevention on the severity of errors if they do eventually occur), and taking into account one's own (and also management's) fallibility, the conscious handling of errors (own errors and the errors of colleagues, employees and superiors) is practiced. The participants should realize that the errors are not the problem, but their consequences. Errors should be seen as an opportunity for improvement. The participants discuss and develop thought patterns, behavior patterns and methods in support of modern error management, the challenge of which is the prevention of repeated errors and the minimization of the consequences of errors.

Target audience
This training is especially suited for management executives from technical (e. g. design and development, planning, production, logistics, quality management) as well as commercial areas (purchasing, controlling).

Contents
+ The customer's zero-error expectation as the starting point
+ Why errors are really inevitable and yet what you can do about them
+ Analysis of the role of error culture and mindset in the organization
+ Executives and their handling of errors
+ Error prevention and error management as a sensible supplement
+ Error management to minimize error consequences, prevention of repetitive errors
+ Methods and tools for effective error management

Prerequisites for participation
Management responsibility and willingness, within the framework of this training, to admit the realization of one's own fallibility as well as interactive teamwork and case studies.

Qualification certificate
At the end of the course you will receive a VDA participation certificate.

Duration
1 ½ days

ID 2221
Error Culture and Leadership
An approx. 60 minute lecture in your organization

A signal lecture for decision makers to encourage them to communicate the issue of error culture and leadership through further in-house trainings.

Executives from top management are mostly not able or not prepared to "sacrifice" 1 ½ or 2 days to an issue they hardly know anything about.

The lecture will familiarize the decision makers with the main topics of the training.

They will be given an introduction to current error research and the fundamental concepts of error management.

Lecture and training have USP character, at the present time there is no comparable training available on the market.

Target Audience
Top executives, top management

Content
The lecture introduces you to the main content of the training:
+ Introduction to error research
+ Fundamental concepts of error management
+ Culture and mindset of good error management
+ Tool overview

The following topics will be presented and explained:
+ The main aspects of culture and mindset of good error (management) culture
+ Overview of main tools for error management
+ Dealing with errors, the main (human) causes of errors, the mechanisms of subsequent errors and error cascades

The term error is defined in a broader sense, going beyond "standard definitions" and based on the theory that, in the end, all errors, even technical ones, are induced by human behavior.

Central messages:
+ Everyone makes mistakes, mistakes are unavoidable
+ The error is not the problem, it is the negative consequences of the error
+ You can learn to deal with errors in a positive way and to pass this behavior on
+ The way executives deal with their own mistakes and colleagues' and employees' mistakes defines the culture of an organization
+ A positive way of handling errors reduces the error risk for customers
+ Good error culture has a positive effect on profitability

These statements are made plausible by analyses and reports from real experiences.

At the same time, the decision makers are made aware of the idea that preventive efforts alone are not sufficient. Convincing evidence for this is that despite significant expenditure on error prevention almost every organization still has a high overhead for eliminating errors and solving problems.

Dates
Dates by agreement

Fee
Please enquire for your individual quotation.

ID 2401
Process Management

To sustainably embed and improve the process approach throughout the whole organization provides significant leverage for success in global competition.

Process management is the comprehensive method to achieve process orientation. Consistent process management produces perceptible advantages that have a positive effect on any calculation of success.

The objective of business process management is to utilize the information available in the organization for the organization's business processes, to align them with the customers and thus generate a significant contribution to achieving business objectives.

Professional design and optimization of processes increases the profitability of an organization. Thus, comprehensive process know-how is a core competence for executives in quality and process management. If you're quicker, you can beat competition.

In our training to "VDA Process Manager" you learn to analyze processes, evaluate and improve them with measures.

Target audience
People who want to stabilize and improve sequences and processes in their organizations with proven quality management methods.

Contents
+ Process management basics
+ Process organization
+ Process types, levels and models
+ Process identification
+ Structuring processes
+ Developing process objectives and measures
+ Measuring and controlling processes
+ Process interactions
+ Process analysis and optimization
+ Methods and tools for process improvement

Prerequisites for participation
Knowledge about organizational processes

Qualification certificate
After passing the test you will receive a VDA participation certificate.

Duration
2 days

NEW

ID 2601

Environmental Management Basics according to DIN EN ISO 14001

More and more automotive manufacturers and suppliers, by way of the general conditions of sale, are required to implement environment and resource conserving production methods. The number of organizations in the automotive supply chain documenting this with certification to DIN EN ISO 14001 is increasing.

Based on this DIN EN ISO 14001, participants receive a general overview over the structure, extent and maintenance of an environmental management system. The main focus is on the PDCA approach (Plan-Do-Check-Act) and the general prerequisites for an environmental input and output data collection. With the aid of examples from automotive industry, solutions and procedures are demonstrated, discussed and practiced in group exercises.

Contents

+ Objectives and benefits of a certification to DIN EN ISO 14001
+ What is DIN EN ISO 14001 and what are the differences to EMAS and further environmental management approaches
+ Structure of the standard DIN EN ISO 14001
+ Relevant environmental legislation and regulations
+ Formal prerequisites and procedure of certification and/or validation
+ Function, requirements and tasks for the environmental representative and/or internal auditor
+ Integration of environmental management into the organization's management
+ Practical implementation and project organization
+ PDCA approach and the requirement for continuous improvement
+ Input and output data collection and documentation von environmental effects
+ Procedure and extent of an environmental audit according to DIN EN ISO 14001
+ Exercises and case examples from the automotive sector

Target audience

Decision makers in the quality management area, environmental representatives and prospective environmental department personnel

Prerequisites for participation

None

Methodology

The training alternates between lecture, discussion and group exercises.

Duration

2 days

QM Methods and Tools in Practice

+ Compact Training QM Methods
+ SPC – Economical process Design and Process Control with Due Regard to Tolerances (VDA 4)
+ FTA – Fault Tree Analysis – Model for Structured Examination of Complex Relationships (VDA 4)
+ FMEA – Failure Mode and Effects Analysis, Product and Process-FMEA according to VDA 4, Special Characteristics
+ QFD – Quality Function Deployment (VDA 4)
+ TRIZ/TIPS – Theory of Inventive Problem Solving (VDA 4)
+ DFMA – Design for Manufacture and Assembly (VDA 4)
+ DoE – Design of Experiments (VDA 4)
+ VDA 2 – Production Process and Product Approval (PPF)
+ Problem Solving Techniques 8D and 5Why (VDA 4)
+ Compact Training Core Tools
+ Automotive Core Tools
+ VDA 16 – Decorative Surfaces of Attachment and Functional Parts
+ Qualification for VDA 5 – Test Process Representative
+ Basic Training Measuring Techniques
+ Qualification for VDA Test Equipment Representative

QM Methods and Tools in Practice

Application of Methods

Target audience:
Decision makers

Compact Training QM-Methods
Duration: 1 day | ID 2101 | page 82
Contents: Methods, selection, benefits, examples

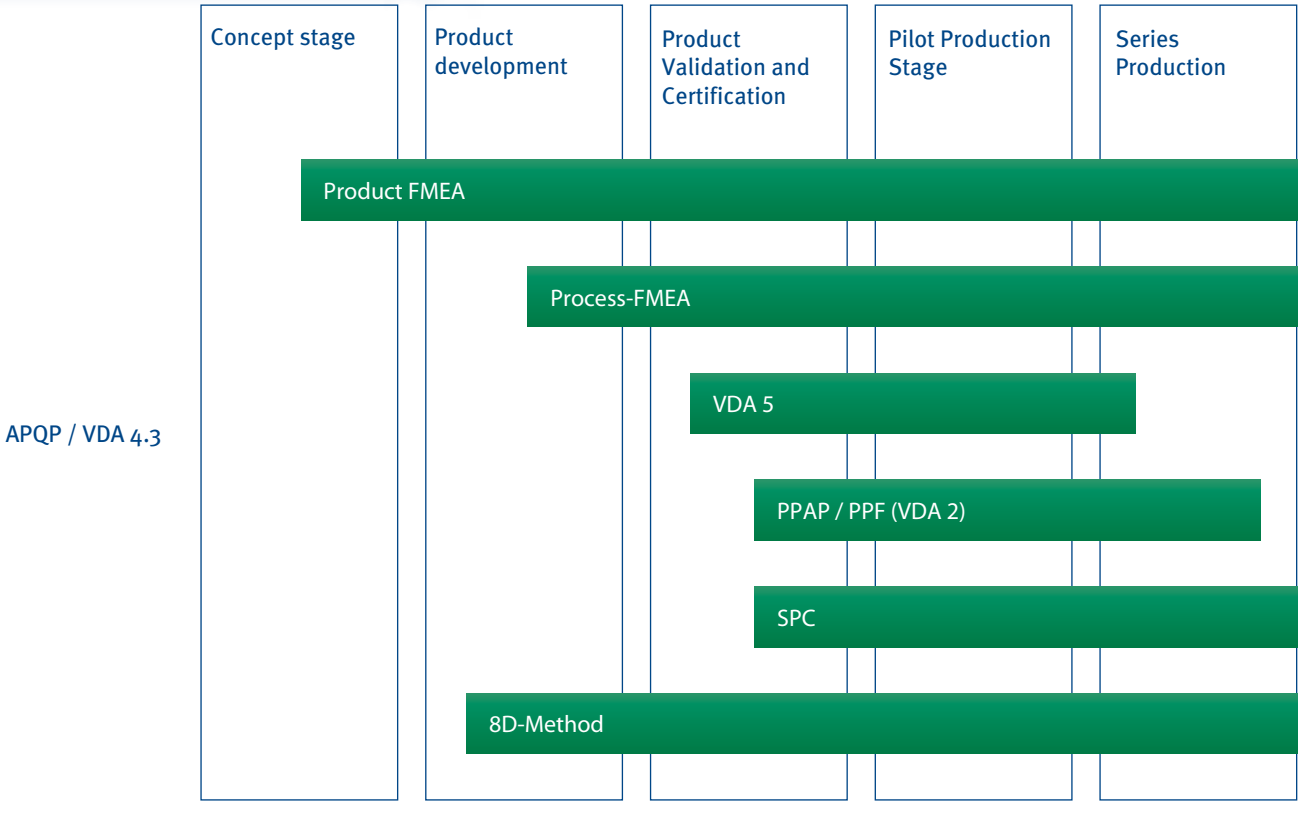
Target audience:
Project staff

Compact Training Core Tools
Duration: 1 day | ID 2706 | page 95
Contents: APQP, PPAP, FMEA, MSA, SPC, 8D

Understanding Interrelationships

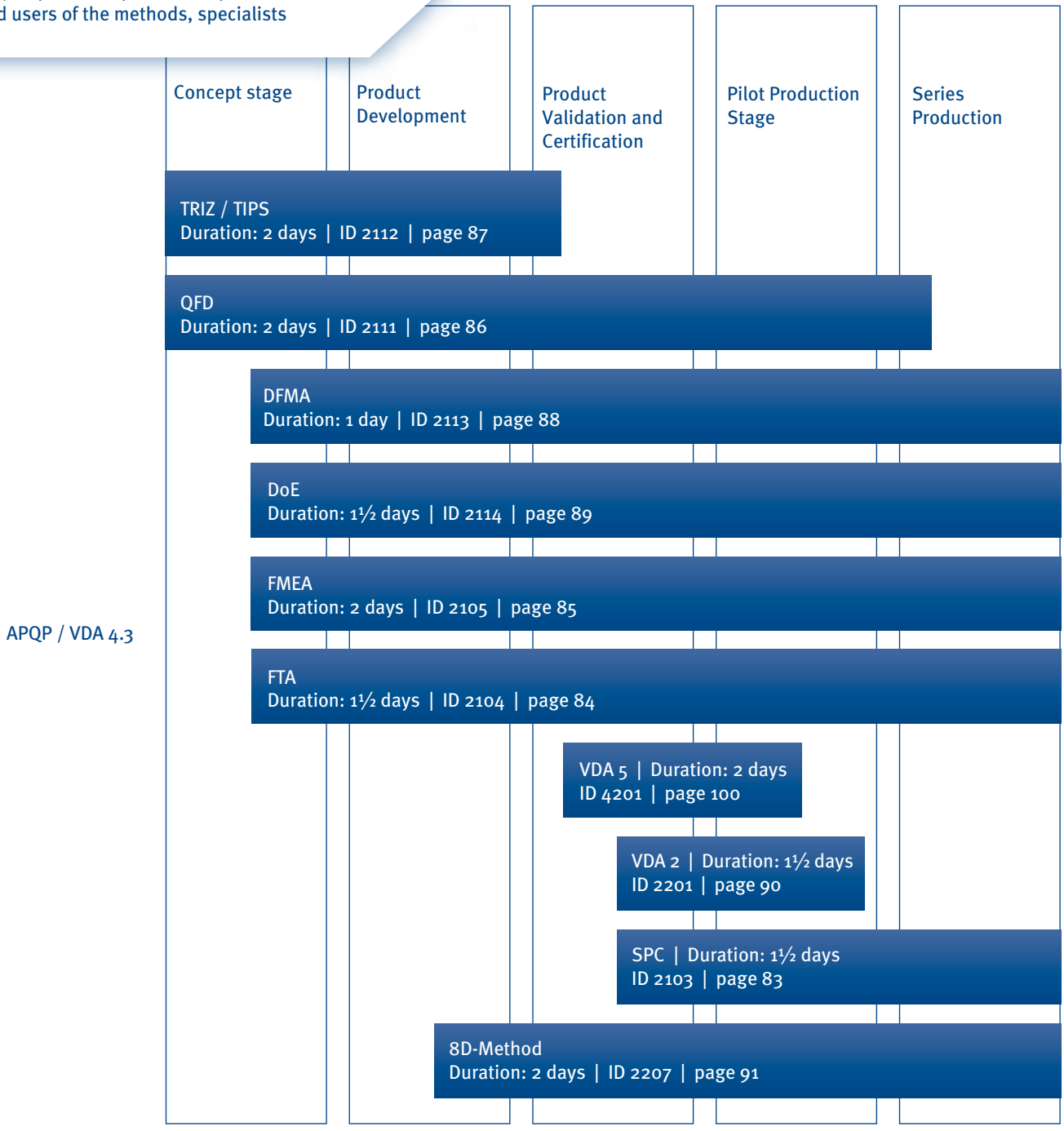
Target audience:
Project planners, persons responsible for and users of the methods

Automotive Core Tools
Duration: 2 x 3 days | ID 2707/2708 | page 96/97
Examination for "Automotive Core Tools Professional"
Duration: 1 day | ID 2709 | page 98



Consolidation of Methods

Target audience:
Project planners, persons responsible for and users of the methods, specialists



ID 2101
Compact Training QM Methods

It is essential to support objective and risk-focused handling of tasks in connection with new developments, changes or further developments of products and processes with quality management methods. Furthermore, the application of QM methods is required by laws, standards and regulations and thus constitutes the “state of the art”.

This compact training Quality Management Methods was developed to provide qualification for decision-makers who need information or employees interested in other or further tasks in their professional field.

This compact training includes contents, selection and application of QM methods, risk analyses and approach models that support automotive or supplier tasks. Apart from the proven methods of QFD, DoE and FTA, TRIZ, economical tolerance process, DFMA and SIX SIGMA are discussed. The selection method developed by VDA QMC for the application or QM methods is explained.

Practical and exercise examples help to obtain practical relevance, and the participants are thus prepared for cases of application in their present or future field of activity.

A final test helps the participants to assess their qualification status after the training.

Target audience
Decision-makers for the application of methods, responsible project managers, employees participating in decision processes, employees aspiring to qualification for the future.

Contents
+ Overview over contents of QM methods
+ Presentation and explanation of practical examples
+ Group exercises
+ Selection and evaluation of benefit of the various QM methods
+ Final test

Prerequisites for participation
None, basic knowledge of statistics is helpful.

Qualification certificate
After passing the test you will receive a VDA participation certificate.

Duration
1 day

ID 2103
SPC – Economical Process Design and Control in Consideration of the Tolerances (VDA 4)

In this seminar you will learn the correct use of process capability examination and will gain expertise in distribution patterns and therefore also in the basic principles of calculation to determine process capability indicators.

This procedure requires a coordinated tolerance process between developer and production planner and/or finisher. According to specific studies, there is still significant waste of resources and material in our industry, since findings are often not consistently implemented.

Target audience
Employees from development, production, persons responsible for the application control of quality methods, production process planners and supervisors, product developers and persons in charge of processes, (prospective) executives of the automotive and supplier industry.

Contents
+ Improved cooperation of product and process development
+ The use of optimized methods for process configuration and monitoring with working examples
+ The selection and control of significant process characteristics
+ Determination of the suitable method of process control
+ By processing projects from your own company you will practice optimizing the fulfillment of quality characteristics required by the quality management system in the product development process.

Prerequisites for participation
None

Qualification certificate
At the end of the course you will receive a VDA participation certificate.

Duration
1 ½ day

ID 2104
FTA – Fault Tree Analysis – Model for the Structured Examination of Complex Relationships (VDA 4)

With the help of Fault Tree Analysis (FTA), the logical links from component or subsystem failures that lead to an undesired effect are identified. All possible failures as well as failure combinations and their causes are identified. Especially critical effects and/or effects combinations can be represented. Reliability variables (e.g. probability of the undesired effect or system availability) can be calculated, objective evaluation criteria for system concepts, and clearly arranged documentation of the failure mechanism can be achieved.

The purpose of the analysis is not only to detect failure causes, but also their functional interactions. FTA can be used preventively as well as for the identification of the cause of existing problems.

Target audience
Project leaders and their employees, (prospective) decision makers, developers of components and systems.

Contents
In structured group work you learn:
+ to describe cause-effect relationships by means of FTA
+ to identify risks in systems
+ to deduce the consequences from failures

Prerequisites for participation
None

Qualification certificate
At the end of the course you will receive a VDA participation certificate.

Duration
1 ½ days

NEW

ID 2105

FMEA – Failure Mode and Effects Analysis, Product and Process FMEA according to VDA 4, Special Characteristics

Product and process FMEA is a risk analysis that accompanies planning and development and that is integrated into technical departments. FMEA is an instrument for early identification and avoidance of potential failures, especially in new concepts. By means of a systematical approach, potential errors are determined and evaluated during development and planning phases. By determining actions, failures are avoided and/or risks are reduced. It is therefore an important management instrument that supports interdisciplinary teamwork. FMEA also indicates, through experience, calculation, testing and examination, by how much the risk has been reduced or can still be reduced in future. Thus failure mode costs are minimized and cross-divisional teamwork is optimized, so that FMEA is of significant benefit to the organization.

Due to the interaction between the process Special Characteristics with the product and process FMEA, this training also deals with the process Special Characteristics and explains the correlations. Processes must be defined and provided evidence of for the identification, definition and further safeguarding of the Special Characteristics. This training teaches the basic requirements and how to deal with them with the aid of examples in different stages of production in the automotive sector.

Target audience
Project leaders, project members, executives and employees involved in interdisciplinary work in development, testing, planning, production and quality management.

Contents
+ Establish objectives of the analysis
+ Analyze products and processes in five steps by means of practice examples
+ Evaluation and quantification of risks
+ Evaluation of analyses
+ Transferability to future problems
+ Successfully deal with problems interdisciplinarily
+ Requirements for identifying Special Characteristics
+ Safeguarding Special Characteristics
+ Correlation FMEA/Special Characteristics
+ Exercises/Case examples

Prerequisites for participation
None

Qualification certificate
At the end of the course you will receive a VDA participation certificate.

Duration
2 days

ID 2111
QFD – Quality Function Deployment (VDA 4)

With this comprehensive planning and communication system, all resources of the organization are coordinated in the preliminary decision phase (concept finding), in order to develop, manufacture and market the products and services that the customer expects. This applies equally to customers as end customers and customers as subpurchasers in the supply chain.

By means of quality scales with matrix fields, dependencies and relationships, right up to product comparisons, are represented in the “House of Quality”.

Eventually this relationship matrix shows how the customer requirements can be implemented in product characteristics, with ranking lists for objectives and practical implementation in the organization.

This approach also effectuates the reduction and avoidance of failures and their failure mode costs that normally occur in the implementation of orders with requirement specifications or market analyses.

Target audience
Persons responsible for projects and executives from advance development, design, testing, planning, controlling, purchasing, sales and quality management.

Contents
+ Determination of the stated and not stated customer requirements
+ A comparison with the competitor’s products is demonstrated
+ The relationship between customer requirements and product characteristics is developed and evaluated
+ The technical difficulties in the implementation in your own circumstances are also evaluated
+ Concrete objectives with target values are established for product characteristics
+ You will learn about the advantages of customer orientation, transparency and teamwork
+ Group work with practical examples

Prerequisites for participation
None

Qualification certificate
At the end of the course you will receive a VDA participation certificate.

Duration
2 days

ID 2112
TRIZ / TIPS – Theory of Inventive Problem Solving (VDA 4)

With this method, innovative solutions are found and existing systems are optimized. The basic principles for successful application are the goal-oriented definition of tasks and resolving of contradictions.

The identification, amplification and elimination of technical and physical contradictions in technical systems by means of basic innovative principles and standard solutions of inventive tasks lead to astonishing findings and to some extent surprising solution approaches.

In the future TRIZ will be the method in industry and other branches for improving innovative ability and in this way maintaining productivity of the organization. The early results of using TRIZ fulfill the cross-functional tasks within quality management.

Target audience
Executives, decision makers and persons responsible for projects in advance development, design and planning.

Contents
+ The starting position is described and first the overall objective is deduced, taking corporate and technological trends into consideration
+ A functional system analysis is carried out applying the evolution laws of technology
+ A problem matrix is created from the objective factors and system parameters, in order to identify inconsistencies
+ By means of problem solving tools and by using known principles and regularities, the participant can recognize solutions
+ The introduction to simple practical examples allows decision making for further consolidation and applications in your own organization
+ The participants are introduced to inventive problem solving approaches in group work

Prerequisites for participation
None

Qualification certificate
At the end of the course you will receive a VDA participation certificate.

Duration
2 days

ID 2113
DFMA – Design for Manufacturing and Assembly (VDA 4)

In the early phase of the product development process, a coordination of all sectors of the organization that are involved in the product takes place, so that the requirements of all parties involved in product design are integrated.

The simultaneous engineering team and the application of DFMA as methodical support provide for an optimization of engineering design and manufacturing costs.

Decrease in the number of parts and cutting down development time, reduction of assembly expenditures and increase in quality. The many changes that used to mount up just before SoP and the ensuing costs are greatly reduced or possibly completely avoided.

Target audience
Decision makers and project employees in advance development, design, planning, production and quality management.

Contents
In group work the participants learn the systematic approach in the simultaneous engineering team with the objective of optimizing a developed system/module, in order to lower costs and increase quality.

+ Analysis of the current state by developing a structure diagram with the allocation of indicators
+ Systematic discussion on the basis of a targeted list of questions
+ Sorting and prioritization of solution approaches
+ Comparing the possible alternatives and deciding on an optimized system

Prerequisites for participation
Basic principles of project management

Qualification certificate
At the end of the course you will receive a VDA participation certificate.

Duration
1 day

ID 2114
DoE – Test Methodology Design of Experiments (VDA 4)

Practice-suitable analysis of systems in experimental tests using statistical design. The focus is on the obtainment of knowledge about system behavior with new products or product changes, as well as with production processes with reduced testing expenditure. Despite fewer experimental tests, a meaningful result arises from the statistical test method according to Shainin or Taguchi with the improved parameters. DoE is also a quick and accurate problem solving method for problems in production with machine and procedure-dependent production processes.

If used consistently, the organization will benefit from cost reductions and increases in quality.

Target audience
Project members and responsible persons from development, testing, planning, production and quality management.

Contents
+ Group work with practical examples
+ Exact system descriptions with the determination of interfaces and problem analysis
+ Exemplary description of influencing variables with their interactions and of target values
+ Reproduction of statistical tests according to the Shainin or Taguchi methods
+ Selection of the best solution for the system and/or process

Prerequisites for participation
None

Note
In order to reproduce the testing calibration and the evaluations, we recommend a PC or programmable calculator.

Qualification certificate
At the end of the course you will receive a VDA participation certificate.

Duration
1 ½ days

NEW

ID 2201

VDA 2 – PPF (Production Process and Product Approval)

The fifth edition of the VDA volume 2 was fundamentally revised in 2011 and adapted to the current automotive demands. Correlations to existing VDA volumes (e. g. maturity level assurance, VDA 6.3) are highlighted and integrated.

The objective of this training it to convey to participants the
+ triggers,
+ requirements,
+ structured implementation in operational and organizational structure
+ as well as providing evidence for the PPF procedure.

Target audience
Quality managers, quality engineers, purchasing/development/logistics/production personnel with quality relevant tasks, as well as all interested automotive personnel

Contents
+ Overview and relation to important legal/statutory regulations (e. g. BGB, HGB, ProdHaftG, GPSG, KBA, IMDS, REACH)
+ Structure of the fifth edition of VDA volume 2
+ Contents with changes since the fourth edition
+ Focus areas:
  + Basic sequence of PPF and sampling
  + Planning and coordination of PPF procedure incl. chronological integration into product engineering process
  + Trigger matrix
  + Sampling levels
  + Process validation
  + Dealing with small-scale series
+ Explanation of the necessary organization-specific need for regulation
+ Practical example sampling process

Prerequisites for participation
+ Working knowledge of ISO/TS 16949 basic requirements
+ Experience and knowledge in dealing with customer-specific requirements for sampling processes (e. g. Volkswagen AG, BMW AG and Daimler AG)
+ General basic knowledge of the VDA volumes is advantageous
+ Participation in VDA training “Maturity Level Assurance” is recommended

Qualification certificate
At the end of the course you will receive a VDA participation certificate.

Duration
1½ days

ID 2207
Problem Solving Methods 8D and 5 Whys Problem Solving Techniques (VDA 4)

Often problem solving is only understood to mean writing 8D reports. This seminar communicates the specific techniques of the 8D method and additionally demonstrates supporting analytical techniques for problem processing.

The participants will be trained to handle the evaluation of existing data and to describe still missing information in such a way that other team members can procure it for further processing.

Target audience
This course appeals especially to an organization's employees from sales, development, customer service and claims processing, production, purchasing, logistics, as well as internal and external quality assurance who in the foreseeable future will be put in charge of a problem solving team.

Contents
+ ISO/TS 16949, responsibility of management and correction and prevention measures
+ Team development
+ The problem solving methods 8D and 5 Whys as a process
+ Important techniques from 8D and analytical methods
+ Analytical selection
+ Case studies
+ Group work and team development
+ 8D report

Prerequisites for participation
Preferably first experiences with problem processing in your own organization.

Qualification certificate
At the end of the course you will receive a VDA participation certificate.

Duration
2 days

ID 2209
Problem Solving Methods 8D and 5 Whys
User Seminar (in-house only)

For many, the path from case study to concrete application proves a great challenge, sometimes overly demanding. This seminar was developed in order to accompany this step in an organization.

Therefore, as well as the case study, the participants also immediately deal with a problem from their own area of work. Parallel to the presentation of the 8D method steps, examples from your own organization are analyzed and prepared for a solution. Often, a solution can already be worked out in the course of the seminar.

With the case study, the seminar deals with all steps of the 8D method and 5 Whys. This cannot apply to all selected problem cases for the examples of use.

Four groups are formed with 1 topic each and with at the most 5 participants.

Target audience
This course is especially interesting for employees from sales, development, customer service and claims processing, production, purchasing, logistics as well as internal and external quality assurance who need a solution to current problems.

Contents
+ ISO/TS 16949, management responsibility and correction and prevention measures
+ The problem solving methods 8D and 5 Whys as a process
+ Important techniques from 8D and analytical methods
+ Case studies
+ Current internal and external claims
+ Group work and team development
+ 8D report

Prerequisites for participation
Preferably some experience with problem processing in your own organization.

Qualification certificate
At the end of the course you will receive a VDA participation certificate.

Dates
Dates by agreement

Fee
Upon request we will make you an individual offer.

5-Day Schedule

1st and 2nd seminar day

all 4 groups, Basic course for the 8D methods: steps Do to D2
Case studies, problems of the day, 2 days

Definition of tasks according to action plan, Timeframe: 2 to 4 weeks

3rd seminar day

2 groups in the morning, 2 groups in the afternoon
Basic course for the 8D methods: steps D3 to D4
Case studies, problems of the day, 2 x 0,5 day

Definition of tasks according to action plan, Timeframe: 2 to 4 weeks

4th seminar day

2 groups in the morning, 2 groups in the afternoon
Basic course for the 8D methods: steps D5 to D6
Case studies, problems of the day, 2 x 0,5 day

Definition of tasks according to action plan, Timeframe: 2 to 4 weeks

5th seminar day

2 groups in the morning, 2 groups in the afternoon
Basic course for the 8D methods: steps D7 to D8
Case studies, problems of the day, 2 x 0,5 day

Core Tools Overview

Professional planning prior to serial production is essential in order to ensure problem-free delivery to customers in the automotive supply chain. To this purpose, automotive industry has established the Automotive Core Tools as planning instruments:

APQP – Advanced Product Quality Planning – according to VDA 4.3 – project management for new processes and products.
APQP or project planning as well as assurance of maturity create the framework for the application of further Core Tools.

FMEA – Failure Mode and Effects Analysis
Management of process and design risks for the systematic analysis of construction weaknesses and potential production failures.

MSA – Measurement Systems Analysis
Measurement systems analysis and inspection process suitability according to VDA 5 to ensure that measurement systems are suitable for their respective application.

PPAP – Production Part Approval Process – or PPF – production process and product approval according to VDA 2
Approval procedure and initial sampling to provide evidence that products and processes fulfill all requirements at SOP.

SPC – Statistical Process Control
Control and assurance of ppm quality for products and processes during serial production.

8D-Method – Problem solving method
Systematic problem solving for structured processing of acute problems and prevention of reoccurrence.

ID 2706
Compact Training Core Tools

This training provides decision-makers, who need information, and employees, who are interested in further or different tasks in their professional field, with an opportunity to get to know the essential issues and fields of application, as well as customer requirements.

Methods and approach models are presented, discussed and explained using practical examples. Exercises create practical relevance for the participants and prepare them for applying the tools in practice in their present or future field of activity. The final test enables the participants to assess their qualification status after the training.

Target audience
Responsible project managers and all members of project teams, employees aspiring to qualification for the future.

Contents
+ Overview over contents of the “Core Tools”
+ Presentation and explanation of application in practice
+ Group exercises
+ Final test

Prerequisites for participation
None

Qualification certificate
After passing the test you will receive a VDA participation certificate.

Duration
1 day

ID 2707
Automotive Core Tools – Module I

Successful project work requires knowledge about planning processes and methods as well as an understanding of the interrelation between the methods. This training shows how the issues in individual phases of automotive projects are designed, how specific deployment of methods support the achievement of planned results and how the methods are deployed correctly and efficiently.

The theoretically and methodically correct approach is presented. Exercises help to work out and discuss important points to consider in practical implementation.

The first part of the core tool training deals with the statistical methods applied to process design and development, the transition to series production and series production itself, in order to assure capability of test and inspection systems and production processes.

Target audience
All personnel in project teams for product and process design and development, especially from the areas planning, preproduction, test and inspection planning and quality management, as well as production personnel.

Content
+ Measurement system analysis MSA
+ Test equipment capability cg and cgk
+ Test equipment and test process suitability VDA 5 process capability pp and ppk resp. cp and cpk
+ Capability determination in different distribution models and process types
+ Control charts/SPC
+ Application of various Shewhart and approval QC's according to process type
+ Practical exercises for the various methods

Prerequisites for participation
Basic knowledge on quality management and planning in the automotive sector.

Module I can be booked independently of Module II. The participation in both Modules is necessary in order to sit the exam and for the Core Tools Professional certificate.

Qualification certificate
At the end of the course you will receive a VDA participation certificate.

Note
Please bring a notebook and a triangle to the training for use in the exercises.

Duration
3 days

ID 2708
Automotive Core Tools – Module II

The second block of the two-part training deals with project management in the concept phase and product and process design and development. The activities in the various project phases are presented as well as the methods for ensuring product quality.

Target audience
All personnel in project teams for product and process design and development, especially from the areas planning, preproduction, test and inspection planning and quality management.

Content
+ APQP/project planning (VDA 4.3)
+ System analysis
+ Product FMEA
+ Prototypes control plan
+ Design verification plan & report
+ Process FMEA
+ Control plan
+ PPF (VDA 2) and PPAP
+ 8D method
+ Practical exercises for the various methods

Prerequisites for participation
Basic knowledge on quality management and planning in the automotive sector.

Module I can be booked independently of Module II. The participation in both Modules is necessary in order to sit the exam and for the Core Tools Professional certificate.

Certificate of qualification
At the end of the course you will receive a VDA participation certificate.

Duration
3 days

NEW

ID 2709
Examination Day for Certified Automotive Core Tools Professional (optional)

Target audience
All personnel in project teams for product and process design and development, especially from the areas planning, preproduction, test and inspection planning and quality management, as well as production personnel.

Prerequisites for participation
Completion of Modules I und II of Automotive Core Tools

Certificate of qualification
After passing the written and oral exam, you will receive the VDA certificate with a registered number along with an “Automotive Core Tools Professional” card and the corresponding VDA QMC database entry. For this card we need a digital passport photo in JPEG format in advance.

Duration of examination
1 day

NEW

ID 2901

VDA Volume 16 – Decorative Surfaces of Attachment and Functional Parts for Automobile the Exteriors and Interiors

Surfaces dependent on their look and feel play a decisive role in the product development process and throughout the supply chain. If surface specifications are determined too late right into series production, the consequences can occasionally be significant expenditures such as selection, scale determination and processing of complaints, and thus cause increased quality costs.

The objective of the training is to show participants an approach for determining specifications of different look-and-feel characteristics of decorative surfaces. Framework conditions such as tests, test workplace design are taken into consideration to avoid process disturbances throughout the supply chain.

Early definition/determination of the surface specifications in the product development process during feasibility/manufacturability analysis helps to minimize error costs and optimize cross-departmental cooperation throughout the whole process chain.

This training conveys the basic approach and the implementation of surface specifications using examples from various products/parts.

Target audience
Project managers, project staff, executives and interdisciplinary personnel from development, planning, manufacture and quality management

Contents
+ Point of departure
+ Determining objectives of specifications
+ Analysis of products and processes using examples
+ Assessment and quantification of look-and-feel surfaces
+ Evaluation conditions
+ Lighting conditions
+ Viewing distance
+ Viewing time
+ Definition of target agreements
+ Handling and determining tolerance samples
+ Exercises/case examples and creation of a surface specification

Prerequisites for participation
None

Qualification certificate
At the end of the training you will receive a VDA certificate of participation.

Duration
1 day

ID 4201
VDA 5 – Test Process Suitability

VDA Volume 5 with the German title “Prüfprozesseignung” (test process suitability) is available in a 2nd revised 2010 edition. It is the first document to show how the requirements in the international standards and company guidelines can be met, and how the methods proven in practice for determining test equipment capability and measurement uncertainty can be combined without great mathematical effort. VDA volume 5 now encompasses MSA methods as well as determination of measurement uncertainty according to GUM, just as in the 1st edition.

The goal of the training is to enable the participants to identify and calculate influences on test process suitability; design engineers must be aware of the consequences of defined tolerances.

The focus is on the approach to determining the suitability of measurement systems, suitability of measurement and test processes, extended measurement uncertainty and conformity evaluation, as well as tips on standard measurement systems, MPE or error limits, Evaluation and approval of measurement equipment, including multiple setting devices. long-term evaluation, temperature effects and influences by the tested object, e.g. shape deviations, several solutions for attribute measurement systems and proposals for validating measurement software.

Target audience
+ Personnel responsible for planning, selection, purchasing, acceptance and monitoring, as well as calibration of measurement and test equipment or machines and facilities.
+ Personnel from organizations that manufacture test equipment.
+ Personnel concerned with product design and definition of tolerances.

Content
+ Terms and definitions
+ Relation between test process suitability and process capability
+ Development and requirements of the standards, company guidelines
+ Basics of test equipment capability tests according to MSA
+ Determination of measurement uncertainty according to DIN V EN V 13005 (GUM)
+ Content of VDA volume 5 test process suitability
+ Evidence of measurement system and test process suitability
+ Consideration of extended measurement uncertainty near the specification limits
+ Decision rules for approval/rejection according to DIN EN ISO 14253 T1
+ Evidence of suitability in testing attribute characteristics
+ Validation of measurement software
+ Practical exercises with practical measurements

Prerequisites for participation
Basic knowledge of measurement techniques and measurement system analysis procedures

Qualification certificate
At the end of the course you will receive a VDA participation certificate.

After completing this training, you can sit an exam for “test process representative VDA 5”.

Duration
2 days

ID 4202
Examination Day for VDA 5 – Test Process Representative

On the day of the exam, a short overview lecture reviews the main contents of the training “VDA 5 – test process suitability”. Immediately afterwards, the participant sits the “VDA 5 – Test Process Representative” exam.

During the exam, the participant must answer 30 multiple choice questions and prove the suitability of a measurement system and a measurement and test process in two case examples.

Prerequisites for participation
Completion of training VDA 5 – Test Process Suitability

Qualification certificate
After passing the written and oral exam you will receive a VDA certificate “VDA 5 – Test Process Representative” with a registered number, as well as the respective entry into the VDA QMC database.

Duration of exam
1 day

NEW

ID 4210
VDA 5 – Test Process Suitability – Practice Day

The training VDA 5 – Test Process Suitability supplements the theoretical basics with some examples. This training day serves to consolidate the lessons learned so far in practice, in order to gain confidence for everyday use. Our aim is for theory to be well-aligned with practice and vice versa. This will afford you the maximum benefit.

With the help of selected examples, the objective of this training is to enable the participants to identify factors influencing test process suitability, and to compute them very easily with the software tool "solara" by Q-DAS. The focus is on a variety of practical exercises, in order to learn the approach to assess the suitability of measuring systems, suitability of measuring processes, extended measurement uncertainty and conformity assessment in practice.

The focus is on the approach to determining the suitability of measurement systems, suitability of measurement and test processes, extended measurement uncertainty and conformity evaluation, as well as tips on standard measurement systems, MPE or error limits, evaluation and approval of measurement equipment, including multiple setting devices, long-term evaluation, temperature effects and influences by the tested object, and several solutions for attribute measurement systems.

A wide range of the usual measuring equipment is provided, from limit gauges with specifically manufactured test objects, standard test equipment, special devices, manual snap gauges, drilling measurement stands etc. with accessories, high-precision inductive and incremental measuring sensors and display units to a laser micrometer with scanning function.

Target audience

+ Personnel charged with planning, selection, purchasing, incoming testing and monitoring, as well as calibration of measuring and test equipment, and/or conducting test process suitability
+ Personnel from organizations manufacturing measuring equipment and devices
+ Personnel dealing with product design and tolerance determination

Contents

+ Short introduction to the software tool"solara" by Q-DAS
+ Summary of basics of test equipment suitability and determination of test process suitability according to VDA volume 5 – 2010
+ Examples for evidence of attributes with plug gauges for H7 and H9 in comparison (signal detection theory) and Bowker test case example
+ Examples for height measurement with standard test equipment (outside micrometer, dial gauge, inductive measuring sensors), influences of MPE, stand, standard setting, calibration uncertainty, linearity, repeatability, user etc.
+ Examples for diameter measurement (standard test equipment, outside micrometer, manual snap gauge, incremental measuring sensors, laser micrometer), influences of MPE, standard setting, calibration, linearity, temperature etc.
+ Assessment of manufacturing accuracy and calibration uncertainty of standards and transfer of this accuracy to the measuring system
+ Identification of shape deviations and temperature influence of test objects
+ Identify and implement improvement actions
+ Learn to interpret manufacturer information correctly and to research missing information

Prerequisites for participation

Knowledge about procedures for measurement system analysis, knowledge about VDA 5 – Test Process Suitablility

Qualification certificate

At the end of this training you will receive a VDA certificate of participation.

Note

Please bring a notebook computer to work on the exercises.

Duration

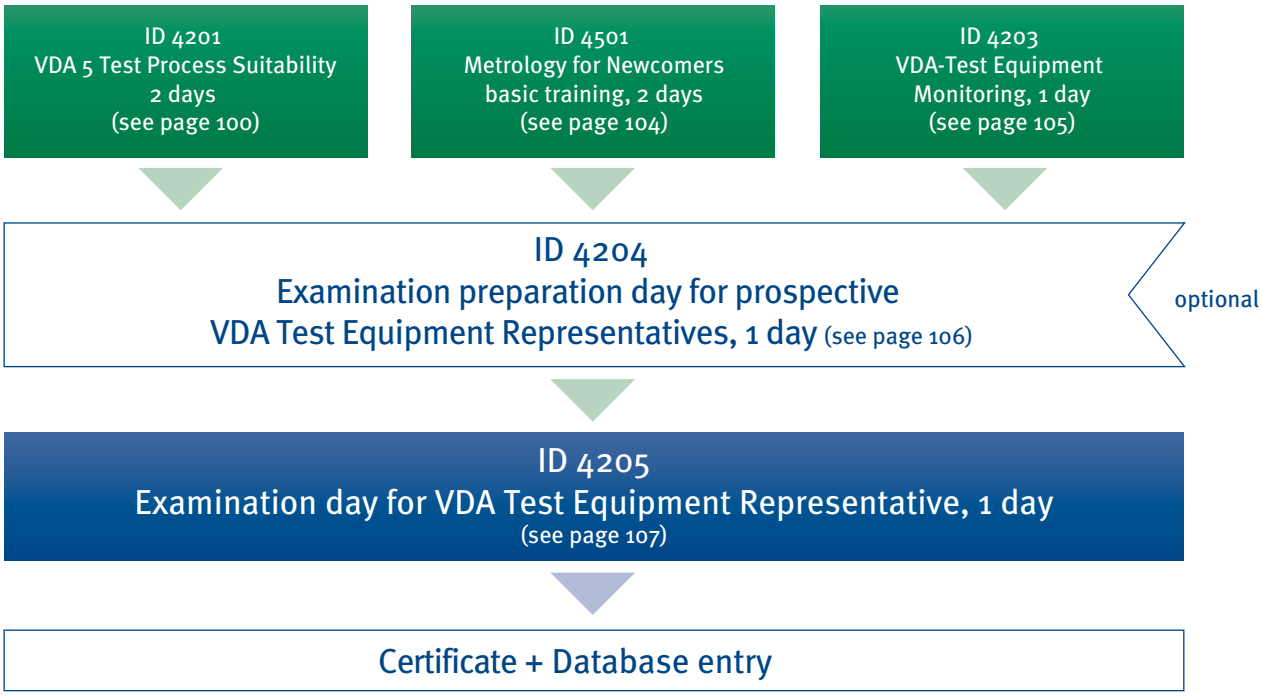
1 day

Qualification as VDA Test Equipment Representative

The series of training for VDA Test Equipment Representative is now offering a comprehensive training for efficient measurement management system according to the new standard 10012-2004. The trainings are suitable for newcomers and experienced personnel for these tasks who want to update their knowledge.

The series of trainings is divided into modules and takes individual experience and knowledge into account. Participants with well-founded knowledge in metrology will not need to take part in the training “Metrology for Newcomers”. Nevertheless, after successfully passing the exam participants will receive a certificate.

Qualification matrix VDA Test Equipment Representative



ID 4501
Basic Training: Measuring Techniques for Newcomers

The participants get to know the basics of measuring techniques, they are able to conduct measurements and interpret the results. They have measurement-relevant knowledge of the standards and are able to define the required prerequisites from the point of view of measuring techniques. They are able to write measurement reports, identify deviations and implement corrections if necessary. Furthermore, they are familiar with the objectives of geometric dimensioning and tolerancing, as well as with the causes of dimensional and tolerancing deviations. They are familiar with the principles of tolerancing and the individual definitions of geometric dimensioning and tolerancing. They are familiar with the objectives and benefits of test and inspection equipment control, can conduct test and inspection control and make test and inspection decisions.

Target audience
All employees from production, quality management and equipment manufacture etc. as well as designers and planners.

Contents
+ Measurement techniques basics
+ General tolerances
+ Measurement deviations (5 M's)
+ Geometric characteristics of work pieces
+ Objectives of geometric dimensioning and tolerancing
+ Origin of dimensioning and tolerancing deviations
+ Principles of tolerancing
+ Drawing input: reference element, tolerated element
+ Definition of geometric tolerances
+ Classification of test and inspection equipment
+ Handling of test and inspection equipment
+ Test and inspection equipment cycle
+ Practical exercises

Prerequisites for participation
None

Qualification certificate
At the end of the course you will receive a VDA participation certificate.

Duration
2 days

ID 4203
VDA Test Equipment Monitoring

The quality of manufactured products or of services is monitored and controlled with test equipment. Thus it is obvious, that test processes also play a decisive role alongside the manufacturing processes. Stable and consistently high quality can only be assured with suitable and reliable test equipment.

As all test equipment is subject to more or less uncertainty and deviation and can be damaged during use, it must be controlled according to the new standard 10012 test equipment management system and monitored at defined intervals.

The goal of the training is to enable the participants to apply the requirements of the standards and guidelines in practice.

The training introduces you to the “functional area metrology”, and examples give you an insight into efficient test equipment management. You will learn about the areas of responsibility and tasks this function comprises and which capabilities are expected.

You will be given an overview over the current requirements of international standards and guidelines as well as valuable information on the basis of the VDI and DKD guidelines for planning and conducting calibrations.

Target audience
+ Personnel responsible for planning, selection, purchasing, acceptance and monitoring of measurement and test equipment, resp. machines and facilities
+ Personnel from organizations manufacturing measurements equipment
+ Personnel from calibration laboratories

Content
+ Terms and definitions
+ Development and requirements of the standards
+ Metrology basics (test and supplementary equipment, requirements, selection, and use of test equipment, influencing factors, statutory measurement and calibration system, SI system, hierarchy of reference standards, calibration bodies, PTB, DAkks, WECC, traceability, calibration certificate, MPE)
+ Legal requirements from product liability
+ Functional area metrology and test equipment management according to ISO 10012
+ Position in the organization and tasks, job profile
+ Handling test equipment (identification, monitoring use, calibration, service and maintenance, scrapping)
+ Structure of test instructions
+ Determination of qualification intervals, examples for dynamization
+ Test equipment monitoring software validation
+ Calibration – internal or external? Selection criteria for external services
+ Audit questions

Prerequisites for participation
Basic metrological knowledge and basic knowledge about measurement system analysis procedures

Qualification certificate
On completing the training you will receive a VDA participation certificate.

Duration
1 day

ID 4204
Examination Preparation for Prospective VDA Test Equipment Representatives

The exam preparation day includes the main subjects from the trainings ID 4501 “Metrology for Newcomers”; ID 4201 “VDA 5 Test Process Suitability” and the training ID 4203 “VDA Test Equipment Monitoring”. This training is optional and not a pre-requisite for sitting the examination day for VDA Test Equipment Representative. It does not replace the trainings mentioned above and is only designed as a refresher course to help understand the contents.

Prerequisites for participation
None

Qualification certificate
After completing this training you will receive a VDA certificate of participation.

Duration
1 day

ID 4205
Examination day VDA Test Equipment Representative

Prerequisites for participation
Participation in the trainings ID 4501 “Metrology for Newcomers”, ID 4201 “VDA 5 new – Test Process Suitability” and ID 4203 “VDA Test Equipment Monitoring”.

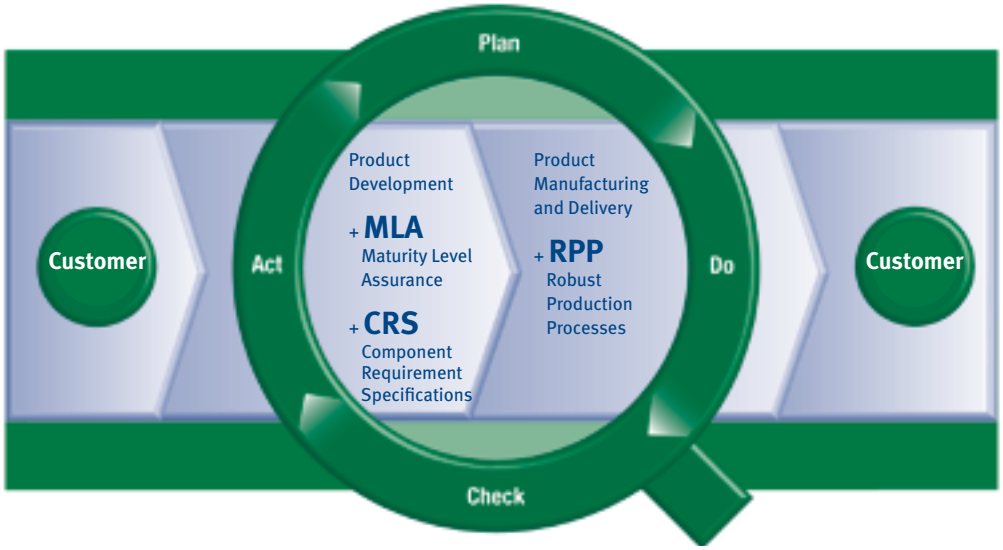
Qualification certificate
After passing the written and oral exam you will receive a VDA certificate for VDA Test Equipment Representative with a registered number in connection with the respective entry into the VDA QMC database.

Duration of exam
1 day

Joint Quality Management in the Supply Chain

+ Maturity Level Assurance for New Parts
+ VDA Standard Guideline Component Requirements Specification
+ VDA Standard “Field Failure Analysis”
+ Safeguarding of the Robust Production Process

Joint Quality Management in the Supply Chain

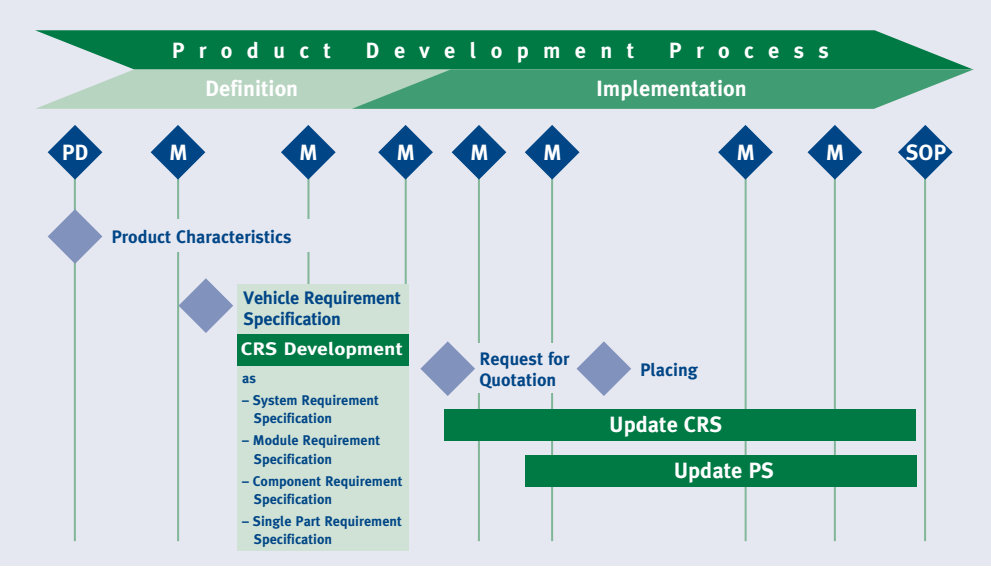


MLA Maturity Level Assurance

CRS Component Requirement Specifications

RPP Robust Production Processes

General classification of the component performance specifications



Legend:
PD: Project Decision
M: Milestone
CRS: Component Requirement Specifications
PS: Performance Specifications
SOP: Start of Production

ID 2704 Maturity Level Assurance for New Parts: Project Leader Training
ID 2703 E-Learning

The objective of the standard is the sustainable improvement of start-up, delivery and field quality of all supplier parts, components and systems through process-accompanying assurance of product maturity at the start of production.

This system for maturity level assurance describes a standard concept for cooperation and communication in complex product development projects with many parties involved in the supply chain. Therefore it provides a standard set of measured values and criteria with the corresponding methodology.

Since planned comprehensive use of the standard in the automotive and supplier industries requires knowledge and competencies in different functions of the organization, a correspondingly broad scope and 2-day training was designed.

Target audience
Product managers, project leaders in product development, product planners, responsible and spokespersons of cross-functional and cross-organizational development teams, persons responsible for components, the supplier's customer team and project leaders, key account managers.

Contents
The training imparts knowledge about maturity level methods (evaluation, contents, control and report systematics) that are necessary for participants in maturity level regulatory processes in the product development process. Furthermore, the measured values and criteria are worked out in detail in workshop mode. Finally, the contents are applied in practice during a group exercise at an "interdisciplinary round table".

+ Initial situation and history
+ Methods and basic principles of maturity level assurance
+ Positive and negative examples from organizations
+ Typical conflict of interests
+ Role of the participants at the round table
+ Chances of cooperation
+ Group exercises

Prerequisites for participation
Experience from work in development projects for parts/components, basic principles of project management.

Qualification certificate
At the end of the course you will receive a VDA participation certificate.

Duration
2 days

ID 2703 E-Learning

Duration
Duration varies according to your previous knowledge, your speed of learning and the number of completed learning units.

Note
The access code is valid for four weeks after first log-in and then expires automatically.

ID 2705
Maturity Level Assurance for New Parts: Information for Executives

A joint standard for maturity level assurance for new parts throughout the supply chain was developed in the VDA QMC by experienced experts from organizations of the automotive and supplier industries.

The objective of the standard is the sustainable improvement of start-up, delivery and field quality of all supplier parts, components and systems through process-accompanying assurance of product maturity for the start of production.

This system for maturity level assurance describes a standard concept for cooperation and communication in complex product development projects with many parties involved in the supply chain. Therefore it provides a standard set of measured values and criteria with the corresponding methodology.

Target audience
(Prospective) executives and decision makers of the automotive manufacturer and supplier industry.

Objective
Learn about the advantages of maturity level assurance and recommend them to selected employees.

Contents
The training communicates a rough overview of the maturity level method and the significance of maturity level. Also, it demonstrates the effects on the organization when implementing and using the method.

+ Method and principles of maturity level assurance
+ Short overview of maturity level RF0-RF7
+ Effects on contractual arrangement in the supply chain and on the QM system

Prerequisites for participation
None

Qualification certificate
At the end of the course you will receive a VDA participation certificate.

Duration
½ day

ID 2710
VDA Standard Guideline – Component Requirement Specification A Contribution to the Increase of Quality for Supplier Components

Today, automotive manufacturers are more and more involving suppliers in the early phases of vehicle development as system and/or module suppliers in order to profit from their know-how and innovative potential. In the course of this, component requirement specifications are becoming more important.

Today, automotive manufacturers have assumed the role of system integrators and to commission suppliers with the development of components and systems. It is then the task of the OEM to specify the requirements for the components sufficiently, to integrate the delivered components and modules into a complete system, and to safeguard the function of the complete system in the vehicle.

The more complex the components in the vehicle become, the more multifaceted the requirements for the components and their descriptions are. The quality of the description of the requirements for a product in the component requirement specification is a fundamental prerequisite for the effective development of safe products and processes. New challenges for OEMs and suppliers arise against this background.

The goal of the VDA component requirement specification guideline is to obtain the clearest and most complete requirements profile for the product and therefore also its production process through a systematic review of all requirements for a product.

Target audience
Product project leaders and persons in charge in the sectors Development, Quality Management, Production and Assembly, Logistics and Service from automotive manufacturers and suppliers who must prepare or edit component requirement specifications.

Contents
+ Background, importance and objective of the component requirement specification
+ Setup and contents of the VDA component requirement specification guideline
+ Documentation and management of requirements
+ Preparation and coordination of a component requirement specification
+ Coordination of the requirement along the supply chain
+ Case studies and exercises

Prerequisites for participation
None

Qualification certificate
At the end of the course you will receive a VDA participation certificate.

Duration
1 day

ID 2730
VDA Standard “Field Failure Analysis” – Training for Executives

The objective of the training is to give the participants an overview over the requirements and possibilities of the standard.

Target audience
This training is designed for executives, decision-makers, customer account managers and project managers as well as those responsible for field failure analysis and warranty for automotive manufacturers and suppliers.

Contents
+ Concept of the field failure analysis process

Introduction to the core issues:
+ Findings
+ NTF process
+ Planning of the field failure analysis process
+ Measures and CIP
+ Reporting

Prerequisites for participation
None

Qualification certificate
At the end of the course you will receive a VDA participation certificate.

Duration
1 day

ID 2731
VDA Standard “Field Failure Analysis” – Training for Users

The objective of the training is to acquaint the participants with the contents of this standard and to enable them to implement it in their own organization.

Target audience
Employees from design and development, production, warranty, quality assurance and sales in automotive and supplier industry that implement and further develop field failure analysis.

Contents
+ Sequence of field failure analysis
+ Concept and findings
+ Inspection plan and problem analysis
+ NTF process
+ Guideline NTF process
+ Measures and CIP
+ Sample strategy and logistics
+ Data exchange and reporting
+ Embedding in one’s own organization
+ Group exercises

Prerequisites for participation
None

Note
The team of instructors usually consists of a representative from automotive and suppler industry respectively.

Qualification certificate
At the end of the course you will receive a VDA participation certificate.

Duration
2 days

NEW

ID 2732
Auditor “Field Failure Analysis”

You will get to know the audit catalog in detail, and will be able to use it to conduct internal and external field failure audits, as well as evaluate the results.

Objective
You understand the contents of the questions and the audit catalog’s evaluation criteria. You are able to independently conduct field failure analysis audits.

Target audience
Quality experts, quality representatives, internal auditors, field failure processing staff

Contents
+ Application of the catalog
+ Requirements for auditors
+ Evaluation scheme
+ Contents of the catalog pertaining to process steps
+ Planning field failure analysis
+ Diagnosis (standard and stress test)
+ NTF process
+ Problem analysis

Prerequisites for participation
+ Participation in training ID 1402 “Module A – General Basics for Process Auditors VDA 6.3“ or qualification as internal auditor or process auditor VDA 6.3
+ Participation in training ID 2731 VDA Standard “Field Failure Analysis“ – for Users

Qualification certificate
After passing the written test you will receive a VDA qualification certificate.

Duration
1 day

ID 2801/2802
Safeguarding the Robust Production Process

The VDA standard “Robust Production Processes” focuses in particular on the set of problems that begin with SoP (Start of Production). The objective is to safeguard production processes and implement a “Robust Production Process” by establishing minimum requirements throughout the supply chain.

By means of a “Robust Production Process” throughout the supply chain of the OEMs and suppliers, product quality (fault-free products according to specification, delivery to schedule, optimized delivery quality and therefore improved field quality) is improved and safeguarded so that the competitive ability of German automotive manufacturers can be sustainably strengthened. Economically, this should also entail a considerable reduction of testing, failure and field costs.

The volume “Robust Production Processes” provides assistance for:
+ How to implement “Robust Production Processes”?
+ How to evaluate or measure “Robust Production Processes”?
+ How to handle influencing variables and faults?
+ How to improve existing production processes?

The model is roughly divided into three parts:
+ The prerequisites
+ A checkpoint before start of production for a status inspection
+ The four control loops: management control loop, supplier control loop, production control loop, and customer control loop

The prerequisites for a “Robust Production Process” must be planned and implemented to an essential degree in the product development process. Therefore, this volume is very closely interlocked with “Maturity Level Assurance”.

As well as fault and supplier management, recommendations for controlling and management are given. For the clear recording and representation of key figures and indicators, cockpits with traffic lights display are recommended. Various checklists and supplementary, tested practical examples on the individual topics can be found in the annex.

The training will communicate the described contents of the new VDA standard “Robust Production Processes” to users and enable them to implement and use them. The application of the described methods and checklists will be communicated in group work using practical examples.

Target audience
Employees from quality assurance, production planners, production managers, purchasers.

Prerequisites for participation
+ Basic principles of quality management (ISO/TS 16949)
+ Employees of the above listed target audiences with knowledge of company-specific production processes
+ Familiarity with the “Robust Production Processes” volume

Objectives
+ Knowledge of the VDA standards
+ Competency to implement and use the standards

Qualification certificate
At the end of the course you will receive a VDA participation certificate.

Training for Users
Duration
1 day

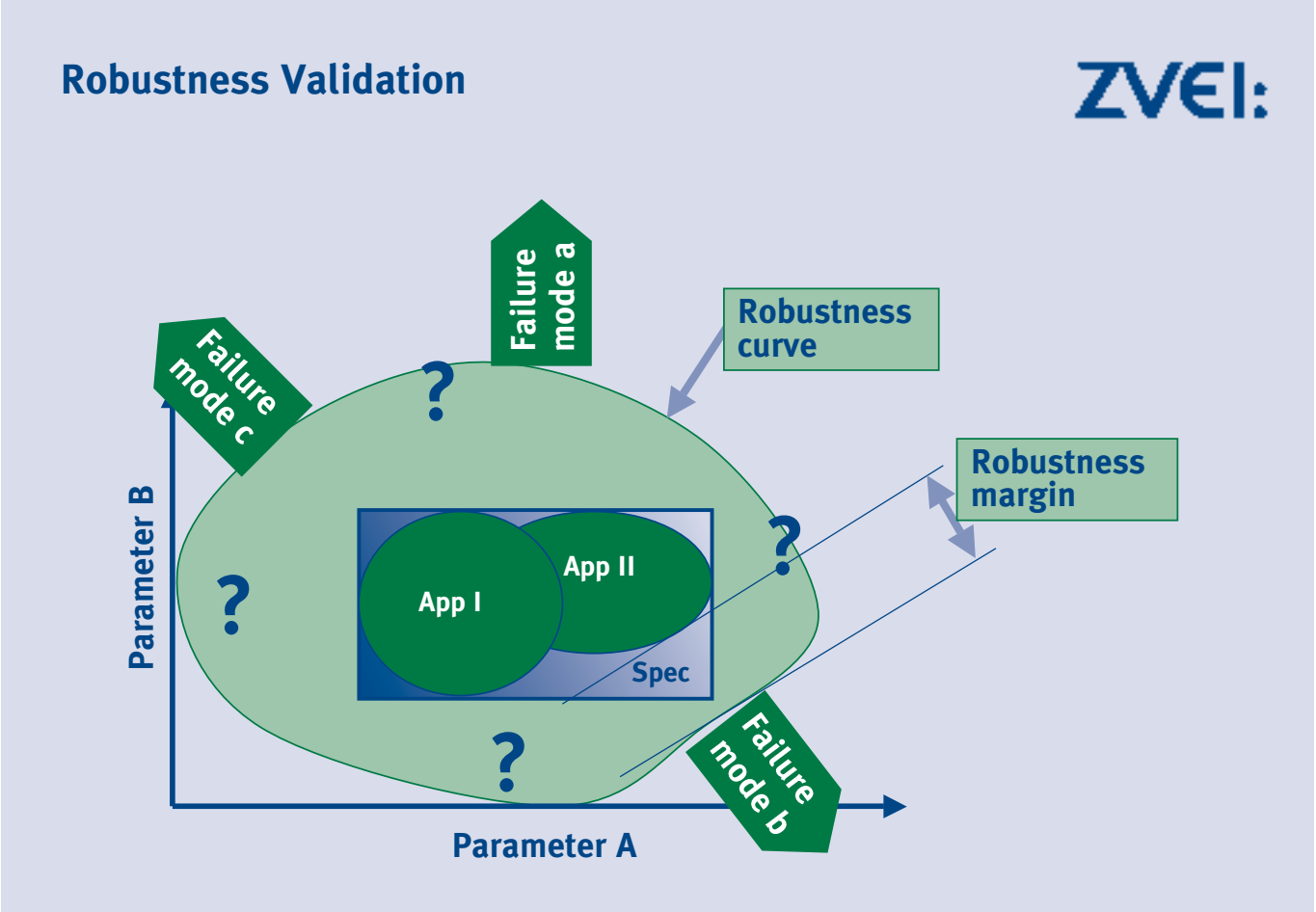
Training for Executives
Duration
½ day

Qualification Programs in Cooperation

+ ZVEI:
  Robustness Validation

+ Fraunhofer Institut:
  VDA Volume 19
  Technical Cleanliness in Automotive Industry

Robustness Validation:
Up-to-date Test and Approval Procedure for Electronic Components



Creating single-digit ppm ratios is a challenge to all participants in the value chain. The formal test sequences of the past are not very suitable, as they are based on an acceptable quality level in the percent range. For optimum test and approval results we need a knowledge-based "fit for application" instead of the previous "fit for standard".

Apart from being cost and time-saving, this procedure, called "robustness validation", pursues a zero-defect strategy. In this context, relative evaluations based on end-of.-life tests, limits of function and observation of previous field experiences have turned out to be especially rewarding.

The central point of this application, which can only be formalized to a certain extent, is personal expertise.

"Robustness validation" contrasts the real capabilities of components with their prospective conditions of use. It helps to highlight the physical limits of electronic components, e. g. semiconductor products, under realistic conditions of use and thus forms the basis of a risk management. The knowledge-based qualification approach avoids tests without insightful results and encourages concentrating on relevant risks and error mechanisms.

The results are increased reliability of electronic automotive control systems and reduced warranty costs.

You can find further information at
www.zvei.org/RobustnessValidation.

ID 2722 Up-to-date Test and Approval Procedure for Electronic Components – Basic- + In-depth Training

Target audience
OEM experts and first tier suppliers from quality, supplier relations and development who need to understand and evaluate the results of a robustness validation
Developers, quality and design engineers at switch level, semiconductor specialists who need to conduct, apply and implement Robustness Validation

Content
This training imparts in-depth knowledge about the robustness validation concept and its procedures. Specifically, the requirements and the format of mission profiles, the application of robustness validation – knowledge matrix, design for reliability. To round things off, the documentation of RV reports and the PPAP are looked into, and the interpretation of the results is explained. Discussion of the participants' practical examples enables direct evaluation of the benefit of this up-to-date approval procedure.

+ Planning and monitoring of RV projects
+ Assessment of results and correct application of an RV
+ Monitor and review RV reporting
+ Basis of the RV concept and its procedures with the example of semiconductor components
+ Influence of RV on component approval
+ Documentation, planning and monitoring of RV projects including interpretation of results
+ Approval of electronic components after RV
+ Practical examples
+ Creation of a comprehensive RV qualification plan with the example of semiconductor components, translation and creation of a mission profile for the next step of the value-added chain, risk assessment
+ Feedback of information acquired from the RV process for the purpose of product improvement, monitoring plan
+ Supplier and technology assessment and approval
+ Integration of RV into development process of the semiconductor manufacturer and first tier supplier (e. g. reference to APQP)
+ Specifications (mission profiles) and quality requirements

Prerequisites for participation
Basic knowledge about the approval of electronic components

Qualification certificate
After successfully completing this training you will receive a VDA-ZVEI participation certificate.

Duration
2 days

ID 2724 Robustness Validation: Up-to-date Test and Approval Procedure for Electrical Control Units (ECU) and Electrical Electronic Modules (EEM) – Basic- + In-depth Training

Target audience

+ OEM experts and first tier suppliers from quality, supplier relations and development who need to understand and evaluate the results of a robustness validation
+ Developers, quality and design engineers at switch and control unit level, who need to conduct, apply and implement Robustness Validation

Content

This training teaches participants to create an application-related specification and to deduce the respective mission profile. Based on these real quality requirements and a risk assessment, meaningful supplier and technology assessments are possible. Product improvements and cost reduction through feedback of acquired information from the RV process are demonstrated. Setting up a monitoring plan to assure the defined quality level rounds off the training.

+ Planning and monitoring of RV projects
+ Assessment of results and correct application of an RV
+ Monitor and review RV reporting
+ Writing mission profiles: requirements and content
+ Knowledge matrix – significance and application
+ Creation of a comprehensive qualification plan with the example of a door module
+ Introduction and motivation for possibilities and sustainability of intelligent testing, technology-specific tests in start-up and production phase, creation of a testing plan and safeguarding robustness during production phase
+ Robust production process and its evaluation – definition of a robust EEM production process, examination of interactions with Component Process Interaction Matrix (CPI Matrix)
+ Robustness Indicator Figure (RIF) – significance and necessity of a robustness measure, interpretation and application of a RIF diagram
+ Practical examples

Prerequisites for participation

Basic knowledge about the approval of electronic components

Qualification certificate

After successfully completing this training you will receive a VDA-ZVEI participation certificate.

Duration

2 days

ID 2728
VDA Volume 19 – Technical Cleanliness in Automotive Industry Qualification for "Inspector for Technical Cleanliness"

Standardized cleanliness inspection
Technical cleanliness of components and assembly groups is an important functional characteristic in the manufacture of modern vehicles.

VDA volume 19 "Inspection of Technical Cleanliness – Particulate Contamination of Functionally Relevant Automotive Components" is the first comprehensive standard publication to deal with the approach and procedures to characterize cleanliness of products in the automotive quality chain. This volume was officially introduced by the VDA QMC in January 2005.

Goal
This training enables the participant to independently design cleanliness analyses according to VDA 19, conduct them with up-to-date equipment and document them in the required manner. Furthermore, the background to the technical necessity of cleanliness inspections and cleanly behavior is explained.

The compatibility between VDA 19 and ISO 16232 (Part1-10) "Road vehicles – Cleanliness of components of fluid circuits" also enables participants to conduct cleanliness analyses according to the international standard.

Target audience
This training aims to qualify automotive, supplier or service personnel who conduct cleanliness inspections. The imparted knowledge and the related practical skills also constitute valuable tools for anyone confronted with the quality factor technical cleanliness in their daily work, such as construction, quality assurance, technical purchasing and sales personnel. Due to the similar cleanliness requirements in the sectors aerospace, hydraulics and precision engineering, this training is also suitable for personnel from these backgrounds.

Number of participants
The number of participants is limited to eight.

Content of 1-day training
Theoretical basis
+ Background on quality factor technical cleanliness in automotive construction
+ Extraction procedures for particle contaminations in components
+ Analytical procedures for the evaluation and quantification of practical contaminations
+ Cleanliness inspection according to VDA volume 19 – abatement measurements, blind values, routine inspections
+ Examples for cleanliness inspections

Qualification certificate
After completing the training you will receive a certificate of participation from the Fraunhofer Institut.

Examination day (optional)
Practical part
The practical part consists of a case example the participants have to work out and present individually, and of practical exercises in a cleanliness lab:
+ Establishing an inspection procedure to determine technical cleanliness, in conformity with regulations
+ Cleanly behavior, determination of blind values
+ Conducting various extraction procedures (spray, rinse, shake, ultrasound) in the cleanliness lab
+ Selection and handling of analytical filters
+ Conducting various analyses (gravimetrical, microscopically)
+ Evaluation and documentation von cleanliness analyses and their results

Theoretical part
Written exam (multiple choice) with 30 questions

Qualification certificate
After completing the 1-day training and successfully passing the exam The Fraunhofer Institut and the VDA QMC will issue you with a certificate and an auditor card which shows you as "Inspector for Technical Cleanliness".

Dates and prices as well as applications under:
www.technische-sauberkeit.de

III. Registration, Details and Additional Information

List of Publications in English Language

VDA QMC
Qualitäts Management Center
im Verband der Automobilindustrie

All our publications in German, English as well as other languages are available for purchase from our online shop located at www.vda-qmc.de/"Webshop".

Volume 1	Documentation and Archiving – Code of practice for the documentation and archiving of quality requirements and quality records
Volume 2	Quality Assurance of Supplies
Volume 3	Part1 Ensuring reliability of car manufacturers – Reliability Management
Volume 4	Quality Assurance in the Process Landscape – General, risk analyses, methods, process models
Volume 4 Part 3	Quality Assurance prior to Serial Application – Project Planning
Volume 6	Quality Audits Fundamentals – Certification requirements for VDA 6.1, VDA 6.2, VDA 6.4 on the basis of ISO 9001
Volume 6 Part 1	QM – System Audit
Volume 6 Part 2	QM System Audit – service
Volume 6 Part 3	Process – Audit
Volume 6 Part 4	QM System Audit – Production Equipment
Volume 6 Part 5	Product Audit
Volume 9	Quality Assurance Emissions and Fuel Consumption – CoP tests on passenger cars and light commercial vehicles
Volume 14	Preventive Quality Management Methods in the Process Landscape
Volume 16	Decorative surfaces of external fittings and functional parts in the internal and externals of automobiles (incl. CD-Rom)
Volume 19	Inspection of Technical Cleanliness – Particulate Contamination of Functionally Relevant Automotive Components
Volume 19.2	Technical cleanliness in assembly – Environment, Logistics, Personnel and Assembly Equipment

IATF HTS2 Means of highlighting the comparisons between the VDA 6 Part 1, 4. Edition or ISO/TS 16949:1999 to the ISO/TS 16949:2002

Maturity Level Assurance for New Parts – Product creation – Methods, measurement criteria, documentation

Volume Specification Standard Structure – Automotive VDA Component Requirement

Standardized process for handling customer complaints

Establishing customer-specific QM system requirements based on ISO/TS 16949

Field failures analysis – Joint Quality Management in the Supply Chain Marketing and Service

Car-washes – Criteria for car-washes conforming to VDA specifications

Registration and Payment Conditions (valid until the end of 2012)

General details

Please only use our registration forms and fill these out completely and legibly. We need your correct information to issue the VDA QMC certificates and if applicable a digital photo for the auditor card.

For some seminars there are special prerequisites concerning professional qualifications and experience. If required prerequisites are not fulfilled, the VDA QMC reserves the right to decline the registration to a seminar.

You can direct your application to us in three different ways:

1. Fax us the registration form at: +49 30 897842-605
2. Book our seminars online: on our homepage at www.vda-qmc.de you will find our seminar offer that leads you to the online booking.
3. Send us your application by post to the following address:

VDA QMC – Training and Professional Development
Behrenstrasse 35
10117 Berlin
Germany

Terms of payment

The following terms of payment apply independent of the method of payment: immediately after receipt of your application you will receive a confirmation of receipt from us. Normally the invoice will be sent to you directly after the event and is due without deduction.

Cancellation/Rebooking

Please send us your cancellations/rebookings in writing by post or fax (for address and fax number see above).

The following fee table applies for cancellations of all events:

6 weeks before the start of the event:
free
From 4 to 6 weeks before the start of the event:
25% of the event price
From 2 to 4 weeks before the start of the event:
50% of the event price
Less than 2 weeks before the start of the event:
100% of the event price

The cancellation fees naturally do not apply when a replacement participant is provided.

With multiple part events the first event day of the first event block is always considered for the calculation of the cancellation fee, irrespective of the cancelled event part.

Literature for seminar preparation that has already been delivered will be invoiced at the regular sales price if you do not participate in the seminar and if this literature is not sent back to us in new condition at the latest on the day of the cancellation.

Cancellation of the event

If an event is fully booked or cannot take place due to an act of God (e.g. the instructor falls ill on short notice) we will inform you immediately. If the number of registered participants is too low, we reserve the right to cancel the event up to seven days before it begins. In either case we will try to offer you a new event date.

General terms and conditions

Our T&C as well as the examination regulations can be found on our homepage www.vda-qmc.de.

VDA QMC

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im Verband der Automobilindustrie

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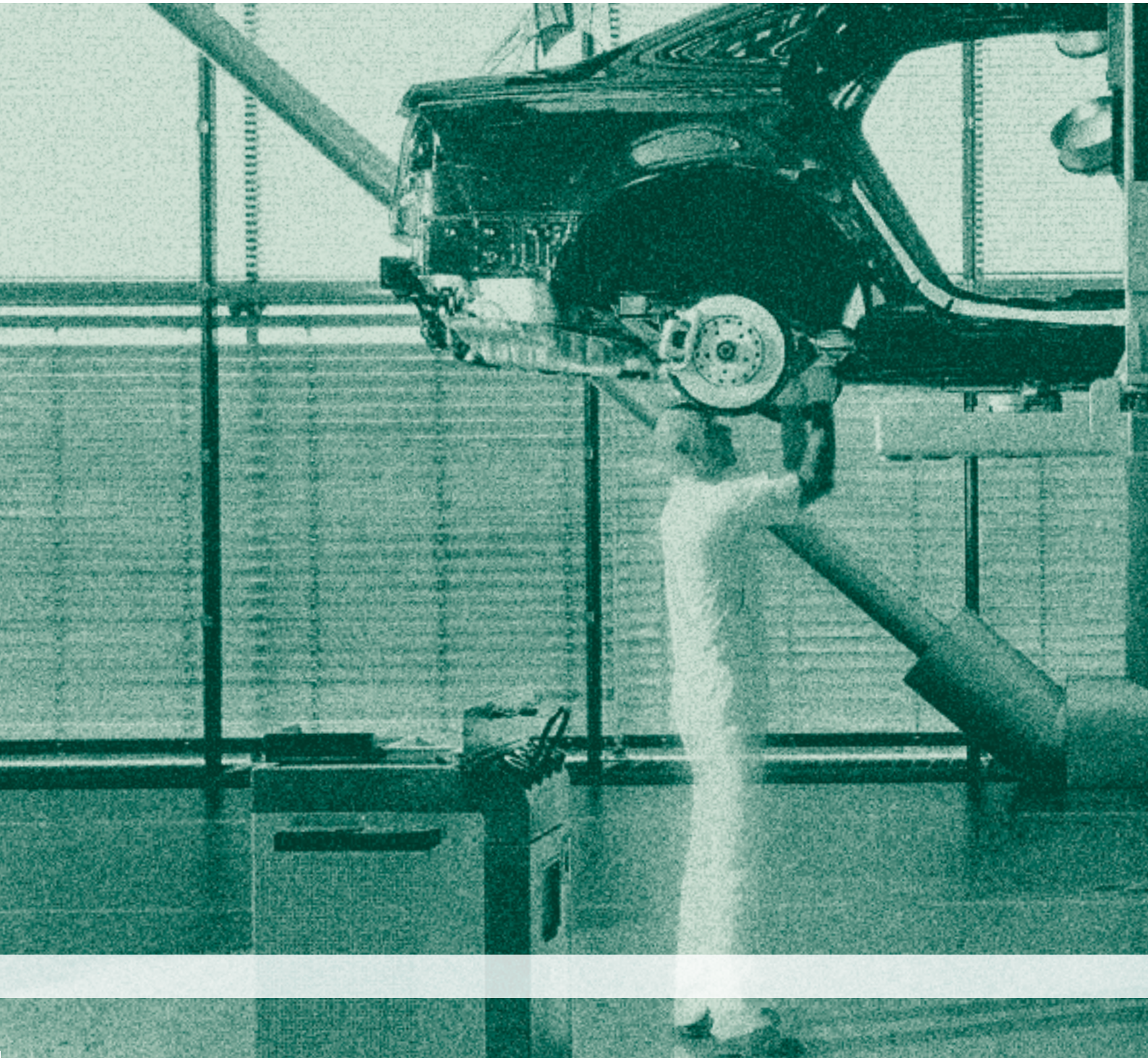
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