Quality Management Training 
and Professional Development

VDA-Quality Manager and Internal Auditor
Automotive Core Tools
Robustness Validation
VDA 6.x*
Cross-Cultural Training Russia
ISO/TS 16949:2002*
Automotive SPICE®
Maturity Level Assurance – Implementation*
Contractual and Product Liability

*The Original
only at VDA-QMC.
*Practice-Oriented
Since 1 August 1997, the Quality Management Center (QMC) has been available to German automotive manufacturers and their suppliers. It is the task of the QMC within the VDA (German Automobile Industry Association) to further quality in the automotive industry and the quality idea throughout the complete value-added chain of manufacturers and suppliers and beyond. The spectrum of the VDA-QMC ranges from the development of systems and methods to the design 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 the same number of automotive suppliers are represented in this committee by their QM Managers; the VDA is represented by a Managing Director.

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:
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We offer forward-looking professional development in a comfortable seminar atmosphere. It is important to us that our seminars consist of comparatively small groups of participants and that we conduct all of our events in the best possible instructor-participant dialogue. On our premises you won’t find any university lectures in auditoriums or lecture halls. Instead we offer active and direct participation by working in small groups and on practical case studies.

We have three seminar rooms at our disposal that are well-lit and comfortably furnished. Each room is fitted with modern equipment and ergonomic furnishings.

Service and Catering
You will be comfortable here, and you will be able to expand and build up your knowledge in relaxed, positive surroundings. You can retire to our friendly coffee shop and converse without interruption, or simply enjoy the peace and quiet in a cultivated atmosphere. Smoking is allowed only on the patio.
In the seminar breaks we have a wide variety of hot and cold beverages, as well as fruit and pastries. A good start after the lunch break is also well provided for: our friendly staff will provide you with a diversified hot buffet of seasonal and fresh products. Our complete service is naturally included in the seminar price.

Hotels in the Area
As soon as we receive your registration, we will gladly send you informational material with the details of overnight accommodation in the area. These hotels can offer you special conditions that we have arranged for you. Please remember to indicate “VDA-QMC” as reference.
You can also find our list of hotels on our homepage: www.vda-qmc.de under “Training and Professional Development” / “Trainingsorganisation” / “Hotelliste”.

Renting Conference Rooms from VDA-QMC
Are you looking for a neutral, conveniently located venue for your own conferences or meetings in the automotive branch?
You can of course also rent our premises. We would be happy to advise you!

Contact
Phone: +49 (0) 6171/9122-23
Email: seminare@vda-qmc.de

Our Instructors – Only the Very Best are Good Enough for Us.
The success of every seminar depends on the instructors who are in charge of it. Because the learning matter is only then really effective and can be put into practice if the instructors live what they teach. As a logical consequence, you receive from us only branch-specific qualification from experienced specialists and managers. Our selected and highly qualified instructors convey their well-founded and experience-based expert knowledge for the advancement of your quality management — independent of whether you are a large or small organization, manufacturer or supplier. We will make sure that in our seminars you receive the right answers to your questions. Your individual problem is the drive for our solution approach.

Find some brief introductions to our instructors on page 98.
In-House Training


Of course we also offer our seminars as customized, cost-effective in-house trainings in your organization. Our offer is valid worldwide and also for further automotive-specific quality management topics that are not listed in this program.

Perhaps you would like your staff to work in training sequences on certain operating processes of your organization. Have you already defined a desired date?

Or, for the introduction of a new quality method, would you like to offer a kick-off training that would be attended exclusively by your staff and your supplier's staff?

In-house trainings are an interesting offer for your organization, especially from the economic viewpoint:

+ No additional travel time for your employees.
+ Traveling and accommodation costs usually do not apply for the participants.
+ The seminar fees are reduced through the use of own resources (e.g. rooms and equipment).

Your requests are our motivation:

+ Seminar, training, examination, implementation in practice?
+ Germany, Europe, or worldwide?
+ German, English, Chinese, or another language?

Talk to us.
We would be glad to inform and advise you about all the options for in-house training and to prepare an individual offer for you according to your request. If you are interested, a fine-tuning of the contents can be done in a preliminary talk with a VDA instructor.

Contact
Phone: +49 (0) 6171/9122-22
Email: inhouse@vda-qmc.de
We also conduct our events abroad (outside of Germany) and also with the support of selected cooperation partners. By means of the support of the following organizations we can qualify you e.g. for ISO/TS 16949:2002 in your home country:

**VOLKSWAGEN Instituto:** Autopista México - Puebla Km. 116 | Puebla, C.P. 72700 | Mexico  
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**SERNAUTO:** Spanish Association of equipments and Components for the automotive industry  
C/ Castelló 120, 28006 Madrid | Spain  
phone: +34 91 562 10 41 | fax: +34 91 561 84 37 | e-mail: sernauto@sernauto.es | web: www.sernauto.es

**Czech Society for Quality:** Novotného lávka 5 | 116 68 Praha 1 | Czech Republic  
phone: +420 221 082 269 | fax: +420 221 082 229 | e-mail: sekretariat@csq.cz | web: www.csq.cz

**VDA-QMC Quality Management Center (Beijing) Co., Ltd.:** Unit 1618, Landmark Tower 2 | 8 Bei Dong San Huan Lu 100004 Beijing | China | Reg.Nr.: CNCA-P-2005-145  
phone: +86 10 6590 0059 | fax: +86 10 6590 0406 | e-mail: wagner@vdachina.com.cn | web: www.vdachina.com.cn

**IQA – Instituto da Qualidade Automotiva:** Al. dos Nhambiquaras, 1509 | Indianópolis 04090-013 | São Paulo - SP | Brasil  
phone: +55 11 5533 4545 | fax: +55 11 5533 8867 | e-mail: iqa@iqa.org.br | web: www.iqa.org.br

**TIQMS:** PO Box 66383 Highveld | Centurion | 0169 South Africa  
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**Central Japan Industries Association (Chu San Ren):** ISO Division | 3-12-13 Shirakabe | Higashiku, Nagoya | Japan  
phone: +81 52 931 9824 | fax: +81 52 931 5198 | e-mail: iso@chusanren.or.jp | web: www.chusanren.or.jp

**Korea Automotive Manufacturing Education Center Ltd. (Kamec):** Sinan Building, 249 | Chulsan-3dong | Kwangmyung-shi Kyungki-do | 423/836 | Korea  
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**Quality Systems Group:** Av. Pte. R. Sáenz Peña 616 – Of. 611 | C1035AAO – Buenos Aires | Argentina  
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### VDA Seminars in the Worldwide Network

We also conduct our events abroad (outside of Germany) and also with the support of selected cooperation partners. By means of the support of the following organizations we can qualify you e.g. for ISO/TS 16949:2002 in your home country:

**VOLKSWAGEN Instituto:** Autopista México - Puebla Km. 116 | Puebla, C.P. 72700 | Mexico  
phone: +52 222 230 64 05 | fax: +52 222 230 98 87 | e-mail: vwinstituto.qms@ivw.com.mx | web: www.infode.com.mx

**SERNAUTO:** Spanish Association of equipments and Components for the automotive industry  
C/ Castelló 120, 28006 Madrid | Spain  
phone: +34 91 562 10 41 | fax: +34 91 561 84 37 | e-mail: sernauto@sernauto.es | web: www.sernauto.es

**Czech Society for Quality:** Novotného lávka 5 | 116 68 Praha 1 | Czech Republic  
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**VDA-QMC Quality Management Center (Beijing) Co., Ltd.:** Unit 1618, Landmark Tower 2 | 8 Bei Dong San Huan Lu 100004 Beijing | China | Reg.Nr.: CNCA-P-2005-145  
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**IQA – Instituto da Qualidade Automotiva:** Al. dos Nhambiquaras, 1509 | Indianópolis 04090-013 | São Paulo - SP | Brasil  
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phone: +81 52 931 9824 | fax: +81 52 931 5198 | e-mail: iso@chusanren.or.jp | web: www.chusanren.or.jp

**Korea Automotive Manufacturing Education Center Ltd. (Kamec):** Sinan Building, 249 | Chulsan-3dong | Kwangmyung-shi Kyungki-do | 423/836 | Korea  
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**VDA-QMC Russland OOO:** Moscow | Russian Federation  
phone: +7 915 300 3972 | e-mail: gasmann@vda-qmc.de
If you have a definite interest, we will of course be happy to provide you with detailed information about our cooperation partners and their VDA-QMC licensed services. Our worldwide network is continuously reviewed by VDA-QMC and we also endeavor to adjust it if necessary.

Furthermore, we generally carry out VDA and ISO/TS trainings and tests worldwide upon our customers’ request. In recent years also in Austria, France, Spain, USA, Poland, Russia, Hungary, Turkey, Iran, Malaysia and in the Philippines, for example. Naturally we offer all additional products and services of our portfolio abroad.

We are convinced that we will find the right product for your individual qualification needs, in the right language, with the right instructor and in the right location.
1. Automotive-Specific Qualification for Management, Specialists and Project Managers

Joint Quality Management in the Supply Chain

ISO/TS 16949:2002 and VDA standards, QM Basic Principles

QM Methods and Tools in Use

Automotive SPICE®

Strategical Approaches to Cost Reduction and an Increase in Quality

Law and Goods Traffic

Qualification Programs in Cooperation
Joint Quality Management in the Supply Chain

General classification of the component performance specifications

Legend:
PD: Project Decision  CRS: Component Requirement Specifications  SOP: Start of Production
M: Milestone  PS: Performance Specifications
Maturity Level Assurance for New Parts: Information for Managers

In recent months 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) managers 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
+ Positive and/or negative examples from organizations
+ Short overview of maturity level RF0-RF6
+ 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
Maturity Level Assurance for New Parts: Project Leader Training

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 function 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. The team of instructors generally consists of experienced representatives from the automotive and supplier industry.

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

Duration
2 days
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 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
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 the user and enable him/her 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 16949:2002)
+ 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.

**Duration**
- Training for Users: 1 day
- Training for Managers: ½ day
Quality Management (QM) has been a buzzword for years. The automotive industry requires all suppliers to implement QM systems. But what actually is Quality Management exactly? The answer to this question with all of its facets is the subject of this seminar. We want the quality of our products and services to convince our customers to purchase from our company. The quality of our products in turn depends on the quality of the processes installed in our own organization. The processes are planned and carried out by employees, so the quality of our employees must also be right. With the knowledge of the basic principles of quality management, the foundation for motivation for quality performance is created. For a full understanding of QM, it is necessary to understand the terms of quality management – indeed it has its own terminology.

### Target audience
Managers and employees from all company sectors.

### Contents
- Reasons for quality management
- Quality management terms
- Customer satisfaction
- Quality management systems
- Process orientation
- Quality testing
- Quality control through control loop
- Quality improvement with methods and CIP (Continuous Improvement Process)

### Methodology
The seminar alternates between lecture, discussion and group work.

### Prerequisites for participation
None

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

### Duration
2 days
ISO/TS 16949:2002 Requirements: Workshop for Managers

More than ever, managers are 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**
Managers that are not auditors. Responsible persons from all sectors such as production, development, purchasing etc.

**Contents**
- Impart an overview of ISO/TS 16949:2002 requirements
- Expert answers to participants' questions by the IATF Oversight representative of VDA-QMC.

**Features**
The seminar does not take place in the usual seminar rooms but in the casual atmosphere of a hotel in the Oberursel/Taunus region.

**Prerequisites for participation**
None

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

**Duration**
2 x ½ day
Implementation of ISO/TS 16949:2002 in your Organization: 
Practical Planning and Procedure

Your company is preparing for certification according to ISO/TS 16949:2002 and is dealing with questions of content and strategical procedure. At the same time you want to prepare your employees from operational business practically for the complete certification process and to 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 16949:2002 in their own organization.

**Contents**
- Planning and procedure in ISO/TS 16949:2002 implementation
- Stumbling blocks in the certification process – the right documentation
- Learning to understand and implement the requirements in the catalogue of requirements
- Practical exercises for the core elements of ISO/TS 16949:2002
- 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
What must a purchaser know about the QM system? The quality of the purchased parts has a considerable influence on the capability of the manufacturing process and the products. Therefore, the selection of suitable, capable suppliers requires special consideration. The special requirements for a quality management system in the automotive industry are defined in ISO/TS 16949:2002 and in the VDA volumes. In addition, advanced customer-specific requirements are formulated in the purchasing conditions and then form part of the purchase contract. Are the purchasers aware of the expenditure and benefits? What does a QM system in the automotive supply chain have to encompass? What has to be observed with quality certificates? In this one-day seminar the purchaser will be shown which requirements ISO/TS 16949:2002 places on the selection of suppliers, which measures for the validation of delivery quality are necessary, evaluation of supplier performance as well as supplier support. On the basis of practical examples and discussions with colleagues from other organizations, synergy effects develop.

Target audience: Employees from purchasing/procurement in the automotive industry.

Contents:
- Requirements for the procurement process according to ISO/TS 16949:2002
- Overview of the associated requirements from the VDA volumes
- Customer specific requirements
- Details about certification procedure and certificate contents

Prerequisites for participation: None

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

Duration: 1 day
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 9001:2000 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
Every organization is required and also attempts to earn a profit. This is expected by the financiers and employees. Your organization can earn profit by raising turnover with a constant margin, by raising prices or by lowering costs internally or for supplies. But you must take care not to let product quality suffer. Ultimately you as a person and customer want to profit from the quality of the automotive industry’s products. Quality related costs are an important cost factor. In this seminar you will learn which different types of costs these are. The integration into the operating accounting system is demonstrated and the alternative calculation option, activity based costing (ABC), is explained.

**Target audience**  
Managers and employees from quality management and assurance.

**Contents**  
- Quality as a success factor  
- Economic benefits of quality  
- Organization of the accounting system  
- Organization of quality related costs  
- Internal failure costs  
- External failure costs  
- Test costs  
- Failure prevention costs  
- Hidden costs  
- The essentials of process cost calculation

**Methodology**  
The seminar alternates between lecture, discussion and group work.

**Prerequisites for participation**  
None

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

**Duration**  
1 day
QM Methods and Tools in Use

Getting an Overview

Preventive QM Methods
Contents: Methods, selection, benefits, examples
Target Audience: Decision makers
Duration: 1 1/2 days
ID 2102 / p.25

Introduction to Core Tools
Contents: APQP, PPAP, FMEA, MSA, SPC, 8D
Target Audience: Project staff
Duration: 1 day
ID 2706 / S.26

Application of Methods, Understanding Interrelationships

Automotive Core Tools (ID 2707 / p. 28 + ID 2708 / p. 29)
Duration: 2 x 3 days

<table>
<thead>
<tr>
<th>Concept Stage</th>
<th>Product Development</th>
<th>Product Validation and Verification</th>
<th>Pilot Production Stage</th>
<th>Series Production</th>
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<td>Process FMEA</td>
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<td>PPAP / PPF (VDA 2)</td>
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<td>8D Method</td>
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Target Audience: project planners, persons responsible for and users of the methods
After exam qualified as “Automotive Core Tools Professional”
# QM Methods and Tools in Use

### Consolidation of Methods

<table>
<thead>
<tr>
<th>Method</th>
<th>Stage</th>
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<th>Page</th>
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<td>SPC</td>
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<td>8D-Method</td>
<td>Series Production</td>
<td>2 days</td>
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**Target Audience:** Project planners, persons responsible for and users of the methods, specialists

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**DoE**

**FMEA**

**VDA 5 / MSA**

**VDA 3 / PPAP**

**SPC**

**8D-Method**
Preventive Quality Management
Methods in the Process Landscape –
Overview of VDA 4 and VDA 14

For compliance with national and international requirements of standards and laws, quality management methods provide an essential contribution throughout product lifecycle. The overview of the methods recommended by VDA is practically consolidated. VDA-QMC has developed a method which permits selection of the appropriate method for each case and/or the problem solution and to calculate the benefit. In this way the organization is able to increase cost-effectiveness during product realization through higher efficiency in the use of QM methods. The representation of QM methods is not only limited to primary prevention but also to secondary and tertiary prevention, i.e. characteristics monitoring and examination in series production and the avoidance of failure modes. In addition to mature QM methods such as FMEA and DoE, the as yet not very widespread methods DFMA, DMU, TRIZ, 8D and variance analysis, as well as elementary tools will also be examined. Working in a QM-methodical way also supports the introduction of Six Sigma.

Target audience
Managing directors, division managers, method approach decision makers, responsible project leaders, employees that are integrated in decision making processes.

Contents
+ Overview of the methods to be used in practice
+ Training of the selection method
+ Use and benefits of preventive QM methods
+ Examples of the use of fundamental tools

Please note
This seminar starts at 2:00 pm on the first day.

Prerequisites for participation
None

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

Duration
1 ½ days
Introduction to the Core Tools – APQP, PPAP, MSA and 8D Methods

The QM methods, procedures and modules assigned by different manufacturers as part of the so-called core tools will be demonstrated, discussed and practiced with examples in group work in an overview seminar. The consistent use of these tools is expected by the customer, especially in the auditing of processes and workflows.

**APQP – Advanced Product Quality Planning** is a part of project management and therefore also of VDA Maturity Level Assurance. In the VDA seminar “Maturity Level Assurance for New Parts” the participant receives in-depth training with this tool and practices its independent application.

**PPAP – Production Part Approval Process** corresponds to the initial sampling inspection according to VDA 2. In the VDA seminar “Quality Assurance Prior to Deliveries” the participant receives in-depth training with this tool and practices its independent application.

**MSA – Measurement System Analysis**, test equipment capability, is part of the procedure of testing process suitability according to VDA 5. In the VDA seminar “Suitability of Test Processes” this tool is dealt with and practiced extensively.

**The 8D method** is the problem solving method recommended by the VDA. With this method the solution to a quality problem can be systematically found, traced and successfully documented between the customer and the supplier. The 8D method is trained in-depth to be used independently in the VDA seminar “Problem Solving Methods”.

**Target audience**
All employees of project teams predominantly from the sectors planning, production preparation, test equipment planning and quality management, but also from sales and purchasing claims processing.

**Contents**
Overview of the contents and application in small groups
- APQP
- PPAP
- MSA
- 8D method

**Prerequisites for participation**
None

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

**Duration**
1 day
Professional planning before the start of production is necessary in order to assure smooth supply to customers in the automotive industry supply chain. For this purpose, automotive industry has established the Automotive Core Tools as planning instruments:

**APQP and VDA 4.3** – Project management for new processes and products. APQP or Project Planning, as well as Maturity Level Assurance form the framework for the application of additional Core Tools.

**FMEA** – Management of process and development risks for the systematic analysis of design weaknesses and potential manufacturing non-conformances.

**MSA** – Measuring System Analysis and Test Process Suitability (VDA 5) in order to ensure that measuring systems are suited for their respective use.

**PPAP or PPF** – VDA 2 release procedure and initial sample in order to verify that products and processes fulfill all requirements at the start of production.

**SPC** – Statistical Process Control for the control and assurance of ppm quality during series production.

**8D Method** – Systematic problem solving for the structured processing of acute problems and the avoidance of recurrence.

Successful project participation requires proficiency in the planning process and methods as well as an understanding of the interrelationships between methods. The seminar teaches how the individual phases of automotive-specific projects are arranged in terms of content, how attainment of planned results is supported by targeted use of methods, and how the methods are correctly and efficiently used.

Not only the correct procedure in terms of theory and method will be introduced, but exercises will be used to work out and discuss what is important for practical implementation.
**NEW**

Automotive Core Tools - Module I

The first part of the two part seminar deals with the concept phase and product and process development.

**Target audience**
All staff members in project teams for product and process development, primarily from planning, production preparation, test equipment planning and quality management departments.

**Contents**
- APQP/project planning (VDA 4.3); phases 1 and 2
- System analysis
- Product FMEA
- Prototype production control plan
- Process FMEA
- Production control plan
- Practical exercises on the different methods

**Prerequisites for participation**
Basic knowledge of quality management and planning in automotive industry

**Qualification certificate**
At the end of the course you will receive a VDA participation certificate. After participation in Module II and passing the exam, you will receive the VDA certificate with a registered number along with an “Automotive Core Tools Professional” card and the corresponding database entry.

**Duration**
3 days
The second part of the Core Tools seminar addresses process development and the transition to series production.

**Target audience**
All staff members in project teams for product and process development, primarily from planning, production preparation, test equipment planning and quality management departments

**Contents**
- APQP/project planning (VDA 4.3); phases 3 and 4
- Measurement System Analysis - MSA
- Test equipment and test process suitability (VDA 5)
- Process capabilities $p_p$ and $p_{pk}$ or $c_p$ and $c_{pk}$
- PPF (VDA 2) and PPAP
- Quality Control Cards/SPC
- 8D method
- Practical exercises with the different methods
- Progress assessment: written multiple choice test in the afternoon of the third day

**Prerequisites for participation**
Participation in the Automotive Core Tools – Module I seminar

**Qualification certificate**
At the end of the course you will receive a VDA participation certificate. After passing the exam, you will receive the VDA certificate with a registered number along with an “Automotive Core Tools Professional” card and the corresponding database entry.

**Duration**
3 days
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 inconsistencies. The identification, amplification and elimination of technical and physical inconsistencies 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**  
Managers, decision makers and persons responsible for projects in advance development, design and planning.

**Contents**  
The participants are introduced to inventive problem solving approaches in group work.  
+ 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.

**Prerequisites for participation**  
None

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

**Duration**  
2 days
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 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 managers from advance development, design, testing, planning, controlling, purchasing, sales and quality management.

Contents
Group work with practical examples
- 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.

Prerequisites for participation
None

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

Duration
2 days
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
**DoE – Test Methology**

**Design of Experiments**

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

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

The product and process FMEA is a risk analysis that accompanies planning and development and that is integrated into technical departments. FMEA is an important methodical 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. Depending on project progress, FMEA also indicates, through experience, calculation, testing and examination, by how much the risk has been reduced or can still be reduced in the future. Thus, failure mode costs are minimized and cross-divisional teamwork is optimized, so that FMEA is of significant benefit to the organization.

Target audience
Project leaders, project members, managers 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

Prerequisites for participation
None

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

Duration
2 days
Fault Tree Analysis (FTA) –
Model for the Structured Examination of Complex Relationships (According to 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 the 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.

Please note  This seminar starts at 2:00 pm on the first day.

Prerequisites for participation  None

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

Duration  1 ½ days
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 16949:2002, 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
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 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 16949:2002, 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.
The number of participants should be a maximum of 16 to 20.

Qualification certificate
At the end of the course you will receive a VDA participation certificate.
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<th>Groups</th>
<th>Morning Groups</th>
<th>Afternoon Groups</th>
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<th>Case Studies</th>
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In order to demonstrate compliance with customer specifications and to avoid claims due to insufficient test processes, the measurement uncertainties of the applied test process have to be known and have to be reasonably proportionate to given tolerances. Furthermore, the application of statistical methods for measurement analysis is required by ISO/TS 16949.

To comply with these requirements, the MSA and VDA 5 system of rules were developed in the automotive industry.

The seminar addresses the MSA method of the AIAG handbook MSA as well as the procedure to determine measurement uncertainty and to prove test process suitability according to VDA 5.

**Target audience**
Staff members that are in charge of planning, approval and monitoring of measurement and test equipment or machines and facilities, and staff members in testing laboratories

**Contents**
- Examine test equipment capability to determine the characteristics $c_4$ and $c_{pk}$ (method 1)
- Carry out measurement system analyses according to the AIAG reference handbook MSA (GRR method)
- Determination of the standard uncertainty of the test equipment $u_{pm}$ and proof of conformance to measurement-technology requirements for test equipment according to VDA 5
- Determination of measurement uncertainty $U$ and proof of test process suitability ($U/T$ ratio)
- Taking the determined measurement uncertainty at the tolerance limit into account
- Avoidance of non-conformance costs due to unsuitable test processes
- Positive determination of process capabilities

**Please note**
This seminar starts at 2:00pm on the first day.

**Prerequisites for participation**
None

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

**Duration**
1 ½ days
The fourth addition of the VDA volume 2 was revised in 2004 and adjusted to the requirements of the automotive industry. Furthermore, explanations on handling the international material data system were integrated. In future this will be applied more and more in the provision of sample parts in order to keep verification of conformity to legal regulations in the provision of samples. It is the objective of this seminar to learn to use the process approach efficiently in the provision of samples and the assurance of quality prior to delivery, in order to lower costs.

Target audience
Responsible persons, decision makers and their employees that have to have solid method know-how for the assurance of delivery quality. All employees that are involved in the preparation of provision of sample documentation for customers as well as for the approval of the suppliers' provision of samples.

Contents
+ VDA volume 2 with a reference to the changes in the fourth edition
+ Correlations of PPR and IMDS
+ Explanation of necessary company-specific regulation needs
+ Communicate an overview of the legal background
+ Production process and product release (PPR)
+ Principles of Production Part Approval Process (PPAP)
+ Quality performance in series production
+ Supplier selection
+ Quality assurance agreement
+ Declaration of ingredients

Please note
This seminar starts at 2:00 pm on the first day.

Prerequisites for participation
None

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

Duration
2 1/2 days
Economical Process Design and Control (SPC) in Consideration of the Tolerances (According to 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 the findings of 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) managers 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.

**Please note**  This seminar starts at 2:00 pm on the first day.

**Prerequisites for participation**  None

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

**Duration**  1 ½ day
Automotive SPICE® – Overview

ISO/IEC 15504 – referred to as SPICE – is a worldwide and accepted standard for evaluating and improving software development processes. In Germany it is especially used in the automotive industry. Since 2007 assessments in the automotive industry have been preferably carried out according to Automotive SPICE®.

Conducted in cooperation with our Automotive SPICE® training partner:

Kugler Maag CIE GmbH
Leibnizstr. 11
D-70806 Kornwestheim
http://www.kuglermaag.de

method Park Software AG
Wetterkreuz 19a
D-91058 Erlangen
http://www.methodpark.de

SQS Software Quality Systems AG
Stollwerckstr. 11
D-51149 Köln
http://www.sqs.de

Synspace GmbH
Kartäuserstr. 49
D-79102 Freiburg
http://www.synspace.com
Automotive SPICE® for Managers

The course offers a presentation of the Automotive SPICE® model from the perspective of a manager. In particular, the differences between ISO/IEC 15504 and its process reference model and the domain-specific amendments of Automotive SPICE® will be presented. Furthermore, the differences between Automotive SPICE® and other models for design and improvement of processes, such as CMMI, ISO 9001 and ITIL will be introduced. The participants will be shown the possibilities for application of the model in their own company and in cooperation between customer and supplier. On the basis of the course contents, the potential for application in the participants' direct environment can be assessed.

The course consists of presentations, exercises and discussions, and offers ample opportunity for questions, discussions and exchange of experiences.

Target audience

This course is geared towards managers of automotive manufacturers and suppliers. This includes project leaders, coordinators and people responsible for quality from development, supplier management and purchasing.

Instructors

Instructors for this course are exclusively Competent and Principal Assessors with extensive experience in the practical execution of assessments according to Automotive SPICE®.

Prerequisites for participation

None

The number of participants is limited to 12.

Contents

+ The Automotive SPICE® process reference model and the central differences to ISO/IEC 15504.
+ The Automotive SPICE® process assessment model (PAM) and the central differences to ISO/IEC 15504.
+ Automotive SPICE® compared to other models, including ISO 9001:2000, ISO 15504-5, CMMI®, ITIL.
+ The so-called “HIS Scope” (the minimum Automotive SPICE® requirements by German OEMs for their suppliers).
+ Procedure and preparation of an assessment by the customer.
+ The benefits of Automotive SPICE® for control unit and SW suppliers.

Language

The course materials are in English. The seminar itself is offered in German or English.

Qualification certificate

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

Duration

1 day
ISO/IEC 15504 (SPICE: Software Process Improvement and Capability Determination) represents the worldwide, accepted standard for the assessment of process capability and process improvement. ISO/IEC 15504 is used in the automotive industry – especially in Europe – for the assessment and qualification of control unit and SW suppliers. Due to heightened competitive conditions, companies introduce process improvement projects in development as a means of increasing efficiency and quality. As the basis for process assessment and improvement, automotive manufacturers require their suppliers to implement Automotive SPICE® as an ISO/IEC 15504-2 compliant assessment model that has been adjusted to the needs of the automotive industry.

Through numerous exercises and tips, this course prepares the participants for independent – but under the stewardship of a Competent Assessor – processing of individual topics in assessments in order to, for example, assess the processes in their own company or with suppliers according to Automotive SPICE® and to optimize them on this basis.

The seminar described here addresses the fundamentals of ISO/IEC 15504 and Automotive SPICE®. The contents of this training have been standardized through an iNTACS™ curriculum. The certificate is called “iNTACS™ ISO/IEC 15504 Provisional Assessor (Automotive SPICE®)”. Participants must actively participate in the course and pass the independent exam at the end of the course in order to successfully complete Provisional Assessor (Automotive SPICE®) training. Please note that independent preparation before and after each seminar day is recommended in order to pass the exam.

The contents correspond to the curriculum published by INTACS™:

- Process assessment concepts
- ISO/IEC 15504 architecture: elements and relationships
  - The capability dimension: capability levels and process attributes
  - The measurement system: process profile and assessment of the capability levels
  - The process dimension and process reference models (including ISO 12207 AM1 & 2 and Automotive SPICE®)
  - Assessment models and indicators
- Requirements for the conformity of an assessment model
- The assessment models in ISO/IEC 15504-5 and Automotive SPICE®
- Use of the assessment results
- The assessment process
  - Assessment preparation: compilation of the inputs
  - Assessment planning
  - Collection of data: checking of documents
  - Collection of data: interviews
  - Validation of data and process assessment
  - Presentation of the assessment results
  - Verification of assessments conformity
- Assessor competence:
  - Qualification criteria and their validation
  - The International Assessor Certification Scheme
- Case study with role-play – a realistic case study with corresponding documents will be used in order to give the participants the opportunity to carry out a small assessment. The main activities of an assessment – including preparation, interviews, document analysis, data validation and presentation of results – will be practiced by the participants.
The course consists essentially (approx. 60%) of exercises, discussions and exchange of participant experiences with processes and their implementation. There is an independent exam carried out by the Certification Body at the end of the course.

**Target audience**
Quality and project managers, department managers and current or future staff members in process groups, as well as people who in future plan to be responsible for the execution of assessments according to ISO/IEC 15504 or Automotive SPICE®.

**Instructors**
Instructors for this course are exclusively experienced iNTACS™ Certified Principal Assessors with extensive experience in the practical execution of assessments who are also accredited as instructors.

**Prerequisites for participation**
The participants should have professional experience. Participation in the course and in the exam is not dependent on having fulfilled the prerequisites for a registration as Provisional Assessor. The number of participants is limited to 10, according to the iNTACS™ rules.

Prerequisites for certification and registration:
- Three years’ professional experience in IT (e.g. software/system development, project management, quality management, or similar) is recommended.
- Proof of at least two years’ professional experience in the automotive industry is required for a certification as Provisional Assessor.
- Successful participation including passing the exam in the course: “iNTACS™ certified ISO/IEC 15504 Provisional Assessor Automotive SPICE®”.

The prerequisites can be downloaded in their currently valid form directly from www.intacs.info.

**Language**
The course materials are in English. The seminar itself is offered in German or English.

**Duration**
5 days
ISO/IEC 15504 is used in the automotive industry – especially in Europe – for the assessment and qualification of electronics suppliers. Due to heightened competitive conditions, companies introduce process improvement projects in development as a means of increasing efficiency and quality. As the basis for process assessment and process improvement, automotive manufacturers require suppliers to implement Automotive SPICE® as an ISO/IEC 15504 compliant assessment model that has been adjusted to the needs of the automotive industry.

This course communicates the knowledge necessary for a Competent Assessor in an assessment according to Automotive SPICE®. The course builds upon the experiences of the Provisional Assessor training and practical assessment experience. A central element of the course is therefore also the exchange of experiences between participants and consolidation of the use of Automotive SPICE® based on these experiences.

The seminar described here addresses the process assessment model and process reference model Automotive SPICE®. The contents of this training have been standardized by an iNTACS™ curriculum. The certificate is issued by the VDA (German Automotive Industry Association) – Quality Management Center (VDA-QMC) and is called “iNTACS™ ISO/IEC 15504 Competent Assessor (Automotive SPICE®)”.

Three proofs of performance are necessary in order to pass the Competent Assessor training (Automotive SPICE®):
+ You are assigned homework that you have to complete before the beginning of the seminar and then present the solution during the seminar.
+ You actively contribute to the practical sections in the training. This involvement is assessed by the instructor.
+ You successfully complete an independent written multiple choice exam at the end of the course.

Please note that independent preparation before and after each seminar day is recommended in order to pass the exam.

The contents correspond to the published iNTACS™ curriculum:
+ Introduction
+ Process and maturity level dimension: consolidation, typical pitfalls, and common procedures on the basis of the Automotive SPICE® requirements
+ Assessment planning: collection of assessment inputs, preparation of an assessment plan
+ Review of documents
+ Management of Assessment Teams
+ Handling of extreme situations
+ Interview techniques
+ Reporting
+ Conducting assessments at different locations and in different countries
+ Coaching of Provisional Assessors

The course consists essentially (>75%) of exercises, discussions and exchange of participant experiences with Automotive SPICE®.

At the end of the course there is an independent exam carried out by the Certification Body. Please note: participants must complete a task before the start of the course for a successful participation.

Registered Provisional Assessors that have gained experience in assessments and who in future plan to be responsible for assessments according to Automotive SPICE®.
### Instructors
Instructors for this course are exclusively experienced iNTACS™ certified Principal Assessors with extensive experience in practical assessments and who are also accredited instructors.

### Prerequisites for participation
The participants should have assessment experience. Participation in the course and exam is not dependent on the fulfillment of the prerequisites for a registration as Competent Automotive SPICE® Assessor by VDA-QMC. The number of participants is limited to 10, according to the iNTACS™ rules.

Prerequisites for the certification and registration:
- At least four years' professional experience in IT (e.g. software/system development, project management, quality management, etc).
- Registration as iNTACS™ Certified ISO/IEC 15504 Provisional Assessor Automotive SPICE®.
- Proof of 120 assessment hours on at least three assessments, as well as in at least three process groups.
- Provision of the assessments (for the assessment hours given as proof) by the respective Competent or Principal Assessor from the assessments.
- At least one recommendation by a Competent or Principal Assessor from the assessments on the basis of Automotive SPICE®.
- Successful completion of the course and exam: “iNTACS™ Certified ISO/IEC 15504 Competent Assessor Automotive SPICE®”.

The currently valid prerequisites can be downloaded directly from www.intacs.info. Registration is done through the VDA-QMC.

### Language
The course materials are in English. The seminar itself is offered in German or English.

### Qualification certificate
If the participant performs adequately and passes the exam at the end of the seminar, he/she will receive a certificate from VDA which is the basis for the iNTACS™ Competent Assessor Automotive SPICE® certification.

### Duration
5 days
Automotive SPICE® –
Upgrade for Participants with Experience

The participants will learn the differences between ISO/IEC 15504 and Automotive SPICE® and, after the course, will be able to assess which changes to processes are necessary so that they can pass an assessment according to the domain-specific standard. You will acquire the knowledge and skills to plan, prepare and carry out an assessment according to Automotive SPICE® that is conform to ISO/IEC 15504.

The special requirements of Automotive SPICE® will be consolidated by means of practical examples and on the basis of the participants’ experiences.

Concept
The course offers an in-depth introduction and presentation of the differences between ISO/IEC 15504 and the process reference model contained within it to the domain-specific supplements of Automotive SPICE®. Assessors that have not so far been active in this field will be taught the essentials and particularities of the standard for this domain. The seminar supports Provisional and Competent Assessors in the preparation for official assessments according to Automotive SPICE®.

Contents
- The Automotive SPICE® process reference model and the central differences to ISO/IEC 15504
  - Process categories
  - The HIS scope
  - The specific processes: ACQ., SUP.1, SUP.8, SUP.10, SUP.9, the ENG-chain, REU.2
- The Automotive SPICE® process assessment model (PAM) and the central differences to ISO/IEC 15504
  - Process attributes
  - Base/generic practices
  - Work products and their special characteristics
  - Generic resources
- Implications that result from the changes: What do I have to keep in mind in an assessment? How do I have to change my processes in order to comply with a new standard in an assessment?

The course is made up primarily of exercises, discussions and exchange of participant experiences from assessments.

Target audience
Assessors with experience in assessments who would like to prepare for the requirements for assessments according to Automotive SPICE®. Certified ISO/IEC 15504 Provisional Assessors or ISO/IEC 15504 Competent Assessors who want to be certified as Provisional or Competent Assessor Automotive SPICE® by VDA-QMC. Participation is a prerequisite for the certification by VDA-QMC.

Instructors
Instructors for this course are exclusively experienced assessors with extensive experience in the execution of practical assessments according to Automotive SPICE® who are also accredited instructors.

Prerequisites for participation
The participants should have assessment experience.

Language
The course materials are in English. The seminar itself is offered in German or English.

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

Duration
1 day
The course offers a presentation of the Automotive SPICE® model from the perspective of a project manager. Especially Automotive SPICE® management and acquisition processes (project management, risk management, process improvement, reuse and supplier management) will be discussed. These processes will be presented by means of practical examples. The problems which could occur during assessments and what the corresponding process improvements could look like will be discussed.

**Target audience**
This course is geared towards managers of automotive manufacturers and suppliers. This includes project managers, coordinators and persons responsible for quality from development, supplier management and purchasing.

**Instructors**
Instructors for this course are exclusively experienced Competent and Principle Assessors with extensive experience in the execution of practical assessments according to Automotive SPICE® who are also accredited instructors.

**Prerequisites for participation**
None
The number of participants is limited to 12.

**Contents**
- The Automotive SPICE® process assessment model (PAM)
- Additional procedures during an assessment
- Sensible preparation for an assessment
- Consolidation of the Automotive SPICE® processes
  - MAN.3 Project management
  - MAN.5 Risk management
  - MAN.6 Measurement
  - REU.2 Reuse management
  - PIM.3 Process improvement
  - ACQ.3 Contract management
  - ACQ.4 Supplier monitoring
  - ACQ.11 Technical requirement
  - ACQ.12 Legal and administrative requirements
  - ACQ.13 Project requirements
  - ACQ.14 Call for tenders management (SPL.1)
  - ACQ.15 Supplier qualification
- Interpretation of Levels 1-3 and forecast for Level 4
- Improvement potential regarding the listed processes

The course consists of presentations, exercises and discussions, and offers plenty of opportunity for questions, discussions and exchange of experiences.

**Language**
The course materials are in English. The seminar itself is offered in German or English.

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

**Duration**
2 days
ISO 15504 – called SPICE – is a worldwide and accepted standard for the assessment and improvement of software development processes. In Germany it is especially applied in automotive industry. Since 2007, assessments in automotive industry have been preferably carried out according to Automotive SPICE®.

Concept The course offers a presentation of the Automotive SPICE® model from the perspective of a project manager or project member. The Automotive SPICE® Engineering Processes (requirement finding, system requirement analysis, system architecture design, software requirement analysis, software design, software engineering, software integration test, software test, system integration and system test) will be discussed in particular. These processes will be introduced by means of practical examples. The problems that could occur during an assessment and what corresponding process improvement could look like will be discussed.

Target audience This course is geared towards managers of automotive manufacturers and suppliers. This includes project managers, coordinators and persons responsible for quality from development, supplier management and purchasing.

Instructors Instructors for this course are exclusively experienced Competent and Principle Assessors with extensive experience in practical assessments according to Automotive SPICE®.

Prerequisites for participation None
The number of participants is limited to 12.

Contents + The Automotive SPICE® Process Assessment Model (PAM)
+ Basic procedure in an assessment
+ Sensible preparation for an assessment
+ Consolidation of the Automotive SPICE® processes
  - ENG.1 Requirement Finding
  - ENG.2 System Requirement Analysis
  - ENG.3 System Architecture Design
  - ENG.4 Software Requirement Analysis
  - ENG.5 Software Design
  - ENG.6 Software Engineering
  - ENG.7 Software Integration Test
  - ENG.8 Software Test
  - ENG.9 System Integration Test
  - ENG.10 System Test
+ Bilateral traceability of requirements
+ Interpretation of the Levels 1-3 and forecast for Level 4
+ Improvement potential regarding the listed processes

The course consists of presentations, exercises and discussions, and offers plenty of opportunity for questions, discussions and exchange of experiences.

Language The course materials are in English. The seminar itself is offered in German or English.

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

Duration 2 days
ISO 15504 – called SPICE – is a worldwide and accepted standard for the assessment and improvement of software development processes. In Germany it is especially applied in automotive industry. Since 2007, assessments in automotive industry have been preferably carried out according to Automotive SPICE®.

**Concept**
The course offers a presentation of the Automotive SPICE® model from the perspective of a project manager or project member. The Automotive SPICE® Supporting Processes (quality assurance, verification, reviews, documentation, configuration management and change management) will be discussed in particular. These processes will be introduced by means of practical examples. The problems that could occur during an assessment and what corresponding process improvement could look like will be discussed.

**Target audience**
This course is geared towards managers of automotive manufacturers and suppliers. This includes project managers, coordinators and persons responsible for quality from development, supplier management and purchasing.

**Instructors**
Instructors for this course are exclusively experienced Competent and Principle Assessors with extensive experience in the execution of practical assessments according to Automotive SPICE®.

**Prerequisites for participation**
None
The number of participants is limited to 12.

**Contents**
- The Automotive SPICE® Process Assessment Model (PAM)
- Basic procedure in an assessment
- Sensible preparation for an assessment
- Consolidation of the Automotive SPICE® processes
  - SUP.1 Quality Assurance
  - SUP.2 Verification
  - SUP.4 Reviews
  - SUP.7 Documentation
  - SUP.8 Configuration Management
  - SUP.9 Problem Solving Management
  - SUP.10 Change Management
  - SPL.2 Product Release
- Interpretation of the Levels 1-3 and forecast for Level 4
- Improvement potential regarding the listed processes

The course consists of presentations, exercises and discussions, and offers plenty of opportunity for questions, discussions and exchange of experiences.

**Language**
The course materials are in English. The seminar itself is offered in German or English.

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

**Duration**
2 days
## Implementation of “Six Sigma Automotive” in the Organization: Introductory Seminar

Six Sigma is an organization-wide program for quality improvement and cost reduction. Fault-free processes in product development are the objective. The starting points are teamwork on the basis of project management, the application of basic statistical principles for process evaluation and control, as well as the consistent use of accepted quality management methods. Further training levels, such as Six Sigma Automotive Green Belt and later Six Sigma Automotive Black Belt, are also possible.

<table>
<thead>
<tr>
<th><strong>Target audience</strong></th>
<th>Managers, decision makers, project managers and project employees of all sectors of an organization.</th>
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| **Contents**       | + The basic principles of role descriptions and team building for the implementation of Six Sigma Automotive  
                     + Examples of the use of the statistical basics of Six Sigma  
                     + Introduction to DMAIC methodology (Define-Measure-Analyze-Improve-Control)  
                     + Assessment of usability and possible benefit of quality management methods recommended in Six Sigma Automotive training  
                     + Preview of DFSS (Design for Six Sigma) |
| **Prerequisites for participation** | None |
| **Qualification certificate** | At the end of the course you will receive a VDA participation certificate. |
| **Features** | Upon request we can also offer your organization project-accompanying implementation of “Six Sigma Automotive”. Thus the advanced qualifications of the participants can be achieved. |
| **Contact** | Head of Training and Professional Development, Phone: +49 (0) 6171/9122-21  
                        info@vda-qmc.de |
| **Duration** | 1 day |
The EFQM Excellence Model (European Foundation for Quality Management) aims to give orientation for the essential impulse of sustainable improvement of process quality in organizations. A self-assessment according to the EFQM model demonstrates the strengths and improvement potential of the organization and serves as the kick-off for improvement projects.

Fundamental concepts are:
+ Result orientation
+ Customer focus
+ Leadership and constancy of purposes
+ Management by processes and facts
+ People development and involvement
+ Continuous learning, innovation and improvement
+ Partnership development
+ Corporate social responsibility

<table>
<thead>
<tr>
<th>Target audience</th>
<th>Persons (prospectively) in charge of projects, (prospective) managers, quality specialists, auditors.</th>
</tr>
</thead>
</table>
| Contents        | + Communication of the complete methodical procedure for an assessment on the basis of the EFQM Excellence Model.  
+ The EFQM in practice: initiation and review of continuous improvement processes  
+ Participation in and conduction of self-assessment in a team and evaluation of the results.  
+ Application for the national Ludwig Erhard Prize and/or the EFQM Excellence Award |
| Features        | In time for the start of the training you will receive materials for the preparation and execution of a detailed assessment. |
| Prerequisites for participation | None |
| Qualification certificate | For the successful participation we issue an EFQM Assessor Certificate. |
| Duration | 2 days |
Contractual and Product Liability

A working knowledge in the organisation of the basic principles of product liability is necessary for the successful certification to VDA 6.1 (QM System Audit). Depending on their work, the employees in the organization must be conscious of the effects of faults on the product. In principle, employees must be aware of the consequences of product liability for the organization. Contractual and product liability are not only based on continuously changing legislation but also on jurisdiction, the violation of which can have serious consequences.

With this course, we would like to help you successfully implement the basics of product liability in your field of work.

Target audience  (Prospective) managers and representative employees from every automotive sector (development, planning, production, quality assurance, sales, customer service, company management) who have a technical or commercial training

Contents  + Current contractual liability legislation
          + Legal precedents on product liability law
          + Criminal product liability
          + VDA purchasing conditions
          + Current product safety legislation in the EU and the USA (among others, the US Trade Act)
          + Assessment and avoidance of product liability risks
          + Consolidation of juristical questions using case studies

Prerequisites for participation  None

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

Duration  2 days
China's entry into the World Trade Organization in December 2001 was accompanied by extensive reforms of trade legislation. With these changes the tariff walls have been considerably reduced. As a result of this the need also arose to regulate consumer protection in a standardized way. In addition, new certification and labeling was introduced, the China Compulsory Certificate (CCC).

On 1 December 2005, 13 new regulations regarding the certification of automobile components went into effect. Also, the regulations concerning the import of motorized vehicles were revised and supplemented by additional product tests for gasoline consumption. Furthermore, front and rear lights, other lamps and reflectors, as well as rearview mirrors, acoustic signal systems, gasoline tanks, door locking systems, seats and headrests etc are all CCC liable products.

The seminar is based on practical experience with certification. It explains how products liable for certification are determined, which steps have to be taken, and details the important organizations for the certification.

**Target audience**
Managing directors and executive staff of all areas of quality management, development, purchasing, marketing, export and production.

**Contents**
+ Details of the new China Compulsory Certification system
+ CCC process and requirements
+ Case studies of car parts
+ CCC fee ordinance and fees
+ Results of discussions with government agencies
+ National standards in the PR of China
+ Government organizations and accredited test labs
+ Customs legislation in the PR of China
+ Customs clearance options
+ Tariff tables
+ Dutiable value regulations
+ Documents in goods traffic

**Prerequisites for participation**
None

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

**Duration**
1 day
Cross-Cultural Training – China

Even today in the age of globalization, the importance of cross-cultural communication and understanding Chinese business partners as an important foundation for the successful development of a long-term business relationship are often underestimated. This cross-cultural training specifically prepares the participants for the particularities in dealing with Chinese business partners and teaches you behavior and mindset, as well as negotiation strategies and understanding of contracts from the viewpoint of the Chinese. By using different case studies, the different behavior patterns are explained with reference to cultural backgrounds. Better understanding of Chinese partners and the communication of important codes of conduct help in finding constructive solutions in conflict situations and prepare the ground for successful cooperation.

Target audience: Managers and technical experts with personal contact to Chinese business partners.

Contents:
- What is China?
- Short overview of the economic development of China
- The German-Chinese economic relationships
- The basic principles of Chinese negotiation
- Typically Chinese!
- Typically German!
- Social standards and behavior
- All about food and eating
- Business in China
- Communication with business partners and colleagues/coworkers
- Chinese for beginners

Features: The business dinner has a fundamental role in everyday life in China. At lunch in a Chinese restaurant, the participants will be instructed in the correct table manners and will be given answers on the do's and don'ts as well as seating order.

Prerequisites for participation: None

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

Duration: 1 day
Through theoretical training and practical exercises, the participants in this one-day seminar will learn to considerably increase their ability to communicate and their understanding of Russian business partners through the use of various acquired techniques. The differences between German and Russian ways of thinking and how these influence behavior will be highlighted and worked out. You will be able to recognize cultural influences and therefore be able to deal with other cultures more sensitively and successfully. The focus here will clearly be on Russian culture.

This will enable you to handle your business successfully:

+ Successful and profitable negotiations
+ Ideal contract management
+ Avoidance of pitfalls
+ Convincing behavior
+ Meetings, presentations, conversations
+ Team work management
+ Strategy setting
+ Human resource topics
+ Risks and risk reduction strategies
+ General behavior towards your business partners

These insights are corroborated by exercises so that you are prepared for all – even unexpected – events.

**Target audience**

Executives and managers, field representatives, account managers, auditors, controllers, etc.

**Contents**

+ Exercises in self images and public images
+ Mutual perception
+ Dimensions and characteristics of German and Russian cultures
+ Communication standards
+ Cultural and behavioral patterns
+ Personal behavior
+ Presentations, meetings, negotiations
+ Dos and Don’ts
+ Group projects

**Prerequisites for participation**

None

**Qualification certificate**

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

**Duration**

1 day
A Zero Defect strategy for electronic devices requires a modern inspection and release procedure. Formal inspection scopes that have their origins in the 70s and are geared to an acceptable quality level percentage have done their duty in the past. Today they are however hardly suited to guarantee the required single-digit ppm rates. Instead, a “fit-for-standard” is replaced by a knowledge based “fit-for-application”. Only this time and cost saving release procedure makes a Zero Defect strategy possible. In this connection, relative evaluations appear to be especially helpful, based on end-of-life tests, limit of function and the inspection of previous field experiences. There is a limit to the formulation of the latter and they require a competent decision-making capability.

The procedure, called “Robustness Validation”, is especially based on determining the gap between the real capabilities of the components and later operating conditions. It helps to demonstrate the physical limits of semiconductor products under realistic use conditions, and this also constitutes the basis of risk management. A knowledge-based qualification approach which is based on specific fault mechanisms underlies the procedure. In this way, examinations without knowledge gain are avoided and concentration on relevant risks is possible. This standard will increase the reliability of electronic control units in vehicles and in this way will also lead to lower warranty costs.

You can find further information at www.zvei.org/RobustnessValidation.
Automotive-Specific Qualification

• Qualification Programs in cooperation

In order to implement the potential of robustness validation to its full scale, it is necessary to apply it at a very early stage of the project phase. Therefore, we address experts from development and advance development from OEMs and first-tier suppliers, as well as persons in charge of quality throughout the product cycle. For this group, this training is recommended as well as for developers and design engineers at the circuit level and semiconductor specialists.

+ Preparation of a comprehensive qualification plan according to the Robustness Validation.
+ Compiling and preparing a mission profile for the next step in the value-added-chain.
+ Execution of a risk examination.
+ Information feedback from the RV process for the purpose of product improvement. Preparation of a monitoring plan.
+ Supplier and technology evaluation and release.
+ APQP
+ Specifications (mission profiles) and quality requirements.

Objective

+ Concept and procedure of Robustness Validation
+ Mission profiles: requirements and format
+ Robustness Validation knowledge matrix
+ Design rules and their verification
+ Documentation of RV reports and PPAP, including the interpretation of results
+ Examples.

Contents

Fundamentals of the approval of electronic components and test specifications required. Additional basic knowledge of semiconductor components, their technology and their test procedures recommended.

Prerequisites for participation

After successful completion you receive a VDA-ZVEI (German electrical and electronic manufacturers' association) participation certificate.

Qualification certificate

2 days

Duration

Target audience

Objective

Contents

Prerequisites for participation

Qualification certificate

Duration

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AUTOMOTIVE-SPECIFIC QUALIFICATION • QUALIFICATION PROGRAMS IN COOPERATION
More and more people in charge of quality have to assume management functions, without being sufficiently prepared. Besides the technical tasks, the quality of the management tasks has become an important success and survival factor. Only appropriate and good management makes people and organizations efficient.

» Total Quality Management ist wichtig, aber Total Management Quality ist mindestens genauso wichtig.«

Prof. Fredmund Malik

The objective here is the further development of management quality. For this, three different seminar modules are offered in cooperation with the renowned Malik Management Zentrum St. Gallen. Each of the three modules can be booked individually. It is recommended to book them in sequence.

Participants who successfully complete all three seminar modules receive a VDA-QMC certificate in cooperation with the Malik Management Zentrum St. Gallen.

Module I
Corporate Thinking and Acting

Module II
Process and Change Management

Module III
Effective Management

The Malik Management Zentrum St. Gallen has been among the leading providers of management and consulting education for over 30 years. Under the leadership of Prof. Fredmund Malik a company with about 250 employees has developed. At the Malik Management Zentrum St. Gallen, managers of European companies and organizations – globally active industry leaders as well as medium-sized companies – find an extremely effective combination of services.
Module I: Corporate Thinking and Acting

The target group – quality managers – has a high level of specialist knowledge, but has few opportunities to experience overall corporate interrelationships. In this seminar module the participants explore the interconnectedness between company functions on the operative and strategical management level as well as corporate interrelationships. This helps them to integrate their own contributions into the organization.

Learning targets / Benefits

After the “Corporate Thinking and Acting” seminar, the participants are familiar with the levels of corporate management and can differentiate between operative and strategical management. They can identify important interrelationships in company management and the opportunities for exercising influence. The distinctive feature of the approach is based on the experience of entire corporate interrelationships through a company business game. The St. Gallen corporate simulation imparts practice-oriented knowledge of the system-oriented management model. Your own management functions can be critically reviewed by applying the integrated management system.

Contents

Basic principles of strategic management:
+ The corporate navigation system
+ The integrated management system

Raising awareness in a company business game
+ In each case with input sequences and direct application

Strategic management tools
+ Customer benefit
+ Experience curve
+ Key variables

Prerequisites for participation

None

Qualification certificate

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

Features

Participants that successfully complete all three seminar modules receive a VDA-QMC certificate in cooperation with the Malik Management Zentrum St. Gallen after completion of the last seminar module.

Duration

2 days
Module II: 
Process and Change Management

On the first day, the seminar communicates successful procedure and instruments for the development and realization of business and organizational workflows. After this logical level, the second day focuses on the social level – change management.

Learning targets / Benefits
The seminar focuses first on the main features of organizational development and trains the participants in process orientation by intensively using action learning. Moreover, the participants look into the regularities and patterns of change processes. They learn how to handle emotional and social aspects, as well as the method of diagnosis and intervention in such processes. The participants learn to understand interrelationships and to prepare implementation through targeted practical experience in theory and practice.

Contents
Process Management
+ Process documentation, analysis and design
+ Analysis, configuration and cost-effectiveness
+ Tools such as function analysis

Change Management
+ Typical problems and mistakes in change processes
+ Sphere of influence analysis by means of concrete cases
+ Communication in change processes
+ Handling resistance and different change types
+ Managing difficult situations in change projects
+ Conflict management

Prerequisites for participation
None

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

Features
Participants that successfully complete all three seminar modules receive a VDA-QMC certificate in cooperation with the Malik Management Zentrum St. Gallen after completion of the last seminar module.

Duration
2 days
Module III:

Effective Management

In this two-day managerial effectiveness program, management is viewed as a learnable profession. Knowledge and methods are communicated that are comprehensively tested and proven but not well enough known. In the center of this are well-founded and established rules of good management, technical instruments, the learnable skills and insight into the principles of effective management. The objective is to increase the manager's effectiveness.

Learning targets / Benefits
The seminar communicates the principles, tasks and tools of effective management to the participants so that they can reach their objectives successfully and in a structured manner.

Contents
Basic principles
+ De-mystification of a term: the integrated management system
+ Management as a profession: the managing wheel

Fundamentals of effective management:
+ The guiding principles of successful actions, selected tasks and tools:

Selected tasks and tools:
+ The process “management by objectives” and its instruments: assignment, goals, monitoring, as well as evaluating and development
+ Organizing a result responsible unit
+ Effective decision making: the process
+ Effective meeting management
+ Tips for optimized teamwork: team diagnosis and development
+ Personal work method: an instrument for better self-monitoring
+ Systematical garbage removal to purge unimportant things and to concentrate on the basics

Prerequisites for participation
None

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

Features
Participants that successfully complete all three seminar modules receive a VDA-QMC certificate in cooperation with the Malik Management Zentrum St. Gallen after completion of the last seminar module.

Duration
2 days
II. Training and Professional Development for 1st/2nd/3rd Party Auditors

VDA Quality Manager and Internal Auditor

ISO/TS 16949:2002

VDA 6.x
All courses in this program build upon each other and, after successfully passing the examination, lead to a qualified degree with certificate.

The modules can also be booked individually and conclude with a certificate of participation.

Specialists in the automotive industry will be prepared for work in internal improvement projects or with suppliers.

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.

With this qualification you lay the foundation for successful implementation of quality management in your company according to the standards of the automotive industry. You will learn the fundamentals of quality management and be able to implement a QM system and conduct internal audits. You will get to know the most important quality management tools and will learn to assess opportunities for application in your company.

Qualification Program with Certificate: VDA Quality Manager and Internal Auditor

Module I*: 3 days
Fundamentals of Quality Management

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

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

Further specific 1st/2nd party auditor training

ISO/TS VDA 6.1 VDA 6.2 VDA 6.3 VDA 6.4 VDA 6.5 VDA 6.7
System Auditor Process Auditor

*Certificates/documents of other training organizations may be recognized
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 managers 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
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 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
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 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
Module IV: Auditor in the Automotive Industry

You are familiar with the procedure for the process oriented procedure for 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
### Examination Day for the VDA Quality Manager and Internal Auditor

<table>
<thead>
<tr>
<th>Target audience</th>
<th>Participants from Modules I to IV</th>
</tr>
</thead>
</table>
| **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 successful completion of the written and oral tests, you will receive a VDA certificate for VDA Quality Manager and Internal Auditor. |
| **Duration** | 1 day |
Customer-Specific Requirements

Automotive industry requirements are constantly increasing. In addition to fulfilling the continuously changing needs of the customer, excellent quality is an important prerequisite for competing on the market.

In addition to the rules and standards for quality management – first and foremost ISO/TS 16949, and the supporting texts (e.g. VDA volumes, AIAG handbooks such as PPAP, APQP, etc.) – the customer-specific QM requirements have to be observed as well.

Knowledge of current customer-specific QM requirements to be applied - as well as their interpretation within the ISO/TS 16949 certification framework - represents a challenge for the entire supply chain.

In the fields of contract review and feasibility studies, the challenges for dealing with these topics are increasing.

In this one-day seminar, you will receive details on the handling of customer-specific QM requirements and interpretation. By means of practical examples you will be able to determine the procedures for dealing with customer-specific QM requirements for your company in a feasible process description.

Target audience
Staff members from sales/marketing, R&D, purchasing, quality management, supplier management and production departments.

Contents
- Determination of customer-specific QM requirements
- Updating and assessment of the feasibility of customer-specific QM requirements for produced/distributed products
- Assurance of internal communication of customer-specific QM requirements with the involvement of the suppliers
- Review of requirements and how to deal with unfeasible requirements
- Requirements and their effect on the reliability of products
- Checking overall application of customer-specific QM requirements through internal audits
- Process description by means of examples for the organization with assessment of responsibilities and roles of the persons involved.

Prerequisites for participation
Experience in the automotive industry or ISO/TS 16949

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

Duration
1 day
1st/2nd Party Auditors of ISO/TS 16949:2002

Initial Qualification

- **Prerequisites for training:**
  - Demonstrable knowledge of ISO 9001:2000
  - 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

- **Qualification course (ID 1104)**

- **Examination preparation (ID 1100)**
  - Core Tools and certification requirements

- **Examination day (ID 1105)**

  Certificate + Auditor Card + Entry in Database

Re-Qualification

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

- **At least 3 internal system audits in the last 3 years**
  - Examination preparation (ID 1100)
  - Core Tools and certification requirements

- **< 3 internal system audits in the last 3 years**
  - 3-day training Qualification (ID 1104)

  Certificate + Auditor Card + Entry in Database
Qualification Course for (Prospective)  
1st/2nd Party Auditors of  
ISO/TS 16949:2002 (Training)

Target audience
QM employees/representatives or internal/external system auditors with audit experience in the automotive industry and knowledge of ISO 9001:2000.

Contents
+ Consolidation of the methods that are designated by the IATF for process-oriented auditing of ISO/TS 16949:2002
+ Communication of contents, methods and procedure with which 3rd party auditors of ISO/TS 16949:2002 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.

Prerequisites for participation
+ Experience with preparing and conducting audits is recommended.
+ Knowledge of ISO 9001:2000 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 16949:2002 – Technical Specification, Rules and 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 16949:2002.

Duration
3 days
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 3rd party 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/3rd 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
The examination day for the certification of 1st/2nd party auditors of ISO/TS 16949:2002 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 16949:2002 requirements, and in special cases manufacturer-specific requirements.

**Target audience**  
Prospective 1st/2nd party auditors of ISO/TS 16949:2002 that have taken part in the qualification course and existing 1st/2nd party auditors that have taken part in the re-qualification course.

**Prerequisites for participation**  
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 “Aus- und Weiterbildung” / “Formulare”.

+ Provable knowledge of ISO 9001:2000
+ 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 16949:2002 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 16949:2002 you have already completed!

Please also note the overview on page 73.

**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.

**Duration**  
1 day
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 16949:2002.

The competence of 1st/2nd party auditors is also decisive for the implementation of the special requirements of ISO/TS 16949:2002 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 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.

1st/2nd party auditors according to ISO/TS 16949:2002 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

**Target audience**
1st/2nd party auditors according to ISO/TS 16949:2002 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.

**Prerequisites for participation**
VDA certificate for 1st/2nd party auditor ISO/TS 16949:2002 and appropriate proof of conducted audits. Please also note the overview on page 73.

An admission to this course takes place after successful assessment of your application. The necessary application 1110 can be found on our homepage www.vda-qmc.de under “Aus- und Weiterbildung” / “Formulare”.

**Qualification certificate**
After fulfillment of the prerequisites and successful participation, you receive a VDA certificate with registered numbering as well as the corresponding auditor card and the database entry.

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

**Duration**
2 days
Qualification as 3rd Party Auditor of ISO/TS 16949:2002

Admission prerequisites
Admission to this course can be solely applied for through an IATF accredited certification body. The full particulars can be found in the qualification criteria for ISO/TS 16949:2002 3rd party auditors. These accredited certification bodies also have additional current information.

Please note
Since the IATF has revised auditor training for new auditors and for the requalification of existing auditors, we cannot presently offer you any dates for 2009.

When this process is completed we will inform you in a timely manner and publish the dates on our homepage: www.vda-qmc.de.

Thank you for your understanding.

The IATF rules stipulate that all ISO/TS 16949:2002 3rd party auditors have to pass a test for re-qualification at the latest three years after registration in order to maintain their registration.

**Admission prerequisites**

Admission to this course takes place after the successful assessment of your application.

Only the certification bodies accredited by the IATF are allowed to register 3rd party auditors for re-qualification. The exact admission prerequisites are known to the accredited certification bodies and have to be considered to the full extent in the application.

**Please note**

Since the IATF has revised auditor training for new auditors and for the requalification of existing auditors, we cannot presently offer you any dates for 2009.

When this process is completed we will inform you in a timely manner and publish the dates on our homepage: www.vda-qmc.de.

Thank you for your understanding.
Audit Standards

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<th>Serial production</th>
<th>Service</th>
<th>Single unit production</th>
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<td><strong>Standards</strong></td>
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<td><strong>System</strong></td>
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<td><strong>Process</strong></td>
<td>VDA 6.3</td>
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<td>VDA 6.7</td>
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<tr>
<td><strong>Product</strong></td>
<td>VDA 6.5*</td>
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</tbody>
</table>

* In-house qualification as “product auditor” is possible upon request.
VDA volume 6 is the basis for all system audits according to the VDA guidelines VDA 6.1, 6.2 and 6.4. This standard was completely revised in 2008. 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 and other staff members of Certification Bodies that are involved in the certification process, certification auditors, and staff members from organizations that are certified according to VDA 6.1, 6.2 or 6.4 or are planning the certification.

Contents
In the seminar, the contents of VDA volume 6 will be presented. The focus is on the application field of the guidelines, certification process, calculation of audit days, non-conformance management, branch office and witness audits, as well as the auditor qualification. The explanations regarding content will be supported by case studies.

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
Qualification Course for QM System Auditor
According to 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 an industry-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 carrying out QM system audits in their own organization and of implementing additional international QM requirements and make sure they are effective.

Contents
The introduction to the six M-elements (Management of the organisation), 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 handling of 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 receive a qualification certificate.

For prospective 2nd/3rd party auditors
+ Prospective 2nd/3rd party auditors have to successfully complete the corresponding exam. After passing the written and oral tests you receive a VDA certificate with registered numbering as well as a corresponding auditor card and database entry.

Duration
3 days
VDA lead auditors are the 2nd party auditors registered with VDA-QMC. These auditors are entitled, according to their authorized sectors, to request a VDA certificate for the organizations that they have audited.

**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 “Aus- und Weiterbildung” / “Formulare”.

The exact admission prerequisites can be found in the current edition of VDA volume 6 or on our homepage www.vda-qmc.de under “Zertifizierung” / “VDA 6.x” / “Formulare” (registration form).

Participation in the “Qualification to QM System Auditor According to VDA 6.1” is necessary.

**Features**
The registration for the examination day can only be completed by the management of the VDA member companies/your company (for 2nd party auditors) or through a VDA-QMC accredited certification body (for 3rd party auditors).

**Qualification certificate**
After passing the written and oral tests you receive a VDA certificate with registered numbering as well as a corresponding auditor card and database entry.

**Duration**
1 day
Qualification Course for QM System Auditor for Service Providers According to VDA 6.2 (Training)

The revised VDA 6.2:2004 standard builds upon the ISO 9001:2000 and fulfills a requirement similar to ISO/TS 16949 for the service providers of the automotive industry. The qualification as lead and 3rd party auditor according to VDA 6.2:2004 also began in the middle of 2004.

**Target audience**  Trained auditors of the automotive industry with knowledge of ISO 9001:2000 and experience in the service industry; 1st/2nd/3rd party auditors; QM experts; employees and managers from the entire automotive industry (such as car dealers, parts and sales centers, spare part and accessory dealers, logistics providers, engineering offices and other service companies)

**Contents** In this seminar 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 16949:2002 and possible requirements of the OEM on 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 receive a qualification certificate.

For prospective 2nd/3rd party auditors
+ Prospective 2nd/3rd party auditors have to successfully complete the corresponding exam. After passing the written and oral tests you receive a VDA certificate with registered numbering as well as a corresponding auditor card and database entry.

**Duration** 2 days
VDA lead auditors are the 2nd party auditors registered with VDA-QMC. These auditors are entitled, according to their authorized sectors, to request a VDA certificate for the organizations that they have audited.

**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 “Aus- und Weiterbildung” / “Formulare”.

Participation in the seminar “Qualification to QM System Auditor at Service Providers According to VDA 6.2”.

**Features**

The registration for the examination day can only be completed by the management of the VDA member companies/your company (for 2nd party auditors) or through a VDA-QMC accredited certification body (for 3rd party auditors).

**Qualification certificate**

After passing the written and oral tests you receive a VDA certificate with registered numbering as well as a corresponding auditor card and database entry.

**Duration**

1 day
Qualification as Process Auditor
According to VDA 6.3

With the process-oriented approach ISO 9001:2000 as a basis for ISO/TS 16949:2002 and the corresponding customer requirements, this three-day seminar communicates the application of VDA 6.3 throughout the inspection chain (supplier, organization and customer) by means of interpretations and practical examples.

It is our goal that you will be able to identify an associated risk complex by process analysis along product lifecycle. This process enables you to list the risks and corresponding potential in the audit for your company and to provide them with the corresponding actions, for example:

- Reduction of failure costs throughout the inspection chain
- Fulfillment of customer requirements
- Deficit and improvement potentials
- Nonconformities and waste
- Verification of improvement actions and their effectiveness
- Concentration on risk topics
- Integration of risks within risk management
- Concentration on essentials and creation of benefits for your organization
- Facilitation of communication with process-owners

These results will be worked on in the exercises and case studies for corrections, for stabilization and optimization of the processes. A corresponding assurance of maturity level is also given.

**Target audience**
Supplier quality engineers, internal/external auditors, process optimizers, process auditors, employees from the QM sectors.

**Contents**
- Communication of relevant contents, taking ISO/TS 16949 into consideration about meaning and application fields of the process audit VDA 6.3
- Risk analysis of processes and their usage for correction, stabilization and optimization within product lifecycle
- Use in fields such as work safety, risk management and environment, taking specific customer specifications into consideration
- Group work

**Prerequisites for participation**
- Recommendation: basis course ISO 9001:2000
- Professional experience in automotive industry
- All participants are encouraged to bring to the seminar a suitable process from their own organization (development or series production).

**Qualification certificate**
Due to the participation and on the basis of several practical exercises we acknowledge the successful participation in this seminar with a VDA qualification certificate.

**Duration**
3 days
System Audits with Production Facility Manufacturers According to VDA 6.4
Qualification as 1st Party Auditor
According to VDA 6.4

The qualification contents for the system auditor according to VDA 6.3 have been completely revised by VDA-QMC. VDA volume 6.4 (2nd Edition) contains the ISO 9001 requirements and the advanced and/or concrete requirements of the automotive industry. Process-oriented inspection and analysis of organizations based on the process model of international automotive industry. Analyzing business processes so that the weaknesses in the system of workflows, particularly at interfaces, can be identified and improvement potential can be identified.

Target audience
Auditors, QM experts as well as managers from the production facilities industry that want to acquire VDA qualification as an internal auditor.

Contents
- Introduction to current QM system requirements for production facility manufacturers
- Analyze customer oriented processes, octopus model
- Work out the process model of the VDA (similar to IATF)
- Differentiate process characteristics, subdivide processes, merge process chains
- Use the turtle model as a method for risk inspection
- Process-oriented evaluation (VDA point scheme, standard processes)
- Exchange practical experience
- Key aspects are unit production (job shop manufacturing) and the requirements of VDA 6.4 that go beyond ISO 9001:2000

Prerequisites for participation
Knowledge of ISO 9001:2000 as well as basic knowledge of FMEA, SPC and test equipment capability.

Features
This seminar consists of two interconnected parts: fundamental contents of VDA 6.4:2005 and process-orientation in analysis, risk inspection and evaluation.

Qualification certificate
After completion of this seminar and passing the test/exam, we acknowledge the successful participation with a VDA participation certificate “1st Party Auditor”.

Duration
3 days
Qualification as 2nd/3rd Party Auditor
According to VDA 6.4

VDA lead auditors are the 2nd party auditors registered with VDA-QMC. These auditors are entitled, according to their authorized sectors, to request a VDA certificate for the organizations that they have audited. The qualification consists of a total of three parts that can only be booked together. An exception applies to VDA 6.2 (2nd Edition) as well as ISO/TS 16949 auditors who have the necessary verifiable qualification. For these auditors the participation in part 1 is not necessary, but it is recommended.

Target audience
Auditors with an ISO 9001:2000 qualification from production facility industry or with a higher qualification from automotive industry (e.g. VDA 6.1, VDA 6.2 old) that would like to qualify as VDA lead auditors or 3rd party auditors according to VDA 6.4:2005.

Part 1: Process-oriented auditing
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.

+ Work out VDA process model (similar to IATF)
+ Analyze customer-oriented processes, octopus model
+ Differentiate process characteristics, subdivide processes, merge process chains
+ Use the turtle model as a method for risk evaluation

This part is not absolutely necessary for auditors who have successfully completed an appropriate qualification in the course of ISO/TS 16949 or VDA 6.2:2004 training, but it is recommended.


+ In exercises you get to know the QM system requirements for production facility manufacturers
+ Key aspects are unit production (job shop manufacturing) and VDA 6.4 requirements that go beyond ISO 9001:2000
+ Exchange practical experience
+ Process-oriented evaluation (VDA point scheme)

Prerequisites for participation for Part 1 and part 2
ISO 9001:2000 qualification (EOQ or comparable). This course requires experience in the production facility industry.

Qualification certificate for Part 1 and part 2
After the completion of each part you receive a VDA participation certificate.
Part 3:

**Prerequisites for participation**

Proof of participation in parts 1 and 2 is necessary; see course description for exceptions. The exact prerequisites can be found in the current edition of VDA volume 6. Admission to this course takes place after successful assessment of your application.

The necessary application 1511/1512 can be found on our homepage www.vda-qmc.de under “Aus- und Weiterbildung” / “Formulare”.

**Features**

The registration for the examination day can only be completed by the management of your company (for 2nd party auditors) or by a VDA-QMC accredited certification body (for 3rd party auditors). The examination date is confirmed after admission to the examination by VDA-QMC.

**Qualification certificate**

After passing the written and oral tests you receive a VDA certificate with registered numbering as well as a corresponding auditor card and database entry.

**First Qualification**

First qualification after failed examination means:

- Proof of technical training
- Proof of auditor experience
- Proof of professional experience
- Required courses: VDA 6.4:2005 parts 1, 2 and 3

**Duration**

5 days  Variation 1: contains part 1, 2 and 3

3 days  Variation 2: contains part 2 and 3
Qualification as Process Auditor for Unit Production and Job Shop Production According to 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 6.3/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 quiz/test, we acknowledge the successful participation with a VDA qualification certificate “Process Auditor According to VDA 6.7”

Duration  
2 days
III. Implementation of Automotive-Specific Standards and Know-How Transfer in Practice
We have made it our task to actively provide you with the best possible VDA expert competence. Therefore it is our primary interest to prepare our service offer with methods and techniques that consider your needs as a customer. According to customer requests we have included this product so you can now make use of highly qualified VDA consulting in addition to our seminar and training products.

+ Do difficulties arise in the implementation of methods or when using tools throughout your process chain?
+ Can you recognize waste in your organization throughout the value-added-chain on your own, or do you require competent assistance in order to activate lean production and logistic processes?
+ Are you looking for support or consulting for the establishment of long-term manufacturer-supplier partnerships?
+ Do you need an experienced, neutral discussion partner for constructive and critical analysis and development of your organization strategy?
+ Are you looking for a competent coach with experience and standing to support you in your automotive negotiations in an innovative way?
+ Do you need an impartial automotive consultant for any other reason?

**Target audience**  
Forward-looking, innovative organizations of any size throughout automotive and supplier industry.

**Our offer to you**  
We offer individual on-site support from real life for real life. You will be guided and advised by our highly qualified experts from industry.

**You decide the content**  
You tell us you need support for a certain topic. Together we then develop a consultation concept that is tuned to your situation and position and determine the right experts for the solution to your problems. Of course we will consider your requirements when selecting your consultant, in order to guarantee the neutrality and necessary prerequisites for a consultation atmosphere of mutual trust.

Further products, such as topical case supervision and workshops in small groups are also available.

If you are interested or have any further questions please feel free to contact us. We can talk about everything else personally, without any obligation.

**Contact**  
Head of Training and Professional Development, Phone: +49 (0) 6171/9122-21, info@vda-qmc.de
IV. Registration, Details and Additional Information
IV. Registration, Details and Additional Information

Web Shop

In our Online Shop http://webshop.vda.de/qmc/ you can order VDA, ISO/TS publications and other products. Furthermore, it is possible to register for the participation in VDA-QMC seminars and events. Billing can be done over the VDA-QMC account of your company. Alternative online methods of payment are also available to you at the time of your order entry. To order publications in English please see www.vda-qmc.de.

Technical Publications

You would like to become thoroughly familiar with an automotive QM topic? The Quality Management Center of the VDA (VDA-QMC) publishes and distributes the technical volumes and data media listed on the overleaf. You can order them by fax at +49 (0) 6171/ 9122-14, by email at bestellung@qmc-vda.de or on our homepage under www.vda-qmc.de. In the Internet you can catch up on further publications that are still in preparation as well as on our poster materials and range of software.

For orders of publications in English please see www.vda-qmc.de.

We would be glad to send you the ordering addresses for Spanish, Czech, Chinese and Polish publications. We are also available for your questions about ordering under the telephone number +49 (0) 6171/9122-17.
List of Publications in English language

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/“Onlineshop”.

Volume 1 Quality Evidence - Guidelines for the Documentation and Archiving of Quality Records
Volume 2 Quality Assurance of Supplies
Volume 3.1 Ensuring reliability of car manufacturers - Reliability Management
Volume 4 Quality Assurance prior to Serial Application - Quality Assurance during product realization
Methods and Procedures → loose leaf binder
Volume 4 Chap. 3 Product and Process FMEA (loose leaves)
Volume 4.3 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 ISO9001
Volume 6.1 QM - system audit 4th revised, update printing
Volume 6.2 QM System Audit-service
Volume 6.3 Process-Audit
Volume 6.4 QM System Audit - Production Equipment
Volume 6.5 Product Audit
Volume 9 Quality Assurance Emissions and Fuel Consumption
Volume 10 Customer Satisfaction in the Supply Network - Preconditions, Data Collection and Evaluation, Potentials
Volume 14 Preventive Quality Management Methods in the Process Landscape
Volume 16 Decorative Surfaces of Attachment & Functional Parts for Automobil Exteriors and Interiors (incl. CD-Rom)

Brief Introductions to some VDA Instructors

Dönni, Markus, MEng. Formally plant layout, project management: Mercedes-Benz AG, Sindelfingen; from 1994 manager of the central project for first certification of all sites of the Daimler-Benz AG world-wide; from 1997 QMR and division manager of a group-internal aggregate supplier in the DCAG; project manager, consultant and auditor for QM systems and strategical management; experienced in the set-up and application of QM systems to ISO 9000ff, VDA 6.1/2, QS9000 and TS 16949; long experience as assessor according to the Excellence Model of the EFQM, various support and implementation experiences in Business Excellence; from 1998 instructor for certification bodies. From 2000 managing director of a group internal consulting company in the Daimler-Chrysler AG; since 2003 self-employed consulting engineer with emphasis on QM systems.

Füller, Herbert A., M.Eng., mechanical engineer, instructor, member of the REFA RV Hessen board; former manager of production planning and control in the supplier industry (Teves), former technical manager in the optical industry; until 1999 VDA-QM committee; former DGQ board of directors, over 15 years director and manager of the quality management at VDO, from 1993-2003 vice president (business segment) at Siemens VDO Automotive AG. Since September 2003 management consultant at automotive.business.support and working group leader at VDA-QMC volume 4/14.

Grupe, Dr. Matthias, MChem, EQQ auditor, quality technical engineer, in charge of the quality assurance for various automotive supplier companies, among others as manager of quality assurance for Pirelli Germany AG or ITT Automotive GmbH (formally SWF-Autoelectric, Bietigheim), leader of coordination of supplier audits world-wide in the Volkswagen Group.

Kaiser-Dieckhoff, Dr. Uwe, MPhys, EQQ auditor, Train-the-Instructor and moderator training, MasterInstructor and examiner for VDA 6.1, ISO/TS 16949:2002; 1979 to 84 manager of quality methods at ZF Getriebe GmbH, 1985 applications development at Alfred Teves GmbH (today Conti-Teves); 1986 to 91 Bosch Technical Center Microelectronics manager of power semiconductor measuring technology; 1991 to 94 VDA, manager of the Quality Assurance department and support of sector III; component manufacturers; 1991-2001 Bosch headquarters, quality advancement, since 2002 Bosch department manager: external affairs government and political relationships, project acquisition and coordination.

Kieker, Knut, MEng, 1969 to 1987 quality assurance in the automotive industry with managing activities in materials engineering, incoming goods and production inspection, manager of quality management at Beru and Webasto. 1987 to 2005 in QS/QM of MAN Commercial Vehicles AG: QS driving cab production, manager of Q-planning in the Munich factory, information systems (product audits, Q-reporting). Collaboration in central quality management, support of importers with the setup and further development of process-oriented QM systems (since 1996) as well as the introduction and implementation of an integrated management system throughout MAN Commercial Vehicle Group, among other things. REFA teacher and lecturer for statistics, QM, TQM, auditor trainings, co-author of VDA 6.2 and VDA 12, lead auditor, instructor and examiner for VDA 6.2.

Klügel, Martin, MPhys, associate lecturer at the TU Braunschweig, work in development, system analysis, quality assurance, production and production planning. Many years of auditing experience (VDA 6.1, 6.3, 6.4 and 6.7), responsible for qualification and approval of the production facility suppliers for the Volkswagen group for nine years. Chairman of VDA 6.4 and VDA 6.7 working groups until 2006.

Loos, Siegfried started to work for DaimlerChrysler after his degree in electronics in 1973 with the development of car electronics and test equipment. From 1992 to 2004 he worked as a manager in safety concepts, risk analysis and FMEA. He is cross-company integrated into the joint projects of
DGQ, FQS, VDA and VDI. FMEA lecturer since 1993 at VDA, DGQ, VDI, DC, car suppliers. Since 1-1-2007 he has been working for the SL-Qualitätsmanagent GmbH in the field of FMEA with consultation, moderation and seminars.

Mycroft, Robert, BEng. AMIMechE, 1991 to 1998 Audi AG production planning/internal auditor, 1999 to 2003 manager of development and project management of engine cooling systems in the supplier industry (Valeo SA), since then has worked freelance in supplier chain development for Eastern Europe as well as honorary representative in Poland of the Institution of Mechanical Engineers.

Ludwig, Walter, since 2006 independent management consultant for “Excellence Coaching” in the field of sustainable Excellence and in partial capacity for BASF, management consulting. Between 1993 and 2005 he was a member and authorized signatory of the Unit Corporate Quality of the BASF Group, within the Management Consulting of the BASF Group. Within Corporate Quality focal point on Business Excellence Tools such as self-evaluation, balanced scorecard and process management. From 2000 focused on management systems such as ISO 9001, ISO/TS 16949 and ISO 14001, their cross linking and cross unit/countries application/certification. Outside of BASF, since 1996 active as senior assessor in the European Quality Award (EQA) as one of the two team leaders in Europe with nine years of auditing experience. The applicants were all well-known internationally active organizations with the performance levels of finalists and awardees. Since 1999 active as instructor of assessors for the Ludwig Erhard Prize. Practical experience and partial involvement in the development of all Levels of Excellence products, with the corresponding instructor and assessor license (commitment/acknowledgement of Excellence, 2005+ evaluation process of the EFQM).

The fascination with horsepower – whether on four legs (Icelandic horses) or high-performance vehicles (mostly BMWs) – goes well with the experiences with Automotive Excellence and the implementation of excellence for well-known automotive suppliers as a licensed instructor for the VDA-QMC.

Raack, Eckhardt, MEng, Studied at the General Motors Institute, Flint, Michigan; 35 years with Adam Opel AG, many years at the headquarters in Zurich and responsible for quality; 6 years quality assurance manager at the Ruesselsheim factory, 7 years in charge of QM for Opel and General Motors for Europe, co-author of the ISO/TS 16949, IATF Oversight Representative of the VDA.

Schneider, Bernd, studied precision engineering at the Technical University of Kiel, from 1979 employee with Siemens AG, Munich, radar development. In January 1982 changed to BMW AG. Various jobs in the automation technology in body-in-white, paintshop, vehicle assembly and engine production in the Munich factory. From 1986 various management positions, such as in the vehicle assembly, responsible for customer order controlling, assembly planning and automation technology, 1993 changed to quality assurance for delivered parts, training to DGQ quality manager and DGQ auditor. In charge of quality assurance of delivered parts: chassis/drivertrain in the Munich factory. From 1999 project leader in company quality for the BMW Group, in charge of the quality management of parts (own and purchase parts). Since May 2001 member of the VDA 2 working group. In April 2006 changed to production development of the Z models, in charge of quality management in a vehicle project.

Weschler, Emil, industrial training, mechanical engineering studies, Refa technical training, EOQ quality manager, VDA 6.1/VDA 6.3 auditor, ISO/TS 16949 auditor, IATF witness auditor, excellence assessor (Ludwig-Erhard-Preis). 40 years of experience in automotive industry, 20 years with management responsibilities, planning and control, quality assurance of purchased parts / supplier
Brief Introductions to some VDA Instructors

management, quality management, project management, setup, implementation and further development of QM systems, process management, process analysis and optimization. Instructor and examiner for ISO/TS 16949 auditors. Author of various VDA training courses.

Wälzholz-Hammer, Tanja, Industrial MEng, former quality engineer: Fagro Press- und Stanzwerk GmbH; managing director: IJ Stahleisenhandel GmbH; sales manager merchandising sales: C.D. Wälzholz; manager of quality management, member of production management: Rieter Automotive Germany GmbH; group leader/key customer: DQS; veto representative: QS 9000, VDA, TS 16949 and KBA, manager of quality management/management representative: Carl Zeiss Indus-

Wälzholz Consulting and Specialist Department of VDA-QMC.
Directions to Oberursel

The VDA-QMC is conveniently located near Frankfurt am Main.

Arriving by plane
We are located about 25 km from Frankfurt Airport.

If you decide to use public transport, please use a suburban train (S-Bahn) or a train and first go to the Frankfurt Hauptbahnhof (main train station). From there:

Arriving by regional transport
from Frankfurt am Main/Hauptbahnhof (Main Station)
Take the U3 to Hohemark/Oberursel or the S5 to Friedrichsdorf or Bad Homburg and get off at the “OBERURSEL BAHNHOF”. From there you can take a taxi (about a 5-minute drive) directly to VDA-QMC or you can take the 532 bus (to Weißkirchen Ost) and get off at the “LANGWIESENWEG” stop. From here it is only a short walk to the VDA-QMC (An den Drei Hasen 31).

Arriving by car
Oberursel is about 15 km northwest of Frankfurt am Main.

Take the A5 until you come to the Homburger Kreuz (interchange), change to the A661 to Oberursel and exit the motorway at “OBERURSEL STADTMITTE/BAD HOMBURG INDUSTRIEGEBIET”. Turn right onto Homburger Landstraße toward “Oberursel Stadtmitte”. After about 250 meters you come to some traffic lights. Turn right into the industrial park “An den Drei Hasen”. Leave the following roundabout at the third exit. After about 50 meters you will see VDA-QMC on your left. Across from the VDA-QMC there is parking in our fenced in parking area. The entrance is on LANGWIESENWEG.

On the following pages you will find an exact map with directions.
Map with directions
>>> Registration and Payment Conditions
(valid until the end of 2009)

**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.

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 (0) 6171/9122-14
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
   An den Drei Hasen 31 · D-61440 Oberursel

**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).

<table>
<thead>
<tr>
<th>The following fee table applies for cancellations of all events:</th>
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</thead>
<tbody>
<tr>
<td>6 weeks before the start of the event: free</td>
</tr>
<tr>
<td>From 4 to 6 weeks before the start of the event: 25% of the event price</td>
</tr>
<tr>
<td>From 2 to 4 weeks before the start of the event: 50% of the event price</td>
</tr>
<tr>
<td>Less than 2 weeks before the start of the event: 100% of the event price</td>
</tr>
</tbody>
</table>

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.

Special cancellation conditions are valid for 3rd party auditors of ISO/TS 16949:2002. These are known to the accredited certification bodies.

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. We will refund all fees that you have already paid if there is a cancellation on our part, however all further claims are excluded.

**General terms and conditions**
Our T&C can be found on our homepage www.vda-qmc.de.
The Quality Management Center (VDA-QMC) is the editor/publisher of the VDA series and representative of the German automotive industry in all industry-specific international committees – for example in the International Automotive Task Force (IATF).

With our training and professional development center, founded in 2001, we communicate sound know-how in the complete quality sector in the automotive industry. At the center of this is the transfer of the comprehensive quality know-how to the users, our customers.

Our qualification measures are carried out worldwide:
+ in our own training center in Oberursel
+ in exclusive hotels with conference facilities in Germany and abroad
+ and of course also as customized in-house training directly in your company!