

Excellence -service -Efficiency Reliability

AL SERVIZIO DELL'ECCELLENZA

TRAINING CATALOGUE 2018

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TRAINING CATALOGUE 2018

Two extremely important standards have been recently updated: the ISO 9001 standard, which was updated in September 2015, and the new IATF 16949 standard (October 2016 edition), introduced as a further development of ISO/TS 16949, which today has become obsolete. It is worth stressing that as a member of the IATF (International Automotive Task Force) and representative of the national industry, ANFIA actively contributed to developing both the Technical Specification ISO/TS 16949:2009, and the more recent IATF 16949:2016 standard.

In Italy, the copyright for the IATF 16949:2016 standard is held by ANFIA on behalf of the IATF.

In November 2016, the certification scheme was also updated.

In light of these developments and of an economic scenario that requires companies to adopt strategies able to increase competitiveness and to optimise their ability to react quickly to any challenges and new developments, keeping personnel skills constantly up-to-date with the indispensable aid of an ongoing, qualified and effective training, remains crucial to achieving these goals geared to innovation and progress.

Building on several years of experience, ANFIA Service offers consulting and training services with programmes and training methods that are constantly updated to address new market developments, while paying particular attention to the organisational needs of the industry, as confirmed by the promising results that this strategy yielded in recent years.

It is precisely to thank the industry for its positive response and to offer solutions increasingly tailored to its needs that ANFIA Service will offer its training program also in 2018, both in Vicenza for the North-eastern market, and in the province of Chieti to cover Central and Southern Italy.

We are therefore delighted to introduce the new ANFIA Service Training Catalogue 2018.

In addition to a broader spectrum of topics, arranged in order to allow a wide range of professionals to gain insight at favourable conditions into all new developments in the automotive industry, ANFIA Service has further expanded its portfolio with dedicated follow-ups.

Among the interesting new offers listed in the catalogue, a number of courses provided by ANFIA Service under official VDA QMC license for Italy deserve a special mention:

- The Training on Formula Q Compact Training, which focuses on the peculiar, customerspecific requirements of the Volkswagen Group
- The Training focusing on the role of Product Safety Representative (PSB) in the automotive industry
- The Training concerning the VDA standard on field failure analysis (for users), which provides the contents of the FFA (Field Failure Analysis)
- The VDA 4 training on problem solving techniques

Please note that in addition to training, we can assist you with on-field supervision for all VDA methods.

- The following, successful courses are confirmed: Introduction to the SPC, for those who need some general and non-specific knowledge in the subject
- Introduction to the ISO 9001:2015 standard
- The training for first- and second-party ISO 9001:2015 auditors

Given the centrality of the debate over environmental targets for the automotive industry, our training places much emphasis on the relevant measures implemented by large-volume

manufacturers, which remains an interesting challenge in terms of development and integration with existing quality and environmental management systems.

As regards the IATF 16949:2016 training (the international standard for automotive system quality management), ANFIA Service arranges and promptly updates its training portfolio in the quality sector based on the latest, original instructions provided by the IATF.

In this respect, the following training deserves a special mention:

- The requalification course for ISO/TS 16949 auditors according to the new IATF 16949 standard
- The training for the new IATF 16949 auditors In 2018, we will also focus on open badges, one of the most advanced tools for the digital representation of knowledge, skills and soft skills, which can help map, collect, manage and enhance human skills, while at the same time ensuring the right to permanent and global training and ensuring the truthfulness of shared information.

The training listed in this catalogue are available both as **face-to-face training** (at our venue in Turin, Vicenza and Chieti) and **offered at your premises** (provided the minimum requirements for attendance are fulfilled).

Aware of the fact that no training can be fully effective unless it draws on a valid training concept duly concerned with the specific needs to be addressed, with the target group, with the issues to be discussed, and with the appropriate training methods and training staff selection, ANFIA Service helps companies, managers and professionals to lay out adequate training programs and targeted solutions, ranging from feasibility analyses to the organisation and implementation of the relevant projects.

If the eligibility requirements for **funding schemes** are met, we will help you find financing opportunities, in addition to guiding you through the various implementation and allocation steps.

For any doubt or inquiry, please contact us by phone (+39 011 5546531, +39 011 5546536) or email: <u>f.cagnani@anfia.it</u>, <u>e.momo@anfia.it</u>.

Please also visit our website www.anfia.it, where you can find more information and the latest updates on ANFIA Service programmes.

Best regards.

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SP INTRODUCTION TO THE IATF 16949:2016 STANDARD FOR TOP AND MIDDLE MANAGEMENT

Goals: this Training aims to provide an overview of the contents of the IATF 16949 standard with references to the ISO 9001:2015 standard, and is intended for an audience interested in gaining a leadership- and risk management-oriented overall view.

Prerequisites: none.

Target audience: top and middle managers who need to focus on the themes of the IATF 16949 standard, such as leadership, risk-based thinking, corporate responsibility and product safety.

Duration: 4 hours with attendance certificate.

Provided materials: learning materials presented and IATF 16949 standard, in paper form.

Contents:

- The context
- Evolution of automotive standards
- Risk-based thinking and leadership in the IATF 16949:2016 standard
- Analysis of the key elements of the IATF 16949:2016 standard, with references to the ISO 9001:2015 standard

Participation fee per person: \notin 230 + VAT for ANFIA associates \notin 280 + VAT for non-associates



S0 THE IATF 16949:2016 STANDARD

Goals: this Training aims to convey the basic concepts of the IATF 16949 standard, with special focus on processes and on a process-based approach to audits.

Pre-requisites: none.

Target audience: those who need to learn the basics of the IATF 16949 standard and strictly related topics, without however requiring a qualification as auditors (such as function managers, process owners and personnel not directly involved in quality assurance procedures).

Duration: 1 day with attendance certificate / IATF 16949 up-dating certificate.

Provided materials: learning materials presented and IATF 16949 standard, in paper form. **Contents**:

- The context
- Risk-based thinking
- Evolution of automotive standards
- > Key elements of the IATF 16949 standard

Participation fee per person: \notin 230 + VAT for ANFIA associates \notin 280 + VAT for non-associates

SO-a INTRODUCTION to the IATF 16949:2016 Standard for Production Personnel

Goals: this Training, <u>which was developed and arranged specifically for personnel of production</u> <u>departments</u>, provides a valuable aid to gain an overall picture of the IATF 16949 standard, but also focuses in detail on the activities concerning "Production and service provision – Release of products and services – Control of nonconforming outputs". The Training thus deals with topics related to the daily activities of those who work "in the factory" directly on products.

Pre-requisites: none.

Duration: 1 day with attendance certificate; the learning materials presented will also be provided, in paper form.

Note: this Training may be offered only at the company premises, and must be arranged with the customer care service (<u>f.cagnani@anfia.it</u>). A minimum of 6 participants is required.

S2 NEW PROCESS EVALUATION - TRAINING FOR FIRST- AND SECOND-PARTY AUDITORS (FIAT GROUP PURCHASING SUPPLIERS)

Goals: this training aims to illustrate the FGP purchasing methods, from product development to serial production. This method includes process planning review, production process evaluation, supplier eligibility assessment and production demonstration run, on which the Training will focus by means of exercises.

Prerequisites: basic knowledge of quality methods.

Target audience: personnel in charge of first- and second-party process audits.

Duration: 3 days; after passing the final exam, you will receive a certificate of qualification.

Provided materials: learning materials presented, in paper form.

THE TRAINING IS VALIDATED BY FIAT GROUP PURCHASING.

Contents:

- Introduction and history of process evaluation
- PPR (Process Planning Review)
- PA (Process Audit)
- SEA (Supplier Eligibility Assessment)
- Constraints theory
- > PDR (Production Demonstration Run)
- ➢ Final exam

Participation fee per person:	€ 950 + VAT for ANFIA associates
	€ 1,150 + VAT for non-associates



S3-IATF QUALIFICATION FOR FIRST- AND SECOND-PARTY AUDITORS ACCORDING TO THE IATF 16949:2016 QUALITY MANAGEMENT SYSTEM (WITH THE FIFTH DAY, VALID FOR THE PURPOSES OF THE AICQ-SICEV CERTIFICATION PROCEDURE)

Goals: this Training aims to provide participants with knowledge and evidence of the qualification valid for third-party certification as regards the activities of internal audits (first party) and external ones (second party), in accordance with the IATF 16949 scheme. The Training, which underwent a complete update, mirrors the markedly innovative, customeroriented approach of the document, which also focuses on techniques and methods for process and product development, as well as on risk analysis. The revised approach, which is in line with the requirements and skill levels that the IATF expects auditing personnel to meet and achieve, includes more exercises, which help better understand the applicable requirements and provide actual examples of how the relevant norms may be implemented.

Prerequisites: none.

Target audience: all personnel who are involved in quality activities but are not yet qualified as auditors, and need to obtain the IATF 16949 qualification for internal audits (first party) or external audits (second party) in accordance with the ISO 9001 and IATF 16949 standards.

Duration: 4 days with final exam and ISO 9001 and IATF 16949 qualification certificate, which will remain valid until the next update of the relevant standards.

Provided materials: learning materials presented, IATF 16949:2016 standard, ISO 9001:2015 standard, Rules 5th Edition, all in paper form.

Contents:

- Standards and certification Audits
- > The evolution toward the IATF 16949 standard
- Context and risk
- > Analysis of the contents of the ISO 9001 and IATF 16949 standards
- Process analysis
- Rules 5th Edition November 2016
- ➢ Final exam

Participation fee per person - Training for IATF 16949 first- and second-party auditors:

- € 1,190 + VAT for ANFIA associates
- € 1,385 + VAT for non-associates

IATF-AICQ ADDITIONAL SESSION VALID FOR THE PURPOSES OF THE AICQ-SICEV CERTIFICATION PROCEDURE (continues)

A fifth training session day may be optionally attended, in which the ISO 19011:2012 standard will be analysed in greater detail.

At the end of this session, participants will take a written exam on a case study.

Candidates who attend the entire Training (40 hours) and pass the exam of the fourth day for the qualification of IATF 16949:2016 company auditors, as well as the written exam of the fifth day on the case study, may take the AICQ-SICEV exam for the admission in the third-party ISO 9001 auditors register at a favourable price, provided they submit a letter of presentation by to ANFIA Service.

Moreover, a qualification certificate valid for the purposes of the AICQ-SICEV certification procedure will be issued.

Provided materials: learning materials presented, in paper form.

NOTE

Candidates may attend only the additional session if:

➤ they have already obtained the ANFIA qualification for IATF 16949 first- and secondparty auditors

or

they have already obtained the qualification for ISO 9001:2015 auditors from a body recognised by ANFIA

Participation fee per person - additional session valid for the purposes of the AICQ-SICEV certification procedure: € 150 + VAT for ANFIA associates

€ 200 + VAT for non-associates

S4 PROCESS EVALUATION - TRAINING FOR FIRST- AND SECOND-PARTY AUDITORS (FOR SUPPLIERS OTHER THAN THOSE OF FIAT GROUP PURCHASING) UPDATED TO THE IATF 16949 STANDARD

Goals: presentation of the ANFIA guide "Process Evaluation" - 2017 Edition. The guide is updated to the CUSTOMERS requirements of the IATF 16949 standard. The documentation consists of:

- Application guide
- Fully digital check list, easy to use and with "one page" listing all requirements marked by the relevant colours (green, yellow, red)

Finally, the main techniques for definition, management, control and process prevention will be briefly presented (Run&Rate).

Prerequisites: basic knowledge of quality methods.

Target audience: personnel in charge of performing internal process audits (first party) and supplier audits (second party), as well as those in charge of selecting potential suppliers.

Duration: 3 days; after passing the final exam, you will receive a certificate of qualification. **Provided materials**: learning materials presented, ANFIA guide on production process evaluation, in paper form, and check list software.

Contents:

- Introduction to process evaluation
- > Evolution of the automotive market and car makers' demands
- > Brief overview of the relevant techniques (FMEA, SPC, MSA)
- Process Evaluation Guide 2017
- RUN&RATE / One-day production test

Participation fee per person:	€ 750 + VAT for ANFIA associates
	€ 880 + VAT for non-associates

ISO-1 INTRODUCTORY TRAINING ON THE ISO 9001:2015 STANDARD

Goals: this Training aims to provide the essential elements of the UNI EN ISO 9001:2015 standard, along with the relevant application modes and context.

Pre-requisites: none

Target audience:

- all those who operate in the quality sector and need an introductory training on the ISO 9001 standard
- holders of the ISO/TS 16949 qualification who need to attend the S-RQ IATF 16949 requalification Training but lack the basic training required on the ISO 9001 standard

Duration: 1 day with attendance certificate.

Provided materials: learning materials presented and ISO 9001:2015 standard, all in paper form.

Contents:

- Structure of the standard
- > Essential elements of the standard compared to the ISO 9001:2008 standard
- ➤ Test

Participation fee per person:	€ 200 + VAT for ANFIA associates
	€ 250 + VAT for non-associates



S-RQ IATE 16949:2016 REQUALIFICATION FOR ISO/TS 16949 FIRST- AND SECOND-PARTY AUDITORS

Goals: requalification of ISO/TS 16949 first- and second-party auditors according to the IATF 16949 standard. The Training mirrors the markedly innovative, customer-oriented approach of the document, which also focuses on techniques and methods for process and product development, as well as on risk analysis, and presents an entirely new approach, in line with the requirements and skill levels that IATF expects auditing personnel to meet and achieve. Lectures will alternate with exercises, which help better understand the applicable requirements and provide actual examples of how the relevant norms may be implemented.

Pre-requisites:

- The Training DOES NOT address the points of the ISO 9001:2015 standard. Participants are therefore required to gain the required competence concerning the ISO 9001:2015 standard, which is crucial to understanding and effectively attending the three IATF 16949 requalification days
- The may be attended by ISO/TS 16949 first- and second-party auditors (please submit the ISO/TS 16949 qualification certificate along with the application)

The day before the IATF 16949 requalification sessions, an introductory session on the ISO 9001:2015 standard will be held for those who should not meet the prerequisites for attendance concerning the ISO 9001:2015 training.

Target audience: all those who operate in the quality sector and need to obtain the IATF 16949 qualification for internal (first party) and external (second party) audits.

Duration: 3 days; after passing the final exam, you will receive a certificate of requalification, which will remain valid until the next update of the relevant standards.

Provided materials: learning materials presented, IATF 16949, Rules 5th Edition, all in paper form.

S-RQ IATE 16949:2016 REQUALIFICATION FOR ISO/TS 16949 FIRST- AND SECOND-PARTY AUDITORS (continues)

Contents:

- ➢ From ISO/TS 16949 to IATF 16949
- > Analysis of the IATF 16949 requirements
- Transition strategy
- ➢ Rules 5th Edition November 2016
- ➢ Final exam

Participation fee per person: € 650 + VAT for ANFIA associates € 775 + VAT for non-associates

ISO-3 QUALIFICATION FOR FIRST- AND SECOND-PARTY AUDITORS ACCORDING TO THE IATF 16949:2016 QUALITY MANAGEMENT SYSTEM

Goals: gualification of ISO 9001 first- and second-party auditors. Lectures will alternate with exercises, which help better understand the applicable requirements and provide actual examples of how the relevant norms may be implemented. Further, it illustrates the appropriate behaviour and effective communication techniques for audits.

Pre-requisites: none.

Target audience: all those who operate in the quality sector and need to obtain the ISO 9001 qualification for internal (first-party) and external (second-party) audits.

Duration: 3 days; after passing the final exam, you will receive a certificate of qualification, which will remain valid until the next update of the relevant standards.

Provided materials: learning materials presented and ISO 9001:2015 standard, all in paper form.

Contents:

- Context and risk analysis
- Role of top management
- Analysis of the ISO 9001 requirements
- Auditing process (ISO 19011 and 17021)
- ➢ Final exam

Participation fee per person: € 550 + VAT for ANFIA associates € 650 + VAT for non-associates

S5 TRAINING FOR INTERNAL AUDITORS FOR ENVIRONMENTAL AND SAFETY ISSUES, UPDATED TO THE ISO 14001:2015 AND ISO 45001 STANDARDS

Goals: this training aims to train internal auditors for auditing ISO 14001 environmental management systems and ISO 45001 safety systems.

Prerequisites: basic knowledge of the UNI EN ISO 14001:2004 and OHSAS 18001:2007 standards

Target audience: managers of environmental and safety management systems, health and safety managers and all personnel in charge of internal audits.

Duration: 3 days; after passing the final exam, you will receive a certificate of qualification.

Provided materials: learning materials presented, in paper form.

Contents:

- > Environmental and safety management systems
- > The new UNI EN ISO 14001:2015 standard the main changes
- Analysis of the new requirements and comparison with the older UNI EN ISO 14001:2004 standard
- Practical examples and exercises
- > Requirements of the ISO 45001 standard (end of the first day)
- > Test: ISO 14001:2015 and ISO 45001 requirements
- Regulatory compliance in management systems
- Brief overview of environmental legislation
- > Brief overview of safety and health legislation
- Practical examples and exercises
- > Test: regulatory compliance (end of the second day)
- Audit techniques and process
- Peculiarities of environmental and safety audits
- Final exam

Participation fee per person:

€ 700 + VAT for ANFIA associates € 890 + VAT for non-associates

S5-a REFRESHER TRAINING FOR INTERNAL AUDITORS ACCORDING TO THE NEW ISO 14001:2015 STANDARD (ENVIRONMENTAL MANAGEMENT SYSTEMS)

Goals: the Training aims to refresh the skills of internal auditors in charge of auditing ISO 14001 environmental management systems based on the 2015 edition.

Prerequisites: previous attendance of a training for internal ISO 14001 auditors held by ANFIA or other bodies not before December 2004 (please provide evidence of the exams passed and of the Training duration).

Target audience: managers of environmental management systems and all personnel in charge of internal audits.

Duration: 1 day; after passing the final exam, you will receive a skills update certificate.

Provided materials: learning materials presented, in paper form.

Contents:

- The new UNI EN ISO 14001:2015 standard the main changes
- The standard structure (High Level Structure)
- > Analysis of the new requirements and comparison with the older UNI EN ISO 14001:2004 standard
- Transition of management systems and certifications toward the new scheme
- ➢ Final exam

Participation fee per person: € 230 + VAT for ANFIA associates € 300 + VAT for non-associates

S5-b REFRESHER TRAINING FOR INTERNAL AUDITORS ACCORDING TO THE ISO 45001 STANDARD - AS A REPLACEMENT OF THE BS-OHSAS18001:2007 STANDARD (OCCUPATIONAL HEALTH AND SAFETY)

Goals: the Training aims to refresh the skills of internal auditors in charge of auditing occupational health and safety systems based on the forthcoming ISO 45001 standard.

Prerequisites: previous attendance of a Training for internal OHSAS 18001 auditors held by ANFIA or other bodies not before 2007 (please provide evidence of the exams passed and the Training duration).

Target audience: managers of safety management systems and all personnel in charge of internal audits, supervisory authorities 231/2001 and health and safety managers.

Duration: 1 day; after passing the final exam, you will receive a skills update certificate.

Provided materials: learning materials presented, in paper form.

Contents:

- > The new UNI EN ISO 14001:45001 standard
- > The main changes The structure of the standard (High Level Structure) Integrations
- Analysis of the new requirements and comparison with the older OHSAS 18001:2007 standard
- > Transition of management systems and certifications toward the new scheme
- ➢ Final exam

Participation fee per person: \notin 230 + VAT for ANFIA associates \notin 300 + VAT for non-associates

S7 LEAN THINKING AND LEAN ORGANISATION FOR OPERATIONAL EXCELLENCE

Goals: the Training aims to introduce the basics of lean principles as well as the main techniques and tools in use.

The term "Lean Production" was coined by Womack and Jones in their book "*The Machine That Changed the World*", in which these scholars analysed in detailed and compared the performance levels of the production systems of the world's largest car manufacturers. This study, to which ANFIA also contributed, shows that Toyota clearly outperforms competitors.

The Japanese company owes this greater performance level to an innovative and internally developed management method, which relies on a rational approach, on the involvement of all, and, crucially, on a continuous and systematic elimination of wastes.

The Toyota Lean Production method is still an example of organisational excellence, and involves tailoring processes to the needs of customers in order to provide the required value in due time. The lean challenge is to produce in a way that eliminates all costs and wastes that do not create any added value for the customer.

The lean approach in becoming more and more popular in several companies, and the first major benefits are becoming visible.

To an organisation, adopting a lean approach means accepting a challenge to become more competitive; this strategic challenge, which involves the entire organisation, does not come down to a set of tools, but entails a new management approach, also known as "lean thinking".

Pre-requisites: none.

Target audience: all personnel (whether in-house or employed as external consultants) in charge of redefining organisation processes in order to make them more efficient and effective. The Training may be attended not only by production experts, but by all personnel of the operation area.

Duration: 2 days

Provided materials: learning materials presented during the training, in paper form.

Time schedule and certificate: Each day, lectures will be held from 9 AM to 1 PM and from 2 PM to 6 PM. After the training, participants will receive the **ANFIA** attendance certificate.

S7 LEAN THINKING AND LEAN ORGANISATION FOR OPERATIONAL EXCELLENCE (continues) Contents

Lean thinking: an introduction

Definition and development of the lean approach. The 5 core principles. Strategies and development of policies. Critical success factors.

Muda, Mura, Muri:

The concept of value. Value stream. The seven wastes. Variation. Standardisation. The rules of the Toyota DNA.

Stream map:

How to identify activities that do not create added value. The various types of maps. From the value stream to the spaghetti diagram.

Capacity planning & scheduling:

Throughput and operating costs. Lean accounting principles. Planning and kanban. Push and pull systems. Stream synchronisation. Continuous stream. Pacemaker and supermarket. Levelling the production mix. Takt time, pitch time, EPE.

Lean factory:

Layout. Process, cells, fishbones. Construction principles. VAT analysis. Scheduling of different layouts. Stream accounting. Stocks.

The main lean tools:

SMED techniques. TPM. 5S. Poka Yoke.

Exercises:

The Training alternates theory lectures with examples and exercises to be performed individually and/or in groups.

S7 LEAN THINKING AND LEAN ORGANISATION FOR OPERATIONAL EXCELLENCE (continues)

Trainers: the Training will be held by the following trainers:

Francesco Aggogeri - Six Sigma Black Belt Certificate, University of Texas: he works on quality management and processing system management and implements and coordinates Lean and Six Sigma projects. He is a researcher at the Mechanical and Industrial Engineering Department at the University of Brescia, where he teaches B Quality Industrial Management and B Mechanical Production Control and Planning. He holds a LERC qualification and works on continual improvement programs in cooperation with several companies.

Marco Mantoan - Lean Six Sigma Black Belt certificate. Safety, Environment and CEO at ANFIA Service, Italian representative in the IATF Oversight Office for the IATF 16949 certification scheme. He holds a LERC qualification and has worked with multinational enterprises, where he was taught Japanese production techniques by Professor Yamashina, one of the most famous disseminators of these methods in the Western World.

All ANFIA trainers are qualified by the LERC (Lean Enterprise Research Centre), the prestigious research centre of the Cardiff Business School founded by Jones, co-author (together with Womack) of "The Machine That Changed the World".

Dates to be determined based on the submitted requests.

Participation fee per person:

€ 550 + VAT for ANFIA associates € 650 + VAT for non-associates

S8-4G VDA 6.3 2016 - QUALIFICATION FOR PROCESS AUDITORS

Goals: using the process approach and the respective customer-specific requirements, this Training teaches you the basics for qualification as a VDA 6.3 process auditor.

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

Furthermore, the underlying questionnaire is explained according to the assigned process elements, so that, using the process audit, you can identify the respective risks and potentials along the supply chain.

These basics are used to correct, stabilise and optimise processes, and are developed in the exercises and case examples. The aim is to assure a reliable assessment.

<u>The Training is held by ANFIA Service under official VDA QMC license for Italy.</u> Pre-requisites:

- Knowledge of the established quality tools and methods;
- > Knowledge of applicable management system requirements;
- Knowledge of further applicable customer-specific requirements;
- Product and process knowledge in the planned area of application;
- Relevant professional experience depending on the area of application according to VDA Volume 6.3;
- Qualification based on the DIN EN ISO 19011 standard (only for external suppliers of audit services in the supply chain, and for participants who wish to take the additional exam for "certified process auditors")

Target audience: personnel from the QM departments of organisations tasked with conducting process audits in their own organisation (internal) or in the supply chain (external). This Training further addresses external auditors (as service providers).

Duration: 4 days ; after passing the test, you will receive a certificate of qualification.

Provided materials: learning materials presented and VDA 6.3 guide, 2016 Edition, in Italian, all in paper form.

S8-4G VDA 6.3 2016 - QUALIFICATION FOR PROCESS AUDITOR (continues)

Contents:

- Correlation with other requirements
- Overview of the three different types of audits and explanation of the differences
- Overview of the content of the individual VDA 6.3 chapters
- Introduction to the process approach for risk analysis according to the Turtle model
- Audit process from the audit programme to the completion of the audit
- Planning and conducting a process audit
- Assessment scheme of a process audit
- Code of conduct for process auditors
- Process element 2 project management
- Process element 3 planning product and process development
- Process element 4 realisation of product and process development
- Process element 5 supplier management
- Process element 6 serial production
- Process element 7 customer service
- > Overview of the contents of the VDA volume Analysis of field failure parts
- Attribution and assessment of audit findings
- Audit report, documentation and conclusion
- Process element 1 potential analysis
- Introduction to the current SI's and FAQ's

Participation fee per person: € 1,640 + VAT for ANFIA associates € 2,160 + VAT for non-associates

✓ CERTIFICATE



APPLICATION NECESSARY

✓ AUDITOR CARD

✓ DATABASE ENTRY

S8-C VDA 6.3 2016 - EXAMINATION DAY FOR CERTIFIED PROCESS AUDITOR

Pre-requisites: admission to the exam session after successful review of your application, to be filled out and emailed to Federica Cagnani – f.cagnani@anfia.it.

The application form may be downloaded from the relevant Training page at <u>www.anfia.it</u>.

PLEASE NOTE: SHOULD WE RECEIVE ATTENDANCE FORMS WITHOUT THE RELEVANT APPLICATION FORMS, THE ATTENDANCE FORMS WILL NOT BE CONSIDERED, AND NO COMMUNICATION WILL BE SENT TO THE CANDIDATE.

Admission requirements include:

Submission of the qualification certificate "S8-4G- VDA 6.3 2016 QUALIFICATION FOR PROCESS AUDITOR"

or

- Submission of the qualification certificate "S8-D VDA 6.3 2016 UPGRADE MODULE FROM VDA 6.3 (2010) TO VDA 6.3 (2016", IF ALREADY QUALIFIED AS PROCESS AUDITORS VDA 6.3 - EDITION 2010 (MODULE BII)
- > Submission of auditor qualification based on DIN EN ISO 19011
- > At least 5 years' industrial experience, of which at least 2 in QM

After passing the oral and written exam, you will receive a VDA certificate with register number and auditor card, and you will be entered in the VDA QMC database. For the card, it is necessary to send a SHARP AND RECENT digital photo in jpeg format.

The exam starts at 8 AM and ends at ca. 4 PM. The details about the exam session will be provided in the call.

S8-C VDA 6.3 2016 - EXAMINATION DAY FOR CERTIFIED PROCESS AUDITOR (continues)

Participation fee per person:	€ 400 + VAT for ANFL € 500 + VAT fo	A associates or non-associates
Participation fee for retaking the	written exam only:	€ 160 + VAT for ANFIA associates € 200 + VAT for non-associates
Participation fee for retaking the	oral exam only:	€ 240 + VAT for ANFIA associates € 300 + VAT for non-associates



APPLICATION NECESSARY

- ✓ CERTIFICATE
- ✓ AUDITOR CARD
- ✓ DATABASE ENTRY

S8-E VDA 6.3 2016 - QUALIFICATION FOR PROCESS AUDITOR WITH CERTIFIED EXAM - ONE-WEEK TRAINING WITH EXAM

Goals: this Training is designed for participants who want to achieve their qualification as a certified VDA 6.3 process auditor in just one week.

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

Furthermore, the underlying questionnaire is explained according to the assigned process elements, so that, using the process audit, you can identify the respective risks and potentials along the supply chain.

These basics are used to correct, stabilise and optimise processes, and are developed in the exercises and case examples. The aim is to assure a reliable assessment.

The Training is held by ANFIA Service under official VDA QMC license for Italy.

Duration: 5 days (4 days of training, 1 day for the exam) **Provided materials**: learning material presented and VDA Volume 6.3 2016, in Italian, all in paper form.

Target audience: personnel from the QM departments of organisations tasked with conducting process audits in their own organisation (internal) or in the supply chain (external). This Training further addresses external auditors (as service providers).

Pre-requisites: your application must be approved. Please fill out your application and send it via e-mail to Federica Cagnani – f.cagnani@anfia.it

The application form may be downloaded from the relevant Training page at www.anfia.it.

VDA 6.3 2016 - QUALIFICATION FOR PROCESS AUDITOR WITH CERTIFIED EXAM - ONE-S8-F WEEK TRAINING WITH EXAM (continues)

Application approval requirements include:

- submission of auditor qualification based on DIN EN ISO 19011
- > at least 5 years' industrial experience, of which at least 2 in QM

General admission requirements include:

- Knowledge of the established quality tools and methods;
- > Knowledge of applicable management system requirements;
- > Knowledge of further applicable customer-specific requirements;
- Product and process knowledge in the planned area of application;
- Relevant professional experience depending on the area of application according to VDA Volume 6.3:
- Qualification based on the DIN EN ISO 19011 standard (only for external suppliers of audit services in the supply chain, and for participants who wish to take the additional exam for "certified process auditors")

After passing the oral and written exam, you will receive a VDA certificate with register number and auditor card, and you will be entered in the VDA QMC database. For the card, it is necessary to send a SHARP AND RECENT digital photo in jpeg format.

The exam starts at 8 AM and ends at ca. 5 PM. The details about the exam session will be provided in the call.

Participation fee per person: € 2,070 + VAT for ANFIA associates € 2.620 + VAT for non-associates

Contents of S8-E training See S8-4G program

IMPORTANT! THE DEADLINE FOR VDA 6.3 2016 REQUALIFICATION IS JUNE 30, 2018. AFTER THIS DATE, THE S8-D TRAINING WILL NO LONGER BE AVAILABLE, AND THOSE WHO WISH A REQUALIFICATION WILL NEED TO ATTEND THE TWO-DAY COMPETENCE TRAINING (S8-G).



Qualitäts Management Center im Verband der Automobilindustrie S8-D VDA 6.3 2016 – UPGRADE TRAINING: FROM VDA 6.3 (2010) TO VDA 6.3 (2016)

Goals: this upgrade training presents changes in VDA 6.3 (2016 Edition) pertaining to the updates in the questionnaire, changes in the assessment and potential analysis, and other changes.

The Training is held by ANFIA Service under official VDA QMC license for Italy.

Prerequisites: Process auditor VDA 6.3 qualification (2010 Edition)

Target audience: process auditors VDA 6.3 (2010 Edition)

Duration: 1 day; after passing the test, you will receive a certificate of qualification.

Provided materials: learning material presented and VDA Volume 6.3, 2016 Edition, in Italian, all in paper form.

Contents:

- > VDA 6.3 updates
- > Changes in auditor requirements
- Adjusted content of the questionnaire, including changes in the minimum requirements
- > Generic approach in the VDA 6.3 process audit no longer applies
- > Changes in calculating the result
- > VDA 6.3 potential analysis
- > Audit report, documentation and final report adjusted

Participation fee per person: \notin 320 + VAT for ANFIA associates \notin 400 + VAT for non-associates



S8-G VDA 6.3 2016 - COMPETENCE TRAINING FOR CERTIFIED PROCESS AUDITORS

Goals: the Training enables you to strengthen your process auditing competence, to exchange experiences from your auditing practice with other auditors and further develop your practical knowledge. All upgrade module contents are integrated in this course, so that all experiences acquired may be compared with the VDA 6.3 guide – 2016 Edition. After obtaining the VDA 6.3 process auditor qualification, continual further development of your auditing competence should not be neglected. Repeatedly, situations arise during audits that lead to uncertainties in the appropriate assessment of requirements. In this course, you will get the chance to discuss such situations from auditing practice with the other participants and an expert, and determine the appropriateness and application of requirements and assessments. You will increase your confidence in applying process audits and receive motivation for your further personal development.

The Training is held by ANFIA Service under official VDA QMC license for Italy.

Prerequisites: certified process auditor (you must have passed the C module exam)

Target audience: certified process auditors who do not meet the requirement of the 5 process audits (first and second party) that as a whole should cover from P1 to P7, as required to obtain the renewal of the three-year validity of the VDA 6.3 card and certificate.

Duration: 2 days; after passing the test, you will receive a certificate of qualification.

Provided materials: learning material presented and VDA Volume 6.3 2016, in Italian, all in paper form.

S8-G VDA 6.3 2016 - COMPETENCE TRAINING FOR CERTIFIED PROCESS AUDITORS (continues)

Contents:

- > Introduction to new issues and a review of the VDA 6.3 chapter content
- ▶ Risk analysis with the turtle model
- > ISO 19011 guideline for auditing management systems
- > Changes in auditor requirements
- > The individual steps in an audit as a process
- Process elements 1 to 7 refresher (potential analysis, project management, planning and realisation of product and process development, supplier management, process analysis, production and customer service)
- > Attribution and changes in the assessment of audit findings
- > Audit report, documentation and final report adjusted
- Changes in potential analysis
- > Participants' experiences and best practice approach
- Introduction to the current SI's and FAQ's

Participation fee per person: \notin 640 + VAT for ANFIA associates \notin 800 + VAT for non-associates

THE UNI CEI EN ISO/IEC 17025:2018 STANDARD WITH REFERENCE TO IATF 16949:2016

Goals: by explaining the standard, this Training aims to present the structure of system documentation aimed at the development of a laboratory management system in compliance with ISO 17025, as required by the IATF 16949 standard.

Prerequisites: none.

Target audience: test laboratories personnel, management systems managers.

Duration: 1 day with attendance certificate.

Provided materials: learning materials presented, in paper form.

Contents:

- The UNI CEI EN ISO/IEC 17025:2018 standard in the general framework of compliance verification
- Structure of the standard
- General concepts
- > Management requirements: section 4 of the standard
- > Technical requirements: section 5 of the standard

Participation fee per person: € 230 + VAT for ANFIA associates € 280 + VAT for non-associates

M1 FMEA (FAILURE MODE AND EFFECTS ANALYSIS) - ANFIA AND AIAG STANDARDS

Goals: based on the ANFIA and AIAG guidelines, the Training aims to present the theoretical aspects of the FMEA methods as a prevention tool, as well as to conduct a study of cases applied to specific companies in a given product market. The second-generation FMEA will be also touched upon.

Prerequisites for attendance: none.

Target audience: personnel (with different level of responsibilities) required to participate in process and project FMEA tasks.

Duration: 2 days with attendance certificate.

Provided materials: learning material presented and FMEA ANFIA guide, all in paper form.

Contents:

- The theoretical concepts of the FMEA method: concept of function, failure mode and effects
- FMEA as a prevention and risk analysis tool: when it is carried out and which is the item to be analysed
- Product/process FMEA execution modes to identity weaknesses and problems that may jeopardise the functionality, reliability and safety of a given product/process, and hence define the necessary corrections/improvements
- Practice exercise on project FMEAs
- Practice exercise on process FMEAs

Participation fee per person:	€ 420 + VAT for ANFIA associates
	€ 520 + VAT for non-associates

M2-b INTRODUCTION TO STATISTICAL PROCESS CONTROL

Goals: this Training aims to provide the basic concepts for statistical process control to non-specialist personnel in charge of operations.

Prerequisites: none.

Target audience: forepersons, quality control operators / testers / logistics / production

Duration: 1 day with attendance certificate.

Provided materials: learning materials presented, in paper form.

Contents:

- Elements of statistics
- percentage
- absolute frequency
- relative frequency
- cumulative frequency
- standard deviation
- capability studies
 - > Control charts
 - Practice exercises

Participation fee per person: $e \in 230 + VAT$ for ANFIA associates $e \in 280 + VAT$ for non-associates

M2 SPC - STATISTICAL PROCESS CONTROL

Goals: the recent developments of quality systems in the automotive industry call systematically for the application of specific methods, from the product development phase to customer service. In particular, the IATF 16949:2016 standard places major emphasis on prevention and continual improvement methods. In today's process management scenario, SPC is an indispensable tool when it comes to planning, developing and controlling processes. The Training aims to illustrate the contents of the ANFIA SPC Guide, also with the aid of exercises, so that it can be quickly put into practice.

Prerequisites: this training, which requires the knowledge of the basics of statistics (such as average and standard deviation), will allow participants to attend further, more advanced training on statistics.

Target audience: technical personnel involved in process planning, development and control.

Duration: 2 days with attendance certificate.

Provided materials: learning material presented and SPC ANFIA guide, all in paper form.

Required materials: to attend this training, you need to bring a PC for practical exercises

Contents:

- Basics of statistics
- Normality test
- > Control charts for variables and process capacity
- Control charts for attributes
- Practical exercises

Participation fee per person:

€ 600 + VAT for ANFIA associates € 700 + VAT for non-associates

M4 APQP-PPAP - UPDATED TO THE FOURTH EDITION OF THE PPAP AND TO THE IATE 16949 STANDARD

Goals: APQP is a tool for planning and monitoring all phases of the product/process development process.

Originally developed to meet the needs of American manufacturers, this tool is used by many car manufacturers with different performance levels.

As a process through which organisations obtain the approval of parts for production, the PPAP (updated to its 4th Edition) is a natural part of this procedure.

The Training lays the basis for structuring the two methods contractually required by customers and used by internal resources operating in quality management, planning, industrialisation, production and purchasing departments, as well as by personnel normally in charge of sampling operations.

Prerequisites: none.

Target audience: the training is addressed to personnel involved in the various phases of product/process development, and hence operating in quality management, planning, industrialisation, production, purchasing and other departments.

Duration: 2 days with attendance certificate.

Provided materials: learning materials presented, in paper form.

Contents:

- Introduction to the APQP and PPAP procedures, 4th Edition
- > Why it is required
- Your advantages
- > The steps

M5 MSA – MEASUREMENT SYSTEM ANALYSIS

Goals: this Training aims to give participants a better understanding of Measurement System Analysis by illustrating the way in which measurement processes are managed in order to define their goals and requirements, as well as to assess and ensure their conformity.

Recommended methods for capacity assessment and measurement tools and processes approval will be presented and discussed, <u>with reference to the Anfia Guide and to the Aiag "MSA" Guide</u> - 4th Edition.

Participants will be offered an overview of the causes of variation within measurement systems, of the concepts linked to the requirements of repeatability, reproducibility, accuracy, traceability and assessment of uncertainty of measurement results, as well as of the organisational criteria for fitting measurement tools and processes within the framework of a QM system.

Prerequisites: none.

Target audience: technical, quality and metrology departments.

Duration: 2 days; after passing the test, you will receive a certificate of attendance. Those interested in this training may start with the M10 Training on Measurement Uncertainty.

Provided materials: learning material presented and MSA ANFIA guide, all in paper form, as well as software for MSA analyses.

Required materials: to attend this training, you need to bring a PC for practical exercises

Contents:

- > Definitions
- Interaction between measurement process and production processes
- Measurement process management aimed at assessing and ensuring compliance with the relevant requirements (ref. to UNI ISO 10012:2003)
- Elements of statistics
- > Formalised methods for studying accuracy, repeatability, reproducibility and linearity
- Particular cases: methods for studying go/no-go gauge processes (attributes); methods for studying non-replicable measurement processes (PD)

Participation fee per person:	€ 600 + VAT for ANFIA associates
	€ 700 + VAT for non-associates

M9 LEAN SIX SIGMA: GREEN BELT MODULE

Goals: today, the Lean Six Sigma method represents the most effective way to tackle a dynamic market and offer competitive products. Lean Six Sigma is a management strategy for continual improvement that focuses on product quality and process speed. It was originally developed as a synergy between two methods, i.e. Six Sigma and Lean Production, which in recent years have contributed to the major change underwent by industrial process management. Six Sigma focuses on variation by reducing process flaws, whereas Lean Production contributes to eliminating wastes by optimising the use of resources and cycle times. Joined under the heading of Lean Six Sigma, these methods offer one of the most dynamic management programs for improving product quality and production efficiency, thus ensuring higher profits while cutting costs.

The Training aims to introduce the main Lean Six Sigma techniques and tools following the guidelines of the DMAIC operating method (define, measure, analyse, improve, control). The main Lean Six Sigma guidelines will be defined by focusing on brainstorming and analysis tools for continual improvement. Moreover, the Training aims to provide participants with a complete roadmap with which it is possible to develop autonomously a Lean Six Sigma project tailored to the specific context of the company.

Pre-requisites: none.

Target audience: personnel (whether in-house or employed as external consultants) in charge of redefining organisation processes in order to make them more efficient and effective. The Training may be attended not only by quality experts, but by all personnel with some basic knowledge of statistics.

Duration: five days.

Required materials: for this Training you need to bring a personal laptop to install the programs provided by trainers.

Provided materials: SPC software for statistical analyses; DEMO software for DOE; book: "Lean six sigma: la nuova frontiera per la qualità. La sinergia tra six sigma e lean production per un innovativo metodo di gestione e miglioramento dei processi" by Aggogeri F. and Gentili E., Franco Angeli; learning materials presented during the course, in paper form.

Times and degree: each day, lectures will be held from 9 AM to 1 PM and from 2 PM to 6 PM. At the end of the course, participants will receive an ANFIA Green Belt degree, and, after submitting a Project Work, a Lean Green Belt certificate.

Contents:

Introduction to Lean Six-Sigma:

Definition and development of Lean Six Sigma within the company. The improvement process. Definition of project objectives (efficacy and effectiveness). Generating project ideas. Definition of COPQs (Costs of Poor Quality). The Lean contribution and the Six Sigma factor as means to achieve business goals; the role of team leaders and change agents. Defining project priorities. Planning a time schedule. Introduction to DMAIC problem solving. Examples and tools. Define

Development of an improvement project. Definition of the goal and of the work team. Identification of Critical to Customer. Identification of Voice of the Process. Assessment of critical features for quality (CTQs9). ROI and payback analysis. Creating a project charter and planning priorities and time schedules.

M9 LEAN SIX SIGMA: GREEN BELT MODULE (continues)

Measure

Problem statement description. Identification of the features to be measured (continuous/discrete). Definition of sigma, ppm, sigma level and sigma capability: calculation techniques. Fundamental elements of the SPC (distributions, control charts, confidence intervals, boxplots, correlation diagrams...). KPI calculation.

<u>Analyse</u>

KPI assessment. Value stream analysis. Development of brainstorming activities. Brief overview of Kaizen techniques. Cause-effect analysis (6M). PF/CE/CNX/SOPs. FMEA. Efficiency and waste analysis (7 wastes). Input-output relationship. Hypothesis test. ANOVA analysis (one way, Two Ways). Creation of the action log.

Improve

Identification and selection of solutions. Improvement management techniques (Visual Management). Error-proof systems (Poka Yoke). SMED. Introduction to DOE. Factorial plans 2k and fractional plans. Impact of improvements: benefits, responsibilities and times.

Control

Control plan. Identification of control parameters. Recursive problem solving implementation. Analysis of results and impact on business.

Project definition methods

Participation fee per person:

€ 2,050 + VAT for ANFIA associates € 2,600 + VAT for non-associates

M9-U LEAN SIX SIGMA: UPGRADE GREEN BELT MODULE FOR YELLOW BELT

This Training allows participants who have attended the Lean Six Sigma Yellow Belt training to join the Lean Six Sigma Green Belt Module (M9) from the third day, and hence to complete their Green Belt session.

Participation fee per person:

€ 1,450 + VAT for ANFIA associates € 1,900 + VAT for non-associates

M10 MEASUREMENT UNCERTAINTY IN CALIBRATION, VERIFICATION AND TEST PROCESSES

Goals: this Training aims to help participants develop an adequate understanding of the concept of measurement uncertainty, as it is introduced and developed in the relevant international documents: **GUM** (Guide to the Expression of Uncertainty in Measurement) and **VIM** (International Vocabulary of Metrology). The Training will present from an operational standpoint the techniques for devising a suitable "measurement model", from which an "uncertainty balance" may be inferred, which constitutes the most suitable tool to assess the uncertainty associated with the relevant measurement, as well as to document the choices made for this purpose. The Training will introduce examples of measurement uncertainty calculation in the main business applications in which these techniques play a particularly important role.

Pre-requisites: none.

Target audience: technical, quality and metrology departments.

Duration: 1 day with attendance certificate.

Provided materials: learning materials presented, in paper form.

Contents:

- > Definitions
- > Basic concepts. Elements of statistics
- > Examples of measurement uncertainty calculation during workpiece control
- Examples of measurement uncertainty calculation during calibration of tools commonly used for production tests
- Examples of how uncertainty can be used to select the most suitable measurement methods and tools (PUMA method)
- Decision-making processes in test activities: conformity and non-conformity to specifications based on measurement uncertainty

Participation fee per person: € 250 + VAT for ANFIA associates € 300 + VAT for non-associates



Qualitäts Management Center im Verband der Automobilindustrie

M12 PROBLEM SOLVING METHODS 8D AND 5 WHYS - QUALITY ASSURANCE IN THE PROCESS SCENARIO (VDA 4)

Goals: Often problem solving is only understood to mean writing 8D reports. This Training 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.

The Trainingis held by ANFIA Service under official VDA QMC license for Italy.

Prerequisites: If possible, some experience with problem solving in your own organisation.

Target audience: employees from sales, development, customer service and claims processing, production, purchasing, logistics, as well as internal and external quality assurance in charge of a problem solving team.

Duration: 2 days with attendance certificate.

Provided materials: learning materials presented, in paper form. **Contents**:

- Historical development and object of the 8D method
- Overview of 8D method approach
- Comprehension of problems
- Exact description of problems
- Deducing immediate actions
- Correlation between root cause and corrective action
- Use of simple analytical methods
- ➢ Is / is-not analysis
- > Confirmation that the identified cause actually triggers the problem
- Deduce corrective actions
- Planning the implementation of corrective actions
- > Continual improvement of QMS, production and quality planning
- > Recognise the problem solving team and their effect on error culture in organisations
- > Successfully integrate the 8D method in your organisation

Participation fee per person:	€ 550 + VAT for ANFIA associates
	€ 650 + VAT for non-associates

M13 TRAINING ON THE 5S METHOD

Goals: The 5S method is an indispensable tool for reorganising and improving the workplace.

The 5S method ensures a clean and available space for everything. The acronym "5S" stands for five Japanese terms that indicate the basics of visual management and specify the 5 steps needed to make everyday activities more efficient while eliminating wastes.

The 5S method focuses on:

- > order, organisation, cleanness, standardisation;
- > productivity;
- > approach to continual improvement:
- involvement of all personnel;
- > major changes with minimum investments.

These basic principles are so simple, obvious and economical that many companies underestimate their importance. This method helps increase productivity while at the same time improving quality, safety and the environment.

Prerequisites: none.

Target audience: all personnel, since the 5S method is practice-oriented and immediately applicable.

Duration: 1 day with attendance certificate.

Provided materials: learning materials presented, in paper form.

Contents

- Introduction to the 5S method
- Integration in the company as a system
- ➤ What does 5S mean?
- Your advantages
- Implementation in the company
- Exercises

Note: this Training may be offered on the company premises, and must be arranged with the customer care service (<u>f.cagnani@anfia.it</u>). A minimum of 4 participants is required.

M14 LEAN SIX SIGMA: YELLOW BELT MODULE

Goals: today, the Lean Six Sigma method represents the most effective way to tackle a dynamic market and offer a competitive product. Lean Six Sigma is a management strategy for continual improvement that focuses on product quality and process speed. It was originally developed as a synergy between two methods, i.e. Six Sigma and Lean Production, which in recent years have contributed to the major change underwent by industrial process management. Six Sigma focuses on variation by reducing process flaws, whereas Lean Production contributes to eliminating wastes by optimising the use of resources and cycle times. Joined under the heading of Lean Six Sigma, these methods offer one of the most dynamic management programs for improving product quality and production efficiency, thus ensuring higher profits while cutting costs.

The Training aims to introduce the main Lean Six Sigma techniques and tools following the guidelines of the DMAIC problem-solving method (define, measure, analyse, improve, control). The main tools for brainstorming, analysis of causes and continual improvement will be defined with the aid of some examples. Moreover, the Training aims to focus on tools able to facilitate the creation of ideas for future improvement projects, while assessing their reliability and economic return.

Pre-requisites: none.

Target audience: personnel (whether in-house or employed as external consultants) in charge of supporting the redefinition of organisation processes in order to make them more efficient and effective. The Training may be attended not only by quality experts, but by all personnel with some basic knowledge of statistics.

Duration: 2 days.

Required materials: for this Training you need to bring a personal laptop to install the programs provided by trainers.

Provided materials: SPC software for statistical analyses, learning material presented in the course, in paper form.

Time schedule and certificate: each day, lectures will be held from 9 AM to 1 PM and from 2 PM to 6 PM. After the course, participants will receive the ANFIA Yellow Belt certificate.

M14 LEAN SIX SIGMA: YELLOW BELT MODULE (continues)

Contents:

Introduction to Lean Six-Sigma:

Definition of Lean Six Sigma. Development of problem solving within the company. The improvement process. Definition of project objectives (efficacy and effectiveness). The role of team leaders and changes agents. Planning a time schedule. Prioritisation of activities. Introduction to DMAIC problem solving. Examples and tools.

Define

Development of an improvement project. Definition of the goal and of the work team. Identification of Critical to Customer. Identification of Voice of the Process. Assessment of critical features for Quality (CTQs). ROI and payback analysis. Creating a project charter and planning priorities and time schedules.

<u>Measure</u>

Problem statement description (Who?, What?, Where?, How big?, How severe?). Identification of the features to be measured (continuous/discrete). Data collection plan. Identifying measurement tools. KPI calculation. Brief overview of measurement tools reliability (MSA).

<u>Analyse</u>

KPI assessment. Value stream analysis. Brainstorming development (individual vs. group brainstorming). Brief overview of Kaizen techniques. Cause-effect analysis (6M). Root Cause Investigations. PF/CE/CNX/SOPs. Efficiency and waste analysis (7 wastes). Input-output relationship. Creation of the action log.

Improve

Identification and selection of solutions. Improvement management techniques (Visual Management). Error-proof systems (Poka Yoke). Impact of improvements: benefits, responsibilities and times.

<u>Control</u>

Control plan. Identification of control parameters. SPC techniques. Visual Control. Implementation and validation of controls. Recursive problem solving implementation. Quantification of medium- and long-term benefits.

Participation fee per person:

€ 600 + VAT for ANFIA associates € 700 + VAT for non-associates

M15 LEAN SIX SIGMA: UPGRADE BLACK BELT MODULE

Goals: the Lean Six Sigma UPGRADE Black Belt Module provides the skills needed to lead teams towards operational excellence and support strategic goals. This training provides a detailed description of Lean Six Sigma methods and tools. In doing so, the Training aims to train personnel to run improvement projects, to manage a cross-functional team, to identify saving opportunities, to apply advanced problem-solving techniques and to support Green Belts. The Training will focus on tools and advanced techniques for project development according to the DMAIC roadmap. In order to obtain the Lean Six Sigma Black Belt certification, candidates are required to submit a Six Sigma project.

Pre-requisites: evidence of Green Belt certification/skills

Target audience: personnel with process improvement management and execution experience, ideally at Green Belt level. Professionals who wish to gain expertise in the management of multi-functional process improvement.

Certification: the LSS Black Belt certification is issued by ANFIA after successfully completing the training session, which involves passing the final exam and submitting a project attesting the acquisition of Black Belt skills.

Duration: 4 + 4 days.

Required materials: for this Training you need to bring a personal laptop to install the programs provided by trainers.

Provided materials: SPC software for statistical analyses, learning material presented in the training, in paper form.

M15 LEAN SIX SIGMA: UPGRADE BLACK BELT MODULE (continues)

Contents:

- References to the LSS GB training
- Basic elements of coaching and project management
- Strategic assessments in identifying projects
- Introduction to change management
- High-level project planning
- Green Belt selection and project prioritisation
- Notions of basic statistics and inferential statistics
- Sampling distributions and confidence intervals
- Historical data analysis (EDA)
- Correlation analysis
- MSA (XR & ANO VA)
- Interpretation of MSA results and metrics
- Multivariate charts (part 1)
- Re-examination of confidence intervals
- How to perform and interpret hypothesis tests
- Additional hypothesis tests for analysis and improvement
- Capability analysis for non-normal data
- Transformation of non-normal data
- Identifying wastes and the 7 Muda
- Value stream mapping
- Process mapping techniques (Brown Paper, Swim Lane, Time Value Map etc.)
- Lean indicators for operational excellence
- Production by cells and planning principles and layout by cells
- Work analysis (Takt time, Cycle Time, Operator Loading)
- Multivariate charts (part 2)
- Single X vs. single Y (Chi Square and Logistic Regression)
- Regression analysis
- Multi ANOVA
- Residue analysis
- Multivariable regression
- Multiple Logistic Regression
- Lean Improvement Tool
- Total Productive Maintenance (TPM)
- Overall Equipment Effectiveness (OEE)
- SMED (Single Minute Exchange of Die)
- Poka Yoke

M15 LEAN SIX SIGMA: UPGRADE BLACK BELT MODULE (continues)

- Flow and Pull
- Kanban & Inventory
- Production Sequencing
- Capacity Planning e Scheduling
- Introduction to the TOC (Theory of Constraints)
- DOE techniques: application strategies
- Blocks and covariates
- Guidelines of sampling techniques for DOE
- Selecting the test plan
- DOE optimisation
- Complete factorial experiments (2k, 3k)
- Orthogonality test
- Factor screening
- Game: catapult
- Fractional factorial plan design (2k-p)
- The Taguchi method
- Game: airplane/helicopter
- Methods for reducing variance
- Robust Design (FMEA)
- Response Surface Analysis
- Optimisation of Multiple Response
- Introduction to DFSS
- Fractional factorial plan design (2k-p)
- The Taguchi method
- Game: airplane/helicopter
- Methods for reducing variance
- Robust Design (FMEA)
- Response Surface Analysis
- Optimisation of Multiple Response
- Introduction to DFSS
- Project documentation
- Project re-examination (Lesson Learned)
- Results, sustainability and consolidation
- LLS dissemination
- Project selection
- LSS BB exam

Dates to be determined based on the submitted requests.

Participation fee per person: € 2,050 + VAT for ANFIA associates € 2,600 + VAT for non-associates



Qualitäts Management Center im Verband der Automobilindustrie

M16 VDA 2 Production Process and Product Approval

Goals: the fifth edition of the VDA Volume 2 was fundamentally revised in 2012 and adapted to current automotive demands. Correlations to existing VDA volumes (e.g. Maturity Level Assurance, VDA 6.3) are highlighted and integrated. The objective of this Training is:

- to convey the triggers, requirements, structured implementation in operational and organisational structure
- provide evidence for the VDA2 procedure.

The Training is held by ANFIA Service under official VDA QMC license for Italy.

Prerequisites: working knowledge of IATF 16949 basic requirements and experience and knowledge in dealing with customer-specific requirements for sampling processes (e.g. Volkswagen AG, BMW AG and Daimler AG), as well as general basic knowledge of the VDA volumes is advantageous.

Target audience: quality managers, quality engineers,

purchasing/development/logistics/production personnel with quality relevant tasks, as well as all interested automotive personnel.

Contents:

- > Overview and relation to important legal/statutory regulations (IMDS, REACH)
- Structure of the fifth edition of VDA Volume 2
- Changes since the fourth edition
- Focus area
 - Basic sequence of PPA and sampling
 - Planning and coordination of PPA procedure incl. chronological integration into product engineering process
 - Trigger matrix
 - Sampling levels
 - Process validation
 - Dealing with small-scale series
- > Explanation of the necessary organisation-specific need for regulation
- Practical example sampling process

Duration: 1.5 days; after passing the test, you will receive a certificate of qualification. **Provided materials**: learning materials presented, in paper form.

Participation fee per person:

€ 450 + VAT for ANFIA associates € 550 + VAT for non-associates

M18 TRAINING ON CUSTOMER-SPECIFIC REQUIREMENTS IATF

Goals: the Training aims to illustrate the OEM IATF customer-specific requirements according to the last updates through the official account of ANFIA, as an official member of IATF and PLEXUS, and as an official partner of AIAG, which take up directly CSR know-how through an ongoing cooperation with OEMs members of the IATF.

Prerequisites: none.

Target audience: planning, industrialisation, quality, purchasing and sales personnel.

Contents

- ➢ CSR origin
- CSR and IATF 16949
- CSR management process
- > The CSR of the various OEMs
- > The CSR in practice
- Learning efficacy test

Duration: 1 day with attendance certificate.

Provided materials: learning materials presented, in paper form.

Note: this Training may be offered on the company premises, and must be arranged with the customer care service (<u>f.cagnani@anfia.it</u>). A minimum of 6 participants is required.



M19 VDA 6.5 - QUALIFICATION FOR PRODUCT AUDITOR - MANAGEMENT OF PRODUCT AUDIT PROGRAMS

Goals: the Training aims to provide a systematic and structured approach to efficient product audits from a perspective that takes account also of economic aspects.

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

End customer expectations can no longer only be determined in specifications. Automotive manufacturers and the supplier industry must identify these product characteristics independently and transfer them into the products. This focus must also be taken into account when conducting product audits.

Meanwhile, product quality is assured by consistent implementation of preventive quality planning methods. For this reason, product audits have the task of not only assuring quality but also providing evidence.

Within the process chain, product audits are expected to highlight the quality level of the internally / externally manufactured products.

The Trainingis held by ANFIA Service under official VDA QMC license for Italy.

Pre-requisites: none.

Target audience: personnel planning and/or conducting product audits in their organisation.

Duration: 1 day; after passing the final exam, you will receive a certificate of qualification.

Provided materials: learning materials presented and VDA 6.5 Guide on product audit, in paper form.

Contents:

- Product audit basics
- > Structure of the audit programme and product audit sequence
- Audit planning
- ➢ Reporting
- Corrective actions
- > Qualification requirements for product auditors

Participation fee per person: \notin 350 + VAT for ANFIA associates \notin 450 + VAT for non-associates



 Qualitäts Management Center

 im Verband der Automobilindustrie

 M20
 PRODUCT SAFETY REPRESENTATIVE (PSB) IN THE AUTOMOTIVE INDUSTRY

Goals: in the automotive and supplier industry, product safety and product liability have always been high-priority issues. Nations throughout the world have set this down in national and international laws that have been transferred into contractually agreed, specific automotive requirements. These are valid not only for the OEMs themselves but also for the whole supply chain (e.g., as described for VW in the 'Formula Q'). The supplier organisations are required to nominate and install a so-called product safety representative.

Thus, throughout the whole product creation process, liability risks can be determined by relevant expert knowledge, identified, avoided or minimised in product development, and controlled by process development. In the case of product liability incidents and findings from product observations in the organisation itself and in the market, the product safety representative is meant to be a competent contact person for management and customers. In these cases, it is important to suitably co-ordinate proceedings according to legal statutes and also customer-specific requirements.

To know and understand these manifold tasks a product safety representative is faced with, requires comprehensive information and qualification. Experienced trainers teach the participants the necessary broad theoretical knowledge, accompanied by explanations and examples from practice. The practical application of this knowledge in the form of group work is central to this training course.

This Training is held by ANFIA Service under official VDA QMC license for Italy.

Pre-requisites:

- Technical and/or business education
- Experience in automotive quality management, especially in handling complaints and regress
- Education and experience in assessing technical product and process risks (e.g., FMEA facilitator, VDA 6.3 process auditor, designer/developer)
- Knowledge about product use of the products manufactured in the organisation, as well as the state of technology

Note: you are not required to submit an application

M20 PRODUCT SAFETY REPRESENTATIVE (PSB) IN THE AUTOMOTIVE INDUSTRY (continues)

Target audience: executives and personnel from the automotive industry who are to be deployed or already are deployed as product safety representatives.

Duration: 2 days with attendance certificate recognised by Volkswagen AG.

Provided materials: learning materials presented, in paper form.

Contents:

- > Module 1: Necessity of implementing a product safety representative
- > Module 2: Core elements of a system for controlling risks incl. results
- > Module 3: Product safety management and role of the product safety representative
- > Module 4: "Lessons learned", risk rating and structured action
- > Module 5: Volkswagen requirements for the product safety representative

Participation fee per person: \notin 700 + VAT for ANFIA associates \notin 900 + VAT for non-associates

M21 SWOT ANALYSIS - DEVELOPMENT OF STRATEGIES

Goals: this Training aims to present SWOT strategies with respect to the development of business strategies. Starting from analysis of strengths and weaknesses and from the assessment of the opportunities and threats of a project, the Training will define the logical patterns for making structured decisions in the pursuit of a given goal. The Training will include team exercises to help participant better understand the practical application of strategic SWOT techniques.

Pre-requisites: none.

Target audience: function managers (production, quality, sales, logistic, purchasing, finance, HR), product strategy personnel, project manager

Duration: 1 day with attendance certificate.

Provided materials: learning materials presented, in paper form.

Contents:

- > SWOT analysis: when and why it should be applied
- Principles of SWOT Analysis
- SWOT classification
- Work method and action plan
- Benefits and causes of failure
- Practical rules
- > How to identify successful strategies
- > Pugh matrix
- Assessing ideas
- > The crucial steps to developing strategies
- Examples and exercises

Dates to be determined based on the submitted requests.

Participation fee per person:	€ 230 + VAT for ANFIA Associates
	€ 280 + VAT for non-associates

M22 THE SMED METHOD - HOW TO REDUCE EQUIPPING TIMES

Goals: this Training aims to present the SMED method for reducing machine/system equipping times. Building on the concept of waste and on Lean principles, the Training proposes a structured approach focusing on the reduction on non-value-added activities and of associated costs in setup phases. The Training will define how to identify a construction site and how to manage an internal SMED operation, while casting light on the main performance indicators. The Training proposes actual examples and group exercises.

Prerequisites: none.

Target audience: production and quality personnel, toolmakers, maintenance and continual improvement, project managers

Duration: 1 day with attendance certificate.

Provided materials: learning materials presented, in paper form.

Contents:

- Introduction to SMED
- > Traditional approach and SMED approach
- Concept of value and waste
- SMED method
- > The steps of a SMED program
- Time analysis and work methods
- Measure and evaluation of an equipping process
- Separating internal setups from external ones
- The use of pictures and videos in the analysis
- > The 5S of the equipping station
- Identification of solutions and standardisation
- Selecting a construction site
- How to manage the project
- SMED toward operational excellence
- Examples and exercises

Dates to be determined based on the submitted requests.

Participation fee per person: € 230 + VAT for ANFIA Associates

€ 280 + VAT for non-

associates

M23 VDA STANDARD "FIELD FAILURE ANALYSIS" - TRAINING TRAINING FOR USERS

Goals: offering participants the contents of the FFA (Field Failure Analysis) so as to enable them to implement autonomously a field failure analysis in their own organisation. Further, the Training provides a fundamental point of reference for the adherence to the IATF 16949 requirements.

The Training is held by ANFIA Service under official VDA QMC license for Italy.

Pre-requisites: none.

Target audience: planning, development, production, warranty, quality assurance and sales departments in the automotive industry and in the supply chain which implement and develop field failure analysis.

Duration: 2 days; after passing the final exam, you will receive a certificate of qualification.

Provided materials: learning materials presented, in paper form.

Contents:

- Sequence of field failure analysis
- Concept and findings
- Inspection plan and problem analysis
- > NTF process (No Trouble Found)
- > NTF process guidelines
- Measures and CIP
- Sample strategy and logistics
- Data exchange and reporting
- Embedding in one's own organisation

Participation fee per person:

€ 600 + VAT for ANFIA associates € 750 + VAT for non-associates

M25 DESIGN FOR RELIABILITY AND WARRANTY ANALYSIS

Goals: the first part of this Training introduces the main methods for developing a reliable product/system. The Training will also define an integrated method aimed at assessing product/system reliability during the planning phase, studying and modelling reliability data in the experimental stage and analysing performances during operations. The Training proposes actual examples and group exercises.

The second part of the Training introduces the main techniques for warranty analysis, starting from the on-field reliability study of products/systems. The Training will introduce key performance indicators used for studying the life of products/systems as well as the tools able to forecast the number of expected failures and the impact of possible improvements (design change, maintenance techniques, etc.). The Training will also focus on the assessment of costs and warranty periods by analysing the most effective options from a technical-economic standpoint.

Prerequisites none; the knowledge of the basic concepts of statistics provides a basis for attending this course.

Target audience: planners, product and process engineers, quality personnel, R&D managers.

Required materials: for this Training you need to bring a personal laptop to install the programs provided by trainers.

Provided materials: learning materials presented, in paper form.

Contents:

- Design for Reliability (DFR): Introduction to system reliability. Life Cycle Cost analysis. Reliability models for repairable and non-repairable systems. Product/system functionality analysis. FMEA & Boundary diagram. Functional-morphological decomposition. Reliability Block Diagram (RBD). Reliability allocation. Reliability assessment. Identification of critical aspects.
- Life Data Analysis (LDA): Techniques for studying reliability data. Functions and models for studying reliability. Weibull analysis. Data collection for reliability calculation.
- Testing and proof of reliability: Definition of the main testing strategies. Introduction to accelerated tests, simulation and testing activities. Reliability proof techniques.
- > Case studies and application examples.
- Product/system reliability indicators: Definition of reliability. Metrics and indicators (Failure rate, Failure Frequency, MTBF, B10). On-field data collection methods. Forecast of reliability and duration (conditional reliability). Warranty cost (calculation and forecast).
- Warranty analysis Methods and tools: Reliability of reliability models and systems. Repairable and non-repairable products/systems. Forecast tools and techniques: Nevada charts. Availability and maintainability of complex systems. Analysis of failed product/system functionalities. Forecast of warranty costs and assessment of accruals. Assessment of warranty periods and extension strategies.

DESIGN FOR RELIABILITY AND WARRANTY ANALYSIS (continues) M25

> Implementation of an integrated end-to-end process: Development of a process for improving and supporting reliability activities. Analysis of the impact of product/system changes in the warranty period. Life cycle cost analysis.

Dates to be determined based on the submitted requests.

Participation fee per person: € 460 + IVA for ANFIA Associates € 560 + IVA for non-associates

M27 VALUE STREAM MAPPING

Goals: this Training aims to explain how to map the value chain, in order to identify and eliminate wastes and hence reduce lead times. Starting from the main lean concepts, the program proposes a structured path to develop in a group a Value Stream Mapping, by calculating the main stream indicators, defining critical aspects and identifying the wastes that need to be focused upon.

Prerequisites: none.

Target audience: production, quality, logistic and planning personnel, continual improvement managers.

Duration: 1 day with attendance certificate.

Provided materials: learning materials presented, in paper form.

Contents:

- ➤ The 5 lean principles.
- Concept of value and stream
- > VSM: methodological approach
- > Definition of the study area
- Identification of the product family to be mapped
- Preparation of the work team
- Collection of critical information
- Representation of the current condition
- > Calculation of the main stream parameters
- Identification of critical aspects
- > Definition of possible kanban loops and alignment with takt time
- Identification of solutions (future state)
- Implementation of actions and support
- Examples and exercises

Dates to be determined based on the submitted requests.

Participation fee per person:	€ 230 + VAT for ANFIA associates
	€ 280 + VAT for non-associates



Volkswagen Bildungsinstitut

M28 FORMULA Q - COMPACT TRAINING

Goals: Formula Q is a body of rules comprising all Volkswagen requirements for quality and project management in cooperation with partners in the supply chain. Compliance with these specifications ensures a smooth product engineering process and series supply for the purpose of the customers.

This qualification is provided in cooperation with Volkswagen Bildungsinstitut GmbH, and it acquaints you with these mandatory requirements in detail. Lectures will alternate with group discussions.

You will learn about the Volkswagen requirements for Formula Q-concrete, Formula Q-Capability and Formula Q-QPN Integral.

This Training is held by ANFIA Service under official VDA QMC license for Itally.

Prerequisites: none.

Target audience: executives and personnel from all areas of the process chain from planning, purchasing, manufacturing, logistics and quality assurance.

Duration: 2 days; after passing the test, you will receive a certificate of qualification.

Provided materials: learning materials presented, in paper form.

Contents:

- Formula Q basic overview
- Formula Q-concrete
- ➢ Formula Q-QPN integral
- > Formula Q-Capability with the annex for process audit
- ➢ Formula Q in the query / placing phase
- > Formula Q in design cooperation with Volkswagen
- Formula Q in product approval
- Formula Q in process approval
- Formula Q in serial operation
- Explanation of some applications (e.g. QPN, self-audit, QTR)

Participation fee per person: \notin 700 + VAT for ANFIA associates \notin 900 + VAT for non-associates

T2 TRAINING ON THE "FUNCTIONAL SAFETY" OF ELECTRIC/ELECTRONIC SYSTEMS OF ROAD VEHICLES - ISO 26262

Goals: this Training aims to provide an understanding of the main requirements of the ISO 26262 standard "Road vehicles - Functional safety", which was published in November 2011 and applies to safety-related electric/electronic systems installed on serially manufactured vehicles not exceeding 3.5 tonnes. Functional safety means the absence of unacceptable risks due to a potential source of hazard following a failure of Electric/Electronic (E/E) systems, such as those recently installed in vehicles for safety purposes. The functionalities of these systems are to be considered safety-critical, in that their failure may undermine the controllability of the vehicle, which in turn may expose people to risks. The ISO 26262 standard, specifically developed for the automotive industry, is the result of a joint international attempt to embrace a shared approach to these potential problems. The Training will therefore present the key elements of the standard, from the Concept Phase to the Start of Production, along the V-cycle of development. These include in particular: Safety Goals, Automotive Safety Integrity Level (ASIL), Functional Safety Requirements, Technical Safety Requirements, System Integration and Safety Verifications & Validation. Finally, the Training aims to make participants aware of the approach required to ensure conformity to the ISO 26262 standard, based on Confirmation Measures: Audits, Confirmation Reviews, Assessment, with respect to the ASIL of the product being developed.

Target audience: the Training is addressed to personnel in charge (with various levels of responsibilities) of development, control and validation of E/E systems to be installed on vehicles.

Duration: 3 days.

Contents:

- ISO 26262 reference framework Safety and functional safety- Implications in terms of Product Liability- Scope of application of the ISO 26262 standard - Structure and contents of the ISO 26262 standard
- Key concepts- Definitions and key concepts for functional safety- Relationships between IEC 61508 and ISO 26262
- Functional Safety Management- Overview of safety lifecycle- Management of functional safety- Safety plan
- Concept Phase- Item definition- Initiation of safety lifecycle- Hazard analysis and risk assessment- Functional safety concept (incl. ASIL decomposition)
- Product development at system level Specification & design phases- Initiation of product development at the system level- Specification of the technical safety requirements- System design

T2 TRAININGON THE "FUNCTIONAL SAFETY" OF ELECTRIC/ELECTRONIC SYSTEMS OF ROAD VEHICLES - ISO 26262 (continues)

- > Product development at hardware & software level
- Product development at system level Integration, testing and validation- Item integration and testing- Safety validation- Functional safety assessment- Release for production
- Production and operation
- > Supporting processes
- Safety Elements out of Contest (SEooC)
- Confirmation measures

Training methods and exercises: The Training will be held in Italian using learning materials in English, with theory sessions integrated by exercises on simple examples to strengthen methodological knowledge and help participants extend them to the context they operate in.

Provided materials: learning materials in English presented during the course, in paper form.

Time schedule and certificate: each day, lectures will be held from 9 AM to 1 PM and from 2 PM to 6 PM. After the course, participants will receive the ANFIA attendance certificate.

Trainers: the Training will be held by experts on "Functional Safety" ISO 26262 with on-field experience in the automotive industry and constantly updated on the relevant developments, also thanks to their involvement in European research projects. The Training will be held in cooperation with 4S Group (Turin).

Note: this Training may be offered on the company premises, and must be arranged with the customer care service (<u>f.cagnani@anfia.it</u>). A minimum of 4 participants is required.

Our trainers

MARCO MANTOAN

Degree in economics. After several years of experience in multinational companies in the quality and product development sector, he became CEO of ANFIA Service. Italian representative in the international control group of the IATF 16949 certification scheme. In Italy, he is the only official trainer for third-party auditors for the IATF 16949 scheme and IATF witness auditor. Lean Six Sigma Black Belt certificate. He holds a lean qualification certificate awarded by the LERC (Lean Enterprise Research Centre - Cardiff Business School). Qualified trainer for VDA QMC courses.

GIUSEPPE BARBUTO

Several years of experience in the industrial sectors of quality and safety. He was in charge of quality in medium-sized and multinational companies of the automotive industry, with experiences in several technological sectors. He works as a consultant and trainer at ANFIA Service. He is third-party auditor for quality management systems. He is IATF witness auditor and co-trainer in courses for IATF third-party auditors. Qualified trainer for VDA QMC courses.

LIBORIO SALEMI

Solid international experience. After holding different positions in quality departments, he became head of the quality department of a famous automotive components manufacturer, and further honed his skills and soft skills at a German top-tier car manufacturer in the role of Kaufteilemanagement (Supplier Readiness Management). He is ANFIA Service member of the Italian Oversight Office. He is IATF witness auditor and co-trainer in courses for IATF 16949 first-and second-party auditors. He is a qualified trainer for VDA QMC courses and works as a consultant in quality and business management.

FRANCESCO AGGOGERI

Six Sigma Master Black Belt Certificate, University of Texas: he works on quality management and processing system management and implements and coordinates Lean and Six Sigma project. He is a researcher at the Mechanical and Industrial Engineering Department at the University of Brescia, where he teaches B Mechanical Production Control and Planning. He holds a lean qualification certificate awarded by LERC (Lean Enterprise Research Centre - Cardiff Business School).

CARLO LA TORRE

After receiving his degree in physics, he started working on industrial research. Later, he worked for several years as manager of quality management bodies in the automotive industry, in addition to managing business process development projects as well as reliability and statistical methods. He contributed to the Anfia Guide on Measurement system analysis and Process improvement management. He is a former ANFIA representative in the IATF (International Automotive Task Force).

OSVALDO MAZZARELLA

After several years of industrial experience in product/process development and planning, he specialised in quality methods – APQP, PPAP, FMEA, process audits and problem solving techniques.

EURO SETTIMELLI

Degree in engineering. A former system, safety and environmental manager in the industrial sector, he started working as a self-employed consultant. He was member of the Technical Committee of the Istituto Superiore di Sanità for the implementation of the health care reform. He works as a consultant and instructor. Expert of safety and environmental management systems, AICQ-SICEV qualified environmental auditor.

FABRIZIO CANESI

Several years of industrial experience in planning and quality departments of middle-sized and multinational companies operating in different technological sectors. He works as a consultant and instructor at ANFIA Service.