



Fraunhofer

IPA

Inspector for Technical Cleanliness VDA 19.1
• Dates on request

Inspector for Technical Cleanliness

VDA Volume 19 Part 1 (3rd revised edition, 2026) – Technical Cleanliness in the Automotive Industry

VDA QMC

German Association of the Automotive Industry
Quality Management Center

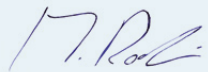
Introduction

In the production of modern vehicles, the technical cleanliness of components and subassemblies is an important functional and safety-relevant quality characteristic.

VDA Volume 19.1 "Inspection of Technical Cleanliness – Particulate contamination of functionally-relevant automotive components" deals comprehensively with the methods and procedures for determining the cleanliness level of parts and products in the automotive supply chain. The VDA Volume 19 was first published in 2005 by the VDA QMC. This standard was extensively revised in the year 2015 and published as VDA volume 19 part 1. In 2026 followed the 3rd edition of the VDA volume 19 part 1, after another broad revision. Many technological and methodological improvements have been included, which have become necessary due to the transition towards electromobility and autonomous driving.

Fraunhofer IPA is offering in collaboration with the VDA QMC, a unique training to the industry, to become a Technical Cleanliness Inspector.

We warmly invite you to attend the seminar and looking forward to hearing from you soon.



Dr.-Ing. Markus Rochowicz
Research Team Leader Cleanliness Technology

The event at a glance

Lecture Day

Topics

- Technical cleanliness in automotive industry
- Extraction methods for detaching particles from components
- Analysis methods for evaluating particle contamination
- Qualification of the cleanliness inspection via declining tests and blank value tests
- Documentation, cleanliness specifications and examples of inspections

Exercise and Examination Day

Exercises

The practical part is divided into a case study, which is processed and presented independently by the participants and practical exercises in the cleanliness laboratory:

- A case study which is dealt with by the participants, including the topics of extraction, filtration and analysis as well as the documentation of cleanliness limiting values and analysis results
- Presentation and discussion of case studies in the group
- Practical exercises in the cleanliness laboratory at several workplaces for extraction, filtration and analysis

Test

Written test (single choice) with 20 questions

Certificate of Qualification

Digital Certificate VDA QMC and Fraunhofer IPA "Inspector for Technical Cleanliness"

Program

Theory Day

- 9:00 a.m. **Welcome and introduction of the participants**
- 9:30 a.m. **Introduction and background information on technical cleanliness**
- 10:00 a.m. Coffee Break
- 10:10 a.m. **Inspection Methods Part 1:** Extraction – Method and selection
- 11:10 a.m. Coffee Break
- 11:30 a.m. **Inspection Methods Part 2:** Analysis and Filtration
- 12:30 p.m. Lunch Break
- 1:30 p.m. **Qualification and Blank Value**
- 2:30 p.m. **Overview of additional content from VDA 19.1**
- 3:00 p.m. Coffee Break
- 3:30 p.m. **Laboratory excursion**
Guided tour in the cleanliness laboratories in groups; Presentation of equipment and methods
- 4:30 p.m. **Final discussion**
- 5:00 p.m. End of the day

Examination Day

- 8:15 a.m. **Instructions on Safety Aspects**
- 8:30 a.m. **Carrying out a Case Study***
Elaboration of an inspection procedure according to VDA 19.1 (selection of an extraction and analysis method, declining test, blank value)
- 9:45 a.m. Coffee Break
- 10:00 a.m. **Group 1 & 2:** Presentation of the case study
Group 3: Laboratory Exercise Part 1 – Extraction
Group 4: Laboratory Exercise Part 2 – Analysis
- 11:15 a.m. **Group 1:** Laboratory Exercise Part 1 – Extraction
Group 2: Laboratory Exercise Part 2 – Analysis
Group 3 & 4: Presentation of the case study
- 12:30 p.m. Lunch Break
- 1:30 p.m. **Group 1 & 2:** (single choice) Test*
Group 3: Laboratory Exercise Part 2 – Analysis
Group 4: Laboratory Exercise Part 1 – Extraction
- 2:45 p.m. Coffee Break
- 3:15 p.m. **Group 1:** Laboratory Exercise Part 2 – Analysis
Group 2: Laboratory Exercise Part 1 – Extraction
Group 3 & 4: (single choice) Test*
- 4:30 p.m. **Closing discussion**
- 5:00 p.m. Anticipated end

* The following aids are permitted for working on the case studies and for the test: VDA 19.1, seminar documents, calculator

Seminar leader and speakers

Keynote Speaker

Dr.-Ing. Markus Rochowicz

Research Team Manager Cleanliness Technology
Fraunhofer Institute for Manufacturing Engineering
and Automation IPA, Stuttgart, Germany

Speakers

Dipl.-Wirt.-Ing. Patrick Brag

Cleanliness Analysis and Personal Training
Fraunhofer Institute for Manufacturing Engineering
and Automation IPA, Stuttgart, Germany

Ann-Katrin Großmann, MBE

Project Manager of Cleanliness Technology
Fraunhofer Institute for Manufacturing Engineering
and Automation IPA, Stuttgart, Germany

Yvonne Holzapfel

Head of the Cleanliness Laboratory
Fraunhofer Institute for Manufacturing Engineering
and Automation IPA, Stuttgart, Germany

Registration and Event Management

technische.sauberkeit@ipa.fraunhofer.de

Organisational details

Registration, change of registration and cancellation



The registration can be changed and transmitted to another participant free of charge. Please inform us about any change in writing. Please understand that cancellation up to 10 days before the start of the event will be charged with € 100, after this date the full price fee will be due.

Participation fees

The participation fee is **€ 1.750,-** per person.

This fee includes: Digital Certificate VDA QMC and Fraunhofer IPA, seminar documents, a VDA Volume 19.1, joint lunch, snacks and drinks.

Event location

Fraunhofer IPA
Nobelstrasse 12, 70569 Stuttgart, Germany

Imprint

Fraunhofer IPA
Nobelstrasse 12, 70569 Stuttgart, Germany
technische.sauberkeit@ipa.fraunhofer.de

How to find us

www.ipa.fraunhofer.de/en/contact.html
You can park your car free of charge in the parking garage of the Fraunhofer Institute Center on the days of the seminar.

Travel sustainably

The Fraunhofer IPA is easily accessible by environmentally friendly means of transportation such as bus and train. If possible, please avoid traveling by plane. If you need overnight accommodation, we will be happy to recommend you accommodation near the institute. Below you will find an exemplary list of organizations that offer opportunities to compensate your carbon footprint:

- Primaklima
- atmosfair
- MyClimate
- Klima Kollekte

Accommodation service

If you need a hotel room during your stay in Stuttgart, please contact:

Tourist Information i-Punkt

Phone +49 711 22 28-100

<https://www.stuttgart-tourist.de/uebernachten-stuttgart/hotels-stuttgart>

Antitrust notice

As the organizer, we would like to point out that the exchange of information between companies may be relevant under antitrust law and that anti-competitive agreements and practices are prohibited. Each participant in the event is responsible for compliance with antitrust regulations.



Event Organizer

**Fraunhofer Institute for Manufacturing
Engineering and Automation IPA**

Nobelstrasse 12
70569 Stuttgart
Germany