

ENGE SOLUTIONS

◆ Experts in Technical Cleanliness ◆

TRAINING

Technical Cleanliness in Assembly

*IN ACCORDING WITH
STANDARD VDA 19.2*

Technical Cleanliness in the Automobile Industry

TRAINING

Expert in Technical Cleanliness in Assembly

BRIEF INTRODUCTION

In the manufacture of modern vehicles, the technical cleanliness of components and subassemblies are an important functional feature of quality. This training is intended as an aid for planners and quality management staff involved in the planning of new processes and sequences or the optimization of existing ones in assembly areas and their environments where cleanliness (particles) is a critical factor.

Important Topics:

- Environment;
- Logistics;
- Personnel;
- Assembly Equipment.

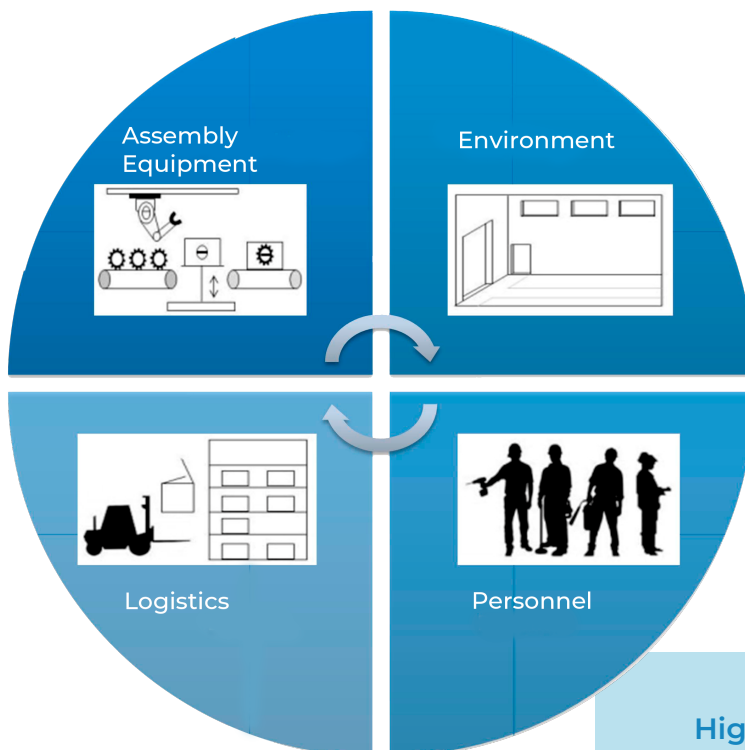
New Technologies, diesel engine, gasoline (ICE), hybrid or electric (EV), demands the high quality control of particles, an small particle can cause a big damage in the system.

INTERNAL AUDITOR TRAINING

Become an Internal Auditor of Cleanliness!



Failure due to defect



SPEAKER

Dipl.-Ing. Fernando Dias, was qualified at Gläser GmbH and Fraunhofer Institute for Manufacturing Engineering IPA (Stuttgart - Germany). Expert in Technical Cleanliness with more than 15 years of experience in this area. Benefit from our many years of experience in the field of Technical Cleanliness!

High power density leads to functional sensitization, higher strain, tight tolerances, more complex components and component functions react increasingly sensitively to particulate contamination.



Assembly Line

At a GLANCE

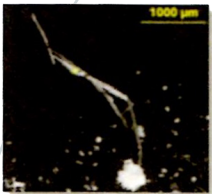
OBJECTIVES OF THE QUALIFICATION

How do I protect my clean components from recontamination?

Training and Consulting VDA 19.2, learn to understand and to apply the topics of VDA 19.2.

The aim of the guideline is to:

- Avoid the generation of critical particulate contamination in sensitive areas.
- Defined room in which the contamination from outside is avoided and systematically be contained and eliminated.
- The method how to reach suitable conditions depending on the cleanliness requirements.
- Cleanliness-oriented regulation with in the area, material and personnel transfer.
- Usually no clean air technology is required.
- Separation from other working areas.
- Protect components and aggregates against the entry of particle from the environment.



Particles from a screw fastening process

You are ready for the future of
automotive sector

Planner

The procedures are not intended, nor are they necessarily suitable, for determining and verifying values for cleanliness limits for environments, processes and surfaces.

Internal Auditor Certification



Material included



**"As clean as necessary, not as clean as possible.
From the inside to the outside."**

We are one of the few service providers who offer you the complete portfolio for Technical Cleanliness. Our portfolio ranges from consulting, training, laboratory trade, consumable and equipment all in one place.

📍 Address

Rua Eçauna 428
Jardim Umarizal
CEP 05754-040
São Paulo/SP | Brasil

✉ E-mail

comercial@engesolutions.com.br

📞 Phone

+55 11 3483-8552
+55 11 3804-0668

