

FB-860.3 Cleaning Conditions

Release: 01.02.2023

Generally, we would like to point out that in addition to the RQDL conditions, we provide our RQDL services exclusively in accordance with our General Terms of Trade (www.pink-vak.de)! By sending us your parts, you hereby declare your agreement.

1. Scope of services RQDL

The cleaning, including the packaging of the components, will follow (and be in accordance with) the requested Zeiss specifications. The following special services are shown in one position, separate from the cleaning process:

- Procurement of materials / purchased parts
- Pre-cleaning / post-cleaning
- Special stain removal
- Cooling tube cleaning according to Zeiss specification
- Leak testing according to Zeiss specification
- Assembly and integration
- Assembly measurement and qualification
- Appliances
- Special expenses for incoming goods subject to inspection
- Photo documentation
- Initial sample test reports or customer-specific certificates
- XPS samples or special process proofs
- Special labels, packaging according to customer requirements
- Storage costs

2. Packaging

2.1 Triple packaging (PE-MBB-PE):

Our service is based on Carl Zeiss SMT Specification 000000-2191-896/25 ("EUV Cleanliness Specification Packaging and Transport"). Please note the information in this document regarding the permitted delivery crates and packaging material. For reasons of environmental protection and product safety, we recommend the use of customised returnable packaging made of approved plastics. When planning, please bear in mind that we, as far as possible, triple-pack the items as follows: Inner foil: PE, middle foil: moisture barrier bag and outer foil: PE. Any foam inlays required must still accommodate the triple-packed part.

2.2 Double PE-Packaging:

Our service is based on Carl Zeiss SMT Specification 000000-2191-896/25 ("EUV Cleanliness Specification Packaging and Transport"). Please note the information in this document regarding the permitted delivery crates and packaging material. For reasons of environmental protection and product safety, we recommend the use of customised returnable packaging made of approved plastics. When planning, please bear in mind that we double-pack the parts in PE foil bags. Any foam inlays required must still accommodate the double-packed part. If special packaging is required (e.g. moisture barrier bag, drying bag, ...) please ask for this specifically.

3. Labelling specification

With regard to labelling, our service is based on Carl Zeiss SMT Specification 1016250 ("Labelling Specification"). The PINK GmbH Vakuumtechnik labels are based on this document.

4. Logistics specification

With regard to logistics, our service is based on Carl Zeiss SMT Specification 2134-920-26-001_V02 ("Logistic specification"). The PINK GmbH Vakuumtechnik logistics are based on this document. Please note that we offer EXW Incoterms®2020 as a standard, meaning that our customers are required to arrange the delivery and collection of their goods.

5. Transport racks and small load carriers

For the safe transport of large-scale parts and small load carriers, corresponding racks are required. These are to be engineered and manufactured following consultation and are not a component element of this offer. They are to be cleaned according to Specification FU1009781 prior of each use. These racks must be available to us prior to the commencement of the order. In addition, attachment points for lifting the components have to be included and agreed upon. Even when packaged in double PE foil, the parts must be transportable. Cleaning can only be carried out once the cleaning and transport racks are available to us.

6. Parts with fine crevices

When dealing with components with fine crevices the customer must ensure these crevices contain no substances prohibited in Zeiss Specification FU1000711. We recommend carrying out a sample cleaning and, where appropriate, tests to ensure the quality of the baseline condition and the cleaning result.

7. Soldered assemblies

The customer must prove that the wet cleaning of soldered assemblies does not result in the leaking of substances prohibited in Zeiss Specification FU1000711. The customer ensures that the solder joints are free from fissures, cavities and crevices which cannot be cleaned. Soldered joints may be prone to corrosion during wet cleaning; therefore, the cleaning process should be tested in advance.

8. Welded assemblies

The customer ensures that the welded joints are free from fissures, cavities and crevices which cannot be cleaned. We recommend a sample cleaning in order to examine the quality prior to and following the cleaning.

9. Coated assemblies

The customer must ensure that the wet cleaning of coated components does not result in the leaking of substances prohibited in Zeiss Specification FU1000711.

10. Anodized surfaces

The structured nature of anodized surfaces facilitates deep-seated residual contamination. Imbedded hydrocarbons, for example, might gas out of these pores and it may not be possible to remove smaller particles. An initial sample inspection is recommended in order to assess the cleaning result.

11. Surface

The fine cleaning processes are carried out in accordance with Zeiss specifications. As we cannot examine each material used by every customer, it is not possible to completely rule out a reaction between the cleaner and impurities on the component. In rare cases this may lead to an optical change (e.g. discolouration) of the surface.

12. Assembly and integration

The customer must provide assembly instructions or assembly drawings when submitting the enquiry, in order for us to be able to evaluate whether this is feasible. Testing stages and the measurement methodology are to be agreed upon.

13. RGA service on items cleaned by the customer

The customer ensures that the parts are adequately cleaned and will not contaminate the RGA chamber or emit substances prohibited in specification FU1000711/FU1009782. A special cleaning procedure of the RGA system due to contamination caused by customer parts is subject to charge. For the smallest chamber size, the estimated price of such a procedure lies at 7.000,00 €.

14. Provision of clean parts

The customer assures that the parts are adequately cleaned and shall hence provide PINK GmbH Vakuumtechnik, free of charge and without request, with all records of particle tests (FU1009781, FU1009782, FU1000711) as well as the RGA results (FU1009782, FU1000711). In case the provided goods are not delivered in accordance with the pre-cleaning specification defined in the offer, we reserve the right to return the parts with a return fee of minimum € 150.00 and maximum € 1,500.00 - depending on the respective effort and volume.