



valid until: January 30, 2031

Fraunhofer

TESTED[®] DEVICE

Roxtec International AB
SLFRS 200 HF MS RAL9016
Report No. RO 2601-1704

DUPLICATE

Statement of
Qualification

Single product
Particle Emission
in Cleanroom
(atmospheric)

Statement of Qualification · Single product

Customer
 Roxtec International AB
 Rombvägen 2
 37165 Lyckeby
 Sweden

Tested product

Category: Cleanroom Facilities

Subcategory: Wall/Ceiling/Floor/Door

Product name: SLFRS 200 HF MS RAL9016 + RS 200 AISI316 WOC + GASKET SLFR/RS 200 SILICONE
 (manufacturing date: quarter 3/2025; color: RAL9016 (White); lubricant: Assembly gel white; parts and article number: SLFRS 200 HF MS RAL9016 (110657), RS 200 AISI316 WOC (RS00200750021), GASKET SLFR/RS 200 SILICONE (105753))

Random sampling of particle emissions (airborne) at representative sites in cleanroom under atmospheric conditions

Standards/guidelines: ISO 14644-1, -14
 The norms stated generally refer to the version valid at the time of the tests.

Test equipment: Optical particle counter:
 LasAir II 110 and LasAir III 110 with measuring ranges $\geq 0.1 \mu\text{m}$, $\geq 0.2 \mu\text{m}$, $\geq 0.3 \mu\text{m}$, $\geq 0.5 \mu\text{m}$, $\geq 1.0 \mu\text{m}$ and $\geq 5.0 \mu\text{m}$

- Cleanroom Air Cleanliness Class (according to ISO 14644-1):..... ISO 1
- Airflow velocity:..... 0.45 m/s
- Airflow pattern:..... vertical laminar flow
- Room temperature: $22 \text{ }^\circ\text{C} \pm 0.5 \text{ }^\circ\text{C}$
- Relative humidity: $45 \% \pm 5 \%$

Test procedure parameters: The system was subjected to stress as follows:

- Structure-borne noise: approx. 50 Hz
- Oscillation velocity (\emptyset): $v = 0.8628 \text{ mm/s}$
- Oscillation acceleration (\emptyset): $a = 0.2520 \text{ m/s}^2$
- Deflection of the system (\emptyset): $s = 0.0690 \text{ mm}$

Test result / Classification

The SLFRS 200 HF MS RAL9016 + RS 200 AISI316 WOC + GASKET SLFR/RS 200 SILICONE is suitable for use under the specified test parameters (room temperature: $22 \text{ }^\circ\text{C} \pm 0.5 \text{ }^\circ\text{C}$; relative humidity: $45 \% \pm 5 \%$) in cleanrooms of the following Air Cleanliness Class according to ISO 14644-1:

Test parameter(s)	Air Cleanliness Class
Structure-borne noise = approx. 50 Hz	1
Overall result	

Please note: Transport damages, incorrect installation, oil leakage; aging behavior, corrosion etc. can influence the test result.

The measuring devices used for the qualification tests are calibrated at regular intervals; their results can be traced back to national and international standards. In cases where no national standards exist, the test procedure implemented complies with the technical regulations and norms applicable at the time of the test. The relevant documentation can be viewed on request at any time.

Detailed information and parameters of the test environment can be found in the Fraunhofer IPA test report.

Fraunhofer Institute for Manufacturing Engineering and Automation IPA

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 Report No. first document

Stuttgart, January 30, 2026
 Place, date of first document issued

Business unit Testing and Certification

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Nobelstrasse 12
 70569 Stuttgart
 Germany

on behalf of 
 Dr.-Ing. Frank Bürger, head of business unit Testing and Certification