valid until: December 19, 2029

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TESTED®
DEVICE

Roxtec International AB
GH 8x1 HF GB/AISI316
Report No. RO 2410-1566

Statement of
Qualification

Single product
Particle Emission
in Cleanroom
(atmospheric)

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Statement of Qualification · Single product

Customer

Roxtec International AB
Rombvägen 2
37165 Lyckeby
Sweden

Component tested

Category: Cleanroom Facilities

Subcategory: Wall / Ceiling / Floor / Door

Product name: GH 8x1 High finish (HF) glass blasted (GB) AISI316 steel frame with Roxylon EPDM modules using assembly gel white and TSL 8x8 butyl strip (manufacturing date: 8/2024; article number: 155331)

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 devices: Optical particle counter:
LasAir II 110 and LasAir III 110 with measuring ranges ≥ 0.1 µm, ≥ 0.2 µm, ≥ 0.3 µm, ≥ 0.5 µm, ≥ 1.0 µm and ≥ 5.0 µm

Test environment parameters:

- 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 °C ± 0.5 °C
- Relative humidity: ..... 45 % ± 5 %

Test procedure parameters:

- Structure-borne noise: ..... approx. 50 Hz
- Oscillation velocity (Ø): ..... v = 0.5300 mm/s
- Oscillation acceleration (Ø): ..... a = 0.1669 m/s²
- Deflection of the system (Ø): ..... s = 0.0280 mm

Test result / Classification

When operated under the specified test conditions (room temperature: 22 °C ± 0.5 °C; relative humidity: 45 % ± 5 %), the GH 8x1 High finish (HF) glass blasted (GB) AISI316 steel frame with Roxylon EPDM modules using assembly gel white and TSL 8x8 butyl strip is suitable for use in cleanrooms fulfilling the specifications of the following Air Cleanliness Class according to ISO 14644-1:

Test parameter(s)	Air Cleanlines Class
Structure-borne noise = approx. 50 Hz	4
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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on behalf of
Dr.-Ing. Frank Bürger, Project Manager Fraunhofer IPA

This document only applies to the named product in its original state and is valid for a period of 5 years from the date the first document was issued. The document can be verified under **www.tested-device.com**.