



Fraunhofer

TESTED[®] DEVICE

VAT Vakuumventile AG
Valve 9450X-XA24-AEY1
Report No. VA 1306-653

DUPLICATE

Statement of
Qualification

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Customer: VAT Vakuumentile AG
Seelstraße 1
9469 Haag
Schweiz

Test results / Classification:
(according to ISO 14644-1)

The Vacuum Valve 9450X-XA24-AEY1 is suitable for use in cleanrooms fulfilling Air Cleanliness Class 5.

Component tested:

Category: Process Equipment
Subcategory: Vacuum Components
Type: Vacuum Valve 9450X-XA24-AEY1

Random check measurements of particle emission (airborne) at representative points

Test procedure: According to VDI 2083 – 9.1, ISO 14644-1
Each standard stated refers to the version valid at the time of testing.

Measuring instruments: Optical Particle Counter:
Model LasAir II 110 with measuring channels of 0.1 µm, ≥ 0.2 µm,
≥ 0.3 µm, ≥ 0.5 µm, ≥ 1.0 µm and ≥ 5.0 µm

Test parameters of the test environment:

- Cleanroom Air Cleanliness Class (according to ISO 14644-1):..... ISO 1
- Air flow velocity:..... 0.45 m/s
- Air flow guidance:vertical unidirectional air flow
- Temperature:22 °C ± 0.5 °C (71.6 °F ± 0.9 °F)
- Relative humidity: 45 % ± 5 %

Test parameters of the test execution:

- Cycle time: 6 s
- Working pressure: 5.5 bar (ultra-pure compressed air)
- Tubing: LEGRIS-6x4-Polyurethane-Calibre-D18-387200205
..... LEGRIS-6x4-Polyurethane-Calibre-D15-329901303
- Tube length: 192 cm

The measuring equipment used for the qualification is regularly calibrated and is based on national and international standards. In the case where no national standards exist, the measuring procedure used corresponds with technical regulations and norms valid at the time of the measurement. The documents drawn up for this procedure are available for viewing.

The validity of this certificate applies only to the mentioned product in this particular condition for a duration of 5 years.
Further information: www.tested-device.com.

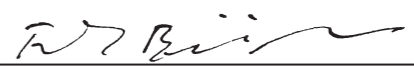
Fraunhofer Institute for
Manufacturing Engineering and Automation IPA

Department Ultraclean Technology
and Micromanufacturing

Nobelstrasse 12
70569 Stuttgart
Germany

Stuttgart, October 28, 2013

Place, Date


i. A.
Project manager

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