



Fraunhofer

TESTED[®] DEVICE

VAT Vakuumventile AG
ATM door 076-50x336 (prototype)
Report No. VA 1206-605

DUPLICATE

Statement of
Qualification

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Customer: VAT Vakuumventile AG
Seelstraße 1
9469 Haag
Switzerland

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

The atmospheric door 076-50x336 (prototype) is in modification 1 suitable for use in cleanrooms fulfilling Air Cleanliness Class 5, and in modification 2 it is suitable for use in cleanrooms fulfilling Air Cleanliness Class 6.

Component tested:

Category: Process Equipment
Subcategory: Vacuum Components
Type: Atmospheric door 076-50x336 (prototype)

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

Test procedure: According to VDI 2083 Part 9.1

Measuring instruments being used: Optical Particle Counter
Model LasAir II 110 manufactured by PMS with measuring channels of
 $\geq 0.1 \mu\text{m}$, $\geq 0.2 \mu\text{m}$, $\geq 0.3 \mu\text{m}$, $\geq 0.5 \mu\text{m}$, $\geq 1.0 \mu\text{m}$ and $\geq 5.0 \mu\text{m}$

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 \pm 0.5 °C (71.6 °F \pm 0.9 °F)
- Relative humidity: 45 % \pm 5 %

Test parameters of the test execution:

- Modification 1:..... Gate with vulcanised seal
- Modification 2:..... Gate with O-ring seal
- 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.

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and Micromanufacturing

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Stuttgart, September 11, 2012
Place, Date


i. A.
Project manager