

## Fraunhofer

# TESTED® DEVICE

VAT Vakuumventile AG ATM Door 076-50x336

Report No. VA 1306-653

Statement of Qualification





### **Statement of Qualification**

Customer: VAT Vakuumventile AG

Seelistraße 1 9469 Haag Switzerland

**Component tested:** 

Category: Process Equipment

Subcategory: Vacuum Components

Type: Atmospheric door ATM Door 076-50x336

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

Test procedure:

Measuring instruments:

Test parameters of the test environment:

Test parameters of the test execution:

According to VDI 2083 – 9.1, ISO 14644-1

Each standard stated refers to the version valid at the time of testing.

Optical Particle Counter:

Model LasAir II 110 with measuring channels of  $0.1 \,\mu\text{m}$ ,  $\geq 0.2 \,\mu\text{m}$ ,  $\geq 0.3 \,\mu\text{m}$ ,  $\geq 0.5 \,\mu\text{m}$ ,  $\geq 1.0 \,\mu\text{m}$  and  $\geq 5.0 \,\mu\text{m}$ 

• Cleanroom Air Cleanliness Class (acc	ording 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 %

•	Cvcle time:	6

•	Working pressure:	5.5 bar (ultra-pure compressed air)
•	Tubing:	LEGRIS-6x4-Polyurethane-Calibre-D18-387200205

LEGRIS-6x4-Polyurethane-Calibre-D15-329901303
Tube length:

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•	Modification	1:	Gate with	vulcanised	seal



Test results / Classification:

(according to ISO 14644-1)

The atmospheric door ATM Door 076-50x336 with a gate with vulcanised seal is suitable for use in cleanrooms fulfilling Air Cleanliness Class 6.

The atmospheric door ATM Door 076-50x336 with a gate with O-ring seal is suitable for use in cleanrooms fulfilling Air Cleanliness Class 6.

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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

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Nobelstrasse 12 70569 Stuttgart Germany Stuttgart, October 28, 2013

Place, Date

i. A. Project manager