



Fraunhofer

TESTED[®] DEVICE

OWAcoustic[®] Universal
Report No. OW 0504-322

DUPLICATE

Statement of
Qualification

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Manufacturer of object to be tested:

Odenwald Faserplattenwerk GmbH
Dr. Freundt-Str. 3
D-63916 Amorbach

Component tested:

Ceiling System

Type:

OWAcoustic® Universal

Test parameters of object to be assessed:

Investigation of airborne particulate contamination during a simulated stress on the specimen by impressing a representative impact sound.

Performed tests:

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

Test results/classification:

Due to the emission of particles, the specimen is suitable for use in cleanrooms fulfilling the specifications of the Air Cleanliness Class ISO Class 4 (according to ISO 14644-1). That is comparable with Class 10 according with US Federal Standard 209E and Class 2 according with VDI 2083 Part.

Standards used for the qualification:

VDI 2083 Part 1 and 8; ISO 14644-1

Test environment:

Cleanroom of Cleanliness Class ISO Class 1 (according to ISO 14644-1)

Air flow velocity: 0.45 m/s
Air flow guidance: vertical unidirectional air flow from ceiling to floor (raised floor)

Temperature: 71.6°F ± 0.9°F
Relative humidity: 45% ± 5%

GC/MS instrumentation: Finnigan MAT ITS 40 with gas-chromatography column type CP-SIL 8CB-MS; 50m x 0,25 ID;
DF = 0,40µm of the Company Chrompack Method of ionisation: Ionisation caused by electron collision

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.



Fraunhofer Institut
Produktionstechnik und
Automatisierung

Fraunhofer-Institut
für Produktionstechnik
und Automatisierung IPA

Abteilung Reinst- und Mikroproduktion
Department Cleanroom Manufacturing

Nobelstrasse 12
D-70569 Stuttgart

Stuttgart, Germany, 4th April 2005

Place, date

Signature of person responsible