



**Fraunhofer**

**TESTED<sup>®</sup>  
DEVICE**

Fehlings Automation GmbH  
Drum feeder DF

**Report No. HM 1204-596**

DUPLICATE

Statement of  
Qualification

# Statement of Qualification

**Customer:** HMPtechnologie GmbH  
Am Eichelgärtchen 36b  
56283 Halsenbach  
Germany

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

The drum feeder DF is suitable for use in cleanrooms fulfilling the Air Cleanliness Class 5.

## Component tested:

Category: Automation Components  
Subcategory: Linear Units  
Type: Drum feeder DF

## 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:

- Cycle of movement: ..... 10/min
- Radius of the drum:..... 155 mm

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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](http://www.tested-device.com).

Fraunhofer Institute for  
Manufacturing Engineering and Automation IPA

Department Ultraclean Technology  
and Micromanufacturing

Nobelstrasse 12  
70569 Stuttgart  
Germany

Stuttgart, June 6, 2012  
Place, Date

  
i. A. Project manager