



valid until: April 19, 2029

# Fraunhofer

## TESTED<sup>®</sup> DEVICE

Canline Systems B.V.

Canline magnellow

**Report No. CA 2404-1511**

DUPLICATE

Statement of  
Qualification

Single product  
Particle Emission

# Statement of Qualification · Single product

**Customer**  
 Canline Systems B.V.  
 Meerheide 216  
 5521 DW Eersel  
 The Netherlands

**Component tested**

Category: Automation Components  
 Subcategory: Transfer Systems and Bearing  
 Product name: Canline magnellow  
 (manufacturing date: 1/30/2023; color: gray/white; article number: 10232345; weight: 116 kg)

## Random sampling of particle emissions (airborne) at representative sites

Standards/Guidelines: ISO 14644-1, -14  
 The norms stated generally refer to the version valid at the time of the tests.

Test devices: Optical particle counter:  
 LasAir II 110 and LasAir III 110 with measuring ranges  $\geq 0.1 \mu\text{m}$ ,  $\geq 0.2 \mu\text{m}$ ,  $\geq 0.3 \mu\text{m}$ ,  $\geq 0.5 \mu\text{m}$ ,  $\geq 1.0 \mu\text{m}$  and  $\geq 5.0 \mu\text{m}$

Test environment parameters:

- Cleanroom Air Cleanliness Class (according to ISO 14644-1):..... ISO 1
- Airflow velocity:.....0.45 m/s
- Airflow pattern:..... vertical laminar flow
- Temperature: .....22 °C  $\pm$  0.5 °C
- Relative humidity: ..... 45 %  $\pm$  5 %

Test procedure parameters:

- Conveying length:..... l = 2679 mm
- Conveying width:..... w = 63 mm
- Minimum Conveying height:..... h<sub>min</sub> = 702 mm
- Maximum Conveying height:..... h<sub>max</sub> = 1594 mm
- Velocity: ..... v = 12 m/min
- Acceleration:..... a = 0.01 m/s<sup>2</sup>

## Test result / Classification

When operated under the specified test conditions, the conveyor system Canline magnellow without safety cover is suitable for use in cleanrooms fulfilling the specifications of the following Air Cleanliness Class according to ISO 14644-1:

Test parameter(s)	Air Cleanliness Class
Conveying length: l = 2679 mm Conveying width: w = 63 mm Minimal Conveying height: h <sub>min</sub> = 702 mm Maximal Conveying height: h <sub>max</sub> = 1594 mm Velocity: v = 12 m/min Acceleration: a = 0.01 m/s <sup>2</sup>	<b>5</b>
<b>Overall result</b>	

Please note: Transport damages, incorrect installation, oil leakage, aging behavior, corrosion etc. can influence the test result.

The measuring devices used for the qualification tests are calibrated at regular intervals; their results can be traced back to national and international standards. In cases where no national standards exist, the test procedure implemented complies with the technical regulations and norms applicable at the time of the test. The relevant documentation can be viewed on request at any time.

Detailed information and parameters of the test environment can be found in the Fraunhofer IPA test report.

Fraunhofer Institute for Manufacturing Engineering and Automation IPA

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Department of Ultraclean Technology and Micromanufacturing

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on behalf of   
Dr.-Ing. Frank Bürger, Project Manager Fraunhofer IPA