



valid until: April 19, 2029

Fraunhofer

TESTED[®] DEVICE

Canline Systems B.V.
Canline mass-conveyor
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 mass-conveyor
 (manufacturing date: 1/30/2023; color: gray/blue; article number: 10231656; weight: 131 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 = 1310 mm
- Conveying width:..... w = 624 mm
- Conveying height:..... h = 1200 mm
- Velocity: v = 18 m/min
- Acceleration:..... a = 0.03 m/s²

Test result / Classification

When operated under the specified test conditions, the conveyor system Canline mass-conveyor 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 = 1310 mm Conveying width: w = 624 mm Conveying height: h = 1200 mm Velocity: v = 18 m/min Acceleration: a = 0.03 m/s ²	5
Overall result	

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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Stuttgart, April 19, 2024
Place, date of first document issued

Department of Ultraclean Technology and Micromanufacturing

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Report No. current document

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Place, current date

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 Germany

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