



Fraunhofer

TESTED[®]
DEVICE

Montech AG
TB40R-400x1500-VR 571673
Report No. MO 2511-1692

DUPLICATE

Statement of
Qualification

Single product
Particle Emission
in Cleanroom
(atmospheric)

Customer	Montech AG Gewerbestrasse 12 4552 Derendingen Switzerland
Tested product	
Category:	Automation Components
Subcategory:	Transfer Systems and Bearing
Product name:	Cleanroom Conveyor TB40R-400x1500-front right 571673 (manufacturing date: 8/2025; conveyor Type: E4/2U0/U2; article number: TB40/3/571673/01; serial number: 571673)

Random sampling of particle emissions (airborne) at representative sites in cleanroom under atmospheric conditions

Standards/guidelines:	ISO 14644-1, -14 The norms stated generally refer to the version valid at the time of the tests.
Test equipment:	Optical particle counter: LasAir II 110 and LasAir III 110 with measuring ranges $\geq 0.1\text{ }\mu\text{m}$, $\geq 0.2\text{ }\mu\text{m}$, $\geq 0.3\text{ }\mu\text{m}$, $\geq 0.5\text{ }\mu\text{m}$, $\geq 1.0\text{ }\mu\text{m}$ and $\geq 5.0\text{ }\mu\text{m}$
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 - Room temperature:22 °C ± 0.5 °C - Relative humidity: 45 % ± 5 %
Test procedure parameters:	- Belt length:l_B = 3080 mm - Belt width:.....w_B = 357 mm - Overall width:.....w = 400 mm - System length:.....l = 1500 mm - Drive unit: head drive - End section:..... knife edge ø16 - Load:none - Max. load:F = 800 N - Belt tension: 0.3 % - Velocity range:..... v = 1 - 33.5 m/min - Parameter Set 1:..... v₁ = 15 m/min - Parameter Set 2:..... v₂ = 30 m/min

Test result / Classification

The Cleanroom Conveyor TB40R-400x1500-front right 571673 is suitable for use under the specified test parameters (room temperature: 22 °C ± 0.5 °C; relative humidity: 45 % ± 5 %) in cleanrooms of the following Air Cleanliness Classes according to ISO 14644-1:

Test parameter(s)	Air Cleanlines Class
v ₁ = 15 m/min	5
v ₂ = 30 m/min	5
Overall result	5

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	MO 2511-1692 Report No. first document	Stuttgart, January 23, 2026 Place, date of first document issued
Business unit Testing and Certification	-- Report No. current document	-- Place, current date
Nobelstrasse 12 70569 Stuttgart Germany	on behalf of Dr.-Ing. Frank Bürger, head of business unit Testing and Certification	