



Fraunhofer

TESTED[®]
DEVICE

STÄUBLI WFT GmbH

Sterimove

Report No. ST 2503-1598

DUPLICATE

Statement of
Qualification

Single product
Particle Emission
in Cleanroom
(atmospheric)

Customer	Stäubli WFT GmbH Industriestrasse 25 92237 Sulzbach-Rosenberg Germany
Tested product	
Category:	Automation Components
Subcategory:	Robotics
Product name:	Sterimove (manufacturing date: 2/17/2025; color: white; weight: 225 kg; article number: V01019688; dimensions: 695 x 769 x 582 mm)

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:	- Parameter Set 1: - Max. reached velocity: v = 1 m/s - Acceleration:a = 300 mm/s² - Deceleration:w = 1000 mm/s² - Attached payload: m = 250 kg - Travel path length:x₁ = 5.1 m; x₂ = 2.1 m - Parameter Set 2: - Included docking station:... DELTA Moov air 03 Wireless Charging System - Loading time: t_L = 120 min - Nominal charging power of the docking station:..... P_{L1} = max. 3300 W - Nominal charging power of the vehicle:.....P_F = 1875 W

Test result / Classification	The mobile pharma robot Sterimove 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
Movement sequence	4
Charging process	4
Overall result	4

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.

Fraunhofer Institute for Manufacturing Engineering and Automation IPA	ST 2503-1598 Report No. first document	Stuttgart, August 5, 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	