



valid until: April 26, 2029

Fraunhofer

TESTED[®] DEVICE

SAMICK PRECISION IND.

LMES25uu

Report No. SA 2308-1446

Single product Particle Emission

DUPLICATE

Qualification Certificate

This is to certify that the product mentioned above, provided by

SAMICK PRECISION IND. CO., Ltd
Daegu, South Korea

has been awarded a Fraunhofer certificate TESTED DEVICE bearing the report number SA 2308-1446.

The linear bushing LMES25uu (color: black) was assessed in compliance with ISO 14644-14. When operated under the specified test conditions, it 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
$v = 0.5 \text{ m/s}; a = 1.0 \text{ m/s}^2$	5
Overall result	

In the course of the particle emission measurements, lubricant leakage was detected on the moving parts of the test piece. In addition to the released airborne particles, this represents a major contamination potential in cleanrooms and the production areas located therein. Therefore, use of the linear bushing in clean/hygienic areas is considered to be critical.

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

SA 1709-944 Stuttgart, February 23, 2018
Report No. first document Place, date of first document issued

SA 2308-1446 Stuttgart, April 26, 2024
Report No. current document Place, current date

on behalf of 
Dr.-Ing. Frank Burger, Project Manager Fraunhofer IPA

This document only applies to the named product in its original state and is valid for a period of 5 years from the current date the document was issued. The document can be verified under www.tested-device.com.

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