



Fraunhofer

TESTED[®] DEVICE

Hanshin Chain Co., Ltd.
RACER PLUS SL-022 HST-FLEX
Report No. HA 1811-1082

Particle Emission

Qualification Certificate

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

Hanshin Chain Co., Ltd.
Siheung-Si, Korea

has been awarded a Fraunhofer certificate TESTED DEVICE bearing the report number HA 1811-1082.

The RoboChain RACER PLUS SL-022 HST-FLEX (color: white) 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 Classes according to ISO 14644-1:

Test parameter(s)	Air Cleanliness Class
$v_1 = 0.5 \text{ m/s}; a_1 = 1.0 \text{ m/s}^2$	1
$v_2 = 1.0 \text{ m/s}; a_2 = 2.0 \text{ m/s}^2$	1
$v_3 = 2.0 \text{ m/s}; a_3 = 4.0 \text{ m/s}^2$	1
Overall result	1

DUPLICATE

This document only applies to the named product in its original state and is valid for a period of 5 years from the date the first 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.

HA 1811-1082
Report No. first document

Stuttgart, January 18, 2019
Place, date of first document issued

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Report No. current document

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Place, current date

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