



valid until: November 10, 2028

# Fraunhofer

## TESTED<sup>®</sup> DEVICE

Rena Technologies  
5-fold endeffector 300 mm  
**Report No. RE 2309-1458**

### Single product Particle Emission

DUPLICATE

### Qualification Certificate

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

**Rena Technologies GmbH**  
Mönchweiler, Germany

has been awarded a Fraunhofer certificate TESTED DEVICE bearing the report number RE 2309-1458.

The 5-fold endeffector 300 mm gripper 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
Switched on vacuum pump Cycle time: t = 50 s Operating pressure: p = 4 bar	1
Switched off vacuum pump Cycle time: t = 50 s Operating pressure: p = 4 bar	1
<b>Overall result</b>	<b>1</b>

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

RE 2309-1458  
Report No. first document

Stuttgart, November 10, 2023  
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



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](http://www.tested-device.com).

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