



Fraunhofer

TESTED[®]
DEVICE

Atlas Copco Tools
Nutrunner QST42-50CT
Report No. AT 1211-623

DUPLICATE

Statement of
Qualification

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Customer:

Atlas Copco Tools Central Europe GmbH
Langemarckstraße 35
45141 Essen
Germany

Test results / Classification:
(according to ISO 14644-1)

The electric fixtured nutrunner QST42-50CT is suitable for use in clean-rooms fulfilling Air Cleanliness Class 4.

Component tested:

Category:

Working Place and Operator

Subcategory:

Work Equipment

Type:

Electric fixtured nutrunner QST42-50CT

Random check measurements of particle emission (airborne) at representative points

Test procedure:

According to VDI 2083 Part 9.1

Measuring instruments:

Optical Particle Counter:
Model LasAir II 110 manufactured by PMS with measuring channels of
≥ 0.1 µm, ≥ 0.2 µm, ≥ 0.3 µm, ≥ 0.5 µm, ≥ 1.0 µm and ≥ 5.0 µm

Test parameters of the test environment:

- Cleanroom Air Cleanliness Class (according to ISO 14644-1):..... ISO 1
- Air flow velocity:.....0.45 m/s
- Air flow guidance:vertical unidirectional air flow
- Temperature:22 °C ± 0.5 °C (71.6 °F ± 0.9 °F)
- Relative humidity: 45 % ± 5 %

Test parameters of the test execution:

- Position: horizontal
- Tool:without
- Angle:360° forward
- Cycle: 14 cycles/min
- Controller:.....Power MACS 4000 controller TC4000-P-ES
- Power supply:..... Power MACS 4000 power supply Main Switch Box