

Fraunhofer

TESTED® DEVICE

Atlas Copco Tools ETD SL 21-07-I06-PS **Report No. AT 1105-553**

Statement of Qualification





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Customer: Atlas Copco Tools Central Europe GmbH

Langemarckstraße 35 45141 Essen Germany

Component tested:

Category: Working Place and Operator

Subcategory: Work Equipment

Type: Tensor ETD SL 21-07-l06-PS with Power Focus 4002

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

Test procedure:

Measuring instruments being used:

Test parameters of the test environment:

Test parameters of the test execution:

According to VDI 2083 Part 9.1

- Optical Particle Counter Model LasAir II 110 manufactured by PMS with measuring channels of \geq 0.1 μ m, \geq 0.2 μ m \geq 0.3 μ m, \geq 0.5 μ m, \geq 1.0 μ m and \geq 5.0 μ m
- Cleanroom of Air Cleanliness Class ISO Class 1 (according to ISO 14644-1)
- Air flow velocity: 0.45 m/s
- Air flow guidance: vertical unidirectional air flow from ceiling to floor
- Temperature: $22 \,^{\circ}\text{C} \pm 0.5 \,^{\circ}\text{C} (71.6 \,^{\circ}\text{F} \pm 0.9 \,^{\circ}\text{F})$
- Relative humidity: $45\% \pm 5\%$
- Horizontal position
- Without tool
- Tool running 250° forward
- 20 cycles/minute



Test results:

(according to ISO 14644-1)

The Tensor ETD SL 21-07-I06-PS with Power Focus 4002 (tested without tool) is suitable for use in cleanrooms fulfilling the Air Cleanliness Class 4.

The measuring equipment used for the qualification is regularly calibrated and is based on national and international standards. In the case where no national standards exist, the measuring procedure used corresponds with technical regulations and norms valid at the time of the measurement. The documents drawn up for this procedure are available for viewing.

The validity of this certificate applies only to the mentioned product in this particular condition for a duration of 5 years.

Further information: **www.tested-device.com**.

Fraunhofer Institute for Manufacturing Engineering and Automation IPA

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Nobelstrasse 12 70569 Stuttgart Germany Stuttgart, June 6, 2011

Place, Date

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