

## Fraunhofer

# TESTED<sup>®</sup> DEVICE

Atlas Copco IT AB QMT41-150-I06 **Report No. AT 2104-1224** 

Statement of Qualification

Single product **Particle Emission** 





## **Statement of Qualification** • Single product

Atlas Copco Industrial Technique AB Customer

Sickla industriväg 19, Nacka

131 54 Stockholm

Sweden

### **Component tested**

Working Place and Operator Category:

Work Equipment Subcategory

Product name: Transducerized Screwdriver QMT41-150-I06

(manufacturing date: week 38/2020; article number: 8432 0843 70; serial

number: B2720145) in combination with:

• Control and drive unit MT FOCUS 6000

(TP09; manufacturing date: week 14/2017; article number:

8432 0851 00; serial number: B9480028)

• MT Power Supply (MT PS 180W-36V) (TP10; manufacturing date: week 30/2017; article number:

8432 0840 02; serial number: B9640581)

## Random sampling of particle emissions (airborne) at representative sites

Standards/Guidelines:

Test devices:

Test environment parameters:

Test procedure parameters:

ISO 14644-1, -14

The norms stated generally refer to the version valid at the time of the tests.

Optical particle counter:

Relative humidity: ....

LasAir II 110 and LasAir III 110 with measuring ranges  $\geq 0.1 \,\mu\text{m}$ ,  $\geq 0.2 \,\mu\text{m}$ ,  $\geq$  0.3 µm,  $\geq$  0.5 µm,  $\geq$  1.0 µm and  $\geq$  5.0 µm

•	Cleanroom Air Cleanliness Class (according to ISO	14644-1):ISO 1
•	Airflow velocity:	0.45 m/s
•	Airflow pattern:	vertical laminar flow
•	Temperature:	22°C±0.5°C

	•	
•	Installation position:	horizonta
	A7 L 2	4000

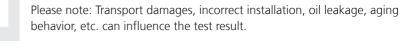
......movement: 15s; break: 5s



### Test result/Classification

When operated under the specified test conditions, the Transducerized Screwdriver QMT41-150-I06 in combination with MT FOCUS 6000 and a MT PS 180W-36V is suitable for use in cleanrooms fulfilling the specifications of the following Air Cleanliness Classes according to ISO 14644-1:

Test parameter(s)	Air Cleanlines Class
Screwdriver:  Installation position: horizontal  Velocity: 1000 rpm  Movement: 15s; Break: 5s	6
Controller	1
Power Supply	1
Overall result	6



The measuring devices used for the qualification tests are calibrated at regular intervals; their results can be traced back to national and international standards. In cases where no national standards exist, the test procedure implemented complies with the technical regulations and norms applicable at the time of the test. The relevant documentation can be viewed on request at any time.

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

Fraunhofer Institute for Manufacturing Engineering and Automation IPA

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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

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