



Fraunhofer

**TESTED[®]
DEVICE**

Sedus Stoll AG
tu-181

Report No. SE 1803-1011

DUPLICATE

Statement of
Qualification

Particle Emission

Statement of Qualification

Customer
 Sedus Stoll AG
 Brückenstrasse 15
 79761 Waldshut-Tiengen
 Germany

Component tested

Category: Working Place and Operator

Subcategory: Chairs

Product name: tu-181 TURN AROUND HIGH DESK CHAIR
 (manufacturing date: 2/14/2018; color: creme; serial number: 0030080079;
 article number: 1503 2203 120 120)

Random sampling of particle emissions (airborne) at representative sites

Standards/Guidelines: ISO 14644-1, -14
 The norms stated generally refer to the version valid at the time of the tests.

Test devices: Optical particle counter:
 LasAir II 110 and LasAir III 110 with measuring ranges $\geq 0.1 \mu\text{m}$, $\geq 0.2 \mu\text{m}$,
 $\geq 0.3 \mu\text{m}$, $\geq 0.5 \mu\text{m}$, $\geq 1.0 \mu\text{m}$ and $\geq 5.0 \mu\text{m}$

Test environment parameters:

- 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 \pm 0.5 °C
- Relative humidity: 45 % \pm 5 %

Test procedure parameters:

- Type of stress applied:pulsating vertical force
- Location of stress impact: midpoint of the seat/backrest
- Seat:
 - Force:.....F = 1200 N
 - Cycles: 12/min
- Backrest:
 - Force:.....F = 350 N
 - Cycles: 12/min

Test result / Classification

When operated under the specified test conditions, the tu-181 TURN AROUND HIGH DESK CHAIR 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
Seat (F = 1200 N; 12 cycles/min)	1
Backrest (F = 350 N; 12 cycles/min)	2
Overall result	2

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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on behalf of 
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