

Test bench for breathing resistance on filtering masks according to DIN EN 149 and DIN EN 13274-3 as well as community face coverings according to CWA 17553

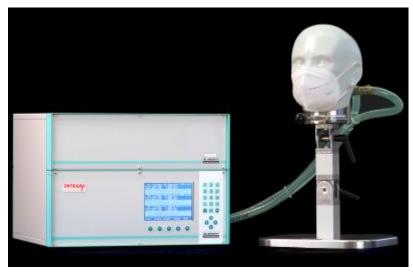






#### **Features:**

With the test bench for breathing resistance on filtering masks according to DIN EN 149 and DIN EN 13274-3 as well as community face coverings according to CWA 17553, exhalation and inhalation processes with a static flow of up to 300 l/min (exhalation) and up to 120 l/min (inhalation) can be simulated. At the same time the resulting pressure in the "mouth area" of the Sheffield-testing-head for breathing resistance can be measured. This enables all breathing resistance measurements to be realized according to DIN EN 149, CWA 17553 and DIN EN 13274-3.



The INTEGRA *DFM 149* test device is based on our INTEGRA test device family, which has been proven in hundreds of applications for years.

256 user-configurable test parameter sets (programs) can be used to test a wide range of requirements of national and international standards and internal factory regulations.

The automated testing process with full automatic monitoring allows tests to be performed by semi-skilled employees. The serial printer interface enables automatic documentation with date and time.

The Sheffield-testing-head is equipped with the measuring tube, as shown in DIN EN 149 and DIN EN 13274-3. The Sheffield-testing-head is swingable up to 90 degrees in all directions. This makes it possible to detect the influence of gravity on valves in masks.



# automated mass-flow and pressure measuring device INTEGRA *DFM 149* (art. no. 1639)

- for measuring the inhalation and exhalation resistance
  - exhalation up to 300 l/min (static)
  - inhalation up to 120 l/min (static)
- full automatic test process with digital specification of all settings
- limit monitoring of all measured values
- 256 test parameter sets for various product variants
- internal data storage and RS232 printer interface for measured value documentation
- mass-flow-control-unit 0...300 l/min with mass-flow precheck, reversible flow direction (Conditions: 23° C / 1000 mbar abs.)
- breathing resistance measuring range ± 20 mbar
- power supply 110-230V / 50(60) Hz; app. 600 W
- vacuum supply min. 120 NI/min at 90 % final vacuum
- supply pressure 6 bar
- size 450mm x 325mm x 380mm (w x h x d)





#### Sheffield – testing – head (art. no. 1638)

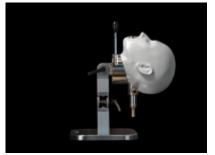
to perform various breathing resistance tests, e.g.

- according to DIN EN 149, §§ 8.9.2, 8.9.3
- according to DIN EN 13274, §§ 7.3.2, 7.3.3

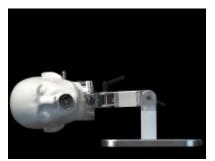
with concentric aspiration-, pressure- and measuring tube in the mouth area

90° swingable: to the front, to the back, to the left, to the right

with hose connections nominal diameter 15 for inhalation and exhalation and nominal diameter 4 for pressure measurement











### Vacuum station for testing according to DIN EN 149, DIN EN 13274-3 and CWA 17553 (art. no. 1647)

- 2 x rotary vane pumps with capacitor-motor, IP54;
  230V +/-10%, 50Hz, 0.35 kW,
- pump capacity: air capacity per pump approx. 10 m³/h against 0 bar (in summary 20m³/h)
- final vacuum -850 mbar (85%) 150 mbar abs.
- housing system "CompactAir" with pull-out bar and solid wheels.
- front cover in aluminium, RAL 7015 colored, main frame parts in aluminium.
- additional 230V power supply socket at the rear (protection via the main fuse of the building 16A)
- on/off switch backlit (green)
- internal vacuum filter and exhaust air silencer
- electrical connection cable with strain relief and safety plug (Schuko) app. L= 1.8 m.





#### **Accessory:**

#### Log printer

- Citizen CBM-910II
- print technology: Dot Matrix
- type: POS printer
- size of letter: 1,08 x 2,4 mm
- colour: white
- lifetime of tape: 200 million letters
- connection technology: cable
- standard interface: parallel
- dimensions: 10.6 x 18 x 8.8 cm
- weight: 470 g





## Dr. Wiesner Steuerungstechnik GmbH

Weststrasse 4 73630 Remshalden – Germany

Phone: +49 7151 9736 - 0 E-Mail: info@drwiesner.de