

determining respirators resistance to dust clogging

Test equipment DOLOMITE

developed on Metabolic breathing simulator
OXY ROBOT platform

APPLICATIONS & INDUSTRIES

- Respirators with anti aerosol and combined filters
- Industrial safety
- RPE certification, research and design



For developers
and manufacturers
of respiratory protective
equipment (RPE)



For certification
bodies and testing
laboratories



For research
centers and
universities



DESCRIPTION

Test equipment «Dolomite» consists of a dust chamber and a breathing machine with an inflatable dummy head for perfect obturation.

The necessary test conditions are created in the dust chamber, and the breathing machine simulates the external breathing of a person with the necessary parameters of the volume and

frequency of lung ventilation, the «exhalation» temperature of 37 °C and relative humidity of at least 95%.

As a result of the test, the time is fixed when the RPE under test has reached the resistance to air flow in the process of dusting. Then you will be able to compare the obtained results with the regulatory requirements for the RPE being tested.

PRINCIPLE OF OPERATION:



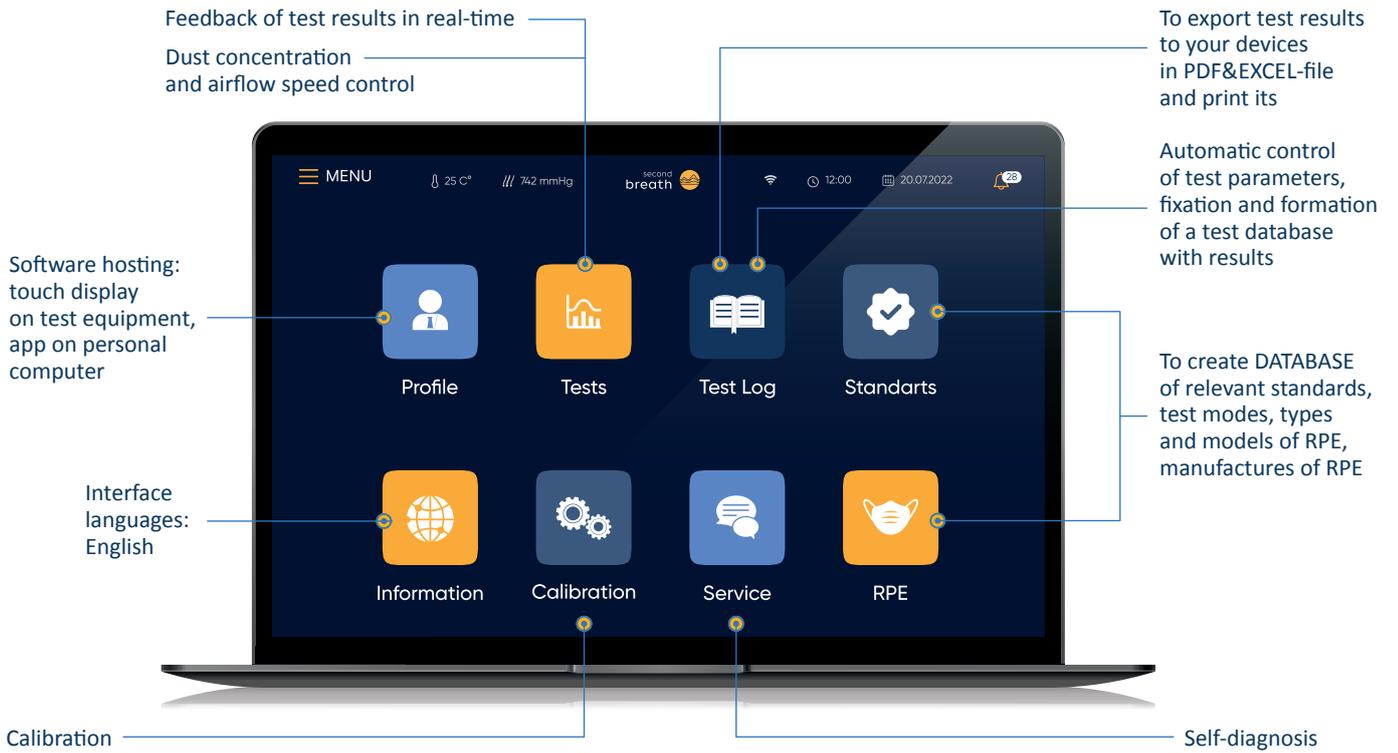
DATA SHEET

SPECIFICATIONS	VALUE	UNIT
Constant air flow through the dust collector	up to 60	m ³ / h
Linear air flow velocity	up to 4	cm / s
Content of dolomite powder in the air near the tested product	300 to 500	mg / m ³
Constant air flow through the tested filter	up to 95,0	dm ³ / min
Breathing depth	0,5 to 3,0	dm ³
Breathing frequency	10 to 40	min ⁻¹
Exhalation humidity	up to 95	%
Exhalation temperature	37	°C
Overall dimensions (length × width × height)	6650×1470×1830	mm
Power supply	50; 230	Hz, V
Power consumption	no more 3	kW
Weight	no more 200	kg
Time to enter the mode	no more 60	min
Average life time	at least 10	years

TERM OF USE	VALUE	UNIT
Ambient temperature	16 to 25	°C
Atmosphere pressure	630 to 800	mm Hg
Relative humidity	30 to 60	%



SOFTWARE PLATFORM POSSIBILITIES



DELIVERY COMPONENTS with test equipment

Name	Q-ty, pcs.
Dummy human head with dust filter	1
Filtration unit with blower	1
Dust generator assembly with power supply	1
Dust concentration control system (aspirator)	1
Trolley	1
Tablet PC with installed software	1
Documentation set	1

The complete set of delivery is given in the instruction manual

RELEVANT STANDARDS*:

EN 149, EN 143, EN 13274-8, EN 405, EN 1827, EN 12941, EN 12942, EN 14387

*meets one or more standards. If you require testing to a standard not listed, please contact us.



WHY TEST EQUIPMENT DOLOMITE?

1. Universal platform for research & quality control of RPE

The software and technical capabilities of the "Dolomite" test equipment are suitable for most tests of filtering masks according to international standards, and in case of changes or new ones, you do not have to partially or completely replace the equipment - the settings are simply and flexibly changed* in the software.

This feature will allow you to conduct tests according to your research scenarios.

*within technical possibilities

2. Modern way of control

To control the test equipment, an application is used on a touch-screen display and the app on a personal computer with a simple and conven-

ient interface in English. It is possible to quickly and easily master the control of the "Dolomite" and involve even a laboratory intern in the work.

3. Saves time for lab staff

Test equipment "Dolomite" software automatically maintains test parameters, records and stores their results, and saves staff time.

4. Increases the productivity of the testing process

Thanks to its own unique development of hardware and software, "Dolomite" quickly comes to the mode (up to 60 minutes), and you can do more tests per day.

5. Lightweight design and advanced ergonomics.

SERVICE



Warranty
from 12 months



Training
of the Customer's staff



Service support
for the entire
period of use



**Development
of the equipment**
according to your terms
of reference



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