

determining the content of CO in the inhaled air

Test equipment MONOXIDE

developed on Metabolic breathing simulator
OXY ROBOT platform



APPLICATIONS & INDUSTRIES

- Filtering self-rescuer
- Fire safety and emergency protection
- RPE certification, research and design

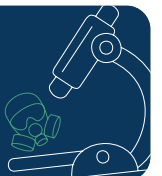
For developers
and manufacturers
of respiratory protective
equipment (RPE)



For certification
bodies and testing
laboratories



For research
centers and
universities



DESCRIPTION

Test equipment «Monoxide» measures the content of carbon monoxide (CO) that has passed through the filter of the RPE in the required time.

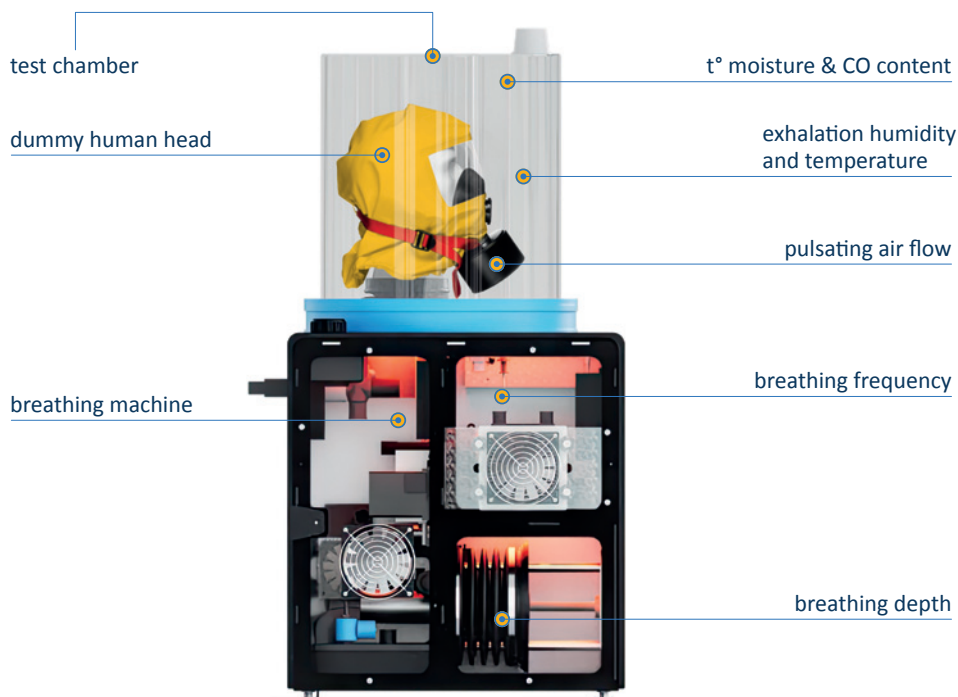
Consists of a test chamber and a breathing simulator with an inflatable dummy head for perfect obturation.

A test atmosphere is created in the chamber with the necessary conditions — temperature, moisture content, volume of carbon monoxide.

The breathing simulator creates a pulsating air flow with the necessary parameters of breathing frequency, breathing depth, temperature and relative humidity on «exhalation».

During the test, the time of the protective action of RPE is determined, i.e. the time from the moment carbon monoxide enters the filter to the moment it appears behind the filter in a breakthrough concentration.

PRINCIPLE OF OPERATION:



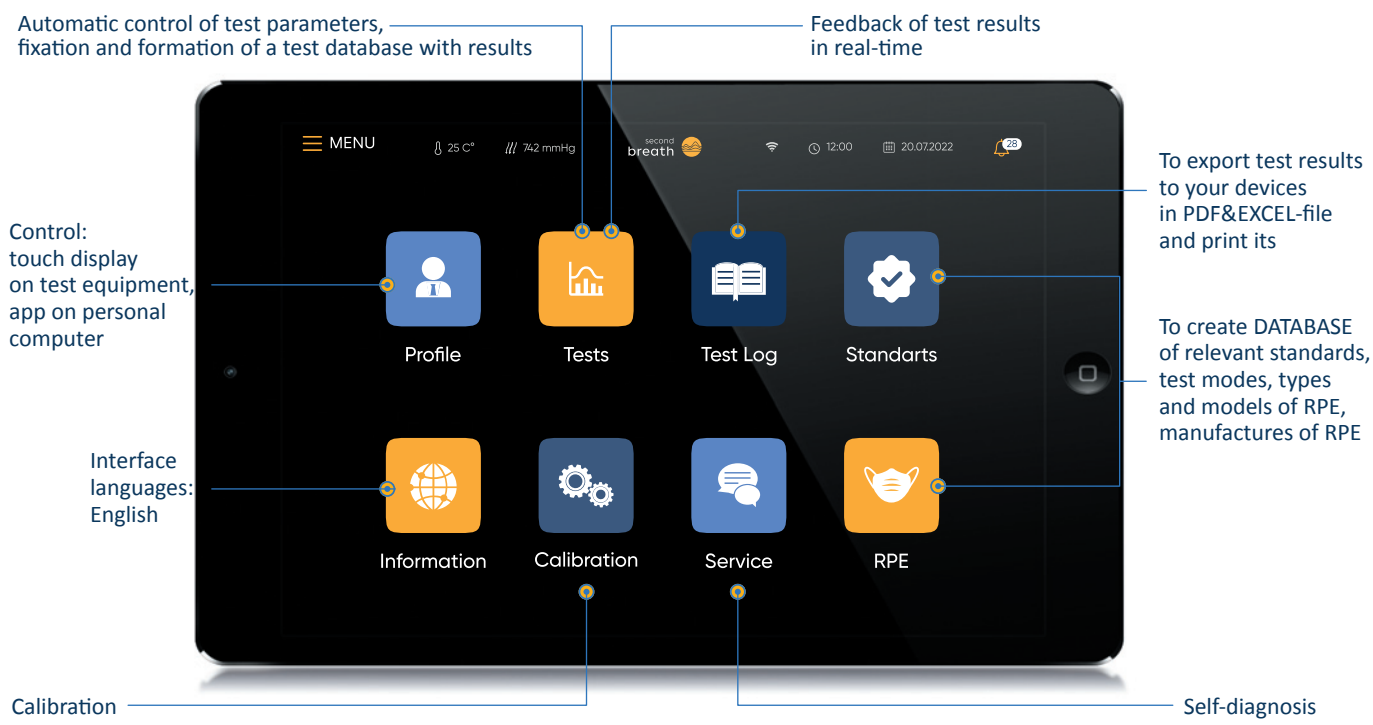
DATA SHEET

SPECIFICATIONS	VALUE	UNIT
Breathing depth	0,1 to 2,0	dm ³
Breathing frequency	10 to 20	min ⁻¹
Volumetric air flow through the chamber	100 or 130	dm ³
Air temperature in the test chamber	25 or 28	°C
Temperature of the exhaled gas mixture	37	°C
Relative humidity of the exhaled gas mixture	95 to 100	% RH
Mass concentration of the moisture in the test chamber at temperature:		
at 25 °C	20,7	g/m ³
at 28 °C	27,0	g/m ³
Volume concentration of the carbon monoxide in the test chamber	0,25 to 1,50	% vol.
Measuring range of the carbon monoxide concentration in the test chamber	0 to 2	% vol.
Measuring range of the carbon monoxide concentration in inhaled Gas-air mixture	0 to 1000	ppm
Overall dimensions (length × width × height)	640×620×1730	mm
Power supply	50; 220	Hz, V AC
Power consumption	no more 2	kW
Weight	no more 50	kg
Time to enter the mode	no more 40	min
Average life time	at least 10	years

TERM OF USE	VALUE	UNIT
Ambient temperature	18 to 22	°C
Atmosphere pressure	630 to 800	mm Hg
Relative humidity	10 to 80	%
The test chamber must be connected to an exhaust ventilation system that provides air flow from the chamber from 6 to 8 m ³ /h, equipped with a carbon monoxide absorber filter FG-70.		



SOFTWARE PLATFORM POSSIBILITIES



DELIVERY COMPONENTS with test equipment

Name	Q-ty, pcs.
Dummy human head	1
Trolley	1
Gas analyzer	1
Tablet PC with installed software	1
Documentation set	1

The complete set of delivery is given in the instruction manual

RELEVANT STANDARDS*:

EN 403, EN 404

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



WHY TEST EQUIPMENT MONOXIDE?

1. Universal platform for research & quality control of RPE

The software and technical capabilities of the «Monoxide» test equipment are suitable for most tests of filtering RPE 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 convenient interface in English. It is possible

to quickly and easily master the control of the «Monoxide» and involve even a laboratory intern in the work.

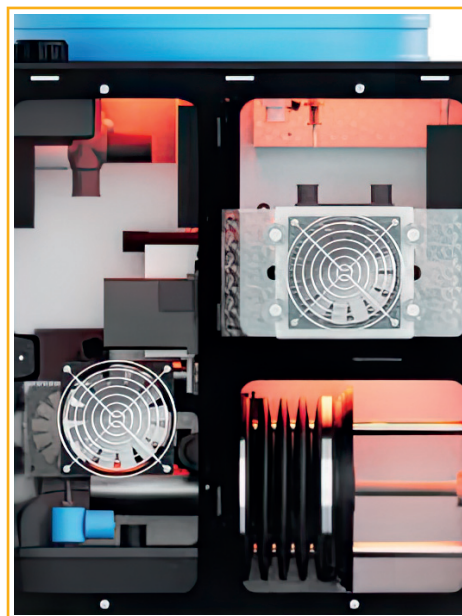
3. Saves time for lab staff

The tests do not require the constant operator presence. Test equipment «Monoxide» software automatically maintains test parameters, records and stores their results.

4. Increases the productivity of the testing process

Thanks to its own unique development of hardware and software, «Monoxide» quickly comes to the mode (up to 40 minutes), and you can do more tests per day.

5. Lightweight design and thoughtful 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

WATCH PRESENTATION VIDEO:

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