

determining total inward leakage

# Test equipment SALT MIST

using sodium chloride aerosol (NaCl) as test agent



## APPLICATIONS & INDUSTRIES

- Anti aerosol full face & half mask
- Half masks with valves and non-removable anti-gas and (or) combined filters
- Filtering self-rescuers
- Industrial safety, 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

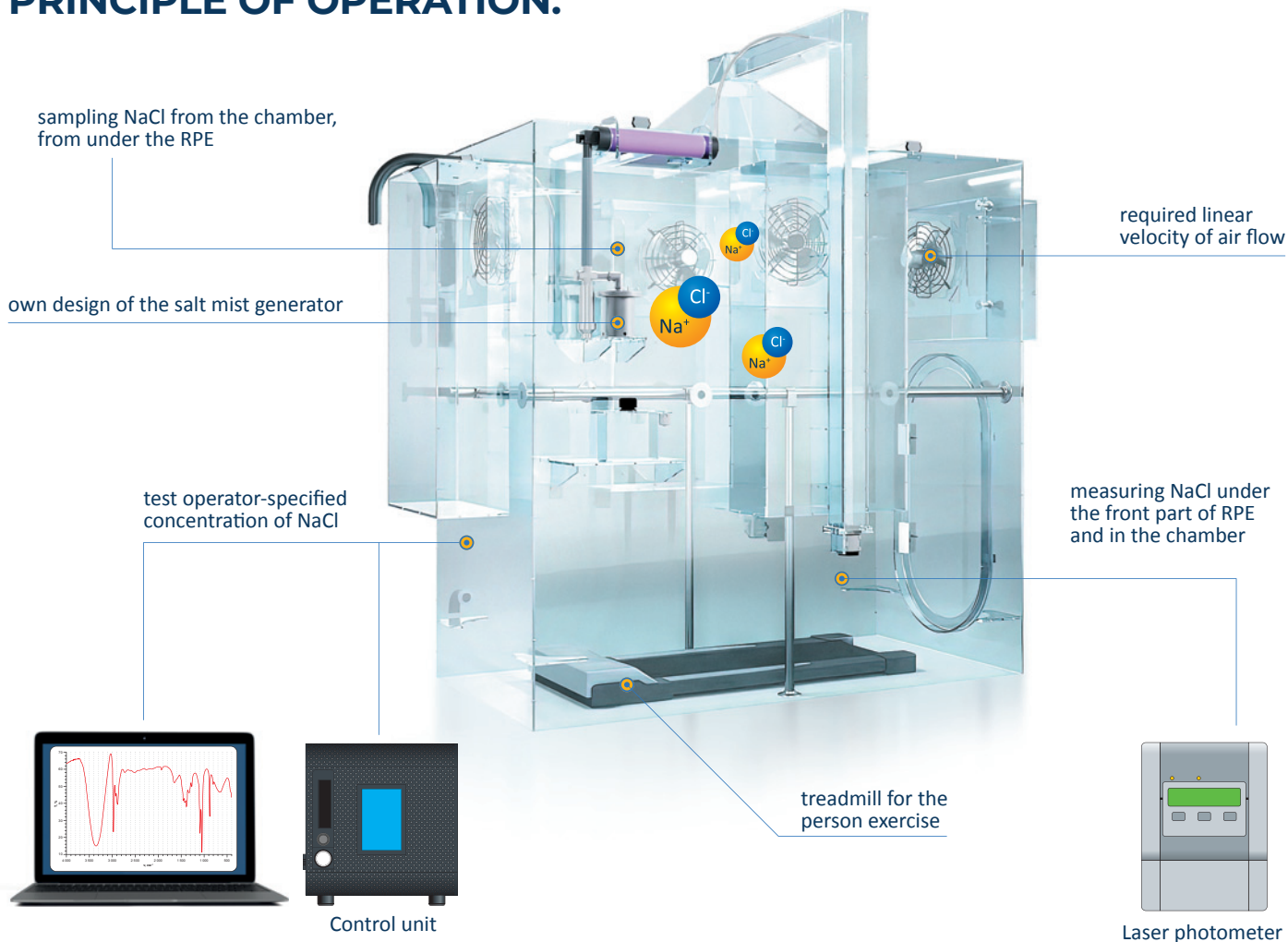


## DESCRIPTION

Test equipment «Salt mist» is intended for testing with persons and determines the leakage of sodium chloride aerosol under the front part of the masks, bypassing the filter — along the obturation strip, through the exhalation and inhalation valves, through the leaky connections of the mask.

During the test, the coefficient of leakage of the test substance under the front of the mask to its content in the chamber atmosphere is calculated.

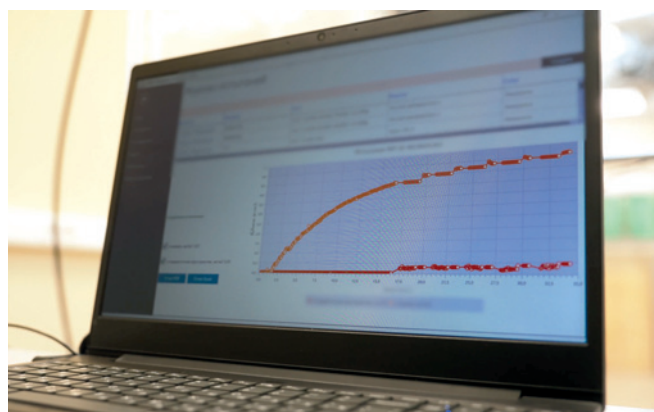
## PRINCIPLE OF OPERATION:



## DATA SHEET

SPECIFICATIONS	VALUE	UNIT
Linear air flow velocity near the head of wearer, when he is in the center of the treadmill, with additional fans turned off	0,12 to 0,20	m/s
Velocity of the additional air flow near the wearer's head with the additional fan turned on	1,80 to 2,20	m/s
Treadmill speed	1 to 6	km/h
The concentration of sodium chloride in the air in the test chamber	4 to 12	mg/m <sup>3</sup>
Sodium chloride particle size distribution range	0,02 to 2,00	μm
Overall dimensions (length×width×height)	2570×1650×2410	mm
Power supply	50; 220	Hz, V
Power consumption	no more 2	kW
Consumption of compressed air	no more 7	nm <sup>3</sup> /h
Time to enter the mode	no more 20	min
Average life time	at least 5	years

TERM OF USE	VALUE	UNIT
Ambient temperature	16 to 32	°C
Atmosphere pressure	630 to 800	mm Hg
Relative humidity	No more 60	%
Supply and exhaust ventilation must operate in the room		



# SOFTWARE PLATFORM POSSIBILITIES

Automatic concentration control; leakage measurement of NaCl, direction, and speed of airflow inside the chamber

Hosting: app on the personal computer


Interface languages: English

Feedback of test results in real-time

To export test results DATABASE to your devices in PDF&EXCEL-file and print its

Automatic fixation and formation of a test database with results

To create DATABASE of relevant standards, test modes, types and models of RPE, manufactures



## DELIVERY COMPONENTS\* with test equipment

Name	Q-ty, pcs.
Treadmill	1
Laser photometer	1
Vacuum pump	1
Salt generator with adsorption dryer	1
Thermal anemometer	1
Control unit	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 13274-8, EN 136, EN 1827, EN 12941, EN 12942

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





## WHY TEST EQUIPMENT SALT MIST?

### 1. Universal platform for research & quality control of RPE

The software and technical capabilities of SALT MIST are suitable for most tests 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

No more manual switching-control of the NaCl aerosol concentration, direction and speed of the airflow inside the chamber is done entirely through an application on a personal computer with an English interface. It is possible to quickly and easily master the control of SALT MIST and involve even a laboratory intern in the work.

### 3. Saves time for lab staff

The software automatically maintains test parameters, records and stores their results, and saves staff time.

It also runs automatically:

- measurement of NaCl aerosol concentration
- measurement of the duration of the inhalation and exhalation phases in the pulse mode of sampling from the front of the RPE
- calculation of the coefficient of leakage of NaCl aerosol when the person performs each exercise

### 4. Increases the productivity of the testing process

Thanks to its own unique development of hardware and software and advanced technologies from the world's best manufacturers test chamber SALT MIST quickly comes to the mode (up to 20 minutes), and you can do more tests per day.

### 5. Ergonomic design

Test chamber is entirely made of plexiglass, which creates a more comfortable environment for the volunteer tester, and communication with him is established through the speaker system built into the treadmill

## WATCH PRESENTATION VIDEO:

[Click here](#)



## 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

