



TESTING PROVIDES SAFETY.  
TESTING EQUIPMENT AND LOGISTICS FOR  
YOUR PERSONAL PROTECTIVE EQUIPMENT.

DETECTION  
PERSONAL PROTECTION  
DIVING TECHNOLOGY  
SYSTEM TECHNOLOGY  
SERVICES

Dräger safety



ST-9910-2006

## Safety is a good feeling.

YOU'RE BOUND TO BE CALLED OUT AGAIN SOONER OR LATER, WHICH IS WHY ALL PERSONAL PROTECTIVE EQUIPMENT MUST BE READY FOR USE AT ALL TIMES AND 100% SAFE.

Personal protective equipment has to be checked regularly by law in most countries. Breathing apparatus and their components such as the lung demand valves, masks and pressure reducers should be tested for leakages and functionality every time they have been used, cleaned or repaired.

Dräger Safety aims to facilitate your workload as much as possible and offers test equipment for your daily maintenance and repairs together with a PC-supported test operation and data management.

Precise and convenient PC-operated universal testing devices for respiratory protective masks (full face), compressed air breathing apparatus, chemical protection suits and closed-circuit breathing apparatus offer you complete safety without any compromise and extend the life-span of your investments.



ST-9572-2006



ST-584-2003



ST-9476-2006



ST-5685-2004



ST-585-2006



ST-584-2006

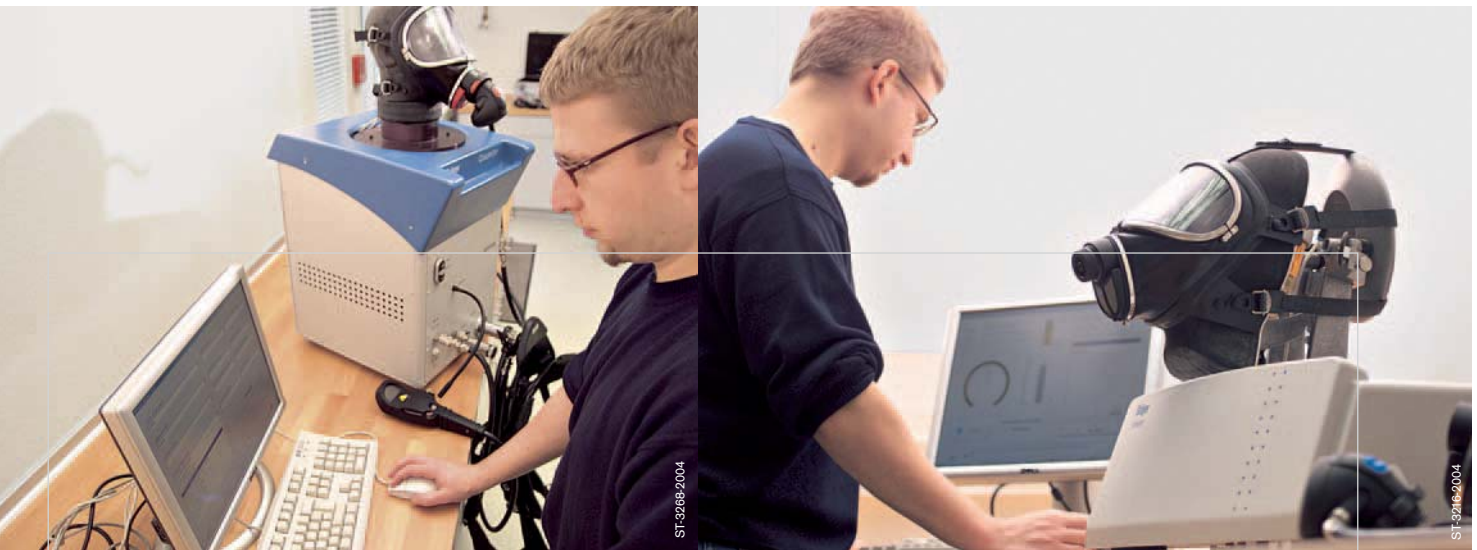
With Dräger Safety test equipment, you can check all conventional breathing apparatus easily.

We will work with you to draw up concepts of how the test equipment can be incorporated into your logistics systems.

In practical training sessions, we show you how to use the test devices and corresponding software correctly and provide you with extensive know-how.

Comprehensive documentation is automatically produced for all tests. This can serve as a record for third parties, but primarily ensures that you can rely on safe protective equipment at all times.

Our service comprises all the stages of the process, from commissioning and system maintenance to repairs, so you can concentrate on what really matters.



## Testing options with Dräger test equipment.

### PERSONAL PROTECTIVE EQUIPMENT

Tests	Dräger Quaestor automatic	Dräger Quaestor III	Dräger Testor 3100	Dräger Testor 2100	Dräger Prestor	Dräger Test-it 6100	Dräger Test-it 4100	Dräger Porta control
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### SCBA

Tests	Dräger Quaestor automatic	Dräger Quaestor III	Dräger Testor 3100	Dräger Testor 2100	Dräger Prestor	Dräger Test-it 6100	Dräger Test-it 4100	Dräger Porta control
<b>Lung demand valve</b>								
Measurement of leakage with positive pressure	•	•	•	•				
Measurement of leakage with negative pressure	•	•	•	•				
Opening pressure	•	•	•	•				
Activity pressure	•	•	•	•				
Static positive pressure	•	•	•	•				
Measurement low pressure (creep test)	•	•	•	•				
Inhalation resistance with variable breathing rate	•	•						
Exhalation resistance with variable breathing rate	•	•						
<b>Pressure reducer</b>								
Static medium pressure	•	•	•	•				
Measurement medium pressure (creep test)	•	•	•	•				
Measurement of the high pressure leakage	•	•	•	• <sup>1</sup>				
Dynamic medium pressure with variable breathing rate	•	•						
Safety valve	• <sup>2</sup>							
<b>Pressure gauge accuracy</b>								
Up to 4 settings	•	•	•	• <sup>1</sup>				



Tests	Dräger Quaestor automatic	Dräger Quaestor III	Dräger Testor 3100	Dräger Testor 2100	Dräger Prestor	Dräger Test-it 6100	Dräger Test-it 4100	Dräger Porta control
<b>Acoustic warning device</b>								
Response threshold when pressure drops	•	•	•	• <sup>1</sup>				
Volume of warning device	•							
<b>Full face masks</b>								
<b>Measurement of leakage</b>								
Positive pressure	•	•	•	•	•	• <sup>3</sup>	•	
Negative pressure	•	•	•	•	•	• <sup>3</sup>	•	
Measurement opening pressure of exhalation valve	•	•	•	•	•		•	
Measurement of breathing resistance	•	•						
<b>CPS<sup>6</sup></b>								
<b>Measurement of leakage</b>								
Suit valves	•	•	•	•				•
Complete CPS	•	•	•	•				•
<b>CCBA</b>								
<b>Additional tests to SCBA</b>								
Response threshold of the low pressure warning	• <sup>4</sup>	• <sup>5</sup>				•		
Inhalation valve	• <sup>4</sup>	• <sup>5</sup>				•		
Exhalation valve	• <sup>4</sup>	• <sup>5</sup>				•		
Drain valve	• <sup>4</sup>	• <sup>5</sup>				•		
Leakage test with positive pressure	• <sup>4</sup>	• <sup>5</sup>				•		
Checking the relief valve	• <sup>4</sup>	• <sup>5</sup>				•		
Constant dosage	• <sup>4</sup>	• <sup>5</sup>				•		
Minimum valve	• <sup>4</sup>	• <sup>5</sup>				•		
Bypass valve	• <sup>4</sup>	• <sup>5</sup>				•		
Checking the residual pressure warning	• <sup>4</sup>	• <sup>5</sup>				•		
<b>Diving equipment</b>								
<b>Additional tests to SCBA</b>								
Response threshold of the resistance warning device while breathing	•	•						

1) Only in combination with a high pressure manometer as accessory

2) Only in combination with the safety valve option for the Dräger Quaestor automatic

3) Only in combination with the test head or test bubble as accessories

4) Only in combination with the safety valve option for the Dräger Quaestor automatic

5) Only in combination with the Flow Option for the Dräger Quaestor III

6) CPS = Chemical protection suit

7) SCBA = Self contained breathing apparatus

8) CCBA = Closed circuit breathing apparatus

## Dräger Quaestor automatic.



GOOD TEST EQUIPMENT NOT ONLY HAS TO BE RUGGED AND EASY TO OPERATE BUT SHOULD ALSO DELIVER QUICK AND RELIABLE TEST RESULTS.

The Dräger Quaestor automatic is a fully automatic test device which is operated comfortably by PC. All tests are performed automatically and step by step.

### Testing options

- Full face masks
- Lung demand valves
- Compressed air breathing apparatus (SCBA)
- Chemicals protection suits
- Closed circuit breathing apparatus (optional)

### Selected performance features

- Fully-automatic leakage and functional tests (high-, medium- and low pressure)
- Testing of breathing resistances and dynamic medium pressure with the help of an integrated artificial lung
- Inflatable test head for a reliable mask tests
- Complete test of a compressed air breathing apparatus including pressure gauge accuracy test in less than 8 minutes
- Measurement of the low-air warning whistle automatically by microphone

- Patented, automatic neck valve to secure conformity with guideline vfdb 0804 on low-pressure tests
- When testing chemical protection suits the Dräger Quaestor automatic not only inflates the suit, it also carries out an automatic pressure adjustment during the slow-down phase



ST-3208-2004

ST-3208-2004

#### Optional utilization of breathing adapter

Alternatively, the dynamic breathing tests of lung demand valves can also be completed without a full face mask, rather using a breathing adapter. This adapter is plugged into the test head mouthpiece and a hose connection provides the contact to the low-pressure sensor in the eye. To attach it to the different lung demand valves the corresponding supplement-adapters are needed.

#### Included software

The testing parameters for the devices – which need to be tested – are lodged in the included software and will be verified automatically during the testing process. As a matter of course, parameters can be changed or added, also for testing other manufacturer's protection equipment. The test sequences as well as the results are depicted graphically on the PC user interface.

After each performed test a corresponding test protocol is generated, which can be printed out if required. Furthermore, the testing history of the breathing protection equipment can be retrieved at any time for statistical needs.

The Dräger Quaestor automatic – produced at our site in Lübeck – offers a complete solution, which increases efficiency and comfort to a high degree.



ST-3271\_2004

The Dräger Quaestor III is a semi-automatic universal test device, which combines PC-operated convenience with precision.

#### Testing options

- Full face masks
- Lung demand valves
- Compressed air breathing apparatus
- Chemical protection suits
- Closed circuit breathing apparatus (as option)

#### Incomparable features

The Dräger Quaestor III has a solid test head as well as a patented neck valve which needs to be operated manually. It decreases the test volume according to guideline vfdb 0804. The integrated artificial lung simulates the human breathing process when testing a compressed air breathing apparatus.

## Dräger Quaestor III.



During the testing process all necessary pressures are generated automatically by the Dräger Quaestor III. As a result, a complete test including pressure gauge accuracy test won't take more than 10 minutes.

### **Included software**

A clear PC user interface and a visual display of the test results facilitate the testing procedure. The testing parameters for the devices - which need to be tested - are lodged in the software and will be verified automatically during the testing process. The Dräger Quaestor III takes care of generating protocols and provides a complete overview of the testing history.

The Dräger Quaestor III can perform leakage tests according to guideline vfdb 0804.