Dräger Quaestor 7000
Test Equipment

All static and dynamic tests of the Dräger Quaestor 7000 are carried out fully automatically. Controlled by the newly developed software each test is carried out intuitively. For the user this guarantees high efficiency through comfort and speed.

- FULLY-AUTOMATIC STATIC AND DYNAMIC TESTS
- COMPREHENSIVE TEST SPECTRUM (E.G. DIVING APPARATUS)
- ERGONOMIC AND FLEXIBLE PRESSURE CONNECTIONS
- FLEXIBLE MICROPHONE TO DETERMINE THE SWITCH-ON POINT OF THE LOW PRESSURE WARNING
- INTUITIVE SOFTWARE WITH COMPREHENSIVE EQUIPMENT MANAGEMENT

THE COMPLETE SOLUTION FOR VERY FREQUENT USE PROVEN IN PRACTICE
Reliable devices for personal protective equipment are the basic requirement for a powerful fire fighting service. With the Dräger Quaestor 7000 a test device is available that, as the flagship of the versatile Dräger test equipment portfolio is essential for every modern respiratory protection workshop with high test volumes. The fully automated and computer-controlled test device provides the complete spectrum of static and dynamic tests for respiratory protection products and relieves the user with maximum comfort benefits during his responsible task. Not only does the Dräger Quaestor 7000 meet a high technical quality standard, it also has been designed in close cooperation with service technicians throughout the world and tailored towards their needs.

COMPREHENSIVE TEST OPTIONS IN MODULAR EXPANSION STAGES
Dräger has developed a modular design providing a suitable solution for every respiratory protection workshop. The Dräger Quaestor 7000 is available in five different versions that in each case test full-face masks, chemical protection suits, airline breathing equipment and compressed air breathing apparatus for functionality and leak tightness. The integrated artificial lung further permits dynamic simulated breathing tests.
Tests of diving apparatus (SCUBA), closed circuit breathing apparatus (CCBA) and safety valves (SV) are options also available. This module can also be retrofitted without difficulties by Dräger Service at a later date. The high-precision and manufacturer-independent measurements are carried out according to EN 137, vfdb guideline 0804 and NFPA 1852.

EXCELLENT USER COMFORT
The fewer additional manual actions are required for the service technician, the more efficient he can design the operational processes. Practice-oriented equipment details characterize the Dräger Quaestor 7000 and provide greatest comfort, speed and first class precision:
- The test process is fully automated. Automatically opening and closing valves accelerate the process and manual intervention is no longer required. An external microphone also automatically captures the switch-on point of the low pressure warning. Thus the service technician can use the time during the test for other activities.
- The test head can be turned without restriction and removed as required. This flexibility allows the user to tailor the test design even more individually and comfortably to his requirements.
- The gel face of the test head which emulates the elasticity of the human facial skin optimizes the tight fit for all common mask sizes.
- The pressure connections of the Dräger Quaestor 7000 are of ergonomic and flexible design. The medium pressure inlet is provided with an extendable hose, to eliminate the risk of leaks and resistance due to additional extension hoses. In addition the rotatable medium pressure outlet reduces the distance between the breathing connection of the lung demand valve and the mask opening or breathing adapter, e.g. if the test head has been rotated by 90 degree.
- A specially designed bracket ensures a comfortable rest position of the gauge or Dräger Bodyguard and the external microphone during the test; this is attached permanently to the Dräger Quaestor 7000 and always guarantees an ideal view of the display area.

SMART ACCESSORIES
With optional accessories the Dräger Quaestor 7000 can be further adapted to your specific requirements and thus extend your user comfort further.
**TECHNICAL DATA/EQUIPMENT**

<table>
<thead>
<tr>
<th><strong>Dräger Quaestor 7000</strong></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Dimensions with test head (D x W x H)</td>
<td>50 x 55 x 65 cm</td>
</tr>
<tr>
<td>Weight (fully equipped with test head)</td>
<td>25 kg</td>
</tr>
<tr>
<td>Permitted temperature (storage)</td>
<td>from -30°C to 60°C</td>
</tr>
<tr>
<td>Permitted temperature (operation)</td>
<td>from 0°C to 40°C</td>
</tr>
<tr>
<td>Permitted air pressure</td>
<td>800 to 1200 hPa</td>
</tr>
<tr>
<td>Permitted humidity</td>
<td>30 to 90% rel. humidity</td>
</tr>
<tr>
<td>Compressed air supply</td>
<td>Buffer bottle or pipework 330 bar stainless steel pipe</td>
</tr>
<tr>
<td>Pressure sensor accuracy</td>
<td>Class ≤ 1.0 according to DIN EN 837</td>
</tr>
<tr>
<td>Pressure ranges</td>
<td>High pressure 0...350 bar</td>
</tr>
<tr>
<td></td>
<td>Medium pressure 0...25 bar</td>
</tr>
<tr>
<td></td>
<td>Low pressure -40...+30 mbar</td>
</tr>
<tr>
<td></td>
<td>Low pressure -70...+30 mbar (diving)</td>
</tr>
<tr>
<td>Flow O₂ for 1-4 l/min (CCBA)</td>
<td></td>
</tr>
<tr>
<td>External cable connections</td>
<td>1 x USB interface to the PC</td>
</tr>
<tr>
<td></td>
<td>1 x 24 V power adapter for 110/230 V power supply</td>
</tr>
<tr>
<td></td>
<td>1 x connection for external microphone</td>
</tr>
<tr>
<td>Breathing frequency of the artificial lung</td>
<td>1 to 40 strokes/min</td>
</tr>
<tr>
<td>Maximum breathing volume</td>
<td>136 l/min</td>
</tr>
<tr>
<td>Tidal Volume</td>
<td>max. 3.4 l</td>
</tr>
</tbody>
</table>
SCOPE OF PERFORMANCES/ORDER INFORMATION

Dräger Quaestor 7000 Standard
PC-supported fully-automatic test instrument for the testing of full-face masks, chemical protection suits, airline breathing equipment and compressed air breathing apparatus R 58 312

Dräger Quaestor 7000 CCBA
PC-supported fully-automatic test instrument for the testing of full-face masks, chemical protection suits, airline breathing equipment and closed circuit breathing apparatus R 58 313

Dräger Quaestor 7000 Scuba
PC-supported, fully automatic test unit for testing full face masks, chemical protection suits, compressed air hose units, breathing apparatus and diving apparatus R 59 165

Dräger Quaestor 7000 Scuba+CCBA
PC-supported fully-automatic test instrument for the testing of full-face masks, chemical protection suits, airline breathing equipment and closed circuit breathing apparatus and diving apparatus R 58 314

Dräger Quaestor 7000 Complete
PC-supported semi-automatic test instrument for the testing of full-face masks, chemical protection suits, airline breathing equipment and compressed air breathing apparatus (including safety valve test at the pressure reducer) closed circuit breathing apparatus and diving apparatus R 58 364

INCLUDED ACCESSORIES

- Multilingual Quaestor test software for the operation of the test stand and equipment management
- High-pressure connections (inlet: 8 mm pipe; outlet 300 bar G 5/8)
- Table mount
- Gauge or Dräger Bodyguard holder on the test device
- External microphone with spiral cable for the automatic detection of the trigger point of the low pressure warning
- Mains cable and PC connection cable

REQUIRED FOR OPERATION

PC meeting the following hardware and operating system conditions
Processor at least 1.6 GHz, main memory at least 2 GB, memory space on the hard disc at least 500 MB, display resolution at least 1024 x 768, Windows XP Professional or later version, USB interface

OPTIONAL ACCESSORIES

- Dräger QSI Box
  Used for the sound insulation of the low pressure warning R 58 382
- Mask/helmet adapter
  Holder to be attached to the test head for all Dräger mask/helmet combinations R 58 116
- Compressed air breathing apparatus holder
  Used to position the compressed air breathing apparatus upright during the test R 57 420
- Breathing adapter
  Enables a positive tightness test in accordance with vfdb 0408 AG 02 535
- Hose CPS-Test
  Necessary to test CPS R61888 (suits with 2 valves) R61889 (suits with 1 valve)

- Wireless barcode scanner AG 02 315
- Wired barcode scanner AG 02 491
- Barcode labels (upon request)
- Transponder reader 65 59 283
- Transponder (upon request)
- Drägerware central workshop 3000 65 39 001
– The Dräger QSI Box* guarantees a sound insulation of the low pressure warning – especially with large test volumes a significantly reduced noise perception by the user. Due to its position next to the test device the Dräger manometer or Bodyguard can easily be placed inside the box before every test in which an electronic or mechanical low pressure warning is activated. The inspection glass and the slightly angled shapes for the manometer or Bodyguard body always ensure the ideal view of the display area.

– As a precaution the test head has already been fitted with two screw-on points to attach a holder for all Dräger mask/helmet combinations when necessary.

– Do you want to work and take care of your back, inspect repair sources directly at eye level and test the compressed air breathing apparatus in the upright position in which it is worn during use? No problem with the compressed air breathing apparatus holder. Without much effort the holder is attached to the left of the test device using the already provided screw-on points and then offers the option to suspend the shoulder harness from the bracket of the holder.

**INTUITIVE SOFTWARE**

The Dräger Quaestor 7000 is easily controlled from the PC. The integral software contains a comprehensive database of preinstalled and, where necessary, amendable device data. The user is guided intuitively with user notices and graphic representations through each individual step of the test sequence. After every completed test a test result report including measuring graphs is created and stored revision-safe for documentation purposes.

Furthermore, the software corresponds to the equipment management requirements today’s modern respiratory protection workshop has. For each respiratory protection product to be tested, individual identification numbers can be assigned, which can additionally be supplemented with location and customer information. An optionally applied test-due list provides timely information about tests that are due. If required, the stored test history of individual respiratory protection products or the equipment inventory can also be viewed at any time. The software also permits a customer-specific design of the test sequences, events and intervals.

*Quaestor Sound Insulation Box*