SmartCHECK **Test Bench**

The Next Generation of Fully Automated Testing





Versatility & Ease of Use



SmartCHECK is the next generation of compact and fully automatic test benches for any SCBA equipment on the market today. A specially designed test head ensures easy handling and the tight fit of full face masks. It features an integrated computer system with touchscreen.

The system software TecBOS.Tech includes a testing Wizard, an intelligent assistant that allows intuitive operation. The user is guided through the smart test-process step by step.

MSA is a full-service provider of personal safety equipment worldwide that offers in-house test bench and software capability. This puts us in a unique position to provide full quality assurance for the entire spectrum of professional safety management. SmartCHECK is MSA's latest development in modular testing and equipment management system solutions.

Versatility

For a wide variety of applications: choose the SmartCHECK version that fulfils your individual needs in testing and select the appropriate software module to optimise your equipment and inventory management.

From one single test bench to a networked workshop solution with several test benches. The SmartCHECK and TecBOS.solutions modular systems adapt to your needs as your range of tasks grow.

Ease of Use

Fully automatic testing and intuitive operation ensure high user friendliness. Additional controls keep track of spare parts and services in combination with integrated monitoring functions.

Operator intervention is possible at all times.

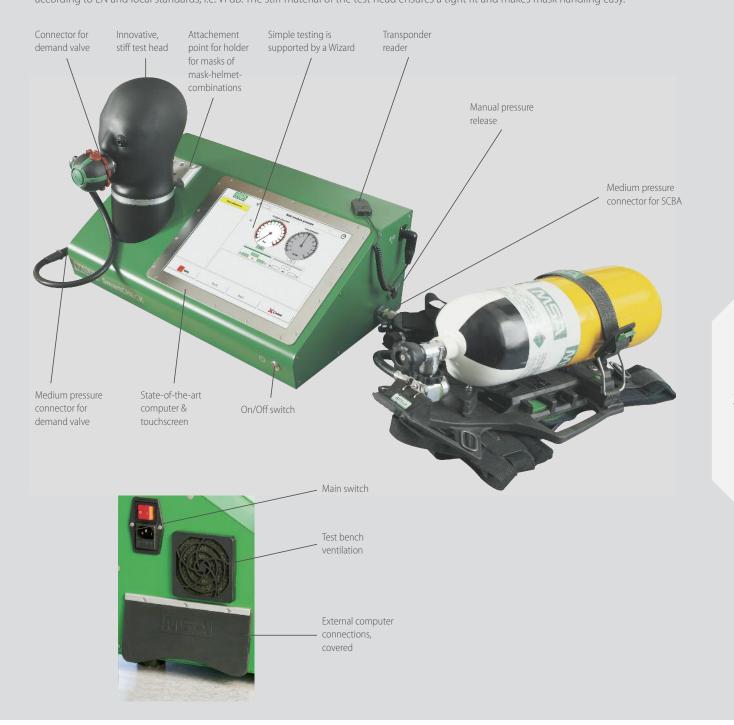




SmartCHECK – Basic Version

The fully automatic basic version of the SmartCHECK offers all standard static tests for low and medium pressure and performs a complete range of tests for:

- full face masks
- lung governed demand valves
- compressed air breathing apparatus
- chemical protective suits
- closed circuit breathing apparatus (AirElite 4h)
- optional: test of closed circuit breathing apparatus with constant dosage according to EN and local standards, i.e. VFdB. The stiff material of the test head ensures a tight fit and makes mask handling easy.

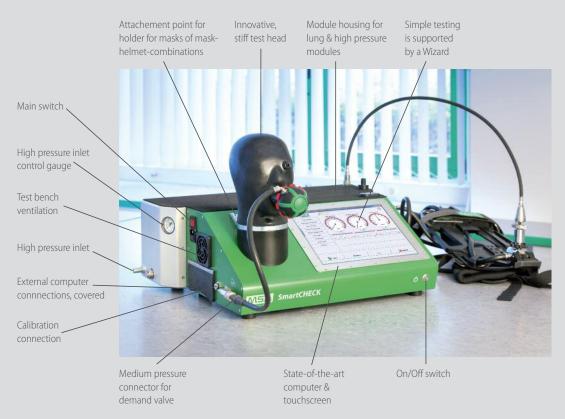


Enhanced Testing Possibilities

SmartCHECK – Modules

The fully automatic SmartCHECK offers all standard tests for low, medium and high pressure. Due to its additional (optional) modules it offers standard dynamic testings and special tests for:

- full face masks
- lung governed demand valves
- compressed air breathing apparatus
- chemical protective suits
- closed circuit breathing apparatus (AirElite 4h)
- optional: test of closed circuit breathing apparatus with constant dosage according to EN and local standards, i.e. VFdB.







Create Your Device according to Your Needs!

SmartCHECK – Basic Version

Full face masks:

Measurement of leak tightness with positive pressure Measurement of leak tightness with negative pressure

Measurement of the opening pressure of the exhalation valve

Measurement of the inhalation resistance with constant flow of 10 l/min

Lung governed demand valves:

Measurement of leak tightness with positive pressure Measurement of leak tightness with negative pressure

Measurement of rise in low pressure

Measurement of the switch over/activation pressure (positive pressure)

Measurement of the static pressure (positive pressure)
Measurement of the opening pressure (negative pressure)

Self contained breathing apparatus:

Measurement of the leak tightness of the medium pressure Measurement of rise in medium pressure

Chemical protective suits:

Measurement of leak tightness with positive pressure

Measurement of leak tightness of the suit valves with negative pressure

Closed circuit breathing apparatus:

Complete test of the MSA closed circuit breathing apparatus AirElite 4h

Transponder Reader

Closed Circuit Breathing Apparatus with Constant Dosage

Device identification using RFID technology 125 kHz

(Extension with measurement of the constant dosage)

Gauge Camera Self contained breathing apparatus:

Closed circuit breathing apparatus:

Complete test of Dräger BG4 EN/BG4 plus

En bloc confirmation and image documentation of the gauge comparisons

Standard High Pressure

Self contained breathing apparatus:

Self contained breathing apparatus:

Self contained breathing apparatus:

See **Standard High Pressure** with extension with: Tests with free-adjustable filling pressures (with air consumption

Measurement of the safety valve opening pressure

Measurement of the safety valve closing pressure

the filling pressure remains stable/will be maintained)

Measurement of the leak tightness of the high pressure Measurement of the opening pressure of the warning signal

Measurement gauge comparison with varying filling pressures including automatic pressure drop

Measurement of the static medium pressure at a specified high pressure $% \left(1\right) =\left(1\right) \left(1\right) \left($

Free-Adjustable High Pressure

Maintenance: adjustment of e.g. warning signals, medium pressure

Safety Valve Test

Artificial Lung

Full face masks:

All devices:

Measurement of the dynamic inhalation and exhalation resistance

Lung governed demand valves:

Measurement of the dynamic inhalation resistance

Self contained breathing apparatus:

Measurement of the dynamic medium pressure

Vacuum Device for Standard High Pressure

Lung governed demand valves:

Measurement of the inhalation resistance with suction and test bench inlet pressure

Lung governed demand valves:

Measurement of the dynamic inhalation resistance

Self contained breathing apparatus:

Measurement of the medium pressure with suction and test bench inlet pressure $% \left(1\right) =\left(1\right) \left(1\right) \left($

Breathing Simulation within Residual Pressure Range

Self contained breathing apparatus:

Dynamic test of pressure reducers and lung governed demand valves within residual pressure range

Vacuum Device for Free-Adjustable High Pressure

Lung governed demand valves:

Measurement of the inhalation resistance with suction and variable high pressure

Self contained breathing apparatus:

Measurement of the medium pressure with suction and variable high pressure

The above-mentioned SmartCHECK components are shown on previous pages. Please see the product photos on pages 3 and 4.

Intelligent Software

The TecBOS.Tech software records and manages e.g. equipment testing dates, upcoming services, all documentation related to work carried out, replacement parts used and test results. By entering the equipment and identifying the users via transponder reader to SmartCHECK, direct testing, without having to go through any intermediate steps, is made possible. This results in greater efficiency and reliability in testing, maintenance scheduling and inventory management of all equipment.

Individualised

A comprehensive database with pre-installed and later easily added equipment (location, service requirements, spare parts) saves time and eliminates the need for interfaces between separate databases.

By selecting a device from the database of different types of equipment, the operator gets all the relevant information: detailed device characteristics, manufacturer, location, users and passed tests.

Network

SmartCHECK test benches and the database can be integrated into a network with other computers and controlled from several PCs in a LAN. Equipment specifications can be updated easily while sharing the same database.

Additional value can be offered through software updates via the Internet and online service support.

Testing

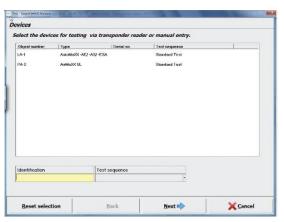
TecBOS.Tech software can be used to test fully automatically any SCBA equipment on the market today. Equipment is entered and identified via keyboard, barcode or transponder reader. The operator is then informed of what tests are due or spare parts required. Preset test sequences can be performed automatically or, alternatively, individual tests can be selected and carried out in detail.

Test sequences and parameters are completely customisable, and the operator can intervene at any time, e.g. repeat particular tests if required. All equipment errors are clearly displayed on-screen, and a full report is generated. The test results are securely stored and can be called up and printed out as necessary.

Smart Assistant

Wizard, the Smart Assistant, ensures a very simple and intuitive operation. The user is guided through each test process. At every step, test sequence instructions are displayed.

Even untrained people can operate the SmartCHECK, as it is almost impossible to make an error when using it.



Smart Assistant with integrated transponder technology.



Comprehensive equipment management, including notifications of services due.

Service

High-level online service and update support is available via the Internet, minimising the need for visits by a service technician.

Upgrade

The SmartCHECK TecBOS.Tech Standard software is an integral part of the extensive TecBOS.solutions package. TecBOS.Tech can be combined with TecBOS.Admin, the application for personnel or incident documentation, or be used in the mobile incident command management tool TecBOS.Command, providing a wide range of possibilities.



TecBOS.Tech

The SmartCHECK comes with the TecBOS.Tech software package of your choice. You can choose between TecBOS.Tech Standard, TecBOS.Tech Professional and TecBOS.Tech Premium.

TecBOS.Tech Standard

- Manual testing
- Automatic testing
- Selective testing
- Pre-installed equipment database
- Clear structure of device types
- Equipment management for BA workshops
- Standard service times
- Maintenance services
- Item administration
- Address management
- Return, outgoing devices and invoicing
- Cost centre interaction
- Terms of payment
- Device exchange

TecBOS.Tech Premium

- Complete inventory management
- Ordering system
- Integrated warehouse management

These features come in addition to the features of the TecBOS.Tech Standard and TecBOS.Tech Professional version, as mentioned above.

TecBOS.Tech Add-Ons

- Mobile management (laptop) with complete synchronisation of the database
- Free selection of database system (ORACLE, Microsoft SQL)
- Interfaces to test benches of other manufacturers available on request

These optional features can only be used in combination with TecBOS.Tech Professional or TecBOS.Tech Premium versions.

TecBOS.Tech Professional

- Open workshop structure (central workshop)
- Location management
- Defect notification
- Multiple Testing
- Device exchange between locations
- Individual mask designer for additional data
- Equipment/user monitoring
- Integrated interval overview



Technical Specifications & Ordering Information

SmartCHECK – Basic Version		
Weight	Approx. 23 kg	
Dimensions	Approx. $600 \times 370 \times 250 \text{ mm}$ (W \times D \times H) H without head Head approx. 220 mm	
Air supply	6–10 bar	
Power supply	100–240 VAC, max. 2.0 A, 50–60 Hz	
Assembly to order code	Scope of delivery 1 SmartCHECK, 1 Silicon oil, 1 Microfibre cloth, 1 Touchpen	

TecBOS.solutions		
10126009	TecBOS.Tech Standard initial license	
10126022	TecBOS.Tech Standard subsequent license	
10126010	TecBOS.Tech Professional initial license	
10126023	TecBOS.Tech Professional subsequent license	
10126021	TecBOS.Tech Premium initial license	
10126024	TecBOS.Tech Premium subsequent license	

For detailed ordering information please contact your local MSA affiliates or visit our new website.

SmartCHECK – Modules (with Lung & Standard High Pressure)		
Weight	Approx. 46 kg	
Dimensions	Approx. 720 x 600 x 250 mm	
Air supply	Medium pressure 6–10 bar High pressure 290–315 bar	
Power supply	100–240 VAC, max. 2.0 A, 50–60 Hz	
Assembly to order code	Scope of delivery 1 SmartCHECK with module housing, 1 Silicon oil, 1 Microfibre cloth, 1 Touchpen, 1 Lung module, 1 Standard High Pressure module	

SmartCHECK – Modules (with Lung & Free-Adjustable High Pressure)		
Weight	Approx. 50 kg	
Dimensions	Approx. 720 x 600 x 250 mm	
Air supply	Medium pressure 6–10 bar High pressure 290–315 bar	
Power supply	100–240 VAC, max. 2.0 A, 50–60 Hz	
Assembly to order code	Scope of delivery 1 SmartCHECK with module housing, 1 Silicon oil, 1 Microfibre cloth, 1 Touchpen, 1 Lung module, 1 Free-Adjustable High Pressure module	

Accessories & Spare Parts		
10108449	SmartCHECK – CPS Leak Test Accessory	
10108450	SmartCHECK – CPS Valve Leak Test Accessory	
10108185	SmartCHECK – AirElite Leak Test Accessories	
10108526	Holder for MHC masks, complete, SmartCHECK	
10093710	Dust filter, pkg 2 pcs, spare, SmartCHECK	
10115053	Silicon oil/bottle 100 ml	
10109451	Microfibre cloth 40 x 40 cm SmartCHECK	
10144996	SmartCHECK – Test Adapter LGDV Rd 40	
10144998	SmartCHECK – Test Adapter LGDV M 45 x 3	
10145001	SmartCHECK – Test Adapter LGDV 88, 96 AS	
10145002	SmartCHECK – Test LGDV AutoMaXX AS	
10145000	SmartCHECK – Test Adapter LGDV ESA	
10096973	High Pressure Supply Line	
D2055754	Plug Screw, Thread Rd 40	
D2055755	Plug Screw, M 45 x 3	
D5175524	Adapter, Plug, Mask Leak Test, LGDV 88, 96 AS	
10035659	Adapter, Mask Leak Test, PS-MaXX	
10144992	SmartCHECK – High Pressure Test Line SCBA	
10144993	SmartCHECK – SCBA Test Adapter 200 bar	
10144994	SmartCHECK – SCBA Test Adapter 300 bar	
10144987	SmartCHECK – Log-On Cards, Starter Set	
	Further accessories such as test adapters and spares on request	

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