

HydroTest SCBA-600

Automated Hydrostatic Test Bench for SCBA Cylinders



The HydroTest SCBA-600 by Arete Technologies is a next-generation hydrostatic pressure testing system engineered for the periodic inspection and certification of SCBA composite, semi-composite, and steel cylinders.

Designed specifically for cylinders up to 8 L in volume and larger capacities available upon request.

Key Advantages

- Simultaneous testing of up to two SCBA cylinders
- Optimized test cycle completed in less than 4 minutes
- Equipped with both digital and mechanical pressure gauges.
- Digital sensor for measuring cylinder volumetric expansion during testing.
- Test pressures up to 500 bar

Fully Automated Operation

Once the cylinders are connected, the HydroTest SCBA-600 automatically performs the complete test sequence, minimizing operator involvement and reducing the possibility of human error.

Built for Industrial Environments

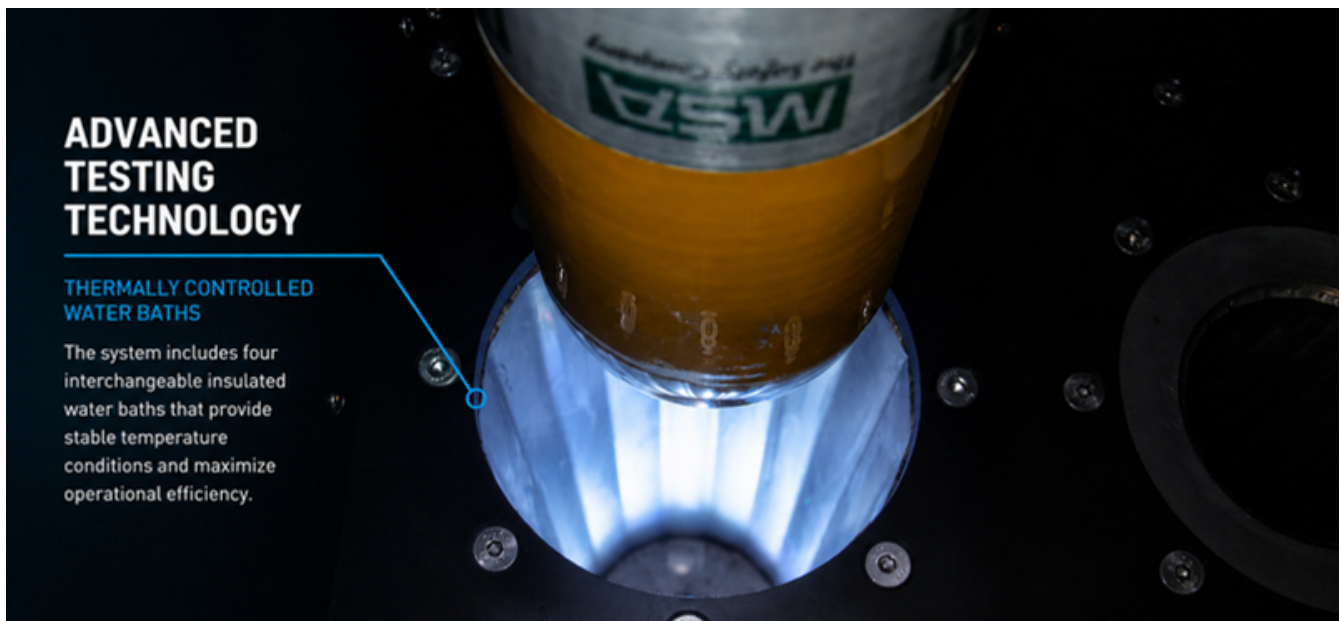
The system frame and critical components are manufactured from stainless steel and aluminum, ensuring:

- Long service life
- Corrosion resistance
- Minimal maintenance requirements



Precision Hydraulic System

- High-pressure hydraulic pump
- Integrated soft-start technology
- Smooth and controlled pressure build-up
- Enhanced equipment longevity



Integrated Filtration

A high-efficiency water filtration system maintains clean testing conditions and ensures measurement consistency throughout operation.

Pneumatic and Compressor Systems

Secure Cylinder Handling

The HydroTest SCBA-600 incorporates a pneumatic clamping mechanism that securely holds cylinders during valve removal and installation procedures.

Dual Compressor Configuration

- Primary compressor delivering a minimum operating pressure of 6 bar
- Secondary high-pressure compressor adjustable from 450 to 600 bar

Inspection and Identification

Integrated Weighing System

Accurate cylinder mass measurement with calibration capability.

Endoscopic Internal Inspection

Built-in endoscope system enables internal cylinder examination with direct image capture and storage within the software database.

Cylinder Identification and Traceability

- Integrated marking device
- Barcode scanner for automatic cylinder registration
- Complete traceability throughout the inspection process



Intelligent Control Software

The HydroTest SCBA-600 is controlled through an industrial-grade computer running Windows 11 and dedicated Arete Technologies software.

Software Features

- Full process automation
- Real-time test visualization
- SQL database storage
- Individual and batch report generation
- Multilingual interface (English / Latvian)
- Remote diagnostics and technical support
- Software updates included for a minimum of 2 years
- Integrated emergency stop system

TESTING SOFTWARE

Advanced software for managing and controlling cylinder testing processes.

Real-time data tracking, test history, and automated reporting for maximum efficiency and compliance.



Compliance

The HydroTest SCBA-600 is designed to comply with:

EN ISO 11623

Gas cylinders – Composite construction – Periodic inspection and testing

and other applicable international inspection standards.

Warranty and Support

Arete Technologies provides comprehensive after-sales support, including:

- Minimum 24-month warranty
- Coverage for equipment, software, and all supplied components
- Scheduled maintenance during warranty period
- Detailed maintenance documentation and service checklists
- Remote technical assistance

Reliable Testing for Critical Safety Equipment

The HydroTest SCBA-600 combines automation, precision measurement, advanced data management, and operator safety in a single integrated solution.

Developed by Arete Technologies, it delivers dependable hydrostatic testing performance for organizations responsible for maintaining SCBA cylinders in firefighting, rescue, industrial, and safety-critical applications.

A request to receive information by email
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