













Anaerobic Chambers



Anaerobe Systems

A BIOLOG <u>BRAN</u>D

biolog

Maintaining an Oxygen-Free Environment

Our best-in-class anaerobic chambers provide an oxygen-free work area for the growth and handling of obligate and facultative anaerobic organisms. Our unique InstaSleeve[™] technology allows an operator to work with their arms inside the oxygen-free environment, and perform tasks with the same dexterity as they would have on a standard laboratory bench, without exposing the microbes or culture media to oxygen. With two models to choose from and flexible configuration options for both, our chambers can provide oxygen-free comfort no matter your throughput needs.



Unmatched Anaerobic Expertise

Anaerobic organisms play critical roles in health and disease pathology of humans and animals, as well as important roles throughout Earth's ecosystems. Isolating and culturing these fastidious organisms with consistent results requires a specialized environment.

Researchers and clinicians working with anaerobic organisms in any sector benefit from Anaerobe Systems' decades of experience with designing, building, and working in anaerobic chambers.

With the purchase of every chamber, we perform on-site installation and basic user training. Also available is a 2.5 day hands-on lab-based training course. This is a unique way to learn from the experts all the most important considerations for successfully working with anaerobes inside the chamber.

CLINICAL DIAGNOSTICS	
BASIC RESEARCH	
INDUSTRIAL MICROBIOLOGY	



Key Features of AS-500

Environmental Conditioning

Circulation system includes oxygen removal, HEPA filtration, hydrogen sulfide and odor removal, as well as excess humidity removal. Palladium catalyst has a built-in heater and does not need to be baked or replaced regularly.

InstaSleeve[™] Technology

Gloveless design improves sample handling and processing dexterity, while providing instant access to the chamber. Positive pressure inside the chamber and arm seals ensure a continuous anaerobic environment with easy and comfortable access, even allowing for small items and supplies to be brought directly into the chamber. Change the sleeve cuff size as needed for different operators, while maintaining an anaerobic environment.

Monitoring and Alarms

Sensors monitor a variety of chamber functions to notify you when systems are not functioning optimally, including oxygen level, gas usage, incubator temperature, gas line pressure, incubator and circulation fans, and catalyst activity.

Modular Expansion

A continuous second workspace can be attached to the chamber, forming the AS-500 XL configuration that provides space for a second person to work in the chamber or to accommodate additional analytical equipment.

Built-in Incubator

500-plate capacity incubator inside the anaerobic work area keeps the rest of the workspace at room temperature. Multiple removable shelves allow for taller items to be incubated.



Lab Integration

Data and power ports allow analytical equipment to be used inside the chamber while interfacing with an external computer. An optional touchscreen computer monitor can be installed inside the chamber.

Touchscreen Controls

A large LCD touchscreen provides for operator interaction with the chamber to run processes and monitor chamber conditions. A smaller interior touchscreen allows the operator to start a passbox cycle from inside the chamber.

Airlock

Large vacuumless passbox with automatic sliding inner door and a slide-out tray runs an automatic cycle to remove oxygen, allowing you to bring supplies into the chamber.

Ergonomic Design

Bright LED lighting, adjustable and removable shelves, and large oval armports all lead to efficient and comfortable work conditions inside the chamber.

Durable

Rigid metal and plexiglass construction is easy to clean, and holds up for 15+ years

Compact

Smaller footprint while still providing a large and versatile anaerobic work environment.

Key Features of AS-150

Smaller Footprint

Smallest footprint that fits easily on any lab countertop, while also providing sufficient anaerobic work environment.

InstaSleeve™ Technology

Gloveless design improves sample handling and processing dexterity, while providing instant access to the chamber. Positive pressure inside the chamber and arm seals ensure a continuous anaerobic environment with easy and comfortable access, even allowing for small items and supplies to be brought directly into the chamber. Change the sleeve cuff size as needed for different operators, while maintaining an anaerobic environment.

Incubator

144-plate capacity separate incubator inside the work area keeps the rest of the chamber at room temperature.

Airlock

The large vacuumless passbox runs an automatic cycle to remove oxygen, allowing supplies to be brought in without introducing oxygen.

Visual Alarms

Color changing LCD screen lights up to indicate when the passbox doors are left open or the gas tank is empty.

Touchscreen Controls

External screen indicates incubator temperature and airlock status, and allows running of processes and calibration.

Durable

Rigid metal and plexiglass construction is easy to clean, and holds up for 15+ years.

Modular Expansion

A continuous second workspace can be attached to the chamber, providing space for a second person to work in the chamber or to accommodate additional analytical equipment.

AS-500 SPECIFICATIONS

Chamber Dimensions & Weight		Airl	ock / Passbox
Exterior Dimensions	Std: 61" W x 32" D x 39" H (155 cm W x 81 cm D x 99 cm H) XL: 104" W x 32" D x 39" H (264 cm W x 81 cm D x 99 cm H)	Outer Opening Dimensions	11.2" W x 11.6" H (28.4 cm W x 29.5 cm H)
Inside Work Surface	Std: 42" W x 28" D x 30" H (107 cm W x 71 cm D x 76 cm H) XL: 86" W x 28" D x 30" H (218 cm W x 71 cm D x 76 cm H)	Inner Opening Dimensions	11.2" W x 11.8" H (28.4 cm W x 30.0 cm H)
Incubator Height Above Floor	10.5″ (26.7 cm)	Airlock Interior Dimensions	14" W x 11" D x 12" H (36 cm W x 28 cm D x 30 cm H)
Storage	2 adjustable shelves	Cycle Time	3 minutes
Armports	10″ (25cm) dia. Equivalent	Cycle Operation	Vacuumless, auto cycle
Weight	300 lbs (136 kg)	Accessibility	Slide out tray & automatic motorized inner door
Incubator		Electrical	
Interior Dimensions	26″ W x 12″ D x 15.75″ H (66 cm W x 30 cm D x 40 cm H)	Voltage	120/240VAC, 50/60Hz
Plate Capacity	500 petri plates	Power	1,300 watts
Temperature Range	Room Temp to 45 °C	Interior Power	Standard 4 120/240 VAC outlets (4A max) XL 3 additional 120/240 VAC outlets (10A max)
Temperature Control	+/- 1.0 °C throughout 0.1 °C setpoint resolution	Power Cable	Country and voltage appropriate
Storage	3 removeable shelves	Interior Connections	HDMI, USB, Ethernet
Monitoring	External display with alarms	Lighting	Integrated LED lights

AS-150 SPECIFICATIONS

Chamber Dimensions & Weight		Air	lock / Passbox
Exterior Dimensions	49″ W x 25″ D x 25″ H (124 cm W x 64 cm D x 64 cm H)	Outer Opening Dimensions	8.0" W x 7.5" H (20 cm W x 19 cm H)
Inside Work Surface	36″ W x 23″ D (91 cm W x 58 cm D)	Inner Opening Dimensions	8.0″ W x 8.5″ H (20.3 cm W x 21.6 cm H)
Incubator Height Above Floor	12.5" (31.75 cm)	Airlock Interior Dimensions	10.5″ W x 10.0″ D x 8.5″ H (26.7 cm W x 25.4 cm D x 21.6 cm H)
Armports	7.5″ (19.0 cm) circular opening	Cycle Time	2 minutes
Weight	200 lbs (91 kg)	Cycle Operation	Vacuumless, auto cycle
Incubator		Electrical	
Interior Dimensions	24" W x 8.5" D x 7.6" H (60.1 cm W x 21.6 cm D x 19.3 cm H)	Voltage	120/240 VAC, 50/60 Hz
Plate Capacity	144 petri plates	Power	720 watts
Temperature Range	Room Temp to 45 °C	Interior Power	2 standard 120/240 VAC outlets
Temperature Control	+/- 1.0 °C throughout 0.1 °C resolution	Power Cable	Country and voltage appropriate
Indicator	External temp display		

KEY DIFFERENCES BETWEEN AS-150 AND AS-500 ANAEROBIC CHAMBERS

	AS-150	AS-500
Size of internal workspace	36" x 24" (91 cm x 61 cm)	42" x 29" (107 cm x 74 cm)
Incubator Capacity	Holds 144 plates	Holds 500 plates
InstaSleeve™ Arm Access	7.5″ (19.0 cm) diameter ports	10″ (25 cm) diameter ports that provide more mobility and comfort
Oxygen removal	Palladium catalyst must be baked daily to regenerate	Self regenerating palladium catalyst with automated self-test; no daily maintenance needed.
Air filtration	No filtration	Built-in HEPA and H ₂ S filters
Oxygen sensor	None - use disposable indicator strips	Built-in digital oxygen sensor
Airlock	Standard door	Automatic sliding inner door, slide out tray, and internal touchscreen for ease of use

AKT-AS 101 Rev C

Biolog for Anaerobic Excellence

Find out how at anaerobesystems.com

biolog

BIOLOG INC.

21124 Cabot Blvd. Hayward, CA 94545 +1 800 284 4949



Anaerobe Systems THE OXYGEN-FREE SPECIALISTS A BIOLOG BRAND

ANAEROBE SYSTEMS

15906 Concord Circle Morgan Hill, CA 95037 +1 800 443 3108