anaerobic hypoxic workstation with two gloves for use

The anaerobic hypoxia workstation creates an anaerobic or microaerobic state by accurately adjusting the oxygen and carbon dioxide concentration in the chamber, which is suitable for the cultivation, transgeneration and observation of a variety of microorganisms.

Anaerobic Hypoxia Workstation Overview

The anaerobic hypoxia workstation meets the needs of national standard microorganisms such as **Shigella, Campylobacter jejuni, Clostridium perfringens, Clostridium botulinum, and Lactobacillus** in different temperature and gas environments. It is widely used in scientific research, clinical, and industrial testing.

Main Features

1. Precise oxygen concentration control: Built-in highly sensitive sensors, real-time monitoring and automatic adjustment, replicating low oxygen states.
2. CO_2 concentration regulation: Precise gas mixing, optimizing the cellular respiratory environment for healthy growth.

3. Intelligent humidity management: Fully automatic humidity control to prevent cultures from drying or over-wetting.
4. Various operation modes: Supports sleeveless and traditional sleeve operation for flexibility and safety.
5. Multi-mode environment switching: Flexibly switch between anaerobic and low-oxygen modes as needed.
6. High-efficiency clean filtration: Optional HEPA device to prevent external pollutants.
7. Double glove design: Equipped with two gloves for efficient two-handed operation.

Working Conditions

- Power: 220V, 50/60Hz, 4A
- Environment: Ambient temperature 25°C, humidity <90%

Advantages

1. Strong environmental stability: Advanced gas regulation and catalytic system ensures long-term stable anaerobic/low-oxygen environment.
2. Wide strain applicability: Suitable for diverse microorganisms, including clinical pathogens and industrial fermentation strains.
3. Safe and efficient operation: Sleeveless system reduces leakage risk, improves safety and flexibility.

4. Energy saving and environmental protection: Intelligent gas and humidity control reduces consumption and increases efficiency.

Working Principle

1. Gas replacement: Vacuum pumps remove air, then inject nitrogen, hydrogen, and carbon dioxide as needed to quickly establish desired environment.
2. Catalytic deoxygenation: Hydrogen reacts with residual oxygen under catalyst, producing water and further reducing oxygen.
3. Automatic humidity control: Built-in humidity sensor and device for real-time detection and adjustment.
4. Gas concentration feedback: Sensors continuously monitor concentrations; control system dynamically adjusts mixture for stability.