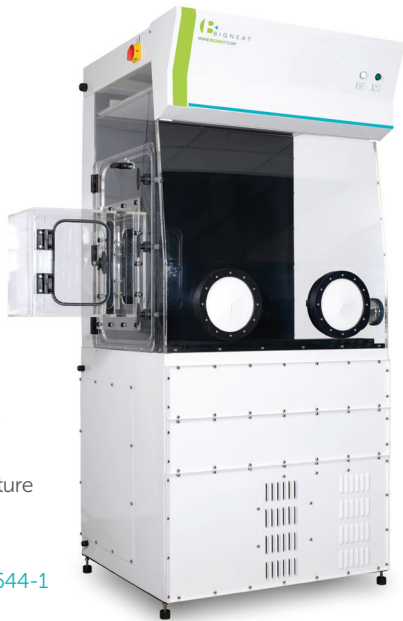




MODEL BCTH

# Controlled Environment Enclosures & Cabinets

for operator and sample/process protection



- ▶ Controlled Humidity  
30%-85%
- Controlled Temperature  
15°C-40°C
- Clean Air  
ISO Class 5 to EN14644-1

## PROVIDING STABLE CONDITIONS FOR EXPERIMENTATION, TESTING & PRODUCTION

Bigneat's BCTH range of cabinets has been designed following years of practical experience and customer collaboration and is an example of Bigneat's innovation in enclosure design & technology.

BCTH cabinets offer a controlled temperature and humidity environment with the option of HEPA filtration for sterile air. It provides the user with the highest quality stable environment at all times irrespective of fluctuations in the surrounding laboratory environment.

BCTH uses a recirculatory air flow system to provide environmentally controlled air to the work surface ensuring sample/process protection.

Manipulation within the enclosure is through iris arm ports.



Rextec sealed gland ports



Tubing and cabling



Transfer hatch

### KEY FEATURE

Cabinet can be customised to suit application and specific temperature and humidity range required

### APPLICATIONS

- Containment of drug discovery robotics systems requiring chilling, incubation or set-level stable temperature
- Containment of moisture sensitive weighing process equipment and analytical equipment, O2 sensitive procedures
- Handling of freeze-dried samples (reducing hygroscopy)
- Material investigations
- Powder flow studies

### MORE FEATURES

- Universal control panel displays status of controlled environment and controls airflow system balance
- Audible and visual alarm indication of incorrect conditions
- Large range of options, transfer ports and waste management systems
- Bigneat enclosures provide excellent visibility of the enclosed system
- Sealed cable gland ports

# IMPROVE RELIABILITY, IMPROVE PRODUCTIVITY, IMPROVE SAFETY.



Air conditioning unit



Transfer hatch shown fully open



Side view showing waste port

## DESCRIPTION OF BCEE AND BCEEH ENCLOSURES AND CHAMBERS

**Recirculation fan filter system:** A roof-mounted recirculatory fan system provides sterile air which protects the contained system, the main fan/blower generates all of the enclosure's internal airstreams.

**Conditioning unit:** Air distributed within the enclosure is passed through a chilled water/refrigerant conditioning plant to maintain the controlled temperature and humidify. A heating element raises the air temperature when it falls below the set temperature (precision  $\pm 0.5^\circ\text{C}$ ). Steam is injected into the airflow from a humidifier unit to maintain the required specification.

**Airflow monitoring and control:** The enclosure is monitored and controlled by an easy touch control system which manages the air flow. In HX models it also controls gas. An audible alarm warns of low airflow conditions.

**Enclosure:** Iris ports enable manipulation of materials within the enclosure and a transfer hatch enables transfer of materials into the enclosure and waste out through the side port.

*Front picture: This cabinet was supplied to leading pharmaceutical research organisation for manipulation and weighing of moisture sensitive powders.*

## STANDARDS

Meeting recognised Standards worldwide

## ESSENTIALS

- High quality construction
- Transfer hatch as standard
- Universal control panel
- Waste port as standard
- Levelling lockable feet

## OPTIONS AND EXTRAS

- Additional electrical sockets
- Carbon filtration
- Computer shelf on flexible arm
- Ducted systems available
- Hydrogen peroxide (or alternative fumigation) connections (night doors, removed for normal operation)
- UV lighting, linked to timed on/off facility in control system
- Waste chute and waste container

## FILTRATION USED IN BCEE ENCLOSURES

**Pre-filtration** eliminates particles at  $5.0\mu\text{m}$  or larger to an efficiency of 92% as defined in BS EN ISO 779.

**Particulate filtration** HEPA filtration (H14 Standard) eliminates particles  $0.3\mu\text{m}$  or larger to an efficiency of 99.995%.

**Exhaust air** HEPA filtration (H14 Standard) eliminates particles  $0.3\mu\text{m}$  or larger to an efficiency of 99.995%.

**Chemcap OS filtration** as an option. Carbon filtration removes solvent and acid vapours.

## QUALITY ASSURED



Bigneat is accredited to BS EN ISO 9001: 2008



Bigneat systems are CE marked

Bigneat manufactures from UL approved components

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