

# Product Announcement: BIostat® B-DCU



## BIostat® B-DCU: Full-featured, integrated benchtop fermentor system

### Needs small footprint at the bench

### Twin-, Triple- or Quad-Multifermentor System

### Modular culture vessel system

### High performance DCU 3 control system

### Ergonomic design

The BIostat® B-DCU is the newest innovation coming from B. Braun Biotech's research and development efforts.

Within the BIostat®-fermentor family, the BIostat® B-DCU now provides an extremely flexible autoclavable benchtop solution where up to 4 separate vessel may be independently controlled.

Due to the new level of vertically integrated system components, the BIostat® B-DCU meets the requirements of a

flexible and expandable research fermentor system, even in space-limited labs.

The culture vessels can be chosen from a modular product architecture. This concept eases dual use for bacterial and cell culture applications.

With this new design concept, individual process configurations can be setup. From control loops to special aeration strategies, the B-DCU handles it all. This is a researcher's most powerful tool.

Sanitary design, documented manufacturing processes and an audit-proven software platform, ensure compliance in GMP development or production environments.



**B. Braun Biotech  
International**

●●● sartorius group

# Product Announcement: BIOSTAT® B-DCU



## BIOSTAT® B-DCU Overview : System components

### Supply Tower

The Supply Tower contains all supply devices for the fermentor. The Supply Tower is a modular component, integrated by process function.

#### Thermostat module

- Efficient thermostat system with circulation pump for jacketed culture vessels
- Connector for heating blanket with single wall culture vessels

#### Drive unit

- Brushless servomotor
- Speed range 10-2000 rpm

#### Pump module

- Up to 4 integrated peristaltic pumps
- Watson-Marlow 101 or 313 pump heads
- Pumps with fixed or variable speed

#### Aeration module

- Connections for up to four gases
- Massflow Controller or pulsed solenoid valves
- Additive or exclusive flow

### Culture vessel

The culture vessels can be customized, configured separately as another component in this modular system.

#### Vessel versions

- 1L, 2L, 5L and 10L working volume
- single wall or jacketed

#### Agitation system choices

- Lip seal, single mechanical seal or magnetic drive
- Rushton impeller, Paddle- or 3-blade-Segmentimpeller

#### Design features

- Polished top plate with integrated lifting handles
- Removable stainless steel rack for holding storage bottles
- Stainless steel stand for culture vessel
- Full line of cell culture accessories

#### Accessories

- Various types of probes
- Microsparger
- Spinfilter
- Bubble free aeration basket

### DCU Tower

The proven DCU system redesigned and packaged; the DCU Tower for extended fermentor control.

#### Hardware

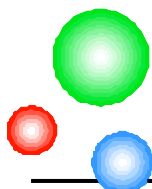
- Industrial VMEbus hardware
- Touch Panel Operator interface
- Expandable process I/O
- Up to 24 integrated amplifier
- Integrated host connection Ethernet or RS 422
- Integrated balance connection RS 232

#### Software

- Configurable software
- "Change Unit" function for independent control of up to four culture vessels
- Software tools for calibration, controllers, sequences, alarm monitoring, maintenance

#### Validation

- Validatable control system (GAMP category 4)
- Validation support for plant qualification



■ FERMENTER ■ SCHÜTTLER ■ HOMOGENISATOREN ■  
ZENTRIFUGEN ■ THERMOSTATE ■ KÜHLGERÄTE  
■ VERBRAUCHSARTIKEL ■ EINMALARTIKEL ■  
ENGINEERING UND BIOPROZESSANLAGEN



**B. Braun Biotech  
International**  
●●● sartorius group

Postfach 1120 · D-34209 Melsungen  
Tel.: ++49-5661-71-3400  
Fax: ++49-5661-71-3702  
E-mail: bbi.info@bbraun.com  
<http://www.bbraunbiotech.com>

QUALITÄT • TECHNOLOGIE • SERVICE