



BTP STERILE

The BTP Sterile is a modular and autoclavable bioreactor system with various available reactor sizes. The plant also has a central control system and extensive process and measuring equipment. The reactors available in various sizes 2 to 15 liters, with other reactor sizes on request.

This system is ideally suited for product development (enzymes, nutrients), process optimization and biotechnology applications. It is characterized by an extensive basic equipment, e.g. sensors, SENSOcontrol, pumps for pH-control and optional pumps for feeding and discharge. Additionally it is possible to inlet 3 gases in the bioreactor.



Components overview

- ① Stirrer (up to 1000 rpm)
- ② Lid with ports for sensors, gas inlet
- ③ Central unit
- ④ Aeration supply for 3 gases
- ⑤ Gas cooler
- ⑥ Double wall reactor (jacked)
- ⑦ Water thermostat
- ⑧ Tubing pumps
- ⑨ Aeration sparger

Features | options

- ✓ Bioreactor sterilizable
- ✓ Glass reactor with different volumes: 2 to 15 liters (other sizes on request)
- ✓ Double wall reactor (coated) or uncoated reactor
- ✓ Stirrer with gastight shaft
- ✓ Heating of the reactor
- ✓ Optional cooling of the reactor
- ✓ Dosage pumps for pH-control, feeding and discharge
- ✓ Gas inlet for 3 gases with mixing unit plus MFC (mass flow controller)
- ✓ Measurement equipment: pH / LDO / redox / CO₂ / cell density temperature
- ✓ Optional gas quality measurement system
- ✓ SENSOcontrol with touch panel

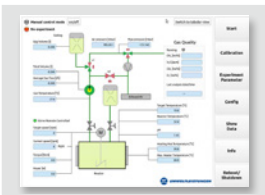


BTP STERILE *ADDITIONAL EQUIPMENT*



Bioreactor sterile - basis unit

Connection options for two bio reactors
 control unit with Panel PC – 15.6” true-flat TFT LCD with projected capacitive touch control, IP65-rated front panel
 control software - Integrated control unit for tube pumps



SENSObcontrol

The universal automation system SENSObcontrol is used for data acquisition applications and control of units (pumps, mixer) of the test plant. A touch panel for intuitive operation is integrated for user-friendly parameter set-up and real time visualization of measured data.



Bioreactors (unjacked)

The bioreactor is available in two different versions: as double walled glass reactor (jacked) or as glass reactor (unjacked). Reactor sizes 2l, 5l, 8l, 10l and 15l incl. mixer unit and sparkling system are available.



Sensors

Available sensors: pH, ORP, dissolved oxygen - LDO, CO₂, conductivity, total cell density
 Sensors autoclavable; diameter: 12 mm / process connection PG 13,5; internal temperature sensor NTC; interface: MODBUS-RTU / electrical connector: VP8; available lengths: 120 / 225 / 325 / 425 mm



Pumps

For every reactor a maximum of 5 pumps heads (SP4-S-UPPH 5061) can be installed. 10 pieces in total - Pump head suitable for several tube sizes
 Flow rate: 0.00014 - 41.52 ml/min (SP4) or 0.0066 - 266 ml/min (SP5) with several tube sizes

The equipment features will be defined by individual quotations.

© 2026 Umwelt- und Ingenieurtechnik GmbH Dresden
 All rights reserved. | For informational purposes only. | Version 02.2026
 Technical data is subject to change and not warranted for operational use.

Information on BTP sterile

