

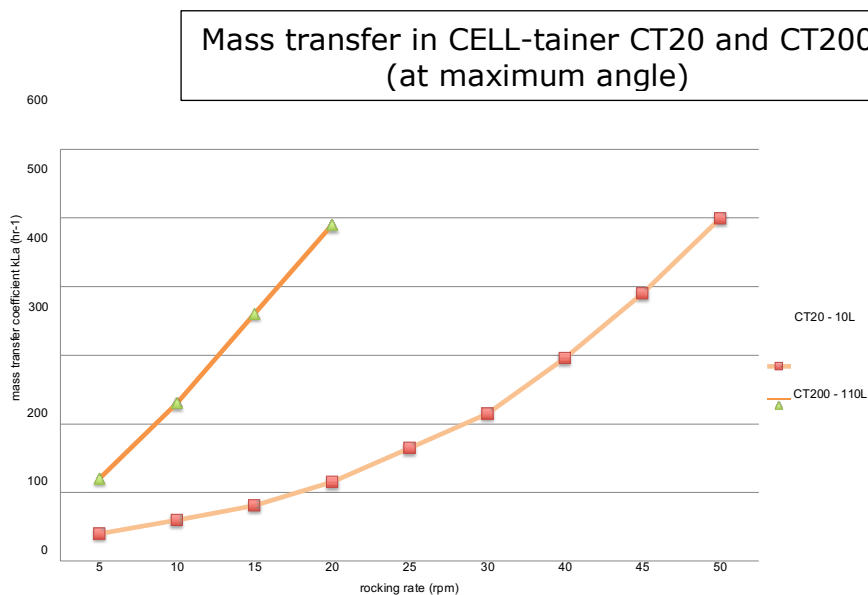


Multi-Purpose Single Use Bioreactors

Designed for the unique requirements of shear sensitive cells and microbial fermentation

Designed for Demanding Cells

The CELL-tainer™ Single-Use Bioreactor is designed to meet the needs of microbial applications, while optimizing mixing, mass transfer and usability that make it the only single use system that covers all of your bioprocessing needs, including shear sensitive cells, like mammalian, adherent cells, fungi, plant and insect cells.



Scalable from R&D to GMP

The CELL-tainer bioreactors are purpose designed to meet the high demands of bioprocessing. The CELL-tainer systems offer:

- CELL-tainer Discovery: 2 x 1L; 2 x 2L or 1 x 4L with individual pH & DO control
- 15L working volume for microbial or 17L working volume for cell culture in the CELL-tainer Utility platform that has a 20L total volume
- 150L working volume for microbial or up to 180L working volume for cell culture in the CELL-tainer Pro platform that has a 200L total volume
- Volumes up to 500L on demand
- Two-dimensional movement for optimal mixing and high mass transfer
- No moving parts in contact with shear sensitive cells
- Consistent scalability from process development through production
- Fully disposable and robust sensors for pH and DO

Less Handling, Less Stress

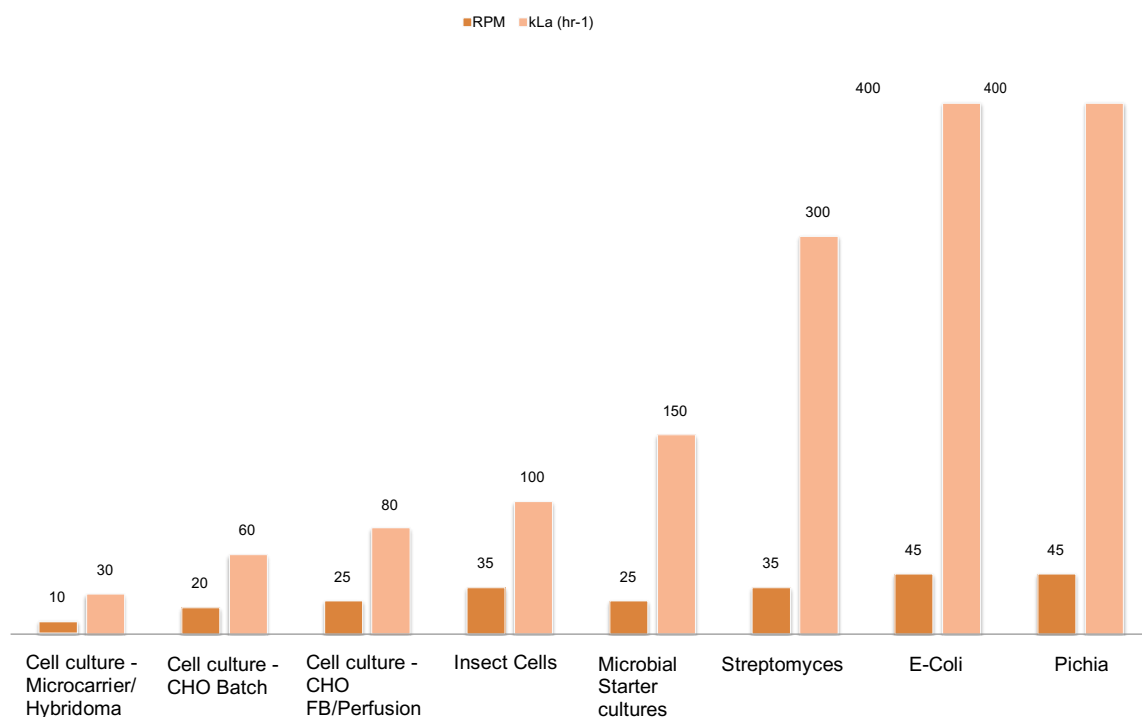
The CELL-tainer single use systems deliver optimal growth of microorganisms through high gas flow rates, powerful agitation, and efficient cooling.

The single-use features enable design flexibility to match your specific needs.

The system offers:

- Wide range of working volume in the same bag – for example 150mL to 17L in the CT20, CELL-tainer Utility platform
- Temperature control, including cooling, by water-filled heat exchanger
- Optimal mass transfer without sparging
- Integrated single-use sensors
- Multiple bag configurations in the Discovery platform
- Space saving design with stackable CELL-tainer Utility 20L devices
- Intuitive touch screen user interface

Operating ranges for different culture types (rpm / kLa) in CT 20 – 10L working volume



The Single Use Bags: Quality and Flexibility

CELL-tainer single-use bioreactor bags are available for the Celltainer equipment in standard or customized configurations. Bags are made from high quality Polyethylene film. The film material is a high oxygen barrier, PE/EVOH laminate material designed for demanding biotechnology applications. The single use bags include integrated single use sensors for pH and oxygen control. Filters are kept dry by an innovative off-gas reducer and a local heater at the filter site.

A variety of components have been qualified to maximize design flexibility, including:

- Single-use sensors
- Tubing and clamps
- Connector types

Equipment Design: Ergonomic and Elegant

The CELL-tainer bioreactor hardware includes many features for easy and safe operation.

- Simplified Bag loading on a sliding tray
- Temperature control by water-filled heat exchanger connected to a thermo-circulator that comprises an electrical heater/ chiller integrated in the CELL-tainer system (Discovery & Custom_Pro systems; external chiller for the Utility system).

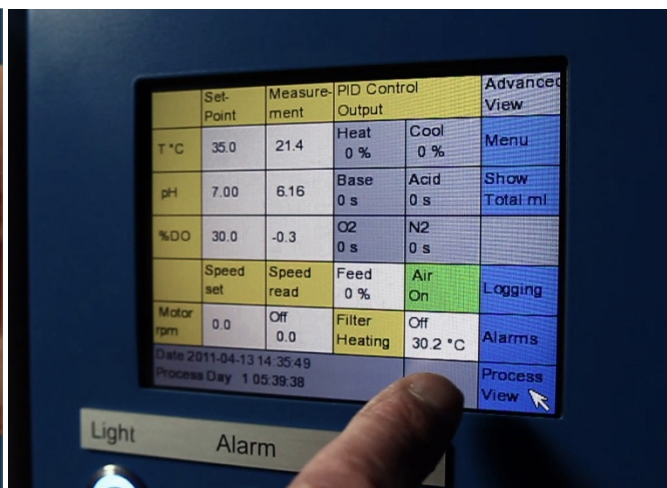
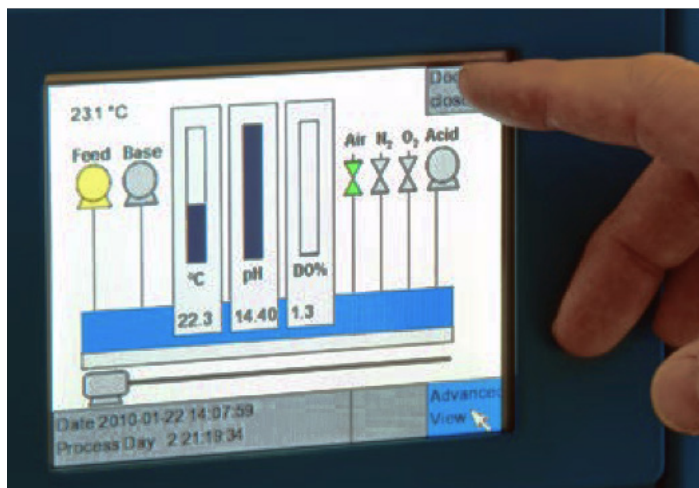




Controllers and Interface

TheCELL-tainer systems are equipped with integrated controllers for the CT20 Utility and CT200 Pro devices. TheDiscoverydevicecanbeoperatedwithaCELL-tainer proprietary PC-based controller platform or alternatively a controller of your choice. All software is GMP compliant.

The controllers are equipped with an intuitive touch screen interface that facilitates operation and process management.



Technical Support

Our technical support team will assist with installation, training & technical support. Additional documentation is available on request.

System Specifications

SPECIFICATION	Discovery	Utility	Pro
Liquid working volume: min/ max	80mL/ 1.5L or 100 mL/3L	150mL/ 17L	1L /170L
Total volume gas and liquid	2 x 1L, 2 x 2L or 1 x 4L	20L	200L
Motor rate in rpm min/ max Mixing angle min/ max Dimensions in mm H: W: D	2 / 30	5/ 50 5°/ 17° 540/1400/830	5/ 30 5.5° / 14.4° 1500/3500/1750

HARDWARE UNITS

Available in multiple formats 2x2L; 20L; 200L	Optimal mixing through two-dimensional rocking movement with no moving parts in the bags
Single use bags	
Supplied sterile and ready to use	Integrated pre-sterilized sensors Gas exhaust with vent filters Easy sampling and cell recovery ports
System Options	
Discovery device	Up to two 1L bags, two 2L bags or one 4L bag Two independent pH and DO management connections
All systems	Sensor and tubing options available

See the other products and services we offer for
your bioprocessing needs

Consumables

Our cleanroom facility in France for bag and sensor assembly provides a platform for prototyping and customized bag solutions.



Consulting

We offer comprehensive consulting services for complex cell culture problems or for new culture projects that optimize your results and performance.

Services include process design, material selection or development.



Find out more at

www.celltainer.com

Contact us

info@celltainer.com

Celltainer Biotech BV
Bothoekweg 9
Winterswijk
The Netherlands

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