



MINI
BIOREACTORS



DIACHROM BIOTECHNOLOGY **MINI BIOREACTORS**

Diachrom Biotechnology introduce a new range of Mini Bioreactors for scale down and screening studies in fermentation and cell cultivation.

Different configurations and set-up on a small volumes are available to reduce materials and consumables costs to improve development results at a lower scale.

Mini Bioreactors are used to generate more data saving time and money.

Our systems are engineered easy to use and upgradable at any time.

The flexibility and scalability of the DIA-BENCH controller platform can manage up to 12 or more Mini Bioreactors online. Controller functionalities and architecture is the same from mini bioreactor to pilot scale to offer a better uniformity, simplicity and self confidence use to our customers.

MINI BIOREACTORS VOLUMES:

- 1000ml total volume, 200ml – 800ml working volume
- 500ml total volume, 100ml - 400ml working volume
- 250ml total volume, 50ml – 200ml working volume

SPECIFICATIONS

- Microbial and Cell culture configuration
- Jacketed glass vessel
- Accurate temperature control
- PLC automation with HMI human interface touch screen
- Fully controlled parameters include pH, pO₂, temperature, foam/level, speed
- Batch, Fed-Batch, Perfusion and Continuous cultivation
- Stainless steel head plate and auxiliaries ports for sensors, septum, sparger aeration (L -sparger or porous sparger), multiple liquid inlets, sample pipe, Exhaust condenser
- Mechanical or Magnetical stirrers up to 2000 rpm speed with height adjustable impellers (Rushton or Marine impellers)

ADVANCED FEATURES

- up to 12 Mini Bioreactors controlled online via a unique HMI interface
- up to 8 variable or fix speed autoclavable peristaltic pumps per vessel
- up to 8 Mass Flow Controllers or rotameters per vessel
- Spare connection for Biomass monitor, Gas analyzer, pCO₂, Methanol analyzer and others
- Intelligent pH and DO probes with self diagnostic
- DIA-NET scada software up to 18 Mini bioreactors or more online

