BIORREACTOR TECHMI BIO INDUSTRIAL 500L







500-LITER INDUSTRIAL FERMENTER / BIOREACTOR

TECHMI BIO 500 is a fermentation control system featuring a 500-liter stainless steel fermenter designed for biotechnology production.
A bioreactor is a device designed to maintain a controlled and optimal environment that facilitates the growth and development of microorganisms, plant cells, or animal cells. It allows biological processes, such as fermentation, to be carried out efficiently and reproducibly. It is an essential piece of equipment in any biotechnology laboratory and is ideal for research and development or for initiating any fermentation process.



KEY FEATURES

Parameter	Specifications
Model	TECHMI BIO 500
Total geometric capacity	500 L
Useful volume	350 L
Minimum operating volume	250 L
Total height of the tank with motor	3.200 mm
Outer diameter of the tank	700 mm
Approximate width of the rack	1.800 mm
Space required for installation	1.900 × 1.600 × 4.000 mm
Manufacturing Material	AISI 316L stainless steel
Control System	Automated Control of Fermentation Parameters
Control variables	Temperature, pH, dissolved oxygen (DO), and defoamer
Dosing System	Automatic Peristaltic Pumps
Additional Instruments	Mettler Toledo Liquid Level Interface and Load Cells
Process Ports	Inoculation, feeding, sampling, unloading, and auxiliary connections
Lighting	12-V Safety Lighting System

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- Constructed of AISI 316L stainless steel, suitable for biotechnology applications.
- Automated fermentation control, with monitoring of temperature, pH, and dissolved oxygen.
- Dosing system using peristaltic pumps for acid, base, nutrients, and defoamer.
- Specialized sampling and discharge valves, as well as connections for product transfer.
- Mettler Toledo load cells for monitoring the system's weight.
- Design geared toward industrial production, with various ports for instrumentation and operation.

Industrial applications:

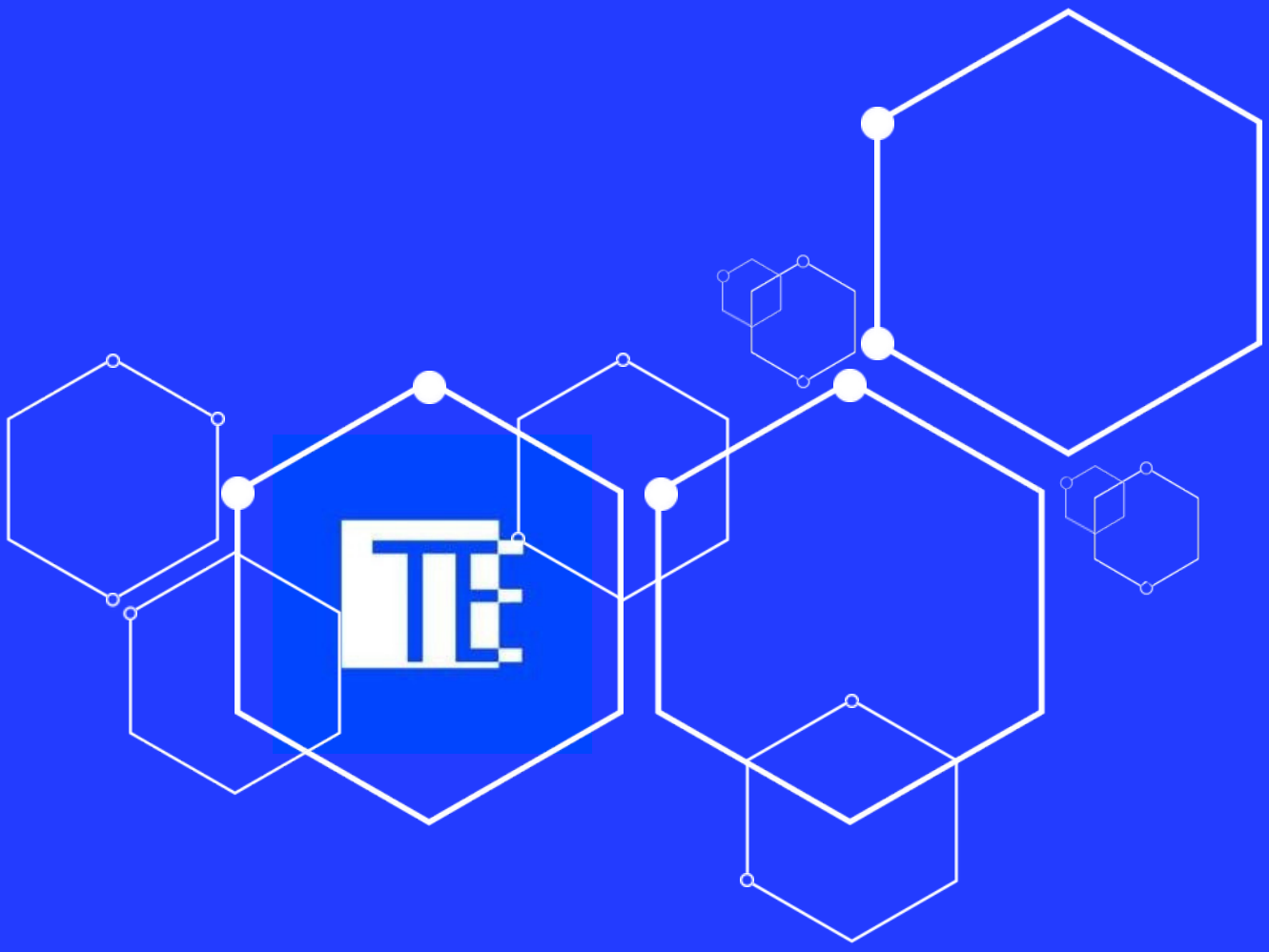
The TECHMI BIO 500 is designed for fermentation processes and biotechnology development, including:

- Production of microorganisms and biomass.
- Development and production of biological products.
- Fermentation for agricultural and food applications.
- Production of metabolites and compounds of biotechnological interest.
- Scaling up and optimization of fermentation processes.









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