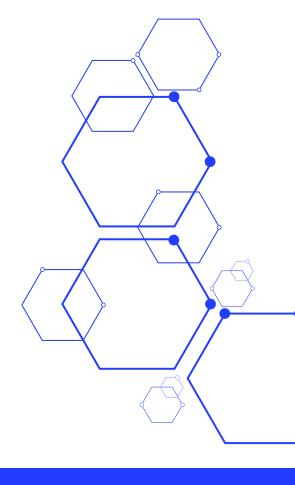
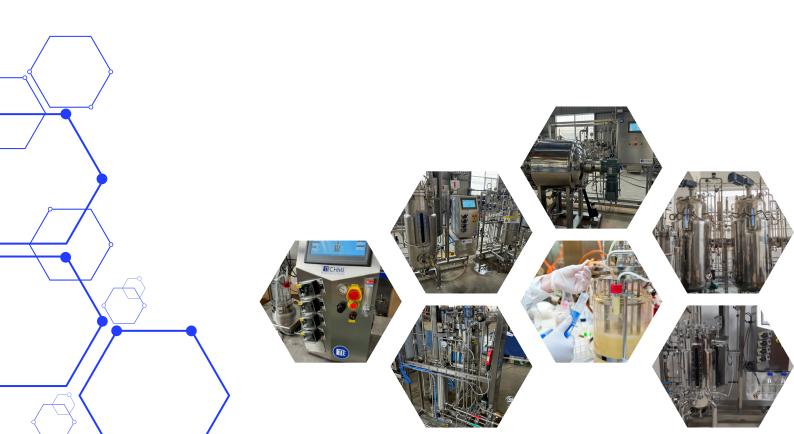


Global solutions for a growing world



# **TECHMI BIO PHARMA**

**AUTOMATIC FERMENTATION TANK FROM 20 TO 50L** 





## **TECHMI BIO PHARMA**

### **AUTOMATIC FERMENTATION TANK FROM 20 TO 50L.**

TECHMI BIO PHARMA is a fermentation control system with a stainless steel fermenter in versions from 20 to 50 liters built under GMP standards oriented to pharmaceutical and biotechnological production. It is a piece of equipment that cannot be missing in a biotechnology laboratory, which requires GMP, it is ideal for research and development, scaling up production or obtaining data and parameters since its operation resembles the simulation of fermentations in industrial conditions.

It is the first step of scaling fermentation trains.



## Automatic fermentation tank from 20 to 50L. 316L Stainless Steel UNDER GMP STANDARD.

TECHMI BIOPILOT Nominal Volume: 20, 30, 50L;

- Automatic fermentation tank with lid lift
- Servomotor for stirring the fermenter
- Direct mechanical agitation with top drive or indirect mechanical agitation with magnetic drive with bottom drive
- It has the function of liquid level alarm and automatic replenishment
- It has the function of foam level alarm and automatic addition of antifoam
- All alarm events can be logged and checked
- Speed, temperature, pH value, DO value, etc. can be adjusted automatically and manually.
- Medium temperature, stirring speed, pH, DO and other tank parameters can be controlled by adjusting curves in sections according to process requirements.
- 4 peristaltic pumps in front of the control box, which can replenish acid, alkali, antifoam and medium to the fermenter

### Applications:

TECHMI Group's PHARMA pilot-scale fermenters, with capacities ranging from 20 to 50 liters and manufactured in 316L stainless steel under GMP regulations, are ideal for process scale-up in biotechnology, pharmaceutical, food, bioenergy, and chemical applications, or in fields requiring GMP compliance. They offer precise control of temperature, pH, oxygen, and agitation, enabling the optimization of fermentation processes at intermediate volumes. Their robust and durable design complies with international regulations and guarantees reliable data for industrial production, facilitating a smooth transition from the laboratory to large-scale manufacturing.



Volume	20, 30 50, 100 L
Material	316L stainless steel under GMP regulations
Fermentation system	Automatic tank with lid lift
Agitation	- Direct mechanics (with top drive) - Indirect mechanics (with lower magnetic drive)
Liquid level alarm	Yes, with automatic replenishment
Foam level alarm	Yes, with automatic addition of antifoam
Alarm event log	All events can be recorded and checked
Controllable parameters	- Speed - Temperature - pH - Value of - THIS
Parameter control	Automatic and manual (curve adjustment according to process requirements)
Sensors and control	Temperature, agitation, pH, DO and other parameters
Peristaltic pumps	4 front pumps for adding acid, alkali, antifoam and medium
Applications	Process scaling in biotechnology, pharmaceuticals, bioenergy, food and chemicals
Advantages	Smooth transition from lab to production Robust and durable design Optimization of the fermentation process

#### **COMPLIANCE WITH GLOBAL REGULATIONS:**

At TECHMI Group, we understand the importance of regulatory compliance in the biotechnology industry. Our fermenters are designed to meet a wide range of international regulations, including GMP (Good Manufacturing Practices), FDA, and CE guidelines, ensuring your processes are safe and ready for regulatory approval.

Made with high-quality materials, our fermenters not only meet the strictest hygiene and safety standards, but also offer durability and strength, ensuring long-term, reliable operation.

We offer comprehensive and detailed documentation that accompanies each fermenter, facilitating audits and compliance with industry-specific regulations. This includes operating manuals, material certificates, and validation testing, all designed to simplify the regulatory process.

In addition to meeting standard regulations, our fermenters can be customized to meet the specific regulatory requirements of your industry or region, ensuring that your equipment is fully aligned with local regulatory requirements.

Reliable Innovation and Guaranteed Compliance With TECHMI Group's 20- to 50-liter fermenters, you not only get advanced and efficient equipment, but also the peace of mind of knowing your process is supported by technology that meets the strictest regulations. Whether for research, development, or pilot scale-up, our fermenters provide you with a complete solution tailored to your needs.



At TECHMI Group, we understand that the success of any fermentation project begins in the lab. That's why our laboratory fermenters are designed to provide the precision, control, and flexibility that researchers need to conduct rigorous experiments and obtain reliable results.

Our fermenters allow for meticulous control of key variables such as temperature, pH, dissolved oxygen, and agitation, ensuring ideal conditions for advanced research.

Designed for versatility, our fermenters can accommodate a wide range of microorganisms and processes, allowing you to explore different fermentation conditions and optimize every step of the process.

Equipped with modern control systems and a user-friendly interface, our fermenters facilitate real-time monitoring and parameter adjustment, allowing researchers to focus on science.

Compact and efficient, our fermenters take up minimal laboratory space and offer maximum functionality without compromising performance, making them ideal for environments where space is limited.

TECHMI Group's laboratory fermenters are designed with scalability in mind. Data obtained at the laboratory level can be easily transferred to a pilot plant, ensuring a smooth and effective transition. Repeatability and Consistency: Thanks to their robust design and precise controls, our fermenters ensure that laboratory results are reproducible on a larger scale, facilitating the development of scalable processes.

**TECHMI Group** offers comprehensive technical support, assisting our clients at every stage of the scale-up process, from laboratory optimization to pilot plant implementation or final formulation. By using fermenters that ensure seamless scale-up, projects can move more quickly from the research phase to production, accelerating time to market.

Our equipment not only facilitates immediate scale-up, but is also designed to be adaptable to future formulation and production needs, offering a long-term investment in fermentation technology.











## **EUROPE**

Commercial office
Carrer del Mas del Jutge, 57, CP 46909,
Torrente, Valencia, España
info@techmigroup.com
clientes@techmigroup.com
techmigroup.com