



# BOS 3.0

## Biostream Operating Software



**Are you ready to explore limitless control?**

# What is BOS 3.0?



## **BOS 3.0 is more than just bioreactor control software: it's your complete bioprocess companion.**

Built to support the next generation of fermentation, BOS 3.0 brings together process control, recipe automation, device integration, and data management in a single, intuitive platform. Whether you're scaling up production or optimizing conditions in R&D, BOS 3.0 helps you stay in control.

What makes BOS 3.0 truly unique is its **customer-centric design**, developed in **co-creation with users over the past five years**.

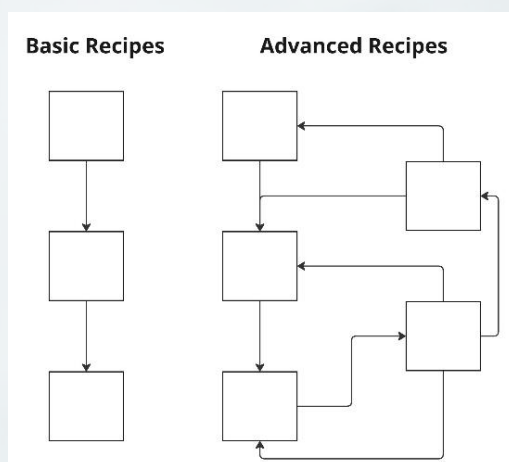
Every feature is based on real-world feedback and tested to ensure maximum usability and relevance.

**We've built BOS 3.0 with your challenges in mind, empowering you to go further with less effort.** From idea to execution, from one reactor to an entire facility, **BOS 3.0 and Biostream grow with you.**

# What makes BOS 3.0 special?

## Advanced Recipes

BOS 3.0 introduces a flexible and programmable recipe engine for advanced process control. Users can now define multi-step sequences, including conditional logic, loops, and complex dependencies. This enables processes like adaptive feeding, ramping, and state-based transitions, critical for high-end bioprocessing workflows.



## Translations

Multi-language support is now integrated into the BOS-interface, allowing the software to be used in various localized environments. Language selection can be customized per user account, making it easier to deploy BOS across international teams and customers.

## Programs

BOS 3.0 introduces a modular architecture for process programs, allowing multiple configurations (e.g., sterilization and pasteurization) to be stored and executed independently. In addition, support for runtime sterilizations is now included, for example, sterilizing transfer lines during an active fermentation.

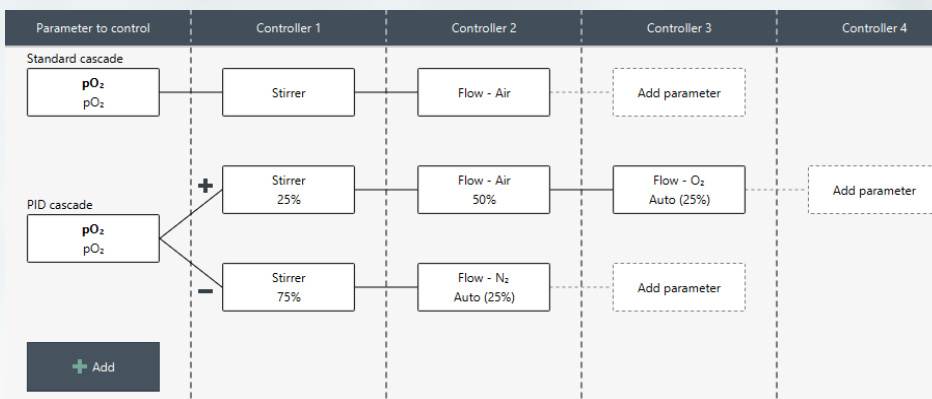
## Global Variables

While previously only locally relevant, BOS 3.0 introduces true Global Variables. These variables are now automatically synchronized between connected reactors. For example, a batch ID or setpoint defined in Reactor A can now be instantly shared with Reactors B and C, enabling system-wide coordination and inter-reactor communication.

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## Extended Preconfigured Devices

BOS 3.0 expands its library of preconfigured device templates for sensors, pumps, and other peripherals. When setting up a device, the user simply selects its Modbus address, and BOS applies a validated profile for that specific model. This enables extended features like logging sensor lifetime or calibration data, without external equipment.

## Multimedia integration

BOS 3.0 offers the option to integrate multimedia content directly into the software interface. This allows users to add videos, images, and documents to support their workflows. For example, embedding training clips, SOPs, or maintenance guides alongside process control. By centralizing knowledge within the system, operators gain faster access to critical information, reducing errors and improving efficiency.

# BOS Version Comparison

The Bio EZ is our entry-level bioreactor, purpose-built for straightforward and essential bioprocessing. It runs on **BOS 3.0 EZ**, offering **the core features** you need without unnecessary complexity. The advanced BOS 3.0 functionalities, such as enhanced automation, complex control strategies, and multi-system coordination, are fully available across the rest of our bioreactor portfolio, ensuring that when your needs grow, your system can grow with you.

| Feature                             | BOS 3.0 EZ | BOS 3.0 |
|-------------------------------------|------------|---------|
| Standard Fermentation Control       | ✓          | ✓       |
| Parameter logging and data trending | ✓          | ✓       |
| OPC connectivity                    | ✓          | ✓       |
| Basic recipes                       | ✓          | ✓       |
| Extended Sensor info                | ✓          | ✓       |
| PID cascade control                 | ✓          | ✓       |
| Multi-language UI                   | ✓          | ✓       |
| Preconfigured device template       | ✓          | ✓       |
| Multi vessel operation              | ✗          | ✓       |
| Multiple program Types              | ✗          | ✓       |
| Global variables                    | ✗          | ✓       |
| Advanced Cascade logic              | ✗          | ✓       |
| Advanced Recipes                    | ✗          | ✓       |
| Runtime sterilization               | ✗          | ✓       |
| Extension board support             | ✗          | ✓       |



# Step Into The Future

## Level Up!

### Cascade & Control Training

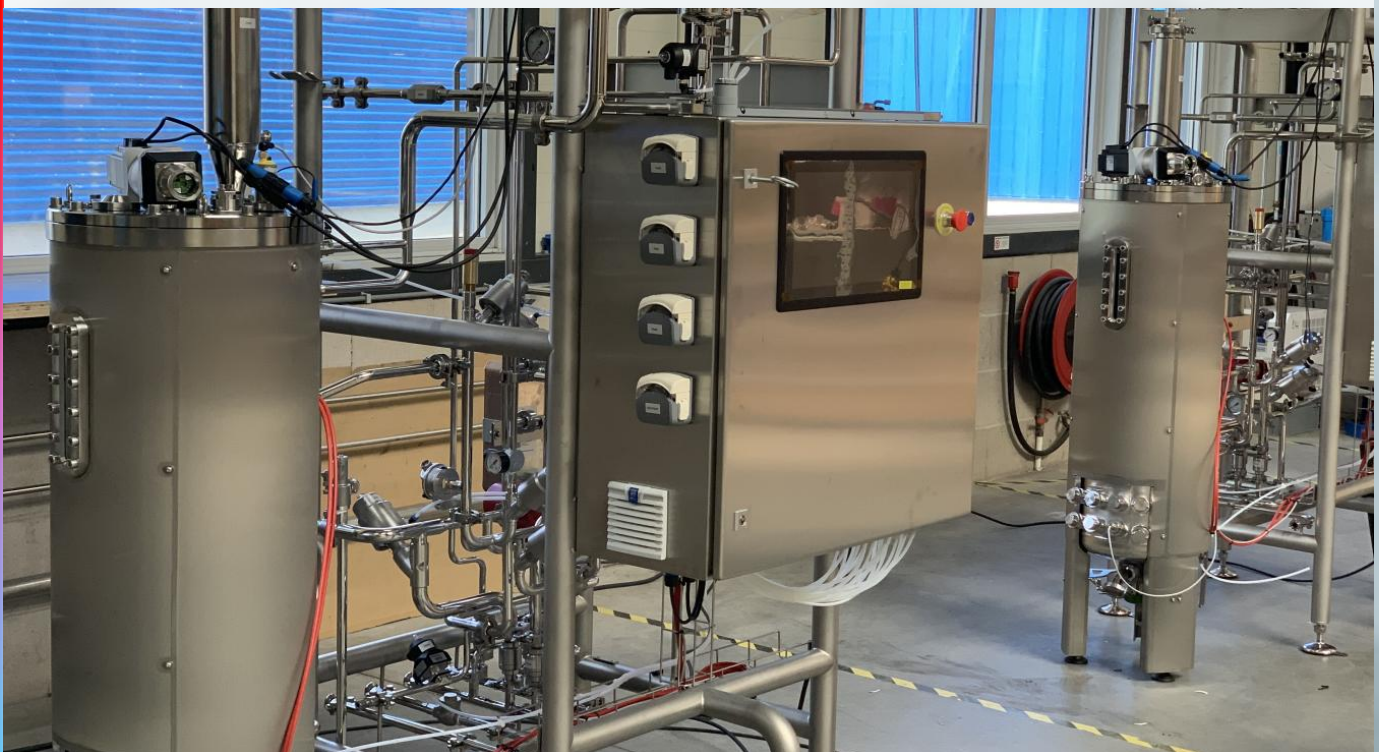
Unlock new control possibilities. Build advanced PID cascades, separate base/acid control channels, and stabilize your process with stepwise strategies that improve performance.







### Programming Training

Take full control with Advanced Recipes and Global Variables. Ideal for complex processes, this training lets you design automated workflows across multiple reactors with smart, adaptable logic.

**€187,50 per hour**



# Biostream Bench-Product Portfolio

| <b>Bio EZ</b><br>             | <b>BioCompact</b><br>   | <b>BioBench</b><br>  | <b>BioBench Twin</b><br> |
|--|--|--|---|
| <b>Volume Range</b>  |  |  |   |
| <b>0.75 L - 7.5 L</b> (Glass)  | <b>0.25 L - 7,5 L</b> (Glass)  | <b>0.25 L - 15 L</b> (Glass)<br><b>2 L - 15 L</b> (Steel and Sterilizable)   | <b>0.25 L - 15 L</b> (Glass)  |
| <b>Product description</b>   |  |  |   |
| <i>Smart Simplicity for Serious Science</i>  | <i>Parallel Power for Smarter Selection</i>  | <i>Limitless Configurations at Lab Scale</i>   | <i>Double Capacity, Clean Design</i>  |
| <b>Customizability Level</b>   |  |  |   |
| <b>Medium:</b><br>Selected options   | <b>High:</b><br>Selected options   | <b>High:</b><br>Extensive options & Specials   | <b>Medium:</b><br>Selected options  |
| <b>Keywords</b>  |  |  |   |
| <ul style="list-style-type: none"> <li>• Plug &amp; Play</li> <li>• Accessible</li> <li>• Low CAPEX</li> </ul> | <ul style="list-style-type: none"> <li>• High Throughput</li> <li>• Strain Optimization</li> <li>• Parrallel Cultivation</li> <li>• Stackable</li> </ul> | <ul style="list-style-type: none"> <li>• SIP</li> <li>• Algae</li> <li>• Solid-State</li> <li>• Airlift</li> <li>• Legacy Vessels</li> </ul> | <ul style="list-style-type: none"> <li>• Dual Reactor</li> <li>• Parallel Production</li> </ul>             |

# Why choose Biostream?

## Scalable bioprocessing solutions, co-created with costumers and backed by in-house expertise

At Biostream, technology is only part of the story. What truly makes us unique are the people behind our products. From sales to service, from application specialists to R&D, every step is driven by dedicated experts who bring knowledge, creativity, and care to our customers. The overview below shows how each product flows through our company, whether standard or custom, always guided by the people who make biotechnology accessible and scalable.



Customer

Defines the need and drives innovation forward, providing feedback that shapes products and ensures real-world relevance.



Sales

Translates customer needs into solutions, guiding choices and connecting clients with the right Biostream technology.



R&D

Designs and develops tailored solutions, transforming complex bioprocessing challenges into scalable, future-ready technologies.



Production

Builds reliable systems with precision and care, ensuring every product meets Biostream's high-quality standards.



Application

Supports customers in real-world use, offering expertise, training, and optimization to maximize process success.



Contact:

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# FAQ

## What does a BOS 3.0 license cost?

The licensing model consists of two components:

- A **User Interface (UI) license**
- A **per-vessel license**

You can choose between two license durations:

- **1-year license**
- **5-year license**, where you only pay for 4 years

The UI license is required once per system model. For example, if you're operating multiple units of the same model (e.g., several BioCompacts), only one UI license is needed, even if they are controlled by different PCs. However, for each different system model (e.g., one BioBench and one BioCompact), a separate UI license is required.

A minimum of one vessel module license must be purchased with each UI license. The only exceptions are the BioBench Twin, which requires a minimum of two vessel module licenses per system, and the Bio EZ, which only requires the BOS 3.0 UI EZ.

| License pricing Bio EZ                              | 1 Year | 5 Year |
|---|--------|--------|
| BOS 3.0 UI EZ                                       | €500   | €1999  |
| License pricing BioCompact, BioBench, BioBench Twin |        |        |
| BOS 3.0 UI  | €630   | €2520  |
| Module Unit per Vessel                              | €365   | €1460  |

*Example calculation for a year license*

$1 \text{ Bio EZ (€500)} + 3 \text{ BioCompacts (€630 + 3 * €365)} + 1 \text{ BioBench Twin (€630 + 2 * €365)} = 3585 \text{ €/year}$

*\*prices subjected to a yearly inflation correction as described in our General Terms and Conditions*

# FAQ

## How does the renewal procedure work?

Approximately one month before your license expires, you will receive a notification both within the BOS software and directly from Biostream, along with a renewal offer. If you wish to continue using your software license, simply accept the offer and submit your payment. Biostream will then provide you with a new license key, which can be easily entered via the software interface.

## What does the BOS 3.0 license include?

During your license period, the following features are available:

- Usage of to the BOS 3.0 user interface
- Fermentations and reactor control software
- Usage of any licensed modules per vessel, as described in the BOS 3.0 manual
- Being part of our user-community
- All updates, which includes, but is not limited to, bug fixes, quality-of-life improvements
- Innovative new features, shaped by our user community

Once your license expires, your current version and data will remain accessible, but you will no longer receive updates or new features.