BioPAT® MFCS

The New Standard
in Bioprocess
Data Management

Simplifying Progress

SARTORIUS

Developed for the Process – Designed for You!

BioPAT® MFCS enables you to incorporate a new standard in bioprocess data management and automation. Its reliable data acquisition, efficient trend monitoring and advanced recipe control make it an ideal tool for all upstream and downstream processes, no matter if you prefer single-use or reusable systems. The new BioPAT® MFCS is your solution for robust and reproducible processes – all backed by our expertise since 1986.
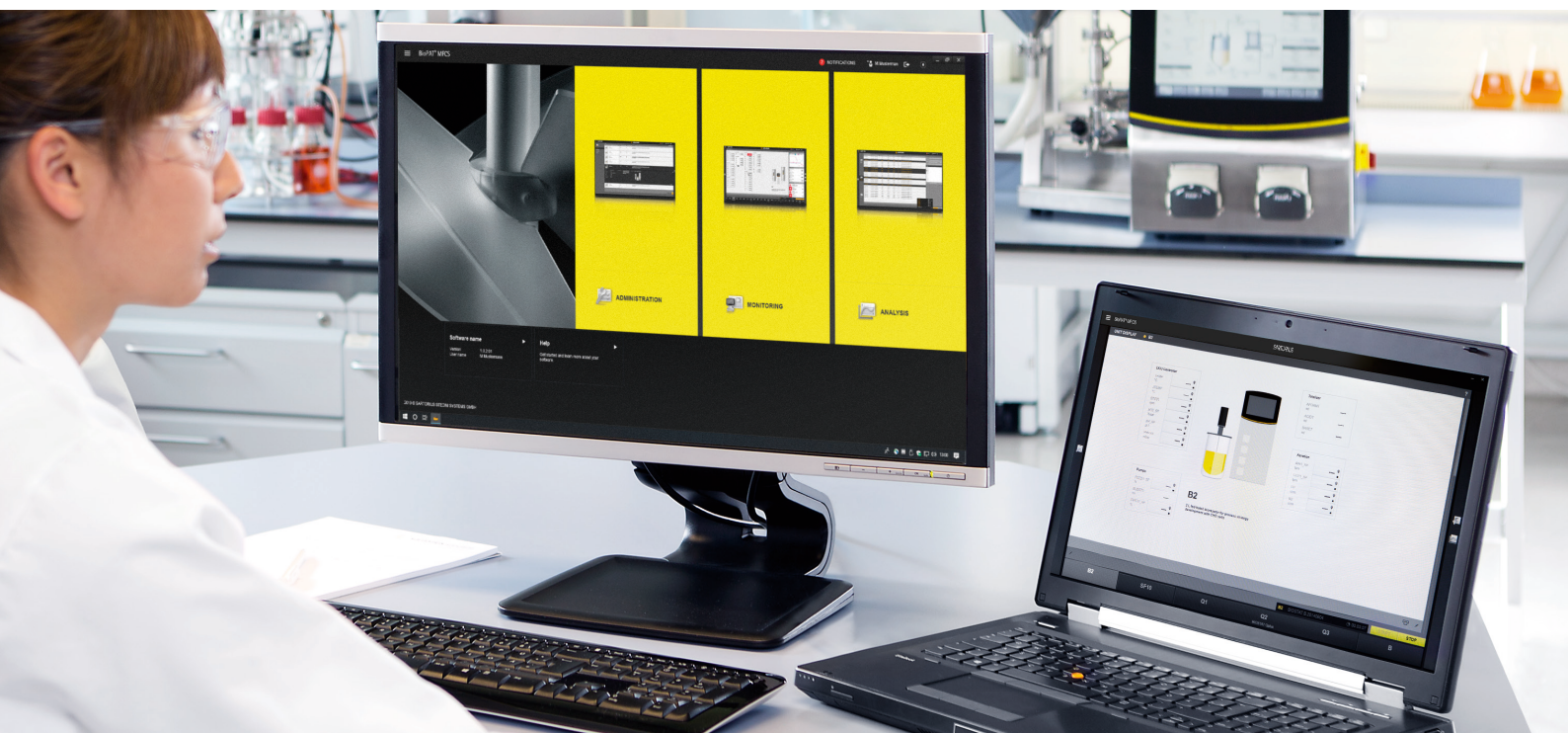
Clear Composition and Design

Experience the attractive and modern software design of BioPAT® MFCS. The intuitive workflow facilitates your daily tasks and its amazingly simple navigation allows rapid access to all the process-relevant information.

Cutting-edge and Compatible Technology

BioPAT® MFCS is compatible with the latest off-the-shelf hardware and software. Quickly collect your data and store it safely in the searchable SQL-database. You will benefit from high performance, scalability and high availability.

Sartorius Service and Support

The Sartorius Service will help you to get the maximum out of your new BioPAT® MFCS. Extensive email support and the possibility to download the most recent version with the latest functionality will ensure reliable operation and easy handling.

1: Intuitive Navigation
Benefit from the easy access to all main operation areas of BioPAT® MFCS.

2: Connectivity
Integrate PAT sensors and analyzers via OPC for enhanced process knowledge.

3: Quick Overview
Quickly switch between up to 24 Units and get all relevant information at a glance.

4: Calculation Capabilities
Calculate important bioprocess parameters and non-direct measurable variables with the calculation module.

5: Focus on Essentials
Get the right focus for a fast and clear data inspection with the slidable time bar.

6: Easy Comparison
Compare up to 12 real-time process values in an online configurable trend.

7: Eye-Opening Performance
Use multi-monitoring access capabilities to boost your productivity.

8: Centralized Storage
Enter off-line process data with the sample data module.

9: Process Safety
Let the alarm management system take care of process limits.

10: Data Integrity & Security
High quality data collection in a fast, powerful, and searchable SQL-database.

Turn Advanced Process Strategies into Reality

Features

- Intuitive graphically guided configuration
- Drag & drop operations and phases
- Sequential, parallel and repeated execution of phases
- State and time-dependent transitions
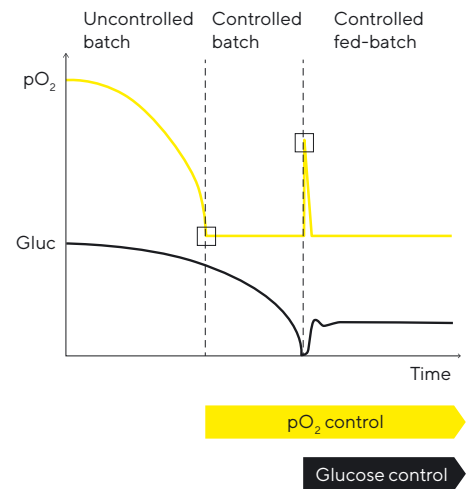- Pre-defined phase types for set-points, feeding profiles or timers
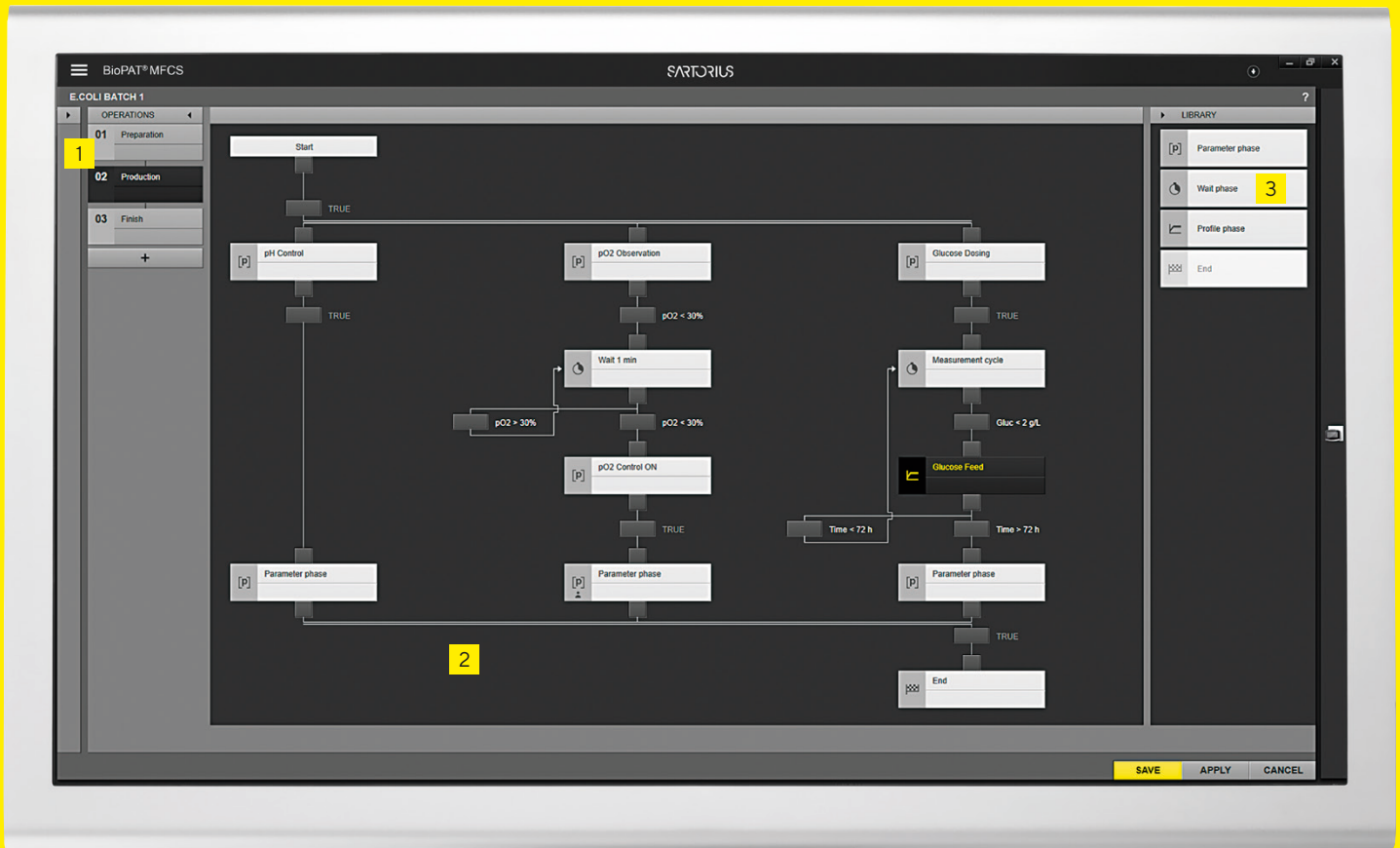
Benefits

- Improved batch-to-batch consistency
- Decreased risk of errors
- Minimized number of rejected lots
- Automated processing to free up operator time
- ANSI-88 compliant standardized automation

Application Example

- Event-based activation of control loops
- Automatic batch end detection, e.g. based on pO_2 | offgas measurements
- Implement advanced feeding strategies for fed-batch processes

Automatically Switch between Process Phases

| pO$_2$ control |
| Glucose control |

BioPAT® MFCS Recipe Control Module

1: Easy Configuration
Get started immediately and implement your process strategies.

2: Intuitive Use
Clear workflows for maximum productivity.

3: Quick Access
Pre-defined functions are right where you need them.

Extend the Possibilities of BioPAT® MFCS

Recipe Control Module
ANSI-88 compliant batch control for robust process automation

OPC Client Module
Connect to Biobrain and additional equipment, e.g. BioPAT® Trace, BioPAT® Xgas

Sample Data Module
Integrate and manage off-line sample data

Calculation Module
Create soft sensors to access non-directly measureable quantities, e.g. OUR, RQ

OPC Server Module
Connect BioPAT® MFCS process data and alarms to your historian or MES systems

Charting Module
Advanced visualization capabilities to compare live and historical batch processes

Multi User Option
Monitor and control your process from up to 30 BioPAT® MFCS clients simultaneously (RDP supported)

Minimum System Requirements

Server & Client Standalone Installation
4-core 2.5 GHz processor
8 GB memory (RAM)
DirectX 10 graphics device (1 GB)
Network card (1 Gbit)
50 GB hard disk space
15.6" monitor (1366 × 768)

Multi User Installation

Client
4-core 2.5 GHz processor
4 GB memory (RAM)
DirectX 10 graphics device (1 GB)
Network card (1 Gbit)
50 GB hard disk space
15.6" monitor (1366 × 768)

Server
8-core 2.5 GHz processor
16 GB memory (RAM) +
2 GB per Terminal Server session
Network card (1 Gbit)
250 GB hard disk space RAID 1 or 5

Supported Operating Systems (64-bit)

Windows® 8.1 Pro and higher
Windows® 10 Pro and higher
Windows® Server 2016 | 2019

Supported Virtual Environments

VMware® Workstation
Hyper-V®

Ordering Information

Software

BioPAT® MFCS 4	Core Software

Additional Software Modules and Options for BioPAT® MFCS 4

Recipe Control Module

OPC Client Module

OPC Server Module

Sample Data Module

Calculation Module

Charting Module

Multi User Option

Microsoft® SQL Server 2019 Standard Runtime (Server, 64-bit)

Microsoft® SQL Server 2019 Standard Runtime (Server, 64-bit) University

Microsoft® SQL Server 2019 Runtime Device CAL (Server, 64-bit)

Microsoft® SQL Server 2019 Runtime Device CAL University (Server, 64-bit)

Services for BioPAT® MFCS 4

Perfusion Recipe

BioPAT® MFCS is available for up to 24 Units.
Please contact your local sales representative regarding a license
for more than 1 Unit.

Upgradable with Upcoming Modules
Additional modules (e.g. User Management and CFR Part 11 module) for the
adaptation of BioPAT® MFCS to your individual process requirements will
be available soon.

Learn more about BioPAT® MFCS and download the demo version.
Stay up-to-date about the latest product and security updates and visit
BioPAT® MFCS website for more information.

Visit BioPAT® MFCS website:
www.sartorius.com/biopatmfcs

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