











## **Process Vessel**

### **BIOJENIK ENGINEERING**

Your Trusted Partner in Bioprocess Engineering

Biojenik Engineering has been providing innovation and reliable bioprocess engineering solution for over 15 years







www.biojenikengineering.com

## **PROCESS VESSEL**

At Biojenik Engineering, our process vessels are designed to meet the highest standards of quality and functionality, catering to the critical needs of pharmaceutical, chemical, and bio-food industries. These vessels combine sanitary engineering with advanced electrical integration, ensuring seamless operation and precise control. The Direct Digital Control (DDC) system incorporated into our designs delivers robust industrial performance while ensuring compliance with stringent pharmaceutical and industrial standards.

## **Application Areas**

Pharmaceutical | Chemical | Bio-Food

## **Performance Advantages**

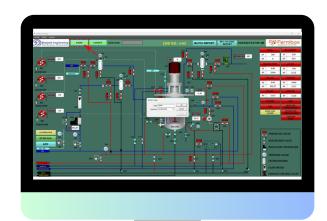
- Superior hygiene and cleanability with high-quality surface finishes
- Wide temperature range suitable for diverse applications
- Modular design for flexibility and scalability
- Optimized energy efficiency through precision heating and cooling

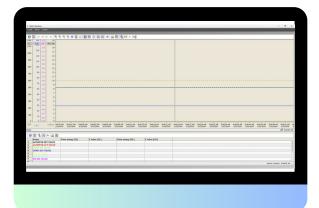












## **Biojenik Engineering SCADA Software**

**Biojenik Engineering's SCADA software** is designed for real-time monitoring and control, offering a range of features to improve efficiency and ensure compliance.

- Software: Siemens WinCC.
- Simulation and Auto-Tuning: Generates random process values for simulation and auto-tuning.
- Third-Party Integration: Free OPC server for third-party device integration.
- Remote Operation: Webex-based remote operation/control of setpoints.
- Customized Interface: Personalize display to show Process, Profiles, Set Points, and Cascade.
- Batch Management: Manage batches and track them using tags.
- Access Control: Different access levels for enhanced security.
- **Dosage Tracking:** Monitor and record material consumption during production.
- Real-Time Data Recording: Automatic recording and trending of setpoints and measurement values.
- Data Export: Export data to Excel for analysis and reporting.
- Data Comparison: Compare and analyze data for improved decision-making.
- Event Alarms & History: Alerts for issues, historical data access, and ANSI-18.2 compliant alarm management.
- Audit Trail: Record-keeping compliant with 21 CFR Part 11 standards.
- **Lifetime Support:** One-time license with lifelong updates and support.

#### **Benefits:**

- Simplifies process monitoring and control.
- Increases efficiency by automating tasks and tracking.
- Ensures compliance with regulatory standards.
- Provides actionable insights with data comparison and analysis.

# **Technical Specification**

S.No	Specifications	Details
1	Material	Stainless Steel (AISI 304, 316, 904); High-Alloy Materials (Optional)
2	Capacity	1L to 40,000L (Custom sizes available)
3	Design	Single-wall, Double-wall, or Triple-wall Construction
4	Surface Finish	<ul> <li>Internal Surface: ≤ 0.2 μm, ≤ 0.4 μm, ≤ 0.6 μm, ≤ 0.8 μm</li> </ul>
5	Heating/Cooling Range	• -20°C to 200°C
6	Pressure Rating	From Atmospheric to High Pressure (custom specifications on request)
7	Sealing Options	Mechanical Seals, Magnetic Seals
8	Agitators	Mechanical Mixers, Homogenizers, Magnetic Stirring Systems
9	Insulation	High-performance thermal insulation with custom cladding options
10	Compliance Standards	cGMP, ASME BPE, FDA, and EU guidelines
11	Automation Options	Fully Automated, Semi-Automated with DDC-based Control Systems
12	Material Traceability	Full traceability for all vessel components

## **Optional Features**

S.No	Specifications	Details
1	Mobile Configurations	Vessels with wheels for portability
2	Hazardous Environment Design	Explosion-proof configurations with ATEX or equivalent certification
8	SIP/CIP Systems	Integrated cleaning and sterilization systems
9	Temperature Sensors	RTDs, Thermocouples, and PT100 sensors for precise monitoring
10	Pressure Gauges	Digital and analog options for continuous pressure monitoring
11	Instrumentation Ports	Multiple ports for sensors, sampling, and instrumentation
12	Viewing Windows	Sight glasses with LED lighting for process monitoring

### **Our Valuable Clients**

#### **S**Biocon Fermbox FEDMENTING THE FUTURE

BANGALORE
BIOINNOVATION
— CENTRE





























### **Biojenik Engineering Services**

We offer a comprehensive range of services to ensure the smooth operation and longevity of your systems:











Process Consultancy



**Technical** Customized Engineering Support & Solutions Troubleshooting



Warranty

Services

AMC &

CMC Services





**Parts Delivery** 

24x7 Customer Support

2 SERVICE

### **Our Certifications**













# Connect with us...

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