



Applikon BioBench, BioPilot and BioProduction

Stainless steel bioreactors for biopharmaceutical
development and production

The Partner of Choice

With more than 40 years of experience in designing bioreactor systems, hundreds of high-quality Applikon stainless steel bioreactors have been supplied to the global biopharmaceutical industry. Getinge offers the standardized Applikon BioBench table-top bioreactors and Applikon BioPilot 'built-on-skid' bioreactors for process optimization, R&D and as a seed for scale up. In addition, Getinge supplies Applikon BioProduction bioreactors which are tailor-made, fully customizable bioreactors that can be equipped with full automatization to comply with cGMP standards for biopharmaceutical production of live-saving vaccines and medicines.



Applications

- Scale-up studies
- Process optimization
- Microbial and Cell culture
- Medium optimization
- Small scale production
- Batch, Fed-Batch, Perfusion and Continuous cultivation

Scale up your bioprocess

The stainless steel Applikon bioreactor range is available in a wide range of volumes, for both microbial and cell culture applications. The main difference between the bioreactors for these two applications is the aspect ratio of the bioreactors. The microbial bioreactor systems have an aspect ratio of 3.0 at total volume, whilst the cell culture bioreactor systems have an aspect ratio of 1.5 at total volume. Ensuring the perfect conditions for your bioprocess and making it comparable with the industry standard.

The compact design guarantees that a minimal footprint is required. All systems can be fully documented for cGMP usage and can be supplied with an extensive documentation package to support validation.

Name and Total Volume	Working volume range	Height over diameter
BioBench 15L	4 – 12L	2.2
BioBench 20L	4 – 17L	3.0
BioBench 30L	7 – 22L	2.0
BioPilot 30L	7 – 20L	1.5
BioPilot 40L	9 – 34L	3.0
BioPilot 60L	10 – 40L	1.5
BioPilot 70L	13 – 50L	3.0
BioPilot 130L	21 – 100L	1.5
BioPilot 140L	32 – 100L	3.0
BioPilot 270L	40 – 200L	3.0
BioProduction	Any volume that suits your needs, ranging up to several thousands liters volume systems.	



Reproducible results every time

The Applikon BioBench, BioPilot and BioProduction are supplied with state-of-the-art controllers. The PID based control loops will enable precise control of your fermentation or cultivation run, producing reproducible results every time.

Industrial control solutions to every need

Getinge has standard control solutions based on a variety of control platforms. For the Applikon BioBench, BioPilot and BioProduction this means that there is a selection in hardware and software combinations available to control the bioreactor. The packages available are Getinge's proprietary solution, DeltaV™, Siemens, Allen-Bradley, BioXpert, LucullusR PIMS and GE iFix. This wide variety enables solutions for every budget, and the capability to meet the most stringent cGMP demands. Besides controller software and hardware Getinge collaborates with the most prominent sensor suppliers. AppliSens, Hamilton, Mettler Toledo, ABER and BlueSens are available as options for Applikon bioreactor systems.

Modularity

A wide range of standard add-on packs are available to customize the Applikon bioreactor systems to your specific demands. Available add-on packs are pressure control, weight control, feed control, biomass sensors, perfusion systems and much more.

Easy to use and clean

Bioreactors systems that suit your bioprocessing needs. All Applikon stainless steel bioreactors are supplied with an electropolished surface finish of $Ra \leq 0.4$ micron. The added benefit of this smooth surface is that biofilms and debris will not stick to the inside of the bioreactors. This in turn greatly simplifies the cleaning procedure of the Applikon BioBench, BioPilot and BioProduction, and provides peace of mind knowing that it is ensured that the bioreactors will always be clean and sterile.

Steering away from contaminations

Getinge always supplies the Applikon BioBench, BioPilot and BioProduction with magnetic coupled agitators ensuring that contaminations via the drive shaft are a thing off the past, since there is no longer a direct connection to the outside world.



Getinge is a global provider of innovative solutions for operating rooms, intensive care units, sterilization departments and for life science companies and institutions. Based on our firsthand experience and close partnerships with clinical experts, healthcare professionals and medtech specialists, we are improving everyday life for people – today and tomorrow.

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