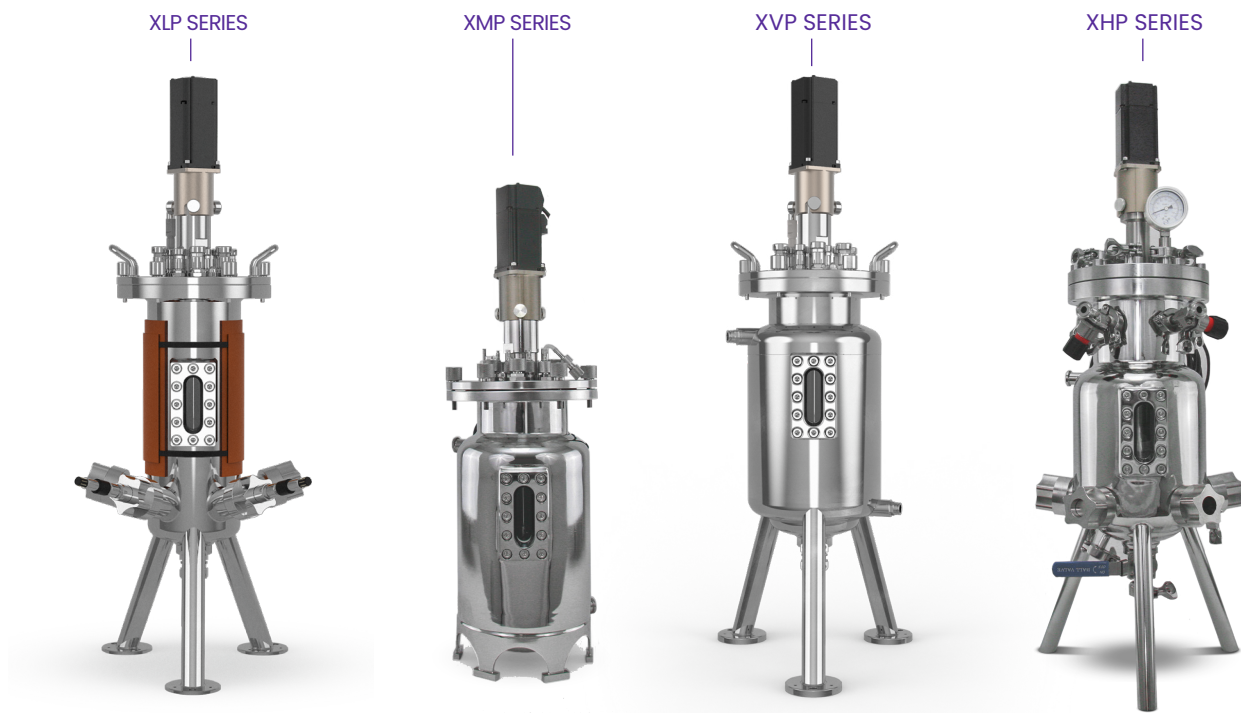


INOX VESSEL

STAINLESS STEEL BIOREACTORS
XLP – XMP – XVP – XHP SERIES

DATASHEET



GENERAL OVERVIEW

Vinci stainless steel benchtop bioreactors are engineered for robust, sterile process development and demanding R&D environments, supporting microbial fermentation, cell culture, and specialized process studies. Built in AISI 316L stainless steel, these vessels provide superior durability and resistance to mechanical stress compared to glass alternatives, making them ideal for laboratories requiring reliable performance, repeatability, and long operational lifetimes.

The stainless steel platform is designed to integrate seamlessly with the BioBook control ecosystem, ensuring consistent workflows across different vessel configurations and enabling reliable process transfer from bench-scale experimentation to larger pilot systems. This modular approach allows researchers to maintain consistent control strategies and experimental setups while adapting vessel formats and pressure capabilities according to process requirements.

XLP SERIES

FEATURE	DESCRIPTION
Material	AISI 316L stainless steel
Available Total Volumes	3L, 5L, 7L, 10L, 12L
Thermostating	Cold finger and heating mantle
Temperature Control	BioBook Wet module, cooling water or chiller
Maximum Temperature	70 °C
Maximum Working Pressure	< 1 barg
Sterilization Method	Autoclave
Headplate Design	Compatible with glass vessel fittings and probes
Bottom Valve	Available

XMP SERIES

FEATURE	DESCRIPTION
Material	AISI 316L stainless steel
Available Total Volumes	3L, 5L, 7L, 10L, 12L
Thermostating	Recirculating jacket
Temperature Control	BioBook Wet module and chiller
Maximum Temperature	121 °C
Maximum Working Pressure	< 2 barg
Sterilization Method	Autoclave and Steam-in-Place (SIP)
Headplate Design	Compatible with glass vessel fittings and probes
Bottom Valve	Not available

XVP SERIES

FEATURE	DESCRIPTION
Material	AISI 316L stainless steel
Available Total Volumes	3L, 5L, 7L, 10L, 12L, 15L, 20L, 50L, 75L, 100L
Thermostating	Recirculating jacket
Temperature Control	BioBook Wet module and chiller
Maximum Temperature	135 °C
Maximum Working Pressure	< 10 barg
Sterilization Method	Autoclave and Steam-in-Place (SIP)
Process Capability	Capable of reproducing full small-scale bioprocess systems

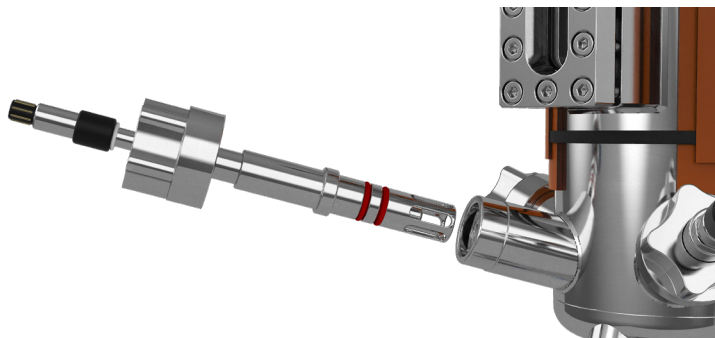
XHP SERIES

FEATURE	DESCRIPTION
Material	AISI 316L stainless steel
Available Total Volumes	3L, 5L, 7L, 10L, 12L, 15L, 20L, 50L, 75L, 100L
Thermostating	Recirculating jacket
Temperature Control	BioBook Wet module and chiller
Maximum Temperature	135 °C
Maximum Working Pressure	< 10 barg
Sterilization Method	Autoclave and Steam-in-Place (SIP)
Probe Interface	Ingold-type ports for sensors and probes
Process Capability	Capable of reproducing full small-scale bioprocess systems

ACCESSORIES

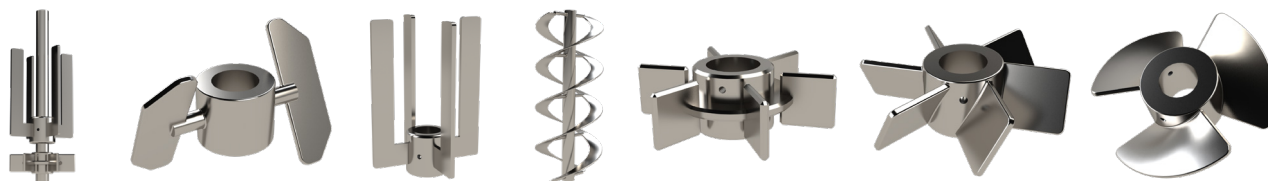
INGOLD

Stainless steel bioreactors of the X and XP series can be configured with a range of custom options and This process connection, also known as an Ingold fitting, uses a female threaded union nut on the sensor holder to connect to a fixed socket welded to the bioreactor vessel. The seal is provided by an O-ring on the holder body, whose position must match the socket length. This ensures the sensor sits flush with the vessel's inner wall, preventing dead spaces where contamination could occur.



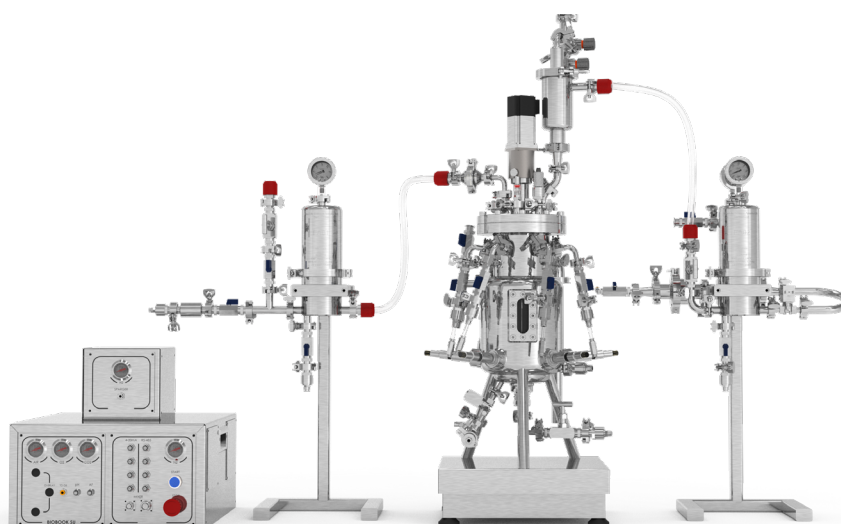
IMPELLERS

Impellers are mechanical mixing devices installed inside bioreactors and mounted on a rotating shaft. Their main function is to mix the culture medium, ensuring uniform distribution of nutrients, gases, temperature, and cells throughout the vessel. Our company manufactures impellers according to customer-specific drawings.

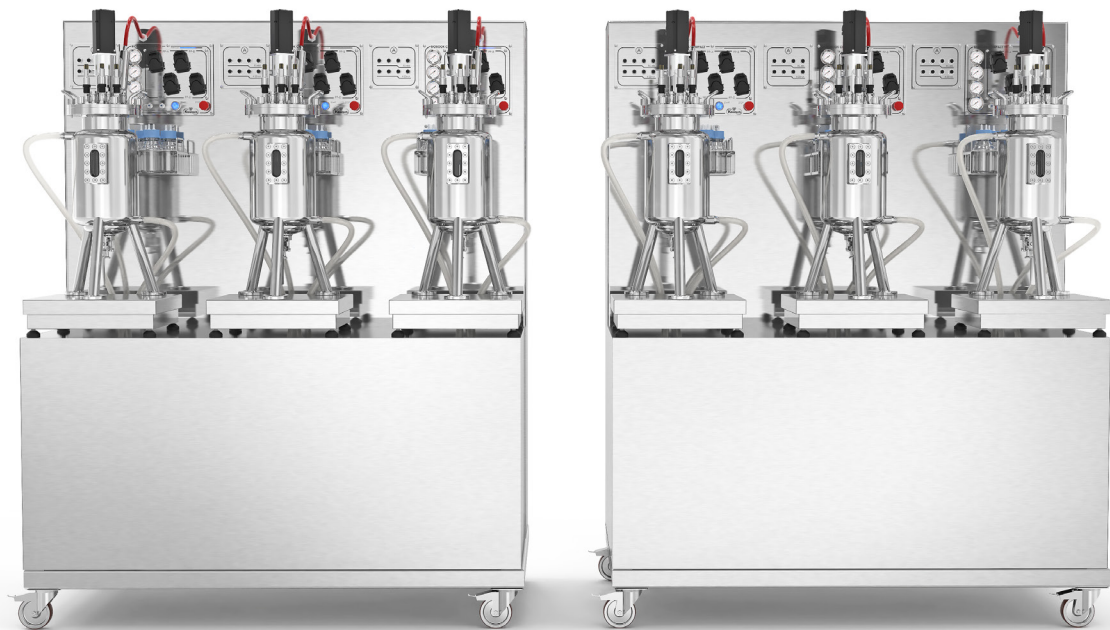


CUSTOM CONFIGURATIONS

Stainless steel bioreactors of the X and XP series can be configured with a range of custom options and design variations to meet specific process requirements. Depending on the application, vessels can be adapted with different port configurations, probe interfaces, agitation systems, spargers, sampling solutions, and instrumentation layouts. Our engineering team works closely with customers to define tailored configurations that align with process conditions, control strategies, and scale-up objectives, ensuring seamless integration with existing workflows and experimental setups.



*Example of custom solution.



*Example of custom solution.