



S & I series

SIP&CIP
CUSTOMIZABLE
PILOT AND
INDUSTRIAL
FERMENTERS/
BIOREACTORS



SOLARIS
BIOTECH SOLUTIONS

SIP & CIP CUSTOMIZABLE PILOT & INDUSTRIAL SCALE FERMENTERS/BIOREACTORS

S-I SERIES

Solaris' **S and I SERIES** systems offer tremendous flexibility within pilot-production scale fermenter and bioreactor systems. Each S/I Series project is tailor-made for the complexities associated with each application. The Solaris industrial team closely collaborates with the client's design and engineering contacts to ensure all specifications are best suited for each process. Up to 30,000 L vessels and beyond - Solaris offers tailored, turn-key pilot and industrial scale systems.

High quality
meets most sophisticated
international standards

**WHY TO
INVEST
IN THIS PRODUCT**

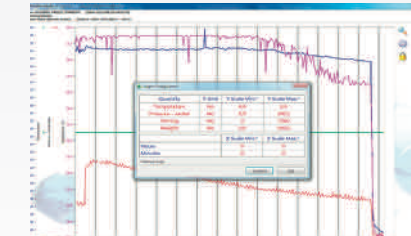
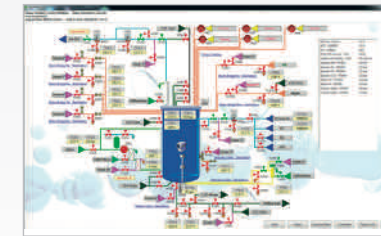


ASME
SETTING THE STANDARD

100%
customized solutions

- Customizable vessels from 5L to > 30.000 L
- Configurable instrumentation for control and/or measurement, including pH, dO₂, CO₂, RPM, gas flow rates, temperature, antifoam, cell density (total and viable cells), weight, redox, conductivity, level, agitation, and much more. New and custom sensors are welcome.
- SCADA Control System SBC-16.
- Software management of data and trends.
- Configurable for microbial or cell culture applications; batch, fed-batch or continuous processes.
- Extensive range of accessories and ancillary equipment.

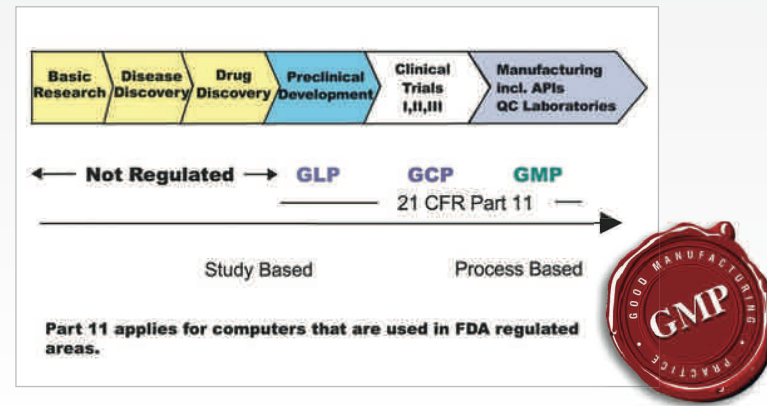
Smart controller for pilot and industrial plants. The SBC-16 system provides highly configurable automatic and manual management of fermentation/cell culture processes.



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S-I SERIES

Each system is completely assembled and tested at the factory prior to installation. The units are then reassembled and retested after delivery to their final location. Systems are provided with a measurement and control system based on a SCADA supervisory platform connected through Ethernet and PLC. The SBC-16 software provides highly configurable automatic and manual management of fermentation/cell culture processes. The system is in accordance with CFR 21 Part 11.



Front view
Illuminated sideglass



Integrated videocamera

GMP customized solutions

For GMP applications, Solaris offers compact solutions with an array of automation techniques for operability. Only top quality stainless steel is utilized, which undergoes the highest quality finishing available. Options include ancillary systems like steam bridge diaphragm valve groups, helping guarantee sterility during inoculation, sampling, harvesting, feeding, etc.

The system is also designed ergonomically such that operating procedures and maintenance can be performed efficiently.



Internal vessel design.

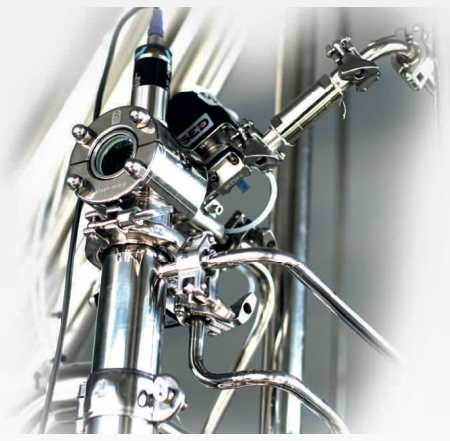


SIP Sampling bottle.

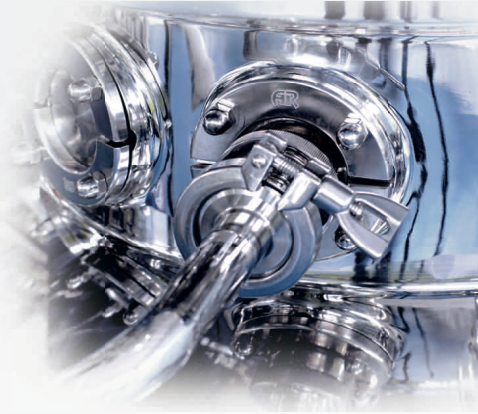




Front view side glass



Automatic mechanical seal lubrication with steam condensate loop

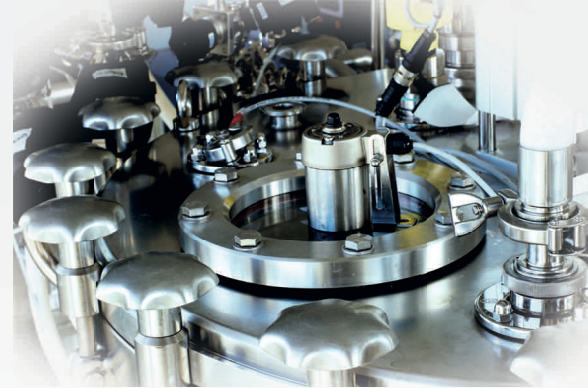


Tri clamp connection
ensure a better cleanability
and easier sterilization



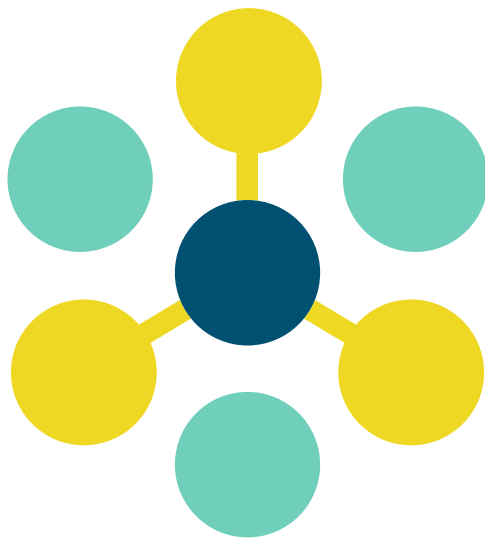






Top view with illuminated side glass





SOLARIS

BIOTECH SOLUTIONS

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