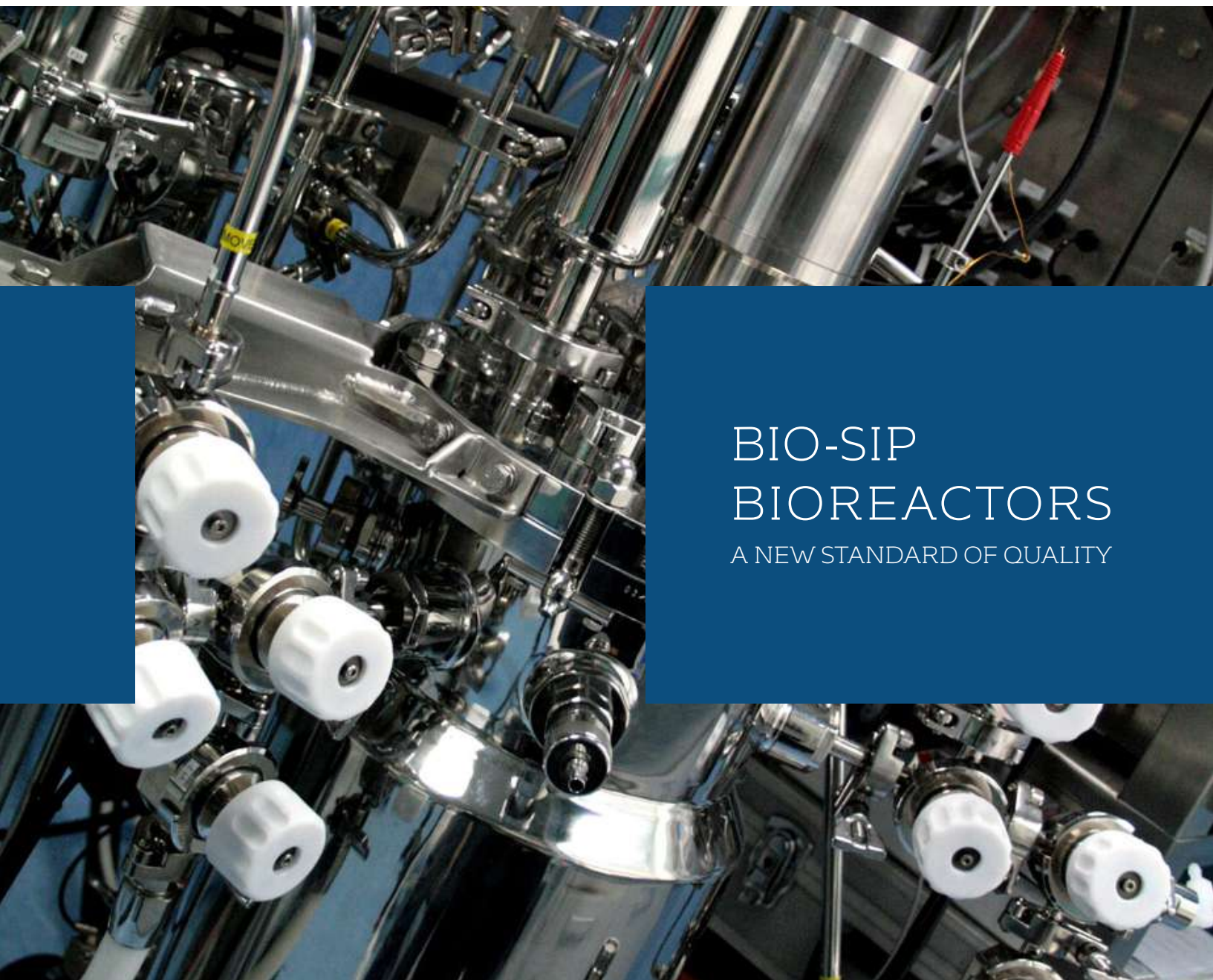


SOLIDABIOTECH.COM



BIO-SIP
BIOREACTORS
A NEW STANDARD OF QUALITY



SOLIDA BIOTECH

Solida Biotech with over 20 years of bioprocess engineering experience has developed a wide range of laboratory, pilot and industrial Bioreactors and Fermenters.

We offer pre-assembled SIP (In situ sterilizable) & CIP (cleanable in place) Bioreactors packages or custom made solutions for microbial fermentations as well as cell cultivation.

We have tanks available starting from 3 liters up to 50L for laboratory applications, up to 500L as pilot plants and up to 20/30 cubic meters for industrial plants.

We provide customized technical solutions for Bioreactors, media & buffer preparation vessels, CIP systems, mobile tanks and formulation vessels



MODULAR IN SITU STERILIZABLE BIOREACTORS & FERMENTERS

Solida Biotech, IACS (Intelligent Automation Control System) capable to Integrate, expand and/or replace your bioreactors modules (sensors, pumps, gas mixing) at any time with the ability to monitor and control more than 64 I/O to manage up to 2 x SIP Bioreactors online.

Interchange a wide range of culture vessels with geometrical ratios for microbial fermentations or cell cultivation with a variety of vessels volumes; 3, 5, 7, 10, 15, 20, 30, 40 and 50 Liters.

More benefits with the expandable modular control unit capable to manage 1 or 2 Bioreactors online

KEY FEATURES

- Leading Master Controller with interchangeable vessels volume from 3 liters to 50 liters
- In situ sterilizable Bioreactors, with benchtop or skid mounted design, to optimize your laboratory spaces
- Automated in-situ sterilization with empty and full vessel sterilization
- Flexible design for easier upscaling and technology transfer
- Superior operations with the powerful open source BIOFLEX Software that supports sophisticated process control, comprehensive data and information management and design of experiments (DoE)
- Advanced process development built around Quality by Design (QbD) standards.
- Turnkey solution with the ability to integrate Biomass sensors, Gas Analyzer, Steam Generators, Chiller and Gas Compressor



PILOT SIP & CIP BIOREACTORS & FERMENTERS

Solida Biotech, supplies a range of standard and custom fit Pilot Bioreactors & Fermenters for multipurpose applications from 20 Liter to 500 Liters w/v.

Our engineering know-how allows us to find technical solutions to meet the needs of a wide variety of customers from the pharmaceutical, biotechnology to food and other industrial applications.

State of the art equipment with the latest hardware and software technologies; quality without compromises.

KEY FEATURES

- Pilot scale culture vessels are available in bacteriological or cell cultivation configurations in the following sizes: 20, 30, 40, 50, 70, 80, 100, 150, 200, 250, 300, 400 and 500 Liters volume w/v
- Flexibility and Reliability with industry standard automation and SCADA software
- Modular Bioreactors design and interconnectivity with external devices give the possibility of individual solutions.
- Integrated or standalone CIP systems for cleaning in place
- Pressure vessel design conform to CE/PED and ASME standards
- GMP, GAMP, CFR21 part 11 validable



BIOREACTORS & FERMENTERS

Solida Biotech design, engineer and manufacture modern industrial Bioreactors & Fermenters up to 20 cubic meters and more.

We provide standalone industrial systems as well as integrated turn-key solutions.

Satellite equipment include; Cleaning in place systems, Harvest and Inactivation vessels, Media and preparation vessels

Our portfolio contains a powerful range of engineering and manufacturing solutions that meet industry best practice and local regulatory requirements.

Excellence in manufacturing:
electropolished finish down to 0.2 $\mu\text{m Ra}$, controlled Ferrite content, full material and welding traceability

KEY FEATURES

- Expertise in design and manufacturing according to the highest requirements and standards such as PED, ASME, BPE and various construction codes (CODAP, ASME, BRITISH STANDARD)
- Advanced design and calculation tools including system for full 3D design, SOLID
- WORKS for mechanical calculations, mixing and cleaning flow models, calculation software
- Large choice of agitation systems to suit any mixing need and product characteristic
- Temperature control, Instrumentation with reliable Sensors, Control Cabinets with leading PLC hardware and SCADA Software
- Quality documentation (Project Quality Plan, manufacturing & inspection file, Factory Acceptance Test protocol) supporting your qualification activities.



CLEANING IN PLACE SYSTEMS

Solida Biotech innovative CIP concepts meet comprehensive high standards to guarantee product safety at every point of the process.

We manufacture CIP and SIP systems for cleaning and sterilization of process equipment from laboratory to industrial scale.

Clean-in-Place (CIP) and Sterilise-in-Place (SIP) systems are designed to both automate essential cleaning and disinfection processes and remove the need for time-consuming disassembly and assembly work.

Efficient cleaning solutions for process vessels, bioreactors, fermenters and other equipment for laboratory, pilot and industrial applications

KEY FEATURES

- Integrated or stand-alone skid mounted CIP systems, semi-automated or fully automated
- Solida Biotech advanced CIP wash unit handles all filtering, preheating, mixing and pumping of water, detergents and demineralized water. It provides continuous monitoring and control of cleaning parameters, including flow rate, detergent concentration, temperature and wash time for full process validation
- All of our CIP units are designed to guarantee successful cleaning. They can be integrated into the single use recovery of cleaning media and single or multi-stream routes, as well as for online and offline cleaning and sanitization.



OUR MACHINES ARE USED FOR THE FOLLOWING APPLICATION:

- Microbial and cell cultivation from R&D to industrial scale
- Production of Vaccines
- Therapeutic proteins
- Monoclonal antibodies
- Ingredients
- Enzymes and biomass
- Blood derivatives (Factors VIII & IX, immunoglobulin, albumin, etc.)
- Immuno-biologicals (Monoclonal Antibodies, Interleukins, Interferon)
- Hormones (Insulin, Growth hormone, etc.)
- Anti-cancer agents
- Vitamins
- Probiotics

Contact us for more details
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