

Elevate upstream bioprocess performance



Upstream bioprocessing manufacturing equipment

Accelerate regulatory compliance and elevate bioprocess performance with flexible and scalable fluid management solutions.

We are experienced problem solvers in fluid management and manufacturers of bioprocessing equipment. Our solutions optimise cell culture processes by tightly controlling critical process parameters and maximising cell viability—driving consistent performance across workflows.



Increase viable cell density

Our precision-engineered equipment ensures the best conditions for cell culture with consistently accurate feeding of media components.

Ensure critical cell growth parameters with digitally controllable cased and panel-mount peristaltic pumps that seamlessly integrate to support rapid configuration of various bioreactor formats. Optimise your process with WMArchitect™ single-use assemblies, custom-designed to meet your specific requirements.



Seamless Integration

CASE STUDY

Bioreactor manufacturer integrates Watson-Marlow equipment

A PROFINET® interface has enabled the seamless integration of Watson-Marlow 630PnN/R and 730PnN/R pumps into the Siemens environment of Adolf Kühner AG's SB2500-Z orbital shaken bioreactor.

Switzerland-based Kühner, a leader in bioreactor innovation, uses three Watson-Marlow pumps in its 2500 L orbital shaken bioreactor for precise flow control, reliability, efficiency, and compatibility with the bioreactor's advanced automation systems.

The smooth integration with advanced automation systems allows for real-time monitoring and data-driven optimisation, ensuring consistent high-quality outputs and supporting scalable production.



“Overall, the integration of Watson-Marlow pumps in the SB2500-Z bioreactor enhances the bioreactor's performance, supports the automation and smart production systems, and ensures high-quality, scalable bioprocessing.”

Julian Müller, Engineer for automation of products and serial production at Kühner



The precise control offered by the integrated Watson-Marlow pumps ensures consistent and reliable bioprocessing conditions. Customers report high reproducibility of results, which is crucial for maintaining product quality and meeting regulatory standards.

Read full Kühner case study here



Overcome space constraints and changing workflows

Laboratory-scale bioprocessing relies on a diverse range of equipment including bioreactors, filtration systems, chromatography units and incubators, all of which occupy valuable benchtop and floor space. Adapt to changing workflows and space constraints with flexible, digital control pumps and automation networks.

The ultra-compact, stackable 100 series pumps feature intuitive manual and automated control options, simplifying setup and operation. Their easily accessible pumpheads enable rapid tubing changeovers and support multiple feed streams for pH control, antifoam dosing, nutrient delivery, and buffer addition, enhancing efficiency and adaptability in dynamic lab environments.



CASE STUDY

CPI Biotech relies on low shear, low pulsation pumps from Watson-Marlow for its bioprocess skids

CPI Biotech relies on a range of peristaltic pumps from Watson-Marlow Fluid Technology Solutions (WMFTS) to ensure its skid platforms provide major multinational biopharmaceutical companies with the flexibility to manage multiple processes.

Since 2017, CPI has integrated WMFTS pumps into its solutions for pH adjustment, depth filtration, virus filtration, virus inactivation, media and buffer preparation, final filling skids and customised single-use skids.

The 530, 630, 730 cased pumps and the provide flexibility for CPI's customers to manage multiple processes and save time due to their high turndown ratio and multiple options for tube materials and sizes.

Martin O'Reilly, Senior Life Sciences Engineer at Watson-Marlow Ireland, said: "Watson-Marlow's wide portfolio of products allows us to address many of CPI's application challenges through the integration of both OEM panel mount pumps and cased pumps in their skid platforms."



Photo courtesy of CPI Biotech

"With their compact size, Watson-Marlow OEM pumps are used where space saving is required, for ease of integration on skids, with multi-pumphead configuration also available."

CPI Biotech, customer testimonial

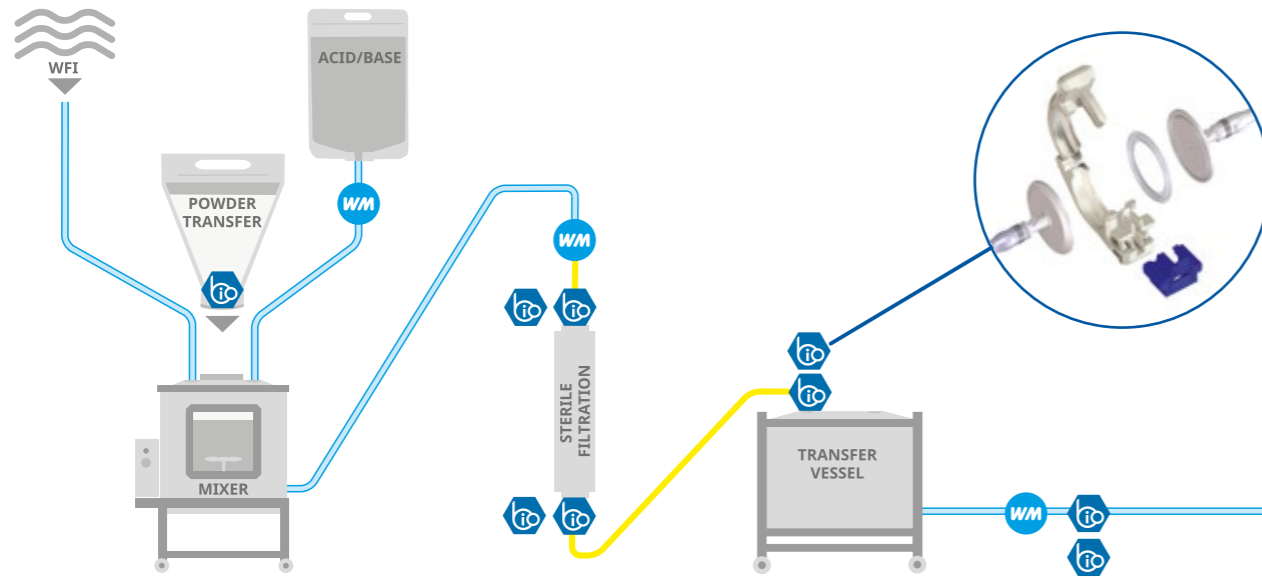


Read full CPI Biotech case study here



Integrated bioprocessing

MEDIA PREPARATION

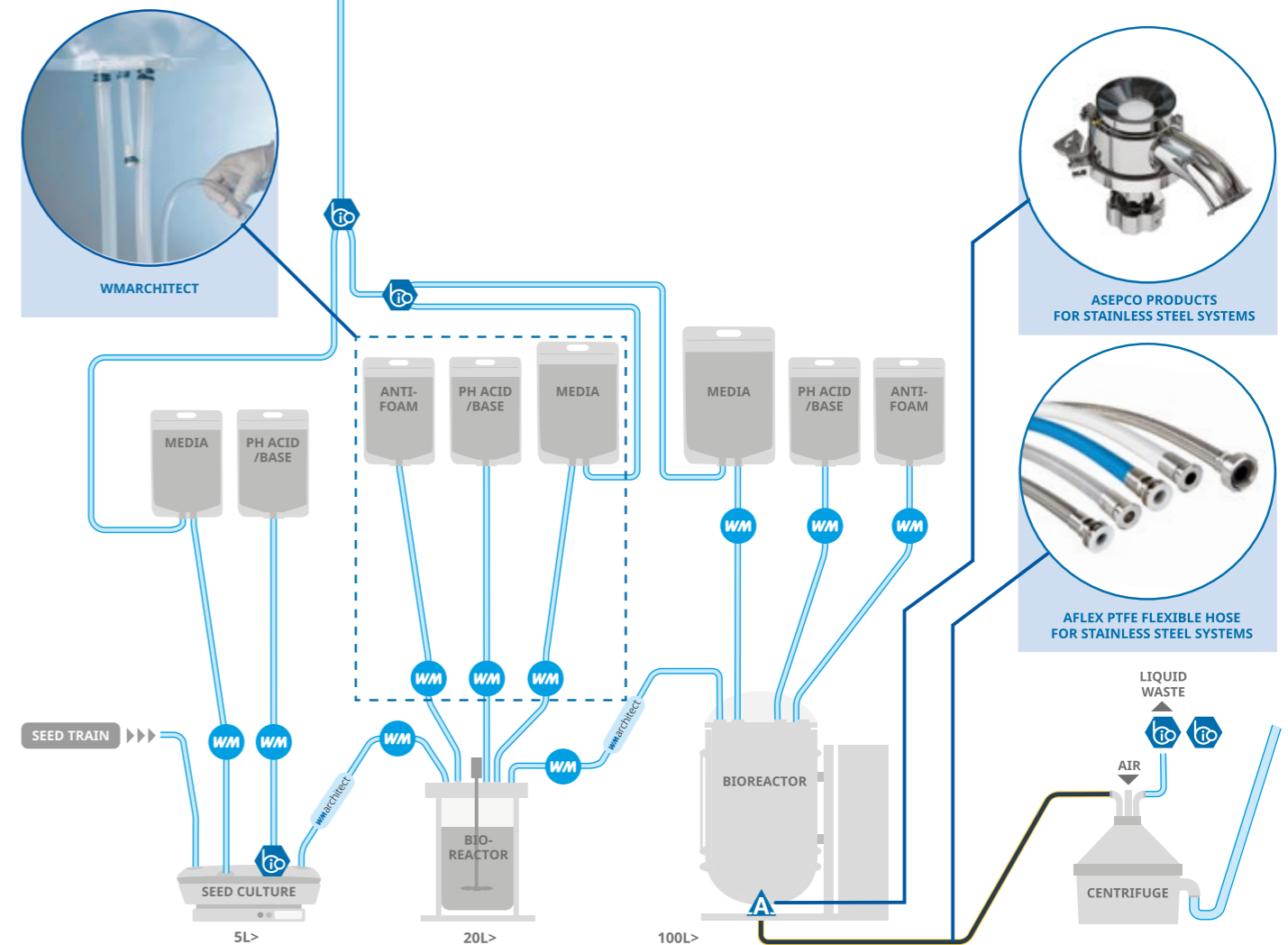


Scalable technologies

For end-to-end solutions from a single supplier, our extensive product range supports every stage of your bioprocess ensuring reliable results from R&D to commercial manufacturing. Continuity in the technical operation across our scalable product range ensures streamlined procedures and training, validation assurance and lifecycle services that drive efficiency.

Watson-Marlow Tubing is available with internal diameters from 0.5 mm up to 25.4 mm ensuring high accuracy control of small flow rates as well as the ability to handle larger flow rates as your bioprocess scales.

FERMENTATION



Watson-Marlow Pumps

Watson-Marlow process pumps

Watson-Marlow Tubing

Pumpsil / PureWeld XL / Bioprene tubing
 Platinum-cured silicone braid hose

ASEPCO

Weirless Radial diaphragm valves

BioPure

BioPure components

High purity Platinum-cured silicone gaskets

WMArchitect

WMArchitect

Aflex Hoses

Aflex PTFE flexible hose

Discover our full upstream product portfolio



Components

A comprehensive portfolio of fluid path components including actuators, aseptic connectors, connectors and clamps, diaphragms, gaskets, inline valves, sample valves and tank valves.

[Explore the range](#)



Assemblies, hoses and tubing

An extensive range of fluid transfer solutions including flexible hose assemblies, fluid path equipment, fluid transfer hose and tubing, peristaltic tubing and single-use assemblies.

[Explore the range](#)



Peristaltic pumps and pumpheads

Integrate peristaltic pumps and pumpheads seamlessly into your upstream bioprocess including cased pumps, panel mount pumps and pumpheads.

[Explore the range](#)



Accelerate regulatory compliance

Our validation testing services team develops rigorous, industry-standard validation studies in collaboration with fully qualified partners. Together, we deliver customised regulatory and compliance solutions that help you meet quality assurance standards with confidence, which accelerates time to approval and maximises operational efficiency.

Uninterrupted Bioprocessing

Our global, sustainable manufacturing mitigates supply chain risk for uninterrupted bioprocessing.

BIOTECHNOLOGY AND PHARMACEUTICAL SOLUTIONS



Watson-Marlow Fluid Technology Solutions

Watson-Marlow Fluid Technology Solutions supports its customers locally through an extensive global network of direct sales operations and distributors

View full upstream range



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