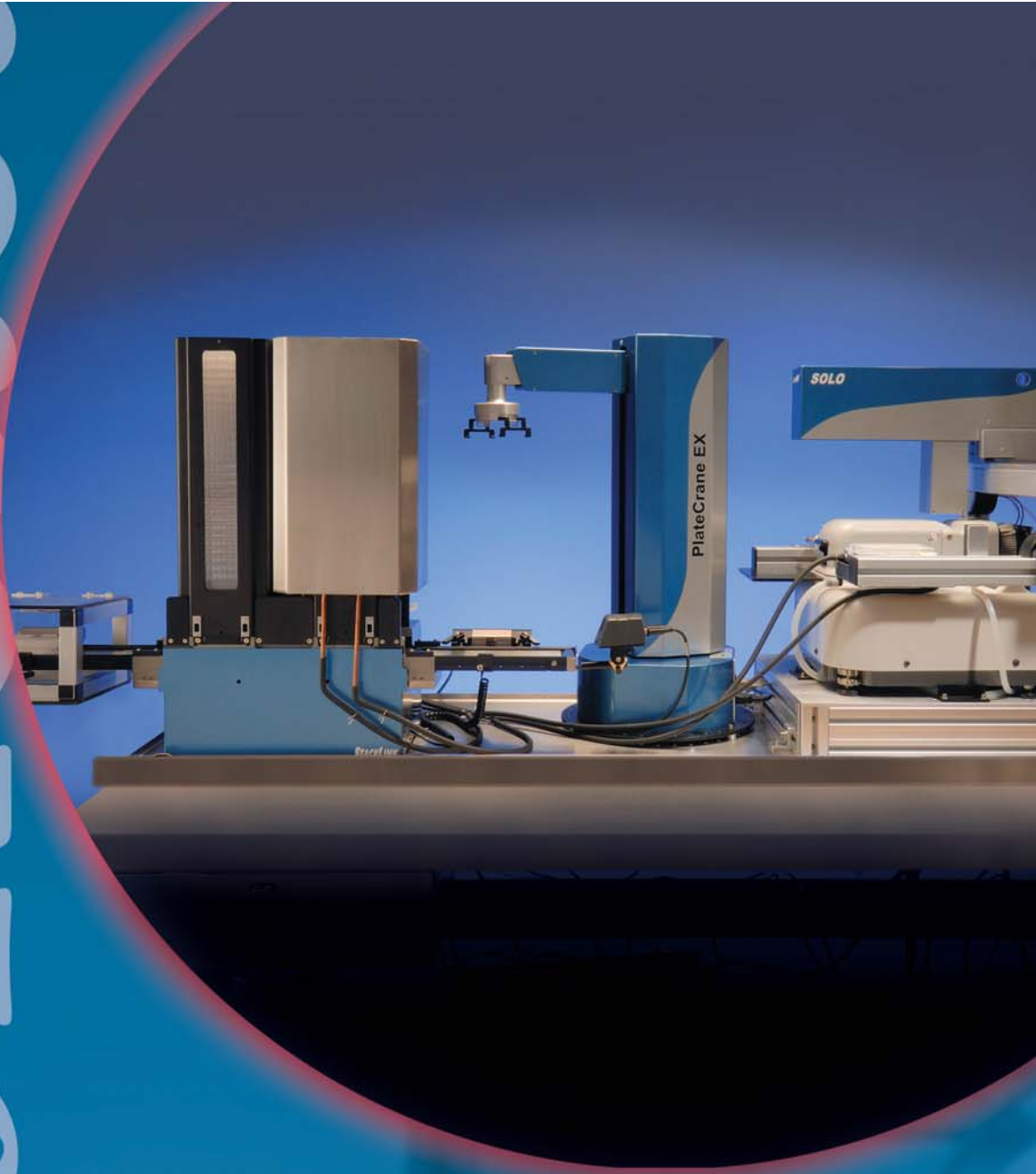
AutoReact



Mini-Bioreactor System

Automated. Independent. Compact.

For use in:

Clone Screening & Selection

Media Development & Improvement

Process Parameter Optimization

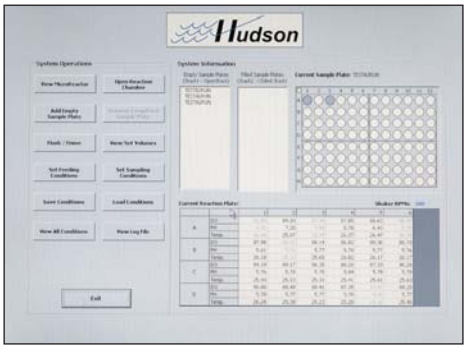
Protein Production

Fermentation Testing

Hudson Control Group

AutoReact- Mini-Bioreactor System

The **AutoReact™** Mini-Bioreactor System provides a revolutionary change in the process of cell culture and fermentation testing. Using a microplate footprint,24-chamber bioreactor, the system automatically loads, samples and feeds cells growing under 24 independent reaction conditions simultaneously.



SoftLinx™ software makes it easy to interface the AutoReact with other automated instruments for seamless process control, scheduling and data-tracking.

Automatic

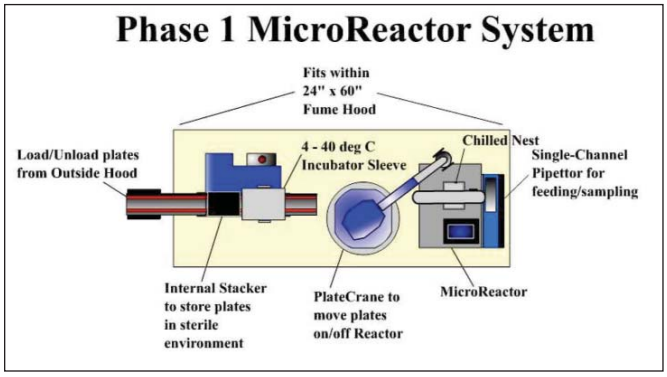
The fully-automated run frees the user from any need to manually sample or monitor any of its 24 reactions, even for runs lasting days. Users can input an unlimited number of test conditions to trigger automated feeding and/or sampling while maintaining samples in a chilled environment for the entire length of the run.

Independent

Researchers can perform high-throughput cell culturing and optimization without burdensome manual attention. The **AutoReact** System employs the Cellerator™ bioreactor from MicroReactor Technologies and takes the place of the large and costly, room-sized shake flask reactor setups common in most labs where cell growth testing is done. The typical large flasks are replaced by a microplate-footprint tube rack that takes the place of 24 flask process control setups. The automation frees up many man hours now necessary for tending the flasks and determining feeding and sampling events.

Compact Footprint

Capable of running 24 independent test processes simultaneously, this system has a footprint that allows it to be entirely contained within a standard bio-safety cabinet. Hudson's automation of the sampling and feeding of the individual process tubes ensures accurate and traceable results. The **AutoReact** is ideal for clone screening and selection, protein production for research applications, and media development and improvement for both research and manufacturing applications.



Features:

- Users input unlimited number of test conditions to trigger automated feeding and/or sampling
- Maintains samples in chilled conditions until the user elects to remove them for analysis
- Automatically loads/unloads sampling microplates without manual intervention
- Eliminates the need for operator monitoring and late-night attendance for sampling and feeding
- The system is programmed to take readings of critical, user-selectable process conditions to determine the need for individual reactor tube sampling and/or feeding
- The system software provides an easy-to-use GUI enabling the input of condition algorithms which will be evaluated against actual measured process parameters to determine the need for and required volume of samples and/or feed media in each tube at any time
- Includes Hudson Control Group's SoftLinx for Systems software, which provides an easy-to-use interface to coordinate the **AutoReact's** operation with other automated instruments
- Sample plate capacity of 30 standard-height microplates
- Up to 7 feeding media reservoirs
- Users can add new sample plates, remove filled plates, and change sampling and feeding conditions anytime during a run

GSA Contract Holder
GS-07F-9491S

Hudson Control Group
Customized Solutions in Microplate Automation and Robotics

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