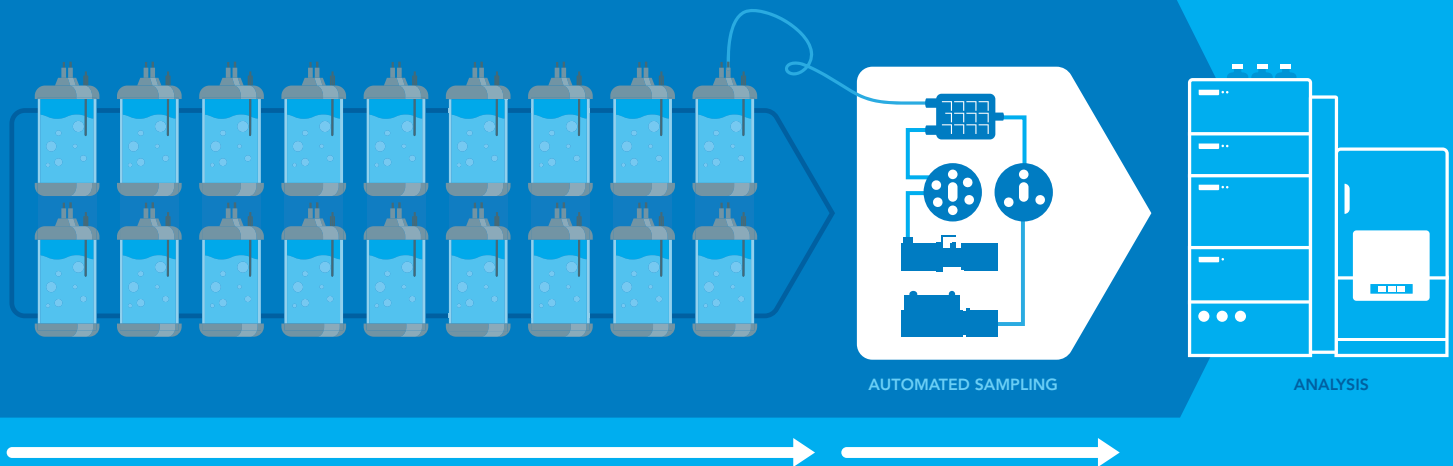


NEW TECHNOLOGY FOR AUTOMATED ASEPTIC
SAMPLING FROM A BIOREACTOR:

Enabling Hands-Free Sample-to-Answer PAT Workflows



FLEXIBLE SCALABILITY

Sample from 1 to 18 Bioreactors via a Centralized Hub

SAMPLING TECHNOLOGY

IDEX Health & Science Sampling Technology
for Custom Integration into OEM Platforms

OEM-Customizable Technology

FROM IDEX HEALTH & SCIENCE

Our solution enables connectivity to sample prep or analytical instruments for completely automated PAT workflows.



System can
scale up to
18 bioreactors
using one
central valve



Central valve and
pump distribute
sample to analysis
and/or fraction
collection

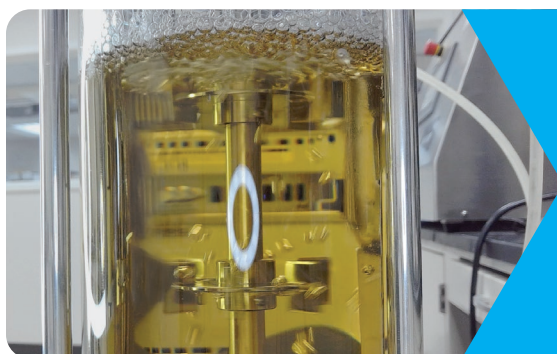
ADVANTAGES FOR OEM PARTNERS

- › Elegant bill of materials enabling a compact form factor
- › Can be easily integrated into cell culture, sample prep, analytical instruments, or stand-alone products
- › Available exclusively to commercial OEM partners
- › Prototype systems available for demo

TECHNICAL ADVANTAGES

- › Minimal sample consumption (less than 100 μ L)
- › Completely degassed sample optimized for analysis
- › Sampling accuracy is maintained regardless of distance from bioreactor, enabling flexible placement
- › No peristaltic pump to induce cell damage

Aseptic Performance



Day 1

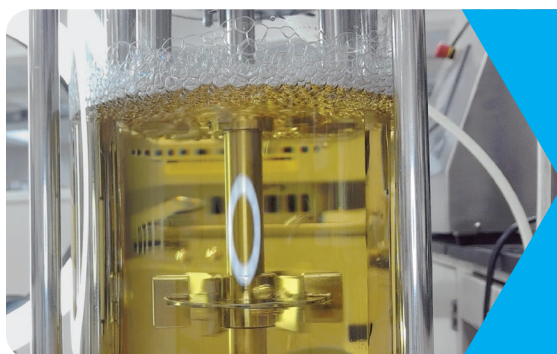
BIOREACTOR
RUN



Sterility
demonstrated
up to 100 days



Testing with
microbial
growth medium



Day 100

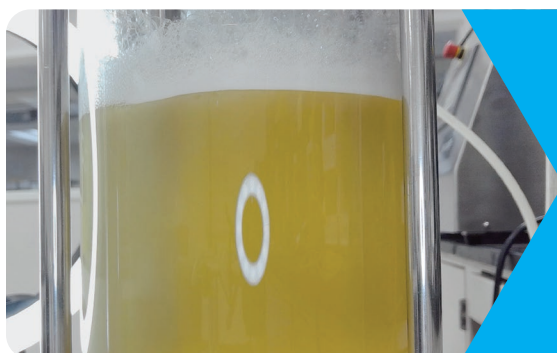
BIOREACTOR
RUN



Sampling
2–4x per day



Sparging low
volume of sterilized
air through
sampling probe



Day 101

BIOREACTOR
RUN

Intentional Sterility Breach

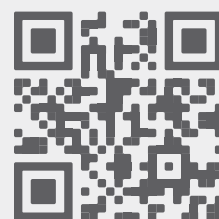


Turbidity of
growth medium
monitored
continuously for
verification of
aseptic performance

IDEX Health & Science Technology Available for OEM Integration



We offer modular sampling technology that can be integrated into platforms for cell culture, analytical, or sample prep applications.



**CONTACT OUR EXPERTS
TO LEARN MORE
ABOUT OUR ASEPTIC
SAMPLING CAPABILITIES**

idex-hs.com/contact