

sbi SCIENTIFIC
BIOPROCESSING

Digitally Simplified Bioprocessing



PROBLEM

Small-scale bioprocess development is still too blind.

Teams can screen many strains and conditions — but the critical process signals often arrive late, offline, or not at all.

- Manual sampling slows iteration
- Many conditions, limited online visibility
- Scale-up decisions start with incomplete insight

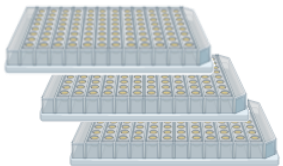
PROBLEM

Good bioprocess development and early scale-up are critical for the success of synthetic biology.



“More than 90% of syn-bio technologies fail because they can’t be scaled.”

Microtiter Plates
0.1 - 1 mL



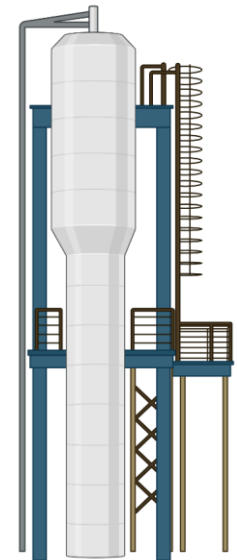
Shake Flasks
10-1000 mL



Benchtop Bioreactor
200mL – 20L



**Pilot and Production
Bioreactor**
200L - 250,000L



Strain Development &
Screening

Strain Selection &
Evaluation

Bioprocess Dev. &
Optimization

Scale-Up

Production

SBI SOLUTION

Bioreactor-like insight at small scale.

SBI connects software, small-scale hardware, lab systems, and compatible sensors into one decision workflow.

Liquid Injection System (LIS)
Fed-Batch, Induction...

DOTS Software
Monitoring, Control, Export

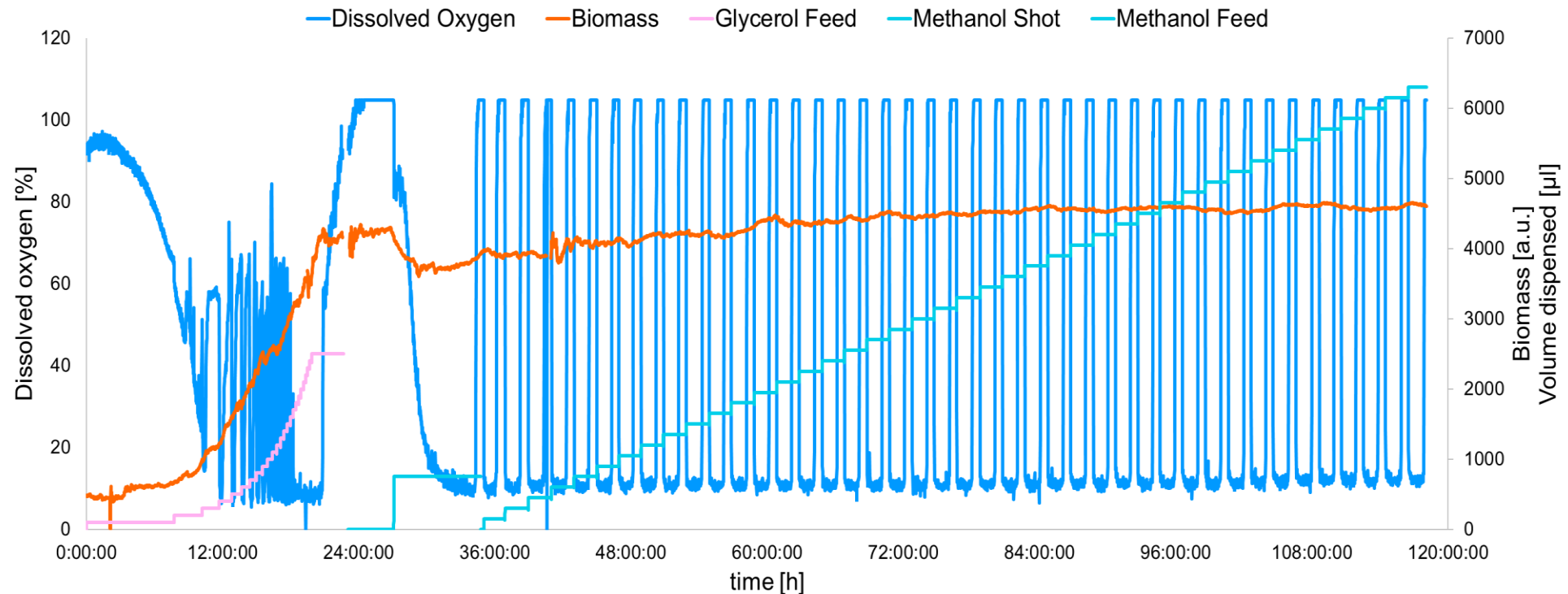
Multiparameter Sensor (MPS)
Biomass, DO, Fluorescence...

Sensor Pills
Dissolved Oxygen (DO)



WHY IT MATTERS

Screen faster. Understand earlier. Scale with confidence.



Fed-batch in combination with a DO-controlled methanol feed during the induction phase resulted in a volumetric yield increase from **3.8 $\mu\text{g}/\text{ml}$** to **56.5 $\mu\text{g}/\text{ml}$** .



Let's Connect!

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