# TruBio bioprocess automation software

The technology and data transfer during the lifecycle of drug development, from bench scale laboratory applications to large-scale production, is often challenging, time consuming, and involves many different user requirements. The Thermo Scientific<sup>™</sup> TruBio<sup>™</sup> software and automation platform improves tech transfer time and validation costs by running on a consistent data model from R&D to commercial production. With TruBio Bioprocess Control Software being powered by both DeltaV Discovery platform at lab scale and DeltaV Distributed Control platform (for pilot, clinical and production scale) both from Emerson, savings have been found in risk mitigation including reduced training and validation costs. Standardizing with open architecture controllers simplifies data transfer and storage resulting in introducing new products faster to market.

### For research and process development solutions

TruBio Discovery software platform provides a simplified solution to meet the needs of research and process development labs. This platform supports research and discovery applications with automation technology that easily translates to commercial operations. A single, workstation-based controller is utilized to execute process control strategies.

- Transferability of software and speed to scale-up conversions when using TruBio software from research to clinical to commercial production processes
- Ability to integrate with most existing vessels (including third-party) currently in place
- Enables easy integration of process measurements and data sources powered by the DeltaV Discovery platform
- Reduced footprint
- Lower cost entry into the DeltaV control platform



### For production scale solutions

TruBio software with the DeltaV platform and the TruLogic controller provides all the capabilities of TruBio Discovery software and adds flexible and reliable state-of-the art control capability. With multiple sensor loops as well as gas and liquid addition capabilities, this software can be used with both Thermo Scientific<sup>™</sup> HyPerforma<sup>™</sup> Single-Use Bioreactors (S.U.B.s), Single-Use Mixers (S.U.M.s) and other third-party bioreactors to provide a process control platform from research through commercial manufacturing.

- Conforms to regulatory requirements for use in cGMP-compliant processes
- Enables building of sophisticated and advanced process control strategies without knowledge of DeltaV platform programming
- Intelligent alarm management
- Multifeed dosing functionality available to scale from small to large doses with high precision
- Ability to create batch recipes for media mixing and buffer preparation
- Redundant controller configurations can be accommodated



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#### Software comparison

Features	TruBio Discovery platform	TruBio software with DeltaV platform
Standard TruBio software interface		$\bigcirc$
Control key process parameters	<b>Ø</b>	
Integrate process parameters	<b>Ø</b>	
Process alarms		
Building alarms		<b>v</b>
Event historian	<b>Ø</b>	<b>v</b>
Save/load files for tech transfer	0	
Batch control and event history collection	<b>Ø</b>	
GMP compliance		
Profibus scales		<b>v</b>
Multifeed dosing function		
G3 controller I/O signals	<b>Ø</b>	
External signals		
Redundant control		

TruBio Discovery software cannot be used with the TruLogic controller

### Find out more at thermofisher.com/automationsoftware



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