

Trust all your moves

Accelerate your science with automation

The time for lab automation is now

Labs are changing. Workflows are more connected than ever, experiments are longer, more complex, and work patterns are evolving. Today's lab:

- Needs to be equipped to manage multiple complex workflows at once
- Seeks greater control over their workspaces and designs for simpler scale-up
- Must maintain trackable processes enabled by traceable data

To achieve these goals, labs require solutions that enhance their **efficiency**, **flexibility**, and **data traceability**.

Automating your workflow, whether in part or in its entirety, delivers reproducible, efficient, and productive processes — no matter the size of your lab.



Decrease hands-on time

Easy-to-use systems require minimal training and input, boosting walk-away time and allowing personnel to focus on value-adding tasks.



Enhance reproducible results

Samples are processed uniformly, making results more consistent.



Maximize throughput

Automation increases instrument uptime, enables remote system control, and facilitates unassisted workflows outside working hours — ultimately shortening timelines.



Connect data

Data and metadata are collected and integrated for traceability and easier regulatory compliance.



Reduce errors

Automated systems decrease manual processes and opportunities for human error.



Scale flexibly

Adaptable processes and modular systems accommodate future capacity needs.

Thermo Fisher Scientific: Your ideal automation partner

As laboratories continue to grow and move towards multiple connected workflows, they need reliable partners. Thermo Fisher Scientific can be your trusted partner on your automation journey, with our:



Proven expertise

Decades of experience in:

- Automated incubation
- Lab robotics
- Intuitive software



Reliability

Trusted products and personalized, supportive partnerships.



Global reach

Worldwide infrastructure and installations.

But the support doesn't end once you've chosen a solution. We are committed to providing exceptional service throughout our partnerships, offering:

- **An extensive support structure** with technical support and access to our global automation service team
- **Service plans** that extend beyond your warranty, to keep your lab operating at its best
- **Access to valuable resources:**
 - **Lab Automation Help Resource (LAHR)** — A live and updated central hub for product information, procedures, release notes, and how-to resources
 - **The Community Forum** — A platform to communicate with our experts, partners, and other automation users



The automated lab: An overview

Industry-leading solutions to automate your workflows and enhance your science

Thermo Fisher Scientific delivers solutions to support you no matter what your automation needs are, from instrument loading to full end-to-end automation, and regardless of your application.

Cell & gene
therapy

Biologics
discovery

Analytical
processes

Cell culture

Flow
cytometry

Screening

ELISA

Synthetic
biology

HPLC-MS
sample prep
& detection

Supporting you through the journey:



Instrument loading journey:

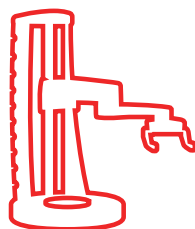
Automate instrument loading and unloading steps.



Simple workflow journey:

Automate a set of benchtop instruments or a simple process.

With a comprehensive portfolio:



Robotic movers:

Power workflows with unmatched ease-of-use, error-proofing, and accuracy.



Automated incubators:

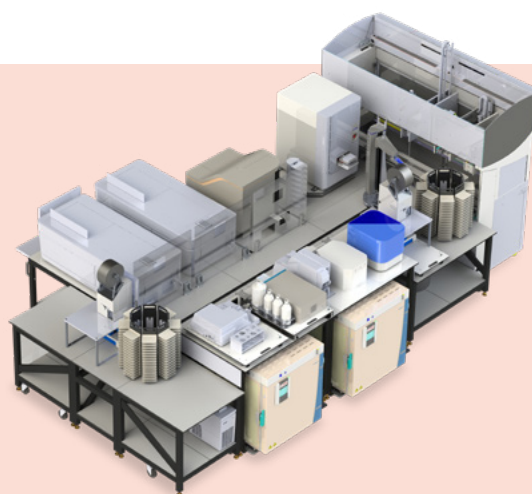
Large amplitude shaking and incubation with repeatable results for perfect cell growth in biotherapeutics.

| | | | | | | | |
|----------------------------|------------------------|-------------|------|------------------------|-------------------------|-------------------|----------|
| Clone selection & scale-up | Transient transfection | Sample prep | qPCR | High-content screening | Nucleic acid extraction | Sample management | ADME/Tox |
|----------------------------|------------------------|-------------|------|------------------------|-------------------------|-------------------|----------|



Configurable platform journey:

Automate **multiple experiments**.



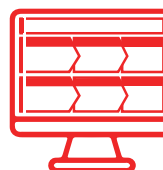
Large system journey:

Automate a **variety of complex, interconnected processes**.



Collaborative platforms:

Light and reconfigurable infrastructure layouts that improve your lab productivity and efficiency.



Automation software:

Real-time data and event-driven dynamic scheduler for seamless physical and digital integration to define, execute, and monitor workflows.

Collaborative platforms

Collaborative workflow solutions to automate your science

Workflows change, and reconfiguring your setup to match doesn't have to be difficult. With a range of collaborative and transforming platforms with light docking solutions available, you can effortlessly set your workflow up again and again and again.

Key benefits:

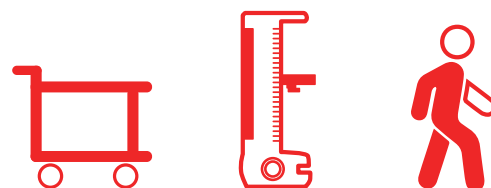
- **Flexibility:** Enjoy future-proofed and scalable solutions. Our light, reconfigurable automation solutions are interchangeable, giving you the set-up you need for now and future use
- **Instrument utilization:** Increase your productivity with lower investment. SmartHandle technology enables easy and error-free online or offline use of your instruments
- **Space efficiency:** Maximize your lab and reduce dead space. Choose to work either horizontally or vertically as your space dictates
- **Ease-of-use:** Improve user confidence. SmartHandle technology provides at-a-glance system health indication for quicker insights
- **Productivity:** Increase walk-away times. Our solutions benefit from autonomous position correction, meaning you have more time for value-added tasks

Choose how you want to work

Thermo Scientific™ Aloft™ Collaborative Laboratory Automation Platform

Enabling the lab of the future, today

A familiar lab infrastructure with effortless reconfigurability that enables intuitive instrument sharing between workflows, without the need for deep training.





Green

The device is available for manual use



Red

Device error



Blue

The device is available for automated use



Yellow

Device warning



Pulsing*

The device is transitioning to the state indicated

Thermo Scientific™ inSPIRE™ Collaborative Laboratory Automation Platform

A configurable and intuitive solution to deliver inspired science

Work vertically to maximize your productivity and minimize your lab footprint.

SmartCart docking solution

Reconfigure your systems smartly and efficiently

The Thermo Scientific™ SmartCart™ is a light and intuitive docking solution, features SmartHandles for safer and smarter instrument moves. Benefitting from the Thermo Scientific™ Momentum™ Workflow Automation Software, the SmartCart allows you to dynamically reconfigure your lab set-up by moving your instruments to another location in your workflow, to a different workflow, or to another lab area entirely.

Benefit from visual and haptic cues with this solution that works on the move, keeping you in full control of system reconfiguration. And with the Thermo Scientific™ Spinnaker™ 3 Microplate Mover's AutoHeal feature, powered by Momentum automation software, you can trust that your move is error-proof.



Robot movers: Spinnaker 3 Microplate Mover

The only collaborative labware mover with integrated vision-assisted teaching and automatic labware levelling

Ever needed an extra hand in the lab? The Spinnaker 3 Microplate Mover collaboratively works alongside you to automate your scientific processes for safer, smarter, and more consistent sample moves. Thanks to the mover's class-leading dexterity and intelligence, automated sample handling and instrument sharing have never been simpler and more effortless.



Key benefits:

- **Trusted robot moves:** Enjoy perfect handling every time. AutoLevel technology means no more worrying about the non-flat world
- **Simplified interface:** A hassle-free and intuitive set-up. Nest locations are dynamically tracked and maintained thanks to the machine vision-enabled auto-healing capabilities
- **Empowered scientists:** Automation is safe, easy, and accessible. Users require little training, and Spinnaker 3 takes reduced effort to operate and maintain compared to other solutions

Automation software: Momentum Workflow Automation Software Suite

Momentum software suite provides dynamic scheduling, inventory management and data connectivity to enable connected workflows

Momentum Workflow Automation Software is a dynamic software platform with an easy-to-use interface, enabling you to create, design, and modify any workflow with ease. With unrivalled data handling, Momentum software is much more than just a scheduler — amongst other features, it gives you remote access to data in real time, and enables you to track and trace data all the way back to the individual well.



Key benefits:

- **Ease-of-use:** Dashboards, guiding wizards and flow controls reduce onboarding time and make automation more accessible for those without coding experience
- **Flexibility:** Our concurrent driver license model makes it easier to reconfigure platforms yourself — with no need for additional device drivers
- **Connectivity:** RESTful API and Unite modules enable real-time bi-directional data connectivity for quicker tech stack integrations
- **Powerful:** Features such as granular batch controls and expression editors lead to smart, dynamic workflows, preventing expensive mistakes
- **Reliability:** Persistent data and audit logs give you uninterrupted and traceable workflows, enabling compliance with requirements such as 21 CFR part 11

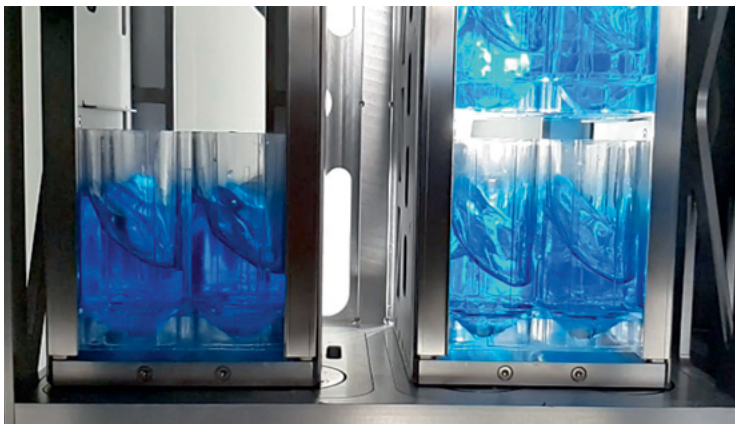
Automated incubators: Cytomat 2 Selector Automated Shaking Incubator

**The first automated incubator with large amplitude shaking for
biotherapeutics transient transfection, clone selection, and scale up**

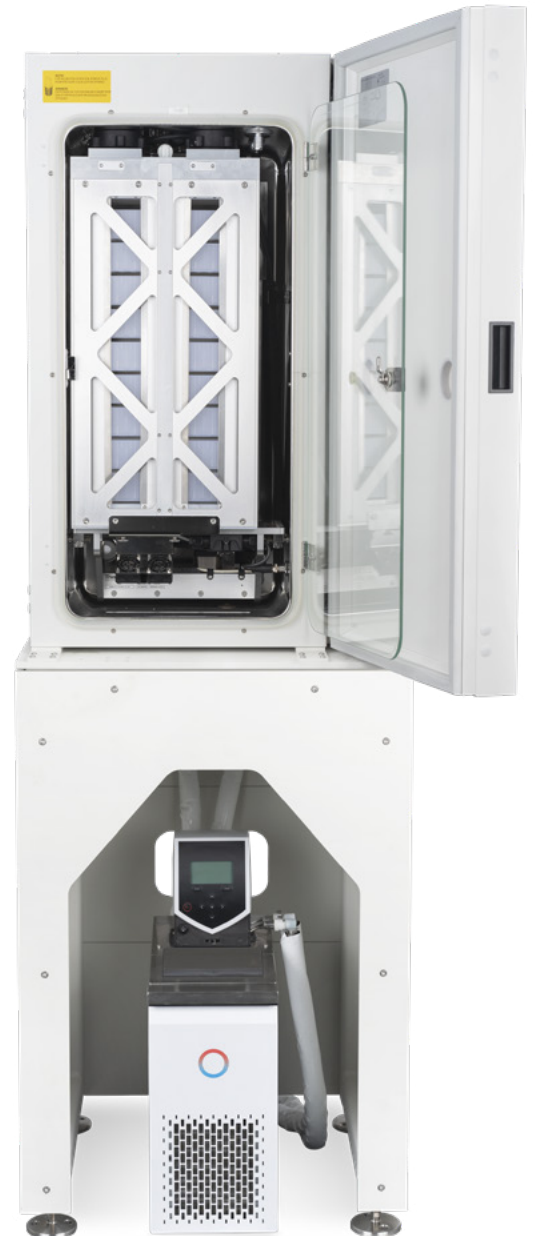
Scale up your cell line production with a fully automated biologics workflow. The Thermo Scientific™ Cytomat™ 2 Selector Automated Shaking Incubator delivers consistent and large amplitude shaking and incubation that reproduces manual processes, increasing throughput for cell line selection, and transient protein expression.

Key benefits:

- **More hands-off time:** Automated large amplitude shaking and incubation mean a seamless transition from manual to automation
- **Experimental safety:** A built-in decontamination routine keeps your samples safe in between runs
- **Increased throughput:** Use of large culture vessels (SBS) avoids cell lines splitting to gain efficiency and throughput for cell line selection scale-up
- **Repeatable results:** Precise and consistent true orbital shaking patterns from top to bottom combined with superior incubation conditions minimize variances and maximize throughput



The Cytomat 2 Selector Automated Shaking Incubator uses consistent true orbital shaking patterns for reproducible results



Deliver world-changing science by trusting your next move with automation



Automated Movers:

thermofisher.com/benchtop-automation



Automated Incubators:

thermofisher.com/cytomat



Collaborative Platforms:

thermofisher.com/inspire



Workflow automation software:

thermofisher.com/momentum

 Find out more at thermofisher.com/labautomation