Hardware, software and custom upgrades

Designed to increase productivity, efficiency, and compliance

In practice, the decision between upgrading and replacing equipment is not binary. Many organizations adopt a hybrid approach—using upgrades to extend the life of existing systems while strategically investing in new equipment where it delivers clear value. New equipment is designed to reflect the latest advancements in automation, data integration, and process control, provide an alternative where legacy equipment may no longer meet performance requirements, simplifying architecture and standardized platforms and enabling better integration into modern digital ecosystems and manufacturing or research strategies.



Modernizing unique or aging equipment protects performance, compliance, and existing investments. It provides a cost-effective means for keeping pace with new releases and innovations when budget is not available to replace equipment. Large biopharma, contract development and manufacturing organizations (CDMOs), commercial manufacturing organizations and academic institutes are increasingly considering the upgrade option to benefit from:

- Access to new, pre-verified functionality and security controls developed since purchase without the full cost of new equipment.
- Keeping systems running on supported operating systems to optimize productivity and reduce the risk of unexpected downtime that could affect validated workflows.
- Limiting the scope of change compared with full system replacement, minimizing disruption to existing IQ/OQ documentation and validated processes.
- Replacing aging components and controllers to stabilize performance, reduce variability, and maintain reproducible processing critical to GMP manufacturing reducing exposure to unplanned failures, parts shortages, and service delays later in the equipment lifecycle.
- Upgrading only what is needed—hardware, software, or system elements—without forcing a disruptive and unsustainable "rip-and-replace" approach or major process redesign.

Why take advantage of custom upgrades?

Custom upgrades are valuable when standard upgrade kits don't fully meet the realities of how the equipment is configured, used, or regulated.

1. Your equipment is customized or non-standard - If a system has been modified, configured for a specific process, or built before standard upgrade kits were available, a custom upgrade ensures changes are designed around your exact configuration, rather than forcing a one-size-fits-all solution.
2. You need to protect validated or regulated workflows - In regulated environments, even small changes can affect qualification status. Custom upgrades are assessed and delivered under controlled procedures, with appropriate documentation (including Change Control Protocols if required), so you can maintain compliance while modernizing your system.
3. You want to extend the useful life of aging equipment - As controllers, operating systems, or components age, sourcing parts and maintaining performance becomes harder. A custom upgrade allows you to replace or modernize only what's needed, reducing downtime risk and delaying costly full replacement.
4. Your operational needs have changed - Processes evolve—higher throughput, new data requirements, or integration with newer software or connectivity standards. Custom upgrades let you adapt existing equipment to current operational demands without starting from scratch.
5. You want expert guidance, not guesswork - With custom upgrades, qualified engineers assess your system and recommend a fit-for-purpose solution, rather than leaving customers to determine compatibility, risk, or scope themselves.

Options available



Our standard hardware upgrades retrofit your equipment with new, pre-verified functionality developed since your original purchase—helping you get more value from your installed base. As systems age, sourcing replacement parts, and optimizing service options becomes increasingly challenging. Upgrading hardware such as controllers and operator console offers reliability, serviceability, and efficiency, featuring standardized components and clear documentation to keep your operations running smoothly.



Software upgrades enhance data security, improve productivity, and ensure your equipment continues to run on supported operating systems. This would include all necessary licenses, for example AVEVA system platform 2020, Excel 2019, SQL Server 2019, or Recipe Management 2020.



For customized equipment, our qualified engineers will assess your setup and requirements to identify the right upgrade for your needs. Our team of custom upgrade engineers work in close collaboration with our custom engineering (CE) organizations globally. Engineers have experience in disciplines from manufacturing, testing, Research & Development, verification, validation, installation and qualification, and have specialist knowledge and experience with the original and custom system designs from Cytiva.

Start the custom upgrades process today

1

Initiate the custom upgrade request

A custom upgrade request is raised and assigned custom upgrade project management to coordinate the activity from assessment through delivery.

2

Understand customer expectations and needs

The project team works with the customer to:

- Determine customer expectations, constraints, and objectives
- Understand the current system configuration and operational requirements

3

Consult and recommend a solution

Based on the initial discussion, the team:

- Consults with the customer
- Advises on the most appropriate custom upgrade solution to meet their needs

4

Review current system documentation

A detailed review of existing documentation is performed, including:

- Current system documentation
- Instrument configuration and historical modifications

5

Feasibility assessment

A custom upgrade feasibility assessment is conducted, with support from CE, to:

- Confirm technical feasibility
- Identify risks, dependencies, or constraints
- Define the scope of engineering and materials required

6

Proposal development

A formal proposal is prepared that includes:

- Description of the recommended custom upgrade solution
- Estimated lead time
- Recommended Sales Price based on engineering hours and materials
- Optional on-site installation support, if requested

7

Order confirmation and preparation

Once approved:

- Materials and components required for the custom upgrade are ordered
- Engineering activities are scheduled

8

Engineering and production

The custom upgrade solution is developed and produced, including:

- Production of the final custom upgrade product
- Creation of updated instrument configuration files
- Development of custom upgrade installation instructions

9

Documentation updates

System documentation is updated to reflect the custom upgrade, including:

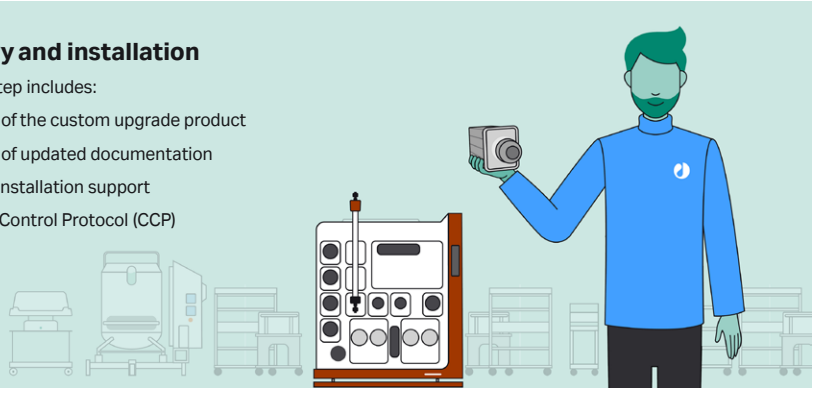
- Updated system documentation
- Configuration and technical records aligned to the final solution

10

Delivery and installation

The final step includes:

- Delivery of the custom upgrade product
- Delivery of updated documentation
- On-site installation support
- Change Control Protocol (CCP)



cytiva.com/equipment-services

Cytiva and the Drop logo are trademarks of Life Sciences IP Holdings Corporation or an affiliate doing business as Cytiva. Any other trademarks are the property of their respective owners.
© 2026 Cytiva
For local office contact information, visit cytiva.com/contact

CY59707-19May26-FL