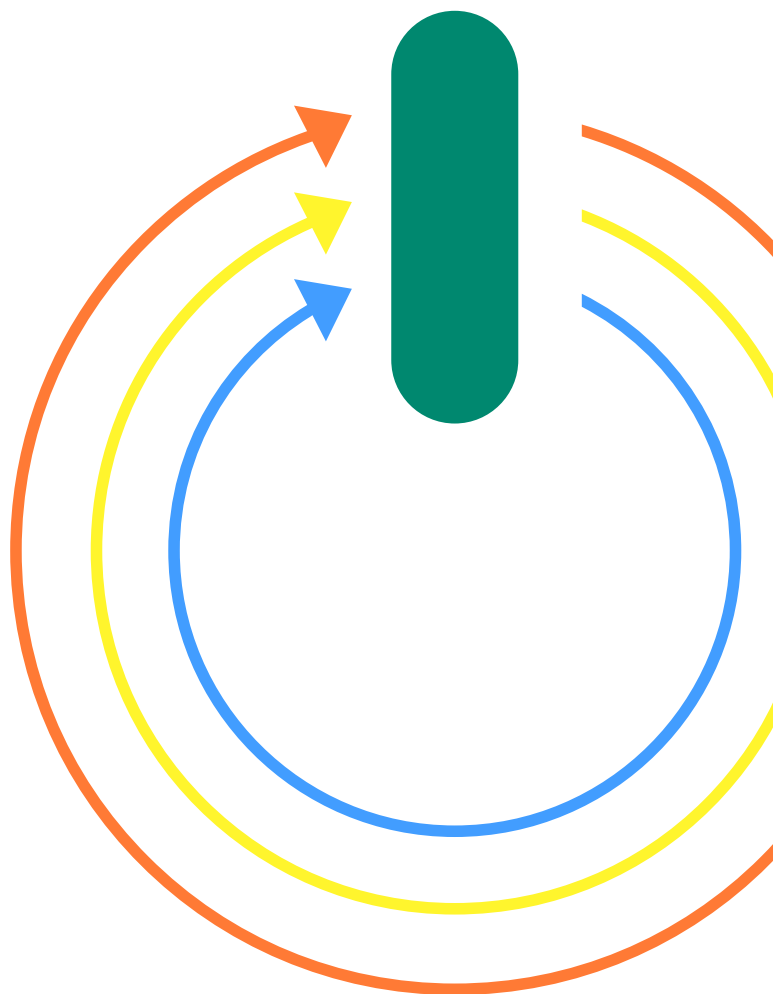





OptiRun Service Solutions

Ensure optimal performance of your ÄKTApocess system with preventative maintenance



Your bioproduction is important. Maintaining complex equipment in prime condition is essential for achieving your objectives in performance, productivity, and compliance.

Preventative maintenance (PM) is critical to optimal outcomes and reduces the likelihood of unexpected breakdowns while maintaining schedule and product quality. It keeps your equipment properly tuned and provides PM service reports upon completion. At Cytiva, PM is an integral part of the design process. You benefit from our global experience maintaining thousands of Cytiva systems. Designing and servicing complex bioprocess equipment requires deep understanding of both the process and the science behind it. Cytiva service engineers are trained and certified to perform PM on your ÄKTApocess™.

-  **Extended lifecycle**
-  **Service traceability**
-  **Maximized productivity**

Cytiva PM supports your bioproduction needs.

Main components of PM	Outcomes you can expect from PM
Functional testing, inspections and calibration	Ensure reliable accuracy of testing data and system functionality; extend the life of your ÄKTApocess system
Wear and tear change	Minimize unexpected failure risk; extend the life of your equipment
Exchange of all elastomers in contact with process fluid	Minimize contamination risk due to leakage to ensure high quality end product for human use
As found as left testing	Ensure evidence equipment runs according to specifications after completed PM
Documentation	Enable traceability with signed preventative maintenance service report upon completion of PM

Comprehensive testing and inspections

During preventative maintenance, our qualified engineers run necessary tests and verifications to keep your equipment to factory specifications and replace any necessary components using quality parts from Cytiva. These tests were designed and optimized throughout the development of the equipment and reflect functional tests performed during assembly, as well as quality tests performed prior to delivery to your site.

Comprehensive set of tests and inspections

Flow meter test	Pump capacity test(s)
Pressure meter test	Air sensor test
Temperature sensor and conductivity meter test	Level sensor test
UV meter test	pH meter test(s)
Valve test (inlet)	Air trap
Valve test (air trap)	Emergency stop test
Valve test (sample)	Buzzer test
Valve test (column)	Cabinet air filter
Valve test (outlet)	Mechanical inspection and process line
Valve test (CIP)	Hydrostatic leakage test
Pressure control valve test	Final check and as found as left tests

Quality parts replaced during PM

Pump wear and tear kits	UV filter
Conductivity sensor o-ring kit	Drive element lubricants in pump(s)
Valves diaphragms	TC gaskets
Valve block o-rings	O-ring kit air trap, o-ring kit pH flow cell, o-ring kit UV flow cell, o-ring pressure sensor flow cell, cabinet air filter

PM, an integral part of our service agreements

To ensure the continued performance of your system, we build preventative maintenance into all our service agreements. Go to [cytiva.com/service](https://www.cytiva.com/service) to learn more about our OptiRun™ service agreements.

Documentation

Cytiva provides a standardized set of documentation and test results after the service or repair. This saves time, reduces costs, and supports compliance when working in a regulated environment. The service engineer documents each PM visit and provides a service report upon completion of the visit.

PM interval

Our standard recommended PM frequency for BioProcess™ systems varies with usage:

System usage	Type of PM visit
NORMAL USAGE: up to 2000 hours per year	One comprehensive PM visit the year after warranty expiration and one basic PM visit the following year (repeat cycle every two years)
HIGH USAGE: 2000 to 4000 hours per year or use of aggressive solvents	One comprehensive PM visit annually
24/7 USAGE: More than 4000 hours per year	Two comprehensive PM visits annually

Note: A basic system PM includes replacement of only pH electrode and UV filter, if applicable. UV lamp replacement is optional but recommended every third year.

[cytiva.com/service](https://www.cytiva.com/service)

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