



Pall Corporation

Customized System Services

for Total Fluid Management



Filtration. Separation. Solution.SM

Customized System Services for Total Fluid Management

We have real solutions for your production challenges.

Our system services enable you to meet regulatory requirements and increase output while reducing your total cost of ownership.

Overall production costs continue to rise as competition gets tougher and environmental regulations become more stringent. To control expenses, you need to maximize efficiency by ensuring that your system operates without a glitch. If your system fails, your labor and operating costs will mount quickly unless the problem is diagnosed promptly and solved correctly. Whether it's prevention or repair, Pall provides real, lasting solutions, not just quick fixes.

Real solutions involve applying the correct filtration and separation technology to reduce contamination, prevent damage to equipment, and lower processing costs. With today's sophisticated production plants, a high-level of technical proficiency is required to properly inspect, diagnose, maintain, and repair your system. Pall Corporation can provide the expertise necessary to ensure that your system operates at peak performance.

Why Pall?

Established more than a half-century ago, Pall Corporation has grown to be the largest and most diverse filtration, separations, and purifications company in the world. Our global presence is far-reaching, and our product portfolio and technical expertise are extensive.

Pall offers a variety of services for all phases of system operation. Located in over 30 countries, our staff scientists and engineers provide these services locally, with intensive, broad-based assistance from Pall's worldwide technical support network. Our staff works directly with you to determine how Pall products and technologies can best be applied to benefit your system. As part of your customized Total Fluid Management solution, Pall products and services are recommended to streamline your operations and help you gain an edge in this increasingly competitive marketplace.

What is Total Fluid Management?

Total Fluid Management (TFM) is the integration of properly selected filtration and separation equipment and services into a production process to yield the highest efficiency at the lowest cost. Pall's Total Fluid Management program consists of a wide range of filtration products, advanced technologies, and services to improve system operation and increase productivity. (Productivity services will be addressed separately.)



Filter press



Pall corporate headquarters



Backwash filter system

A global team of scientists and engineers delivers TFM

At Pall, we are dedicated to providing you with quality service to help maximize the efficiency of your system. Our service engineers have a thorough knowledge of the components, design, operation, and maintenance requirements of Pall filtration and separation systems. They are expert troubleshooters who can quickly identify and resolve disruptions in system operation.

If additional resources are needed, our global teams of Scientific and Laboratory Services (SLS) engineers and scientists are called upon for assistance. These individuals have the following skills and tools to diagnose and solve your process problems.

- Advanced degrees in a broad range of disciplines.
- State-of-the-art equipment, such as scanning electron microscopes, mass spectrometers, and FTIR spectromscopes.
- Software and Intranet communication tools for fast, efficient, 24/7 global information sharing.

Choose from a broad range of system services

Pall offers the following customized, professional services for filtration and separation systems.

Cleanliness audit

A cleanliness audit can uncover contamination problems and their detrimental effects. Contaminants are collected and identified to determine their origin. Recommendations are made for corrective action to optimize your processes and increase the reliability of your equipment.

Laboratory and pilot testing

Pall has a full range of laboratory and pilot scale test devices for our technologies. They are available to assist you in selecting filtration and separation equipment. Pilot scale testing enables you to choose the proper equipment and optimally integrate filtration and separation into your process.

Remote monitoring

For systems equipped with supervisory computer control, Pall offers remote monitoring. System and process engineers track performance and determine trends. Data review is offered as an alternative to monitoring via modem dial-in.

- Remote access to the system via modem to confirm system operation, correct set-point parameters, and evaluate alarms.
- Review of field-collected data provided by the client is performed at Pall by one of our specially trained engineers.
- System performance is summarized in a site-specific report that includes performance and maintenance recommendations from Pall's Scientific and Laboratory Services and System Engineering groups.



Inorganic ceramic crossflow
membrane system



Laboratory services



Polymer filter system

Commissioning

Pall offers an extensive range of commissioning services. We oversee installation to ensure that it is done properly and that your system is fully operational. Specific commissioning services include the following.

- Inspecting equipment prior to installation.
- Installing and removing specific components.
- Reviewing overall system installation.
- Assembling and disassembling components.
- Inspecting components for proper and adequate insulation.
- Inspecting valve operation.
- Loop checking system wiring to and from the control panel.
- Inspecting PLC-related input/output signals.
- Bringing system online to test and confirm design duty.
- Tracking performance and testing filter elements.
- Training staff in all aspects of system operation, maintenance, and troubleshooting.

Training

Systematic training of personnel is critical for efficient operation, profitability, and regulatory compliance. Pall's experienced and highly knowledgeable trainers can tailor courses to meet your needs. Training is conveniently offered at your site or at one of Pall's specialized training facilities.

Maintenance

Pall provides both preventive and corrective maintenance services. Proper preventive maintenance can avert complicated and costly problems including unscheduled downtime. Should the need for corrective action arise, Pall service personnel will troubleshoot and adjust, repair, or replace components to allow your system to resume proper operation. A Pall service contract ensures that your system and equipment receive ongoing maintenance services.

Troubleshooting and system support

Our service technologists are supported by a worldwide network of laboratories that offer analytical services for a wide range of fluids. We can visit your site to evaluate your process. We will also diagnose system or equipment failures and product variability or contamination caused by any of the following.

- Malfunction of system components.
- Filter system leak and/or valve leak.
- PLC malfunction.
- Short on-stream filter or membrane device life.
- Damaged filter or membranes.



Self-cleaning leaf filter system



Training services



Liquid/liquid coalescer system

System operation and upgrades

Pall provides full- and part-time system operation oversight and management. When new requirements necessitate system modifications, our System Services team can provide the following upgrade services for your filtration and separation equipment.

- Modification or upgrade of PLC program.
- Identification and installation of the optimal filter medium.
- Conversion of manually actuated to electrically actuated components.
- Valve upgrades.

Genuine parts, cleaners, filters, and other consumables to be used for system upgrades or as replacements or spares are available at discount prices.

Additional system services

Pall offers other services, such as a precommissioning site audit and flushing/cleaning, that can be customized for your process.

How can Pall system services benefit you?

Our system services offer the following advantages.

- Assist in reducing your operating costs and increasing your process efficiency. Pall offers high-quality products and services to help you meet your purification goals cost-effectively.
- Introduce you to Pall's comprehensive services program. Our Total Fluid Management program offers a full range of system and productivity services to help you meet your filtration, separation, and purification requirements at the lowest cost.
- Provide access to an extensive, multidisciplinary team of experts including engineers, chemists, biochemists, microbiologists, and physicists. Leverage the global technical support network of the world's leader in filtration, separation, and purification solutions.
- Offer you the benefits of Pall's advanced technology. Our teams of service specialists are well versed in all areas of filtration, separations, and purification including microfiltration, ultrafiltration, nanofiltration, reverse osmosis, and phase separation.
- Enable you to redeploy your resources. With your system in the competent hands of our service staff, you can put your resources where they are most needed.



Disposable cartridge filter system



Troubleshooting services



Nanofiltration and reverse osmosis systems

Our recommendations are fully documented

We know how important documentation is to our customers. We will provide you with a technical report detailing our findings and our recommended course of action. This report may be especially helpful during implementation and regulatory audits. At your request, we will format the report to conform to your documentation standards. We can also arrange a meeting to discuss our findings and recommendations with you.

Choose a customized service agreement or individual services

Every business has a unique set of needs, so Pall provides different options for accessing system services.

Service agreement

If you prefer scheduled service, select a service agreement. Choose any combination of services described in this brochure, and we will draft a service agreement that meets your unique system, production, and scheduling requirements.

A service contract ensures your ongoing relationship with Pall. We provide scheduled service so that costly emergencies and downtime can be avoided. Allowing us to track and anticipate your needs enables you to focus on your core business. With a service contract, you can look forward to consistent, optimized system performance and reduced operating and maintenance costs.

Individual services

If you prefer to request system services when you need them, you can choose and customize individual services without a service contract. When you need service, contact us directly for an appointment.

With either option, service contract or individual services, you will have the security of knowing that your filtration equipment is in the hands of expert service and technical staff.

We're available whenever you need us

Think of us as part of your service department. We are on call — available wherever and whenever you need us. Requesting service from the Pall Systems Services team is easy. Contact us directly. We respond quickly when you request start-up assistance, service, or repair, so that your system operates smoothly and production is maximized.

To reach Pall System Services for technical support, call our hotline at 866.475.0115. The hotline is available 24 hours a day, seven days a week. Technical support services can also be requested by calling your local Pall office or via e-mail at systems-services@pall.com.



Blowback filter system



Technical reporting services



Liquid/gas coalescer system

**You trust Pall as your equipment supplier.
Trust us to be your system services provider.**



Microfiltration membrane system



System commissioning services



Oil purifier system



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Pall Corporation has offices and plants throughout the world in locations including: Argentina, Australia, Austria, Belgium, Brazil, Canada, China, France, Germany, India, Indonesia, Ireland, Italy, Japan, Korea, Malaysia, Mexico, the Netherlands, New Zealand, Norway, Poland, Puerto Rico, Russia, Singapore, South Africa, Spain, Sweden, Switzerland, Taiwan, Thailand, United Kingdom, United States, and Venezuela. Distributors are located in all major industrial areas of the world.
