





Pall Corporation

## *Enabling a greener future*

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There is no greater calling or opportunity for a fluid management company than today's challenge – helping customers protect people, the environment and our natural resources. Together we are implementing technologies that purify and conserve water, consume less energy, make alternative energy sources possible and practical, advance medicine and minimize emissions and waste. Our collective efforts are enabling a greener, safer, more sustainable future.

 [www.pall.com/green](http://www.pall.com/green)



## Company Profile

Pall Corporation has been partnering with customers since 1946 helping them to solve their most critical and difficult fluid management challenges. One of the earliest calls for assistance came from the fledging commercial aviation industry after landing gear failures grounded a fleet of new jets. The hydraulic systems were much more contamination sensitive than earlier technology and required sophisticated filtration to protect them. Pall's quick response helped customers solve a crippling problem and get the planes flying and landing safely again. Contamination was at the root of the problem then just as it often is today.

Over the years there have been many more calls for assistance – to help increase product quality, yields and efficiency, meet regulations, remove barriers to innovation, or open a new facility. Pall has amassed the broadest filtration, separation and purification capabilities and experience in the world answering them. Our commitment is to continuously enhance our ability to provide customers with the most effective Total Fluid Management<sup>SM</sup> solutions to help ensure their success.

When our customers succeed, Pall succeeds. And so, we will continue to follow the guiding principles that have brought us to where we are today. This means we will strive to do more for customers than others in our field. And we will always do what's right for them and for those who put their trust in us.

 [www.pall.com/profile](http://www.pall.com/profile)



## *Pall Life Sciences*

Pall Life Sciences provides leading-edge products and services to meet the demanding needs of customers discovering, developing and producing biotech drugs, vaccines and chemically synthesized pharmaceuticals, and to help protect patients in hospitals and nursing homes.

Our membranes and membrane devices optimize detection and sample preparation in drug research and clinical diagnostics, as well as in the growing genomics and proteomics markets. Pall is a leading provider of separation systems and single-use filtration and purification technologies to pharmaceutical and biotechnology companies to support faster development of new drugs and vaccines that are safer and require less energy and water to produce.

Within Medical, Pall technologies are often a patient's last line of defense from dangerous pathogens. Some of our fastest growing products for this market are helping the medical community to prevent hospital-acquired infections. These infections take too many lives, cost billions of dollars and are largely preventable. A newer product family is revolutionizing how blood is processed. Acrodose™ platelet systems enable blood centers to tap into an abundant, but often discarded, supply of whole blood platelets.

Pall has become a trusted partner to this market by meeting its exacting standards for innovation, product performance and global service.



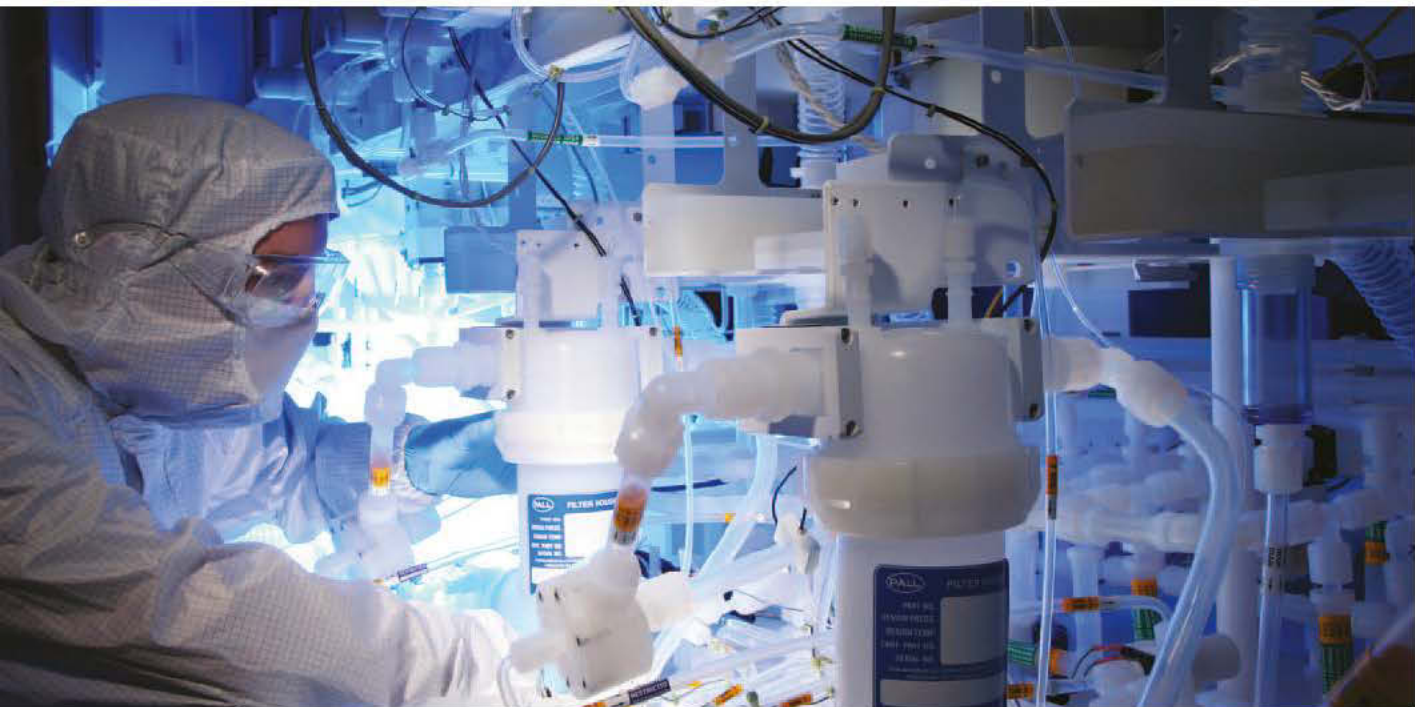
## *Pall Industrial*

Pall Industrial serves an extremely diverse range of customers in fast-growing and established markets and regions. Pall's engineered solutions help municipal and industrial customers economically address mounting water quality, scarcity and demand issues. They enable manufacturers to minimize emissions, waste and operator exposure to chemicals. They're helping energy companies to maximize production and develop commercially successful cleaner-burning and alternative fuels.

Pall is a key supplier to the rapidly innovating and technically demanding semiconductor and consumer electronics industries. Integrated circuits, which control almost every device and machine in routine use today, require sophisticated fluid management technologies. Comparable purification standards are also essential to the efficient and economical production of products such as computer gaming consoles, MP3 players, flat panel displays and multimedia cell phones.

Pall's roots are in providing filtration products for use in critical applications on military and commercial aerospace vehicles. Our products are also a key to the reliability of construction and mining equipment.

Customers specify Pall products because they optimize performance and provide measurable economic benefits. Since product life cycles can span decades, Pall's longevity and financial strength are essential selection criteria that lead customers in both the Industrial and Life Sciences markets to choose us.





**CONSERVATION IS NO LONGER JUST SOCIALLY RESPONSIBLE,  
IT'S AN ECONOMIC NECESSITY.**



## Conserving Energy & Resources

Modern societies have a ferocious appetite for energy. Conservation is no longer just socially responsible, it's an economic necessity.

The impact of rising oil prices ripples throughout industry driving up the cost of fuel, electricity and petroleum-based raw materials. Pall technologies are helping customers conserve energy, increase fuel efficiency and maximize the life and yields of their petroleum-based chemicals and process fluids. This is good news for the environment and for customers' profits.

Pall's highly-engineered systems conserve energy while the company's filter technologies provide optimal fluid quality and long service life. This longer life translates into increased yields and production time. It also means less employee exposure to process chemicals and fluids, reduced emissions and less waste for disposal. Customers are embracing these Pall solutions to help them achieve their production targets while simultaneously reducing their carbon footprints. These technologies are proving that protecting the environment and preserving profits are not mutually exclusive goals.

**INCREASING AVAILABILITY OF PLATELETS** Platelet recipients often receive single donor platelets while those collected from whole blood are typically discarded. This practice exacerbates platelet shortages. Pall's enabling technology, Acrodose™ Systems, safely and economically increase platelet availability. As a result Acrodose™ Platelets are beginning to set a new standard of care.

 [www.pall.com/acrodose](http://www.pall.com/acrodose)





## *Ensuring Energy Meets Demand*

Economic growth in developed and developing nations has fueled an insatiable global appetite for energy. The need not just for more energy but clean and sustainable energy is urgent.

Pall is working with energy producers across the full spectrum of available and emerging eco-friendly technologies to help them achieve both imperatives. Pall technologies are widely used by energy producers to maximize production, protect expensive equipment and meet regulations or even tougher internal emissions targets. They're also playing an essential role in the development and implementation of cleaner methods of treating oil, coal and natural gas.

Increased use of alternative and clean energy technologies is critical to reducing greenhouse gas emissions and dependence on fossil fuels. We are working with the producers of emerging, renewable energy sources like wind, solar and biofuels to help them overcome issues of capacity, efficiency, convenience and economics. Removing these impediments will help clear the way for broad adoption and a sustainable energy supply.



**SOLAR ENERGY RISING** The solar energy industry is constrained by a shortage of silicon feedstock. Pall has recently introduced a silicon recovery system for use by the solar and semiconductor industries. This enables customers to recapture and reuse silicon and up to 95% of the deionized water used in the production process. This results in significant environmental and economic benefits and increases the availability of silicon for solar power.

 [www.pall.com/micro](http://www.pall.com/micro)

THE NEED FOR **SUSTAINABLE ENERGY** IS URGENT.





3/4 OF THE EARTH'S SURFACE  
IS COVERED BY WATER BUT  
**ONLY 1% IS**  
**AVAILABLE FOR USE.**



# Protecting & Preserving Fresh Water

Three-quarters of the Earth's surface is covered by water. Incredibly, less than 1% of it is the fresh water agricultural, industrial and residential users depend on.

Pall's water filtration experts employ a variety of technologies to purify water for households, hospital patients and industrial users around the world. We're helping municipalities provide high-quality drinking water to the communities they serve and to redeploy waste water for irrigation. We're helping manufacturers to produce the caliber of water their operations require, recycle and reuse it within their plants and ultimately to discharge it safely. Advanced membrane technology is also being used to tap into alternative water sources thereby helping to ensure the long-term availability of fresh water.

Pall scientists and engineers are also working with customers in the biopharmaceuticals industry, among others, to engineer as much water as possible out of their manufacturing processes. The decrease in water consumption and ability to recycle it not only provides environmental and economic benefits but opens the possibility of expanding into arid or drought-stricken regions.

**CONSERVING WATER SUPPLIES** Agriculture is by far the largest global consumer of water. Pall's advanced membrane technologies enable municipalities to treat wastewater and reuse it for irrigation and industrial purposes. Customers are also using Pall products to treat wastewater and reinject it into aquifers for future use as drinking water. The practice of reconditioning wastewater is becoming the norm in water-starved regions as municipalities look to preserve and stretch fresh water supplies.

 [www.pall.com/thefutureofwater](http://www.pall.com/thefutureofwater)





## *Minimizing Emissions & Waste*

Companies are implementing environmental protection measures because it's the right thing to do. They're finding that doing what is good for the environment is also good for business.

Pall technologies are helping companies reduce their environmental footprints and keep their production levels high. Filters that maintain optimal fluid quality and have a long service life provide a raft of benefits. They decrease purchasing requirements for additional production fluids and filters. They result in less fluids and filters to dispose of and reduce employee exposure to them. They enable customers to spend more time producing their high-quality products and less time maintaining equipment. Our technical solutions are also helping companies to meet or exceed extremely stringent emissions requirements.

Customers come to us with their most difficult and critical fluid management challenges. They expect the best performing products at the lowest cost of ownership. This is where Pall excels and customers are rewarding us for it.



**REDUCING CHEMICAL USE** The FDA and its global counterparts go to extraordinary lengths to ensure the medicines we take are safe. This rigor applies to the entire process including the sterilization and cleaning requirements for equipment between batches. Cleaning and steam sterilization are energy, water and chemical intensive. Customer data shows that pre-sterilized single-use systems such as Pall's can cut water and cleaning chemical consumption almost in half and enable drug manufacturers to reduce their carbon footprints more than a third.

 [www.pall.com/biopharm](http://www.pall.com/biopharm)



PROTECTING AND PRESERVING  
**THE ENVIRONMENT**  
IS THE RIGHT THING TO DO.



OUR GOAL IS TO CONTINUALLY  
**REDUCE PALL'S**  
**CARBON FOOTPRINT.**



## *Caring for the Environment*

Pall's commitment to green practices extends to every aspect of our company. It encompasses how we partner with customers, the products we make, how we make them and the ways in which we conduct our daily business.

We are continually implementing new practices to strengthen our own green initiatives and those of our customers. From an internal standpoint, we are shrinking our manufacturing footprint. By operating fewer factories located closer to major markets, we'll improve service to customers and substantially reduce our energy consumption and carbon emissions worldwide.

We are also incorporating green principles into our renovation and construction initiatives whenever possible. Among the ways we're doing this is by adhering to LEED guidelines, by specifying recycled building materials and by using natural light sources. All of our facilities worldwide are now ISO 14001 certified. To further our environmental goals and strengthen our internal sustainability framework, we joined the U.S. EPA's Climate Leaders Program.

Our annual Green House Gas (GHS) inventory helps us to make effective policy decisions to reduce Pall's carbon footprint. A comprehensive program to map our material and chemical waste streams has yielded significant improvements at our Western Hemisphere manufacturing sites and will be extended to our other facilities. At our manufacturing facilities worldwide we are reducing energy usage, reducing waste stream and increasing recycling.

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**BUILDING GREENER FACILITIES** Pall's newest facilities incorporate the latest in green technologies to protect the environment and lower operating costs. Our offices and scientific laboratories in Buccinasco, Italy are a model of eco-friendly architecture. Among many green features, solar panels heat water. Water for the HVAC system is drawn from a reflecting pool which is also the source for the irrigation and fire protection systems. The facility was a finalist for the prestigious Urban Land Institute's 2008 Awards for Excellence program.





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Pall Corporation has offices and plants throughout the world.



ENABLING A  
GREENER  
FUTURE.

To see how Pall is helping enable a greener, safer and more sustainable future, visit [www.pall.com/green](http://www.pall.com/green).




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GSF September 2011