Never stop moving
Hydraulic filtration and mobile equipment
For more than 50 years, Parker Filtration has been designing and manufacturing hydraulic filtration solutions to a wide variety of mobile market sectors including agriculture, forestry, construction equipment, materials handling, mining & drilling, road building equipment, transportation, utility and waste management vehicles.

Parker’s Hydraulic Filter Division looks beyond the customary solutions to a flexible approach in preventing breakdowns and extending the lifetime of components in hydraulics, lubrication and fuel systems.

Together, with our customers, we break new ground to provide innovative design, reducing costs in various areas such as new build system maintenance, energy consumption, disposal and weight. Our quality filter solutions and innovations are adopted by leading global equipment manufacturers and end users.

Parker’s Filtration solutions

- Filtration for hydraulic operation system
- Filtration for vehicle drive systems
- System fluid & filter condition monitoring equipment
- Engine air intake filter
- Engine crank shaft filtration
- Engine lube oil filtration
- Engine fuel filtration
Our principles and internal structures are based on dedicated market teams to provide demanding markets, customers and partners with maximum values, tailormade solutions and innovations. In Parker, we call it “Engineering your success”.

**Our solutions focus on value area’s:**

1. **System design & manufacturing**
   - System matched filtration
   - Compact solutions through component integration
   - System design & manufacturing support
   - Cleanliness management control
   - System & fluid conditioning monitoring

2. **System performance**
   Improvement of systems;
   - Productivity
   - Controllability
   - Reliability
   - Safety

3. **System sustainability**
   - Life cycle cost
   - Predictable maintenance
   - Extended service intervals
   - Oil lifetime extension
   - Component lifetime extension

4. **Sustainable environment**
   Impact of equipment to environment
   - Minimise waste of oil and filter elements
   - Reduce number of leakage points
   - Noise & vibration reduction

5. **Energy control**
   - Reduction of energy consumption
   - Energy recovery

6. **Recycling**
   - Disposal cost and material management

7. **Aftermarket**
   - Protected OEM spare element market
   - Training and technical back-up
   - Global spare parts back-up
   - Extended warranty
Quality products reduce downtime in mobile markets

Our philosophy is to improve the productivity, controllability and reliability of mobile equipment, without sacrificing safety.

The market calls for lower cost of ownership. At the same time, complete work cycles & tasks or projects are shortened and OEM’s are challenged to provide equipment which enables the owner to achieve profitable returns on investment.

It is not only the higher level of productivity that counts. As equipment often operates in public or hazardous areas, mobile equipment needs higher levels of control to improve safety. This is directly influenced by system contamination proven to be responsible typically for over 80% of downtime or malfunction of systems. In this respect, filtration and condition monitoring fulfil a vital role.

Parker Filtration continues to develop high quality filtration solutions. A core competence is to develop dedicated technology to condition the fluid. For mobile equipment, Parker’s Microglass filter media sets the benchmark for the industry.

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Important aspects of our filtration solutions are:

**Improve system productivity & controllability**
- Stable removal efficiency of the filter media during flow & pressure fluctuations
- Low pressure drop across the filter media & housing for improved system response

**Ecology & Economy**
- Reduction of pressure lost across the filter saves energy & fuel
- Parker green elements reduce waste by over 50% compared to conventional solutions
- System-matched filter element lifetime

**Reliability & Safety**
- Guaranteed quality of filtration
- System-matched filter element lifetime

Contaminated fluid reduces overall system efficiency. Parker’s engineered solutions focus on system requirements, reliability and safety.

Energy efficiency and savings
Requirements with regard to hydraulic and oil lubrication systems emphasise reliability, safety, long lifetime and reduced energy. Depending on the circumstances, over 80% of system failures are due to contamination levels. System monitoring is essential to prevent reduced performance, equipment failure, downtime costs and negative quality perception by end users.

Catastrophic failures
Occurring suddenly and without warning; catastrophic failures are typically of a permanent nature. They are often caused by larger particles obstructing the relative movement between surfaces, resulting in seizure of the component. Real-time condition monitoring is advisable for applications where catastrophic failures can affect the safety of operation. Trend analysis allows Parker to provide a dedicated package of pre-warnings to ensure that predictive corrective actions can be taken.

Transient failures
This type of failure is short-lived and goes unnoticed, although the consequences rarely do. It is caused by particles that momentarily lodge in a critical clearance between matching parts, only to be washed away during the next operation cycle. As a result components become less predictable and potentially unsafe.

Degradation failures
This failure is caused by the effect of wear induced by contamination. Additional generated contamination can lead to catastrophic failure and necessity to repair and replacement.
Monitoring critical systems is essential of the component as additional generated contamination can lead to catastrophic failure.

The extended package of Parker’s Fluid Condition Monitoring equipment is based on a modular architecture, enabling designers to select the sensors needed for real-time analysis of important system and fluid parameters.

Parker’s integrated solutions include diagnostics and smart decision making processes, communication status reports or warnings to the machine operator or service organisation.

### Monitoring critical systems

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**IQAN-MD3 Electronic Remote control**
Reducing costs by innovative system integration

Solutions for the future require a different approach. Parker's philosophy underlines our ability to support our customers with the design and realisation of new generation equipment.

Parker offers the unique possibility to integrate various system functions into single components. This can result in cost reduction of the application in manufacturing and maintenance; can realise more compact solutions and lower impact for the environment by means of reduced leakage points. In addition to the integrated, protected filters, this guarantees the quality of filtration for maximum protection of the system components.

As a complete supplier of motion & control solutions, Parker is able to support extended warranty; a valuable proposal to OEM’s providing long term reliability and safety towards their customers in the market.

Parker’s experience in mobile markets for more than five decades is focused for our customers through the dedicated Mobile System Team and divisional engineering staff.

Application and system specialists for hydraulic operation, drive system and filtration are available "at your service".

System Knowledge + Standard Filters Customised + Standard System Condition Monitoring Customised + Standard Pumps Customised + Standard Valves Customised
system integration

Sub-system supplied ready for direct plug and operation

Customised co-polymer hydraulic reservoir with integrated filter and breather

Hydraulic pump with integrated pressure filter
A partnership in ecology and economy

Our aim is always to develop long term relationships with our customers. As partners we can work together to provide the most effective solutions for hydraulic filtration. But our aim is not only to provide low cost, extended reliability and performance.

Today’s markets call for environmentally friendly solutions. We call that Ecology & Economy and we often step beyond traditional conventions to take responsibility for society and take the environment into account.

Dedicated support is implicit in a good partnership: for example, making quality spare parts available to our partners and end users. Direct or through dedicated distribution networks. Complete sub-systems or other after market parts like filter elements are provided by Parker, in many cases from Parker’s own central distribution warehouses the EDCs.

Guaranteed filtration quality, improved connection with end users, extended warranty provision and transparency in the after market are basics in any Parker partnership.

Ecology & Economy and LEIF® and Ecoglass III
Parker provides complete sub-systems or other after market parts like filter elements such as the eco-friendly LEIF® and Ecoglass III, making spare parts available to our customers and end users direct or
A partnership in ecology and economy through a dedicated distribution network via our Europe-wide Sales Companies operating on a country by country basis.

**Benefits of Parker’s protected Elements:**

- OEM protected after market excludes piracy
- Guaranteed quality of filtration
- System user fits genuine (Parker) OEM spare parts
- Typically, a reduction of warranty claims
- Extended warranty provision
- OEM contact with end users and service organisations is improved
- Improved after market share and revenue