

Pall Rentals, Analysis and Filter Cleaning Services



PIRENTALSEN

Increase your Productivity, Reduce your Downtime, Remain Profitable

While today's energy industry focuses on productivity improvements, the contamination of process fluids has emerged as a broad potential contributor. Whether feed fluids, solvent used in the processes, intermediate products, or final products, fluid contamination costs the industry billions of dollars every day.

Pall Services offers you smart ways to implement solutions without delay and with the full support of local experts, without the CAPEX burden of purchase

Our services include:

- Contamination mapping & monitoring
- Rental equipment for fluid depollution
- Filter maintenance and equipment upgrades
- Metal elements cleaning
- Rotating machines services, ie lube oil depollution, cleanliness assessment and monitoring

Feed Stocks

- Diagnosis
- Rental
 - Naphtha
 - HVG0
 - Brine
 - Fuel Gas

Solvent Depollution

- Mapping
- Rental
- Monitoring
 - Amines
 - Benfield
 - Glycol

Heat Transfer

- Diagnosis
- Rental
 - Ammonia
 - HTF synthetic oil
 - Water

Final Products

- Diagnosis
- Depollution
- Monitoring
 - LPG
 - Diesel
 - Jet A1
 - Ammonia
 - Lube oils
 - H2O2
 - NaClO

Our scope of service includes:

- Emergency, short-term or semi-permanent rental
- Mission ready filters/separators rental units available
- State of the art filtration and separation technologies
- Turn-key depollution solutions available for turn-around or shutdown
- Pilot scale demonstration of technologies before full application

The Value of Pall Services

Fluid Treatment

Process fluid contamination in solid and liquid forms can impact your plant production, increase your operating and maintenance costs, and reduce your plant's productivity. Through the application of Pall's proven technologies, our particulate and coalescer rental filter skid solutions can potentially save your business hundreds of



thousands of dollars.



It requires no CAPEX investment and is based on supply of mission ready resources available locally, using the most appropriate filtration

technology available to provide an immediate and sustainable solution for your processes.

Filter Cleaning

Industry leaders rely on porous metal filter elements for critical chemical, petrochemical, and polymer process performance and environmental protection. Filter media include cleanable metal fiber, powder, mesh, and composite technologies which, with proper cleaning, can be regenerated to help lower overall costs with yearly savings of more than 30% of the annual elements' costs.

- Recover your unit's initial operating performance
- Avoid unexpected outages
- Extend the useful life of aging elements
- Avoid unscheduled capital expenditure

Purifier Hire

Water in hydraulic, lubrication, power transmission, and insulating fluids adversely affects fluid performance. It threatens overall system reliability and can lead to compromised production and costly downtime.



Pall's rental purifiers go a long way to eliminating these concerns, improve equipment reliability, and overall operating costs. Choose from rental packages to hire, commissioning of new purifiers, or maintaining and repairing older ones.

- Remove the risk of corrosion or fouling related breakdowns
- Reduce unexpected maintenance costs by protecting critical system components
- Extend oil life for less environmental impact



Diagnostics and fluid assessment

Pall Services provide both the expertise and the equipment to diagnose process problems, recommend the appropriate filtration or process improvements and support on-going monitoring to measure success.



Particulate monitors, water sensors, fluid and component cleanliness analysis programs are all available for short or long-term operation, whatever your business needs to get back on track to meet and exceed your production targets.



Our current mission ready fleet, ready for deployment throughout Europe, Middle East and Africa, includes:

| Application | Description | No. of Filter Elements | Nominal Filter Length (in) | Orientation | Pressure Rating (bar) | Rated Flow (m3/hr) |
|---|-------------------------------------|------------------------|----------------------------|-------------|-----------------------|--------------------|
| Particulate Filtration (Process and Final Product) | Ultipleat® High Flow Filter Housing | 1 | 20 | Vertical | 10 | 22 |
| | | 1 | 40 | Vertical | 10 | 90 |
| | | 1 | 40 | Horizontal | 34 | 90 |
| | | 1 | 40 | Vertical | 16 | 90 |
| | | 1 | 40 | Horizontal | 16 | 55 |
| | | 1 | 40 | Horizontal | 10 | 55 |
| | | 1 | 40 | Vertical | 10 | 55 |
| | | 4 | 40 | Horizontal | 13 | 90 |
| | | 4 | 60 | Horizontal | 34 | 80 |
| | | 4 | 60 | Horizontal | 34 | 80 |
| | | 7 | 60 | Horizontal | 34 | 80 |
| | | 7 | 60 | Horizontal | 14 | 80 |
| | | 7 | 60 | Horizontal | 34 | 80 |
| | | 7 | 80 | Horizontal | 58 | 350 |
| | | 7 | 80 | Horizontal | 28 | 350 |
| | | 19 | 80 | Horizontal | 34 | 2,158 |
| | | | Veladisc™ Filter Housing | 4 | 16" dia modules | Vertical |
| Coreless Profile® | 9 | | 40 | Horizontal | 34 | 350 |
| MCC Series Filters | 30 | | 40 | Horizontal | 34 | 200 |
| Ultipleat Diesel Plus | 1 | | 40 | Vertical | 13 | 11.5 |
| | 1 | | 40 | Horizontal | 13 | 22 |
| | 1 | | 40 | Horizontal | 13 | 50 |
| Liquid / Liquid Coalescers (Process and Final Product) | | 5 | 40 | Horizontal | 50 | 90 |
| | | 7 | 40 | Horizontal | 34 | 126 |
| | | 15 | 40 | Horizontal | 40 | 270 |
| | | 31 | 40 | Horizontal | 23 | 550 |
| | | 37 | 40 | Horizontal | 34 | 660 |
| | Oil Purifiers | HNP023 Water removal | N/A | N/A | Mobile | Offline |
| HNP076 Water Removal | | N/A | N/A | Mobile | Offline | 70 l/min |
| Varnish Removal Filter (Water cooled) | | N/A | N/A | Skid | Offline | 42 l/min |
| Varnish Removal Filter X-Proof (Air cooled) | | N/A | N/A | Skid | Offline | 42 l/min |
| Oil Flushing Rig | | N/A | N/A | Mobile | Offline | 250 l/min |
| Morgoil Treatment Purifier | | N/A | N/A | Mobile | Offline | 125 l/min |
| Monitoring | PCM500 Fluid Cleanliness Monitor | N/A | N/A | Mobile | Up to 315 bar | N/A |
| | WS19 Hand Held Water Sensor | N/A | N/A | Mobile | Offline | N/A |

List for directional guidance only. For full specification of available rental products please contact Pall. Please enquire further for full equipment specification. In Europe, contact us on SES_FTAP@pall.com or in Middle East and Africa mea_services@europe.pall.com or visit www.pall.com/en/oil-gas/pro-services.html



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Pall Corporation has offices and plants throughout the world. To locate the Pall office or distributor nearest you, visit www.pall.com/contact.

The information provided in this literature was reviewed for accuracy at the time of publication. Product data may be subject to change without notice. For current information consult your local Pall distributor or contact Pall directly.

IF APPLICABLE Please contact Pall Corporation to verify that the product conforms to your national legislation and/or regional regulatory requirements for water and food contact use.

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