

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

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



Particulate filter skids for flows up to 3500 USGPM



Duplex filter skid ensures continuous supply to services



Off-line oil purifiers remove water and particulate from oil

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.



Pall rental filtration & coalescer skids feature:

- Designed to meet or exceed most Oil & Gas, Refinery and Petrochemical specifications
- ASME Section VIII, Div. 1 with National Board Number and CRN for Canada⁽¹⁾
- Filter skids accept Pall 60" long Ultipleat[®] and Vector[™] High Flow elements
- Coalescer skids accept all Pall 40" L/L Coalescer variants, ie AquaSep[®] and PhaseSep[®] EL
- Available in carbon and /or stainless steel construction
- Options available with or without valves and instruments
- Mobile Skid design with lifting points and fork lift pockets
- Skids with MDMT
- 40° F or -50° F available
- NACE Compliant for sour service⁽²⁾

Common Filtration Applications

- LPG, gasoline, diesel, and jet fuel final product filter
- Amine filtration
- Catalytic reactor bid protection
- Sour water stripper protection
- Pre-filtration for liquid/liquid coalescers

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.



VRF Varnish Removal Filter

- 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



HDP50 Purifier

Common Oil Purification Applications include:

- Any hydraulic and lube oil system contaminated with water
- Pulp & Paper - Paper machine lube oil, power house applications
- Power Generation- turbine lube oil, boiler feed lube oil
- Primary Metals – Morgoil/Lube Systems

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.



PCM500 Cleanliness Monitor measures system fluid cleanliness

Common Coalescer Applications

- Water from LPG, gas oil, steam stripped diesel
- Remove water from fuels to protect catalyst beds
- Remove Hydrocarbon from Sour Water or Rich Amine
- Methanol removal from Propane or LPG streams
- Caustic removal from Hydrocarbon streams

Process filtration and Separation Skids

| Application | Element Type | No. of elements | Inlet/outlet Nozzle | Type | Pressure (psig) | Temp (°F) | Max Flow USGPM | Notes | |
|--|---------------|-----------------|---------------------|---------------|-----------------|-----------|-------------------|-------|--|
| Particulate Filtration (Process and Final Product) | High flow | 1 | 3" - 150# RF | Duplex | 245 | 250 | 500 | 1,4,5 | |
| | | 1 | 3" - 150# RF | Duplex | 225 | 250 | 500 | 1,4,5 | |
| | | 1 | 3" - 300# RF | Duplex | 425 | 250 | 500 | 1,4,5 | |
| | | 1 | 2" - 300# RF | Simplex | 550 | 200 | 250 | 1,4 | |
| | | 1 | 3" - 300# RF | Duplex | 623/560 | 200/300 | 500 | 1,4,5 | |
| | | 7 | 8" - 300# RF | Duplex | 450 | 300 | 3500 | 1,4,5 | |
| | | 7 | 8" - 300# RF | Simplex | 740 | 100 | 3500 | | |
| | | 7 | 8" - 600# RF | Simplex | 1480 | 100 | 3500 | | |
| | | 15 | 12" - 300# RF | Simplex | 740 | 100 | 7500 | | |
| | | 3 | 3" - 150# RF | Simplex | 150 | 200 | 500 | | |
| | | 1401 | 1 | 3" - 300# RF | Simplex | 675 | 137 | 100 | |
| | | 1401 | 1 | 3" - 300# RF | Duplex | 675 | tbc | 100 | |
| | | 1401 | 19 | 12" - 600# RF | Simplex | 1480 | 100 | 2000 | |
| Coreless | 7 | 8" - 300# RF | Duplex | 450 | 300 | 700 | 1,3,4,5 | | |
| Hybrid (particulate or coalescer) | High flow | 4 | 8" - 300# RF | Simplex | 623/560 | 200/300 | 2000 | 1,4,5 | |
| | L/L Coalescer | 4 | | | | | | | |
| | High flow | 7 | | | | | | | |
| | L/L Coalescer | 12 | | | | | | | |
| | High flow | 19 | | | | | | | |
| L/L Coalescer | 37 | 10" - 300# RF | Simplex | 450 | 300 | 9500 | 1,4,5 | | |
| Coalescers | L/L Coalescer | 2 | 6" - 150# RF | Simplex | 195 | 400 | 160 | | |
| | | 4 | 6" - 300# RF | Simplex | 737 | 100 | 320 | | |
| | | 10 | 8" - 150# RF | Simplex | 285 | 100 | 800 | | |
| 3P Skids | High flow | 1 | 3" - 150# RF | Simplex | 285 | 100 | 500 | 1 | |
| | | 4 | 6" - 150# RF | Simplex | 285 | 100 | 200 | 1 | |
| | | 7 | 8" - 150# RF | Simplex | 285 | 100 | 3500 | 1 | |
| | | 12 | 10" - 150# RF | Simplex | 200 | 100 | 6000 | 1 | |
| | | 19 | 12" - 150# RF | Simplex | 200 | 100 | 9500 | 1 | |
| | | 1 | 3" - 600# RF | Simplex | 1480 | 100 | 500 | 1 | |
| | | 4 | 6" - 600# RF | Simplex | 1480 | 100 | 2000 | 1 | |
| | | 7 | 8" - 600# RF | Simplex | 1480 | 100 | 3500 | 1 | |
| | | 15 | 12" - 600# RF | Simplex | 1480 | 100 | 7500 | 1 | |
| Oil Purifiers (water removal / Oil purification) | Types | | Power Supply | | | | Flow (GPM) | | |
| | HDP10 | 1 | 480/60/3 Phase | | | | 10 | | |
| | HDP22 | 1 | 480/60/3 Phase | | | | 20 | | |
| | HDP50 | 1 | 480/60/3 Phase | | | | 50 | | |
| | HLP6 | 1 | 480/60/3 Phase | | | | 6 | | |
| | HLP22 | 1 | 480/60/3 Phase | | | | 22 | | |
| | HVP2703 | 1 | 480/60/3 Phase | | | | 45 | | |
| Varnish Removal | VRF11 | 1 | 480/60/3 Phase | | | | 11 | | |
| | VRF2 | 1 | 120/60/Single Phase | | | | 4 | | |
| Filters | UR690 | 1 | N/A | | | | N/A | 2 | |
| | 1HFH + Pump | 1 | 480/60/3 Phase | | | | 9 | | |
| | 7HFH + Pump | 7 | 480/60/3 Phase | | | | 57 | | |
| Fluid Cleanliness Monitors | PCM500 | N/A | 110 VAC | | | | N/A | | |

(1) Housing has High Flow internals, adaptors are used to accept L/L Coalescer or Coreless Elements, if required.

(2) Accepts 40" UE610 Athalon Element

(3) Long shell to offer sufficient settling zone for coalescer applications

(4) CRN Registered, please check with the Service Team to confirm registration status for required province

(5) MDMT -40°F or lower

List for directional guidance only. For full specification of available rental products please contact Pall.

Visit www.pall.com/en/oil-gas/pro-services.html



PALL CORPORATION

Corporate Headquarters

Port Washington, NY, USA
+1-800-717-7255 toll free (USA)
+1-516-484-5400 phone

European Headquarters

Fribourg, Switzerland
+41 (0)26 350 53 00 phone

Asia-Pacific Headquarters

Singapore
+65 6389 6500 phone

Visit us on the Web at www.pall.com/industry
Contact us at www.pall.com/contact

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.

© Copyright 2023, Pall Corporation. Pall, , AquaSep, PhaseSep, Ultipleat and Vector are trademarks of Pall Corporation.

® Indicates a trademark registered in the USA.

PIRENTUSEN
March 2023