

# FUEL POLISHING



**GREENOIL**  
**STANDARD®**

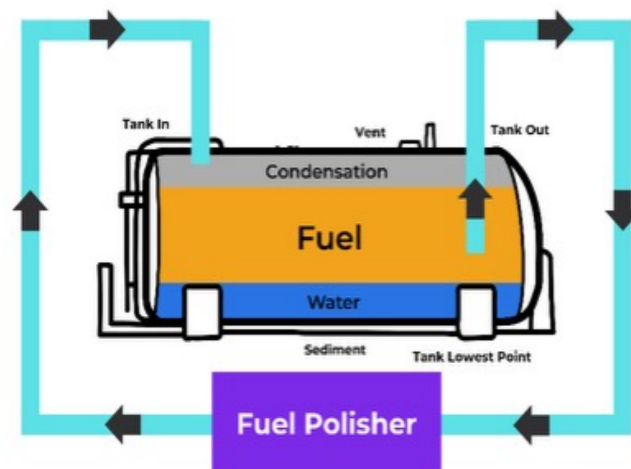
## MAINTAINING CLEAN DIESEL FUEL IS ESSENTIAL FOR THE RELIABILITY OF ALL DIESELS DRIVEN EQUIPMENT, ENGINES AND EMERGENCY POWER SYSTEMS.

**GreenOil Fuel polishing systems** safeguard your operation by eliminating one of the most common failure points: contaminated fuel.

Even after initial filtration, stored diesel remains vulnerable to water ingress, microbial infestation (often referred to as "diesel bug or diesel pests"), and the gradual build-up of solid particulates. Water can enter through condensation, absorption from ambience or during delivery, creating an environment ripe for microbial growth at the oil-water interface, which can clog filters and corrode components.

Fuel polishing works by recirculating diesel through an off-line fine filter unit (3 micron) with coalescer, to remove water, sediment, and biological contamination.

The diesel polishing systems from GreenOil Standard ensure that your fuel remains within regulatory and performance specifications. By keeping contaminant levels (including water and microbes) in check, these systems dramatically improve the reliability of critical equipment like standby generators and fire pumps.



### What Is Diesel Polishing?

Diesel polishing is a high-efficiency fuel cleaning process that removes water, sludge, microbial contamination, and sediments from diesel. This process ensures:

- Optimal engine performance
- Extended fuel storage life
- Reduced maintenance costs

### Why Diesel Polishing Is Essential

- Prevent Engine Failures
- Prevent Filter Clogging
- Eliminate Microbial Growth (Diesel Bug)
- Improve Fuel Efficiency & Reliability

### GreenOil's Sustainable Solution

GreenOil provides Danish-designed and manufactured filtration systems, engineered to be:

- Chemical-free
- Low maintenance
- High performance across all industrial and energy sectors

### Product Range for Diesel Polishing Diesel Purifier Systems

- GreenOil Fuel Units
- Removes water, bacteria, & particles down to 3 microns
- Suitable for continuous or stand-alone operation
- Ideal for storage tanks, distribution tanks, generators, standby systems

### Water Separator Filters

- High-efficiency coalescing filters
- Remove free and emulsified water
- No heating or chemical dosing needed



### Particulate Filters

- Depth filter technology ensures long life and high dirt-holding capacity
- Filter elements made of Eco-friendly sheep wool

### Typical Applications

- Maritime & Offshore
- Backup Generators & Hospitals
- Agricultural Equipment
- Mining Equipment
- Forestry Machinery
- Construction Machinery
- Fuel Storage Facilities

### Why Choose GreenOil?

- Eco-Friendly & Chemical-Free
- Low Maintenance
- Danish Engineering Excellence
- Tested & Certified Worldwide

### Protect Your Diesel Equipment

Trust GreenOil for reliable, sustainable diesel polishing solutions.

### Get in Touch

Contact us today for a quote or a demonstration!



## RECOMMENDED FLOW RATES

For diesel polishing, the recommended flow rate depends on the goal of how often you want the fuel to be circulated and cleaned. A common industry guideline is to circulate the entire tank volume at least once every 24 to 72 hours. For critical systems, once every 24 hours is often preferred.

### 1. Storage Tanks (bulk tanks, large volume)

- Turnover: Every 4–6 weeks minimum.
- Flow rate: 1–3% of tank volume per hour.
- Example: 50,000 L tank polishing at → ~ 500–1,500 L/h.

### 2. Distribution Tanks\* (day tanks, transfer tanks)

- Turnover: Every 1–2 weeks.
- Flow rate: 3–5% of tank volume per hour.
- Example: 5,000 L tank → ~ 150–250 L/h.

### 3. Emergency Equipment Tanks (gensets, fire pumps, UPS systems)

- Critical to keep clean due to rarely used fuel.
- Turnover: Full tank volume within 24 hours recommended.
- Flow rate: 5–10% of tank volume per hour.
- Example: 1,000 L genset tank → ~ 50–100 L/h.

### 4. Bulk Tanks with volumes from 500,000 L

- There are many variables that influence the dimensioning.
- we recommend reaching out to your authorized GreenOil dealer.

*\* The appropriate flow rate for distribution tanks is primarily determined by daily consumption, which is generally a more critical factor than the overall tank size. For tailored guidance, we recommend reaching out to your authorized GreenOil dealer.*



Storage Tanks.



Distribution Tank.

## STORAGE TANK - DISTRIBUTION TANK

Below are two practical scenarios for diesel polishing setups - one for a storage tank and one for a distribution tank - each with recommended flow rates, system goals, and key equipment features. Ideal for planning or presenting a diesel maintenance strategy.

### Scenario 1: Storage Tank – 100,000 Liters

#### Application:

Bulk storage of diesel fuel for long-term backup (e.g., hospitals, datacenters, marine, or utility).

#### Objective:

Maintain fuel quality over months or years, prevent microbial growth, and comply with EN590 standards.

#### Recommended Setup:

- Diesel Polishing System: GreenOil C-Series
- Flow Rate: 2,000–4,000 L/h
- Cycle Frequency: 1 full turnover every 24–48 hours
- Filtration Stages:
  - Water separation (coalescer)
  - Microbial filtration
  - Particulate filtration (down to 2–5 µm)

#### Features:

- Remote alarm outputs (for filter blockage)
- Offline system (no interruption to normal fuel supply)
- Easy-changeable filter cartridges for fast maintenance

### Scenario 2: Distribution Tank\* – 10,000 Liters

#### Application:

Day tank or distribution tank for direct feeding of engines, generators, or vehicle fleets.

#### Objective:

Protect engines from contaminated fuel and ensure clean diesel enters equipment.

#### Recommended Setup:

- Diesel Polishing Unit: GreenOil C series
- Flow Rate: 500–1,000 L/h
- Cycle Frequency: 2–4 polishing cycles daily or continuous polishing during downtime
- Filtration Stages:
  - Quick water separation
  - Fine particulate filtration (2–4 µm)

#### Features:

- Compact footprint for engine room or fuel bay installations
- Easy-changeable filter cartridges for fast maintenance

*\* The appropriate flow rate for distribution tanks is primarily determined by daily consumption, which is generally a more critical factor than the overall tank size. For tailored guidance, we recommend reaching out to your authorized GreenOil dealer.*

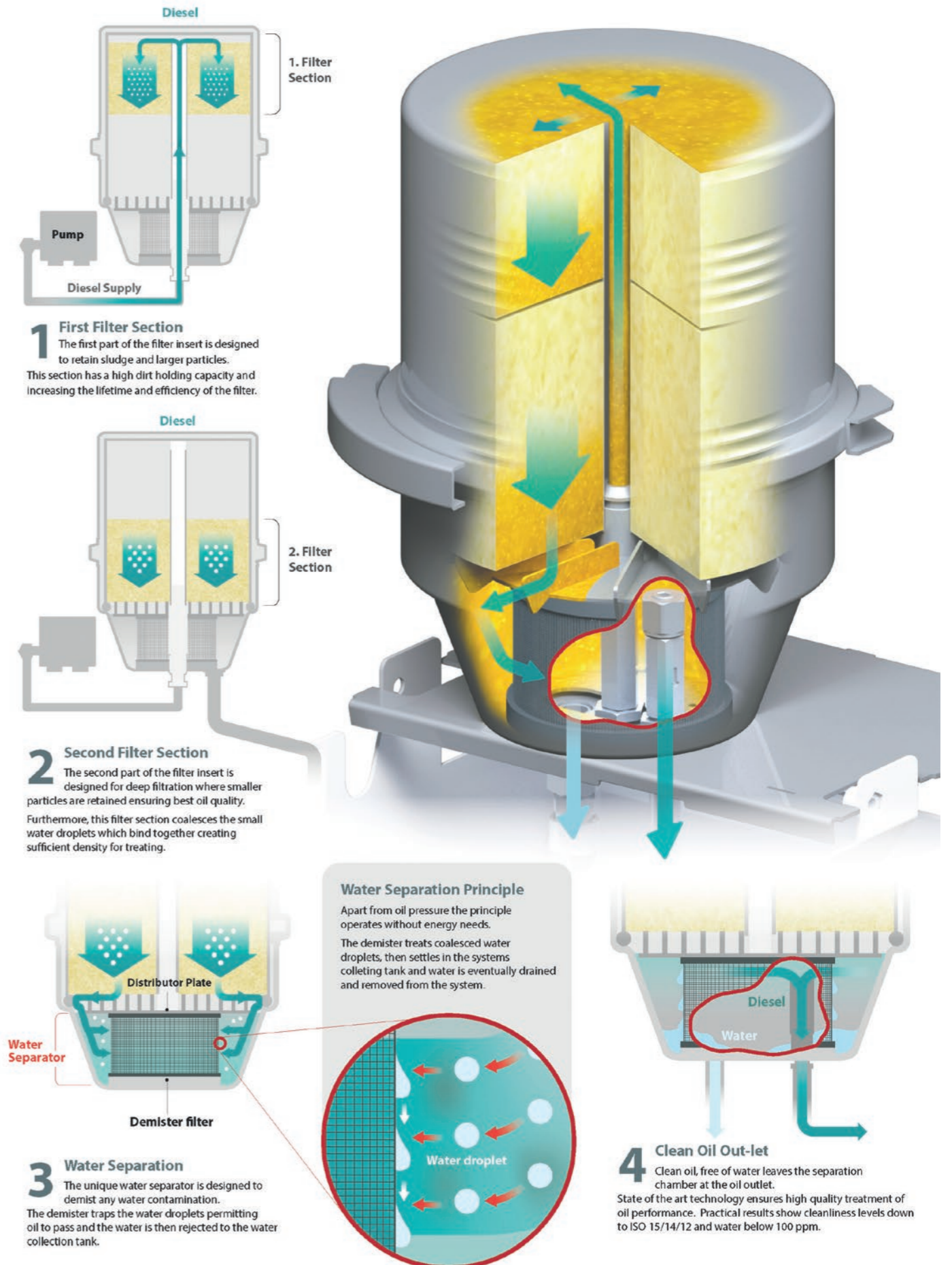
# TECHNICAL DATA FOR DIESEL AND GAS OIL SYSTEMS PARTICLE AND WATER SEPARATION



Technical Data	WP1-C1-125	WP1-C1-250	WP1-C4-500	WP1-C4-1000
Filtered Oil Flow [L/h]	125-150	250-300	550-670	1000-1200
Oil Pressure In, max. [Bar]	1	1	1	1
Oil Suction Height [m]	3-4	3-4	3-4	3-4
Viscosity [cSt]	2-25	2-25	2-25	2-25
Power Supply [VAC - Hz]	1x230, 3x400/440 or 3x440-50/60	1x230, 3x400/440 or 3x440-50/60	1x230, 3x400/440 or 3x690-50/60	1x230, 3x400/440 or 3x690-50/60
Max Power Consumption [W]	250	250	370	370
Connections [“RG] (BSP)	1/2	1/2	3/4	3/4
Dimensions H x W x D [mm]	440 x 425 x 280	440 x 425 x 280	775 x 635 x 435	775 x 820 x 435
Weight [kg]	26	26	47	73
Materials	AISI 304 Stainless	AISI 304 Stainless	AISI 304 Stainless	AISI 304 Stainless
Filter canister [liter]	1 x 8	1 x 8	1 x 8	2 x 8
Water drain tank	N/A	N/A	Standard	Standard
Local Start/stop Panel	Option	Option	Standard	Standard
Pressure alarm and Automatic water drain	Option	Option	Option	Option
Water alarm	N/A	N/A	Standard	Standard

Technical Data	WP1-C4-1500	WP1-C5-2000	WP1-C5-3000	WP1-C4-4000*
Filtered Oil Flow [L/h]	1500-1800	2000-2400	3000-3600	3600-4500
Oil Pressure In, max. [Bar]	1	1	1	1
Oil Suction Height [m]	3-4	3-4	3-4	3-4
Viscosity [cSt]	2-25	2-25	2-25	2-25
Power Supply [VAC - Hz]	3x400/440 or 3x690-50/60	3x400/440 or 3x690-50/60	3x400/440 or 3x690-50/60	3x400/440 or 3x690-50/60
Max Power Consumption [W]	750	750	1500	1500
Connections [“RG] (BSP)	1	1	1	1 1/2
Dimensions H x W x D [mm]	775 x 1105 x 435	605 x 1090 x 640	702 x 1140 x 740	705 x 1140 x 740 + 250 x 620 x 200
Weight [kg]	85	92	92	174
Materials	AISI 304 Stainless	AISI 304 Stainless	AISI 304 Stainless	AISI 304 Stainless
Filter canister [liter]	3 x 8	4 x 8	6 x 8	8 x 8
Water drain tank	Standard	Standard	Standard	Standard
Local Start/stop Panel	Standard	Standard	Standard	Standard
Pressure alarm and Automatic water drain	Option	Standard	Standard	Standard
Water alarm	Standard	Standard	Standard	Standard

\* Available Q2-2026





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