FILTRATION OF MINERAL AND BIO OILS

FILTRELEC ECODESIGN®

THE WIDEST RANGE ON THE MARKET

3 FUNCTIONS TO ROUND OFF YOUR CONTAINMENT BUNDS

- **Continuous evacuation of rainwater**
- **Hydrocarbon entrapment**
- **Seals instantly in case of sudden hydrocarbon leak**

FLOW RATE FROM 3 L/MIN TO 2400 L/MIN

AKHELEC

FILTRELEC ECODESIGN® FILTRATION CARTRIDGES

Flexible storage tank (BSTUB) equipped with FILTRELEC ECODESIGN filters.
ITER construction site (International Thermonuclear Experimental Reactor)

Filtration of drainage water in containment bunds under transformers and other live equipments.

Flow rates from 3 liters/min to 2400 liters/min

Product range developed in partnership with TOTAL and Institut Français du Pétrole Energies Nouvelles.

- **Filters validated by par Bureau Veritas, SGS, TÜV.**
- **Best price-quality ratio on the market.**
- **Guaranties a residual hydrocarbon concentration in rainwater at filter outlet <1 ppm or 5 ppm per liter depending on the model.**
- **Extended service life, reduced maintenance.**
- **Wide range of flow rates available: from 3 to 2400 L/min.**
- **Used filters can be processed with an optional return kit.**

FILTRELEC 100M2. Mobile - Ref. F100MOB

COMPLY WITH THE WATER ACT

Our filters trap permanently harmful hydrocarbon, preventing pollution of surface or underground water and soil.

Decree n°77-254 of 8th March 1977 on the regulation of the discharge of oils and lubricants into surface, underground and sea waters.

FILTERS DESIGNED AND MANUFACTURED IN FRANCE
In compliance with the European REACH regulation

Patented product: device for treating multiphase fluids HOLYBAG (shared patent with RTE N°1555152 - In the process of being deposited).

FILTRELEC ECODESIGN® comes in different models, depending on your installation configuration:

- Flow rate: 3 liters/min
- Flow rate: 5 liters/min
- Flow rate: 15 liters/min (to screw or to seal)
- Flow rate: 100 liters/min (fixed or mobile)
  Flow rate: 2400 liters/min: see foll. page
- Other flow rates on demand

MORE THAN 2000 FILTERS ALREADY INSTALLED

FILTERED PRODUCTS

FILTRELEC ECODESIGN® is the widest filters range on the market. It covers all mineral and bio oils:

- Dielectric mineral oil
- Diesel fuel EN590, automotive gasoline (SP95, SP98), aviation gasoline (avgas, kerosene: Jet A1, Jet B, JP-4, JP-5, JP-8), naphtha, petroleum, PAH, aromatic, paraffin, alkane, hydraulic oil ...
- Natural esters / vegetable oils

	Interface	Body	Dimensions (mm)		Average flow (l / min) under water height of 150 mm	Output	Position	Prefilter	Minimum retention capacity (l)
			Lenght	*Dia.*					
FILTRELEC-M2® GREEN to screw	Male 2''	PVC pressure	449	150	3	Axial	Horizontal	To screw External cage	2
FILTRELEC-5M1.5® to screw	Male 1,5''	PVC pressure	345	110	5	Axial	Horizontal	To screw	0,9
FILTRELEC-15M2® to screw	Male 2''	PVC pressure	292	150	15	Axial	Horizontal	To screw External cage	2
FILTRELEC-15S® to seal	Sealing sleeve in concrete	PVC pressure	400	170	15	Axial	25° or horizontal	External cage	2
FILTRELEC-100M2® fixed	Male 2''	HPDE	1640	1100	100	Axial	Vertical	Integrated External cage	46
FILTRELEC-100M2® mobile	Male 2''	HPDE	1640	1100	100	Axial	Vertical	Integrated External cage	46

The FILTRELEC ECODESIGN® 100M2 MOBILE system has specifically been developed for maintenance intervention and draining of pits by means of a self-priming diaphragm pump, allowing effluents to be measured without emulsifying water and supernatant hydrocarbons. Fast self-priming pump, use up to 6 meters deep.

DESIGN

- These filtration systems operate in gravity: for any other use, please consult us.
- They are made from an oleophilic and hydrophobic polymer that permanently traps hydrocarbons. When a significant oil spill occurs, the polymer reacts by clotting, preventing the fluid from flowing into the environment.
- Self-locking system, works without any mechanical parts or electrical connections: FILTRELEC ECODESIGN® **reduces maintenance costs considerably**.
- An **external pre-filter**, as well as a safety siphon, are required to limit the risk of premature filter fouling due to dust and sediments contained in the water.

INSTALLATION

- GMT sizes the type, number and location of FILTRELEC ECODESIGN® filters according to the retention volume and the rainfall observed in the installation area.
- **The engineering of the most complex systems is carried out by our design office** to offer you a complete solution: concrete pit, fire protection system, rainwater drainage and filtration of drainage water.
- To increase the flow rates, it is also possible to mount several FILTRELEC ECODESIGN® filters in parallel.
- **The filters do not need to be changed** except in case of saturation due to excess of oil. We recommend checking the filter flow and cleaning the prefilter regularly.
- **Waste treatment**: as an option, the PC-BACK KIT allows the collection and reprocessing of saturated filters for disposal in an approved waste collection center certified ISO 14001.

NEW! Exists in 2400 liters / min. flow rate: see following page.

FILTRATION SYSTEM : FILTRELEC ULTIME®

Filtration of dielectric mineral oils in rainwater
Flow rate of 2400 liters/min (40 liters/sec)

NEW!
2400 L/MIN FLOW RATE

DESIGN

- The FILTRELEC ULTIME® system must be installed at the pit exit, after separation by oil-settling.
- A concrete manhole, supplied by GMT or realized by a service provider on site, is positioned in the ground.
- The galvanized steel frame containing a specific filter media then passes through all the outlet flow of the pit.
- Optional: a sensor allows to know the level of saturation of the filter. It closes a dry contact, which can be monitored in the control room of the site and foresee maintenance for the replacement of the filter.

TECHNICAL CHARACTERISTICS

- Flow rate: 2400 liters/min
- Weight of galvanized steel frame with dry powder: 210 kg
- Steel frame dimensions: L 1460 x l 960 x H 662 mm
- Retention capacity: 160 kg of oil

LIFETIME

- Example for a site with a rainfall of 900 mm / year, 150 m² of pit and pollution of 50 ppm at the filter upstream.
- Expected lifetime in this example: 23 years.

FILTRELEC ECODESIGN (EN 01-17)

FILTRELEC ECODESIGN® IS ALSO CUSTOM-BUILT FILTERS

Contact us for any specific request:

- Silicone oil, chemicals ...
- Selection of filter media by our laboratories, in line with your specific needs and constraints.

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