TRITHON®

CENTRIFUGAL AND MEMBRANE HYDRODYNAMIC SEPARATOR

POLYETHYLENE (PE)
BURIED LAYING

SIMOP
EQUIPEMENTS POUR L'ENVIRONNEMENT

Redonnons le meilleur à la terre

6500

1 Description

Rainwater recovered after runoff is responsible for various polluting deposits, particularly in particulate form. These particles will generate suspended solids (MES) which constitute water pollution in 90% solid and undissolved form.

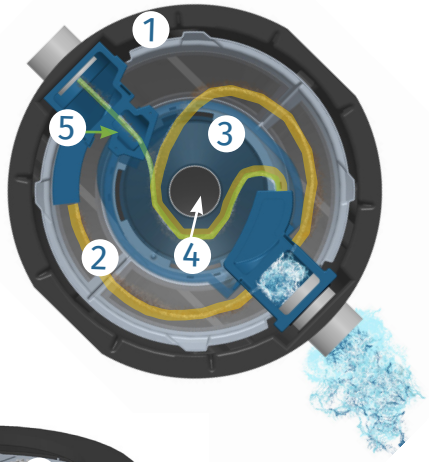
Trithon is intended for the settling of solid particles with a density of between 2.5 and 3 contained in rainwater and the retention of solid floating particles with a density of 0.9 and 0.95.

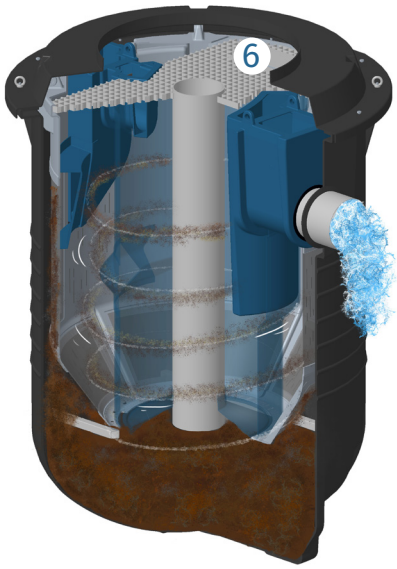
The claimed principle is based on the so-called hydrocyclone technology which allows sedimentation by the effect of centrifugal force.

Trithon can receive flows from 5 to 20L/s, and up to 25L/s (125% of nominal flow) in degraded mode.

The range consists of two products :

- TRITHON5/25 can receive flows from 5 to 20L/s and up to 25L/s (125% of the nominal flow) in degraded mode
- TRITHON3/15 can receive flows from 3 to 12L/s and up to 15L/s (125% of the nominal flow) in degraded mode





2 Functioning

Trithon® is concentrically composed:

① an external area separated from the processing compartments
by selective walls,

② a 1st compartment through which the flow enters the system tangentially,

③ a 2nd finishing compartment,

④ a central access tube to the sludge storage area (for checks and emptying).

Trithon® is also equipped with an overflow ⑤ management device which allows partial treatment in the event of high flow (between 100 and 125% of the nominal flow).

⑥ A technical platform is installed on top of the device and allows servicing and maintenance.

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SIMOP - 10 rue Richedoux 50480 SAINTE-MÈRE-ÉGLISE – FRANCE – Tel. +33 (0)2 33 95 88 00 – Fax +33 (0)2 33 21 50 75 - www.simop.com – e-mail: simop@simop.fr

3 Advantages

- Technology and Efficiency tested by the CSTB certified laboratory
- The Trithon technology has been submitted to ETV, the European program responsible for verifying the performance of innovative environmental technologies.
- Powerful processing: Honorable yield
- Durability: PE corrosion resistant
- Ready to install
- Easy operation and maintenance: suction of sludge and floating materials via 2 guide tubes and cleaning system with spray nozzles included.
- Technical floor
- Inlet water level = outlet water level

4 Features

- Parkings
- Roads
- Car scrapyards
- Waste collection centers
- Airports
- Port areas
- Upstream retention or infiltration basin
- Iinstallations classified for Environmental protection purposes (ICPE)

5 Claims and verifications

Performance claims have been validated by the CSTB and verified by the European verification program ETV

- Average yield per cumulative particle size fraction (with an empty sludge storage compartment)

Size fraction	Feed (%)	Feed (%)	Feed (%)	Feed (%)	Feed (%)
	25	50	75	100	125
Flow rate (L/s) TRITHON3/15	3	6	9	12	15
Flow rate (L/s) TRITHON5/25	5	10	15	20	25
≥ 50µm	91%	78%	67%	59%	54%
≥ 63µm	95%	84%	74%	65%	60%
≥ 75µm	97%	88%	79%	71%	65%
≥ 100µm	99%	94%	89%	81%	75%
≥ 150µm	100%	99%	94%	90%	90%
Average yield					

- Fed at 100%, i.e. at the nominal flow rate, the efficiency on thermoplastic floats is 99.9
- Trithon system efficiency when the storage part is half full and at 125% of the nominal size (in degraded mode): the release has practically no impact on the efficiency (1.85% on average)

OPTIONS

- RH2/TRIT extension Ø 600, height 800 mm, cuttable over 300 mm
- RCB602-20: precast concrete load distributor (only with RH2/TRIT extension)
-ANH22/14310-N: Visual and audible alarm for light liquids with 220V power supply (only 1 hydrocarbon probe possible)
-ANH22/14320: Visual and audible alarm for light liquids with 220 V power supply (3 possible probes)
-ANH22/14506: Alarm with power supply for light liquids by solar panel
-SNB/14220: Sludge level sensor (please provide an ANH22/14320 or ANH22/14506 box)
-CA3/6394/3T/2 Set of 2 anchor belts 3 tons (be careful, plan 2 sets since 4 anchor points)

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6 Handling - installation

Refer to the PTRITPE leaflet.

7 Guarantee

The winery benefits from a 20-year guarantee.

8 Maintenance

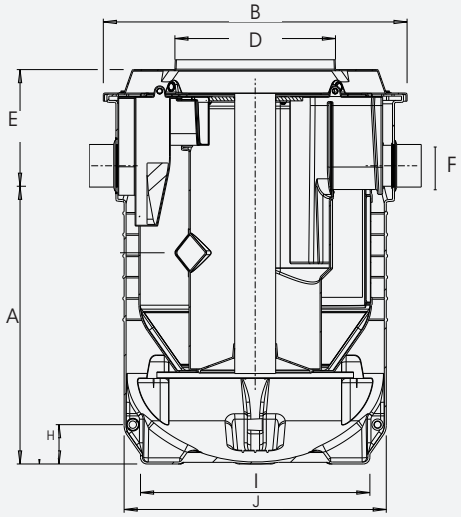
Aspirate the floaters.

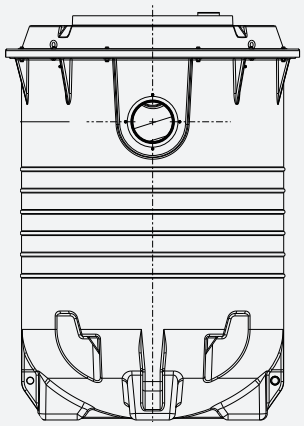
Periodically empty the device (sludge height of the storage compartment reaches 80% of its capacity) the bottom of the tank.

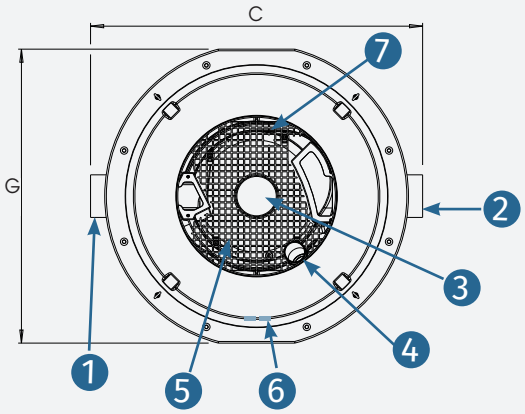
Clean the membrane walls.

A spray nozzle cleaning system is available.

Refer to the E150 manual.







1 – Entrance
2 – Exit
3 – Tube for sludge suction passage
4 – Tube for floating suction passage
5 – Technical floor
6 – Cable gland for passage of alarm probe cable
7 – Connection to the spraying system in 1.1/2 female thread (the drainer must provide a 1.1/2 hose with female adapter)

Reference	A	B Ø	C	D Ø	E	F Ø	G	H	I	J
TRITHON3/15	1550	1554	1757	980	665	200	1494	195	1130	1300
TRITHON5/25	1695	1854	2027	980	712	250	1794	240	1400	1600

Reference	Flow range	Nominal flow rate	Peak flow	Trap volume	Storage of floats	Weight
TRITHON3/15	3 to 15 L/s	12 L/s	15 L/s	240 L	375 L	250 Kg
TRITHON5/25	5 to 25 L/s	20 L/s	25 L/s	725L	615L	350 kg

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