

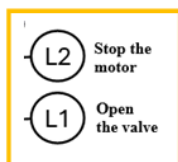
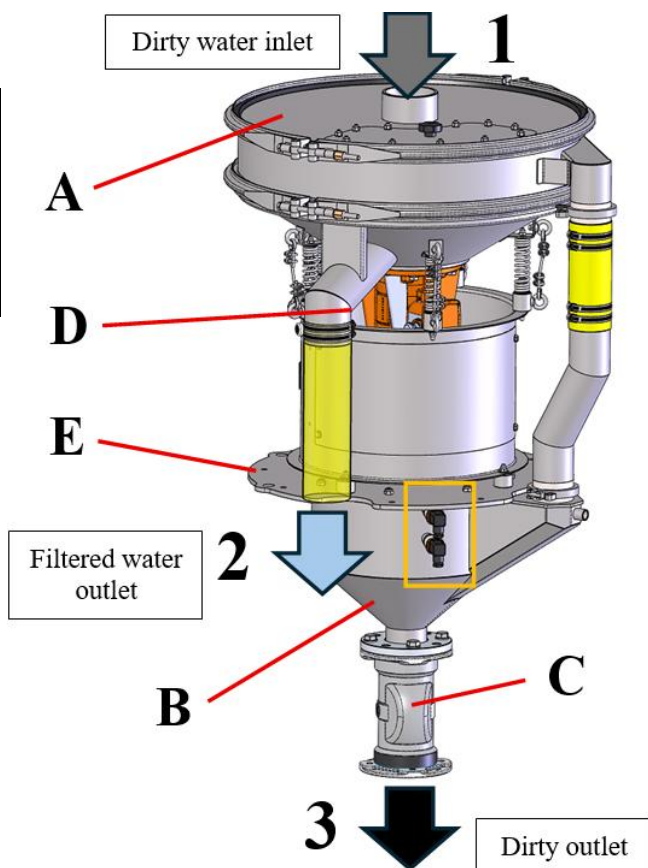
Filter for recycling dirty water



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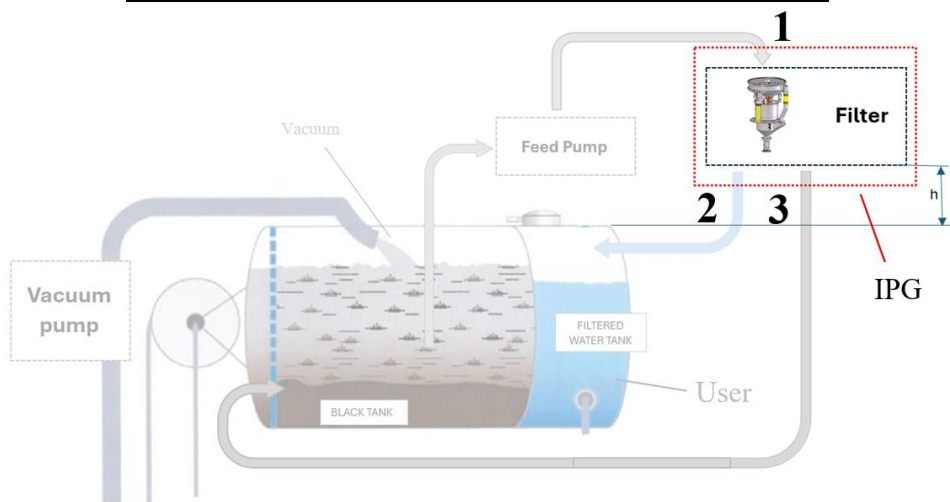
LEGEND

A	FILTER
B	DIRTY ACCUMULATION TANK AND LEVEL SWITCH SENSORS
C	ON/OFF HYDRAULIC VALVE WITH PNEUMATIC ACTUATION
D	ELECTRIC MOTOR
E	SUPPORT FRAME



General information	<ul style="list-style-type: none"> • Compact recycling module • Simple structure • Innovative solution
Construction material of contact parts	Stainless Steel AISI 304 - AISI 316 – AISI 316L
Filtration degree	Filtration capacity up to 50 μm
Safety	Double-mesh filtration system
Flow rate specification	up to 300 l/min of filtered water
Indicative dimensions (not final value)	916 x 936 x 1525 [mm]
Electric motor specifications	1PH, 220-240V, 1500rpm, 50/60Hz
Level switch sensors specifications	10-30V DC, digital output

INSTALLATION GENERAL LAYOUT



General information

- Dirty water from the black tank must be pumped to “inlet 1” of the filtration system using a feed pump (be careful of priming problem).
This feed pump must be able to ensure the required flow rate. The suction must be connected to a vacuum tank (black tank) while the outlet port is connected to an environment at atmospheric pressure.
- The filtration system must be installed at the upper part of the filtered water tank (height h in the figure).
The filtered water from the “outlet 2” must enter in filtered water tank by gravity (“outlet 2” is at atmospheric pressure).
- “Inlet 1 and “outlet 2” must be connected to flexible pipes.
- The operation of the feed pump shall be managed according to the levels of the truck tanks.
- The double-mesh filtration system has been integrated as a safeguard, ensuring system protection in case of failure or rupture of the filtering mesh (replace this mesh as soon as possible).
- Ensure regular cleaning of the filtration system with clean water at the of the workday.
- Check the integrity of the filtering mesh in case of absence of filtered water at “outlet 2”.
- The level of the dirty accumulation tank “B” is controlled by two level switch sensors L1 and L2. The first sensor L1 is used under normal operating conditions for managing the discharge of this tank while the second sensor L2 is used only as a safety device. The on/off pneumatic valve “C” must be opened for a certain period if the first sensor L1 is activated or every 30 seconds if level L1 is not reached. The filtration system and the feed pump must be stopped (with a consequently general check of the layout) if the second security sensor L2 is activated.
- A ON/OFF valve with pneumatic actuation “C” (pneumatic supply pressure ≥ 2.5 bar) is located at the lower part of the dirty accumulation tank. This valve in “output 3” must be connected to the black tank of the truck. The vacuum in the black tank and the opening of the pneumatic valve are essential to achieve the complete discharge of the dirty accumulation tank.
- For the implementation of the complete control logic:
INPUT: Truck tank levels, digital signal of the first level switch sensor L1, digital signal of the second level switch sensor L2 (used as a safety signal).
OUTPUT: pneumatic valve “C” switching signal, feed pump start/stop signal

The system dimension may be subject to change