

## DATENBLATT / DATA SHEET ECOLIT 600 – MF



<b>Model</b>	<b>ECOLIT 600 - MF</b>
Durchflußleistung / flow rate	600 l/min
Abmessungen / measurements (L x W x H)	3260 x 850 x 2055 mm
Gewicht / weight	780 kg
Stromversorgung / power supply	400V - 3/PE - 50Hz
Anschlußleistung / power supply value	13,2 KW
Druckluftanschluß / compressed air supply	6 bar
Betriebsdruck / operating pressure	4,5 bar
Max. Druck / max. pressure	7 bar
Reaktor Tank Inhalt / reactor tank volume	1500 liters
Hydro Zyklone / hydro-cyclones	6 units
Water Stabilizer	3 units
Hochspannungselektrode / high voltage electrode (HVE)	1 unit
Fein Filter / fine filter	3x 2"
Filter Rückspülung / filter back flush	automatic with compressed air
Filter Rückspülungs Steuerung / filter back flush control	pressure switch
Prozess Steuerung / proces control	relais based
Tauchpumpe(n) / submersible pump(s)	3x 2,2 KW
Druckpumpe(n) / supply pump(s)	3x 2,2 KW
Linearmembranverdichter / linear air compressor	120 l/min
Flotationsmembranen / flotation membranes	3 units
Recyclingwasseranschluß / recycled water connection	2"
Einspeisungs Wasseranschluß /feed water connection	3x 38 mm hose barb
Entleerungsleitung / discharge drain return	2x 63 mm
Wasserzähler / water meter	2"
Windkessel / air dome	100 liters



# **ADVANTAGES of FREYLIT ECOLIT- MF recycling systems**

The ECOLIT-MF has several significant advantages which we would like to briefly point out :

## **1. advantage : four stage solid removal**

With the ECOLIT-MF system we remove suspended solids by a four stage process.

- a) By stainless steel pump protector coarse screen to block out solid waste
- b) By hydro-cyclone to remove larger particles.
- c) By dissolved air flotation to remove fine flakes and particles.
- d) By fine filter, which are equipped with an automatic back-flush system (20, 50 or 100 micron). The back flush is activated after every car wash cycle is completed. Moreover, the filter mesh is made of stainless steel and does not need periodic changing.

## **2. advantage : two stage de-germing process**

- a) By high voltage electrode (30,000 Volts / 300 mAmps.)
- b) By our well established water stabilizer

## **3. advantage : removal of algae**

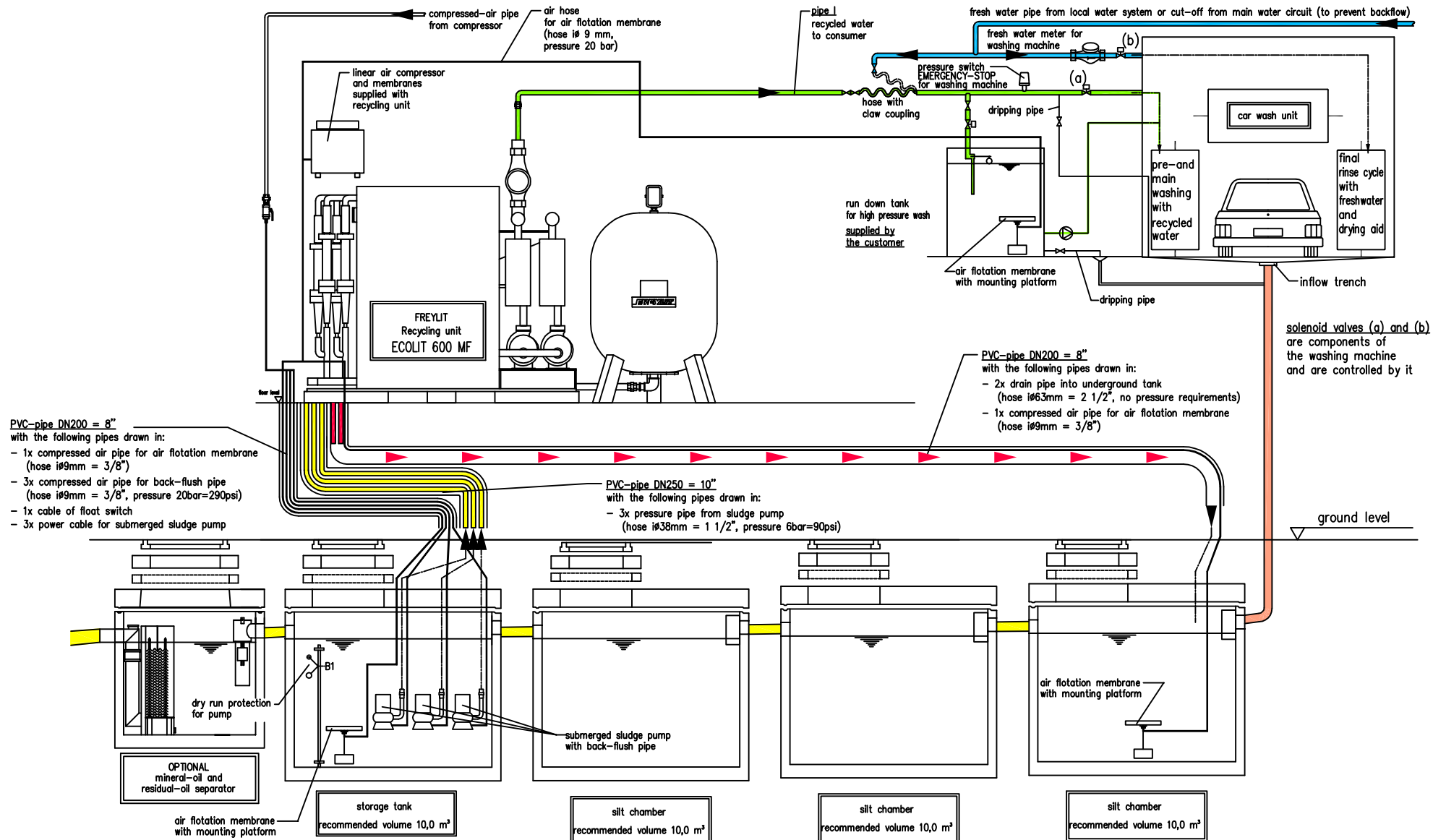
Freylit has been engaged for many years in researching new wash water recycling technology. Recently we discovered that, when wash chemicals are mixed together with dirt and exposed to sunlight algae will grow. These algae will stick to pipes, tanks, car wash and other surfaces and act as a culture for bacteria. These bacteria will cause bad odour. To combat this problem Freylit developed the high voltage electrode which does not only kill bacteria, but is also very effective in preventing the growth of algae. Moreover, the High Voltage Electrode will cause a flocculation of fine particles.

## **4. advantage : dissolved air floatation in the reactor tank**

Dissolved air is produced by an floatation membrane located inside the reactor tank. By air flotation the flakes are brought up to the surface of the water inside the reactor tank and then skimmed off the surface to the overflow back to the silt chamber.

## **5. advantage : easy installation, minimum civil works needed**

The ECKOLIT-MF series is ideal for retrofitting sites where the car wash already exists, because for example the ECOLIT 100-MF or EKOLIT 200 MF only needs two PVC-spring hoses to connect the unit to the underground pit. The ECOLIT 100-MF or EKOLIT 200 MF can work with only one underground tank with an approximate volume of 3780 litres (1000 gallons).



PVC-pipe DN200 = 8"  
with the following pipes drawn in:  
- 1x compressed air pipe for air flotation membrane (hose iØ9mm = 3/8")  
- 3x compressed air pipe for back-flush pipe (hose iØ9mm = 3/8", pressure 20bar=290psi)  
- 1x cable of float switch  
- 3x power cable for submerged sludge pump

PVC-pipe DN250 = 10"  
with the following pipes drawn in:  
- 3x pressure pipe from sludge pump (hose iØ38mm = 1 1/2", pressure 6bar=90psi)

PVC-pipe DN200 = 8"  
with the following pipes drawn in:  
- 2x drain pipe into underground tank (hose iØ63mm = 2 1/2", no pressure requirements)  
- 1x compressed air pipe for air flotation membrane (hose iØ9mm = 3/8")

solenoid valves (a) and (b) are components of the washing machine and are controlled by it

<b>FREYLIT</b>	type:	ECOLIT MF
	pipe connection plan ECOLIT 600 MF	drawing no.: ECOLIT600-MF-507_e
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