DATENBLATT / DATA SHEET
CHVTP 400

Model	**CHVTP 400**
Durchflußleistung / flow rate	400 l/min
Abmessungen / measurements (L x W x H)	2620 x 750 x 1840 mm
Gewicht / weight	640 kg
Stromversorgung / power supply	400V - 3/PE - 50Hz
Anschlußleistung / power supply value	8,8 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	880 liters
Hydro Zyklone / hydro-cyclones	4 units
Water Stabilizer	2 units
Hochspannungselektrode / high voltage electrode (HVE)	1 unit
Fein Filter / fine filter	
Filter Rückspülung / filter back flush	
Filter Rückspülungs Steuerung / filter back flush control	
Prozess Steuerung / proces control	relais based
Tauchpumpe(n) / submersible pump(s)	2x 2,2 KW
Druckpumpe(n) / supply pump(s)	2x 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	2x 38 mm hose barb
Entleerungsleitung / discharge drain return	2x 63 mm
Wasserzähler / water meter	2"
Windkessel / air dome	100 liters


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ADVANTAGES of FREYLIT CHVTP recycling systems

The CHVTP series has several advantages which we would like to briefly point out :

1. advantage : three stage solid removal

With the CHVTP system we remove suspended solids by a three 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.

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

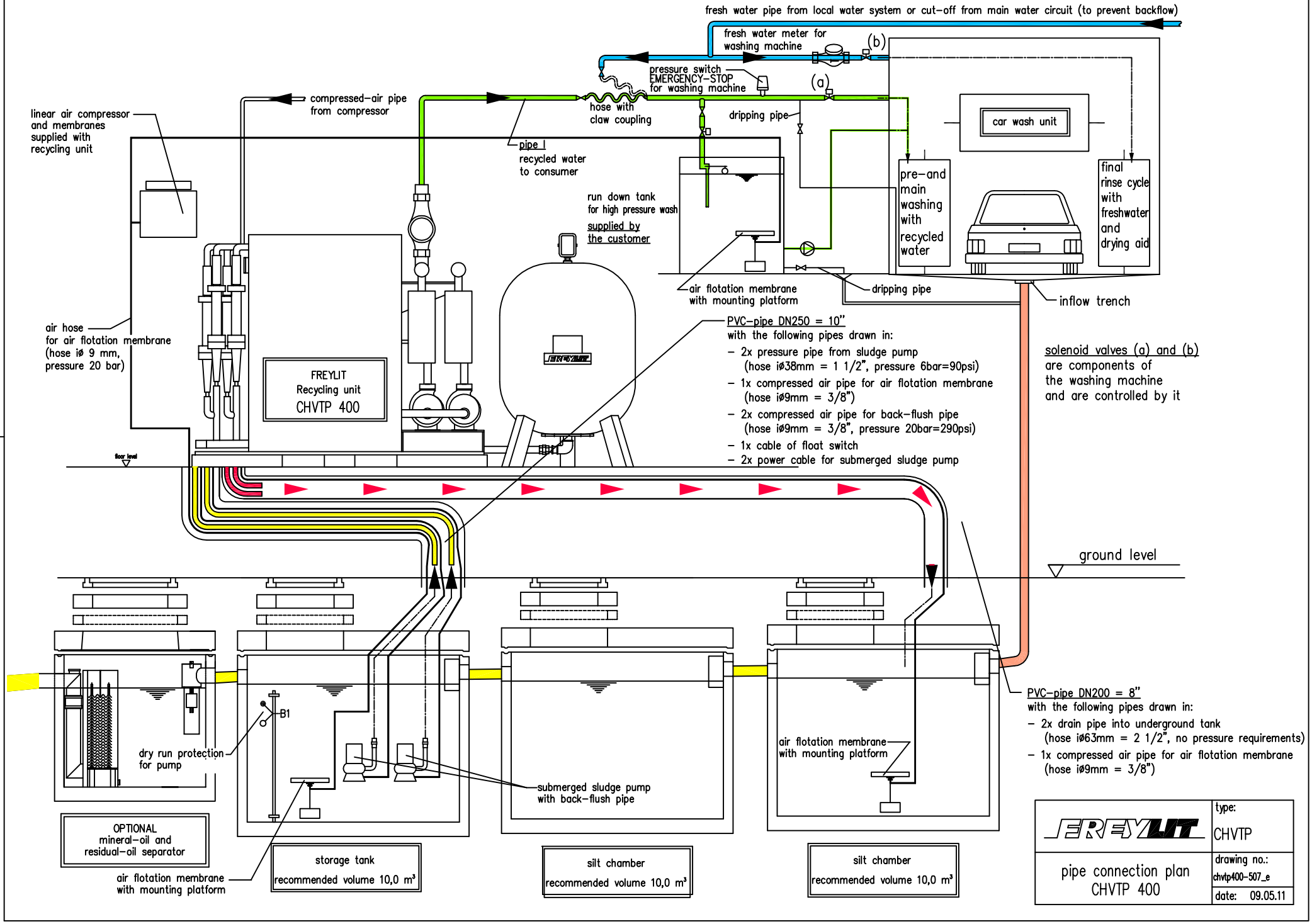
Freylit has been engaged for many years in researching new wash water recycling technology. Recently we discovered that, when wash chemicals are mixed together with dirt and exposed to sunlight algae will grow. These algae will stick to pipes, tanks, car wash and other surfaces and act as a culture for 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 : aeration for the buffer tank

An aeration pipe with nozzles is installed in the buffer tank.. By aeration the flakes are brought up to the surface of the water inside the buffer tank and then skimmed off the surface to the overflow back to the silt chamber.

5. advantage : easy installation, minimum civil works needed

The CHVTP series is ideal for retrofitting sites where the car wash already exists, because for example the CHVTP200 only needs two PVC-spring hoses to connect the unit to the underground pit. The CHVTP200 can work with only one underground tank with an approximate volume of 3780 litres (1000 gallons).


fresh water pipe from local water system or cut-off from main water circuit (to prevent backflow)
fresh water meter for washing machine
(b)
pressure switch EMERGENCY-STOP for washing machine
(a)
compressed-air pipe from compressor
hose with claw coupling
dripping pipe
car wash unit
linear air compressor and membranes supplied with recycling unit
pipe I
recycled water to consumer
run down tank for high pressure wash
supplied by the customer
pre- and main washing with recycled water
final rinse cycle with freshwater and drying aid
air flotation membrane with mounting platform
dripping pipe
inflow trench
air hose for air flotation membrane (hose iø 9 mm, pressure 20 bar)
FREYLIT Recycling unit CHVTP 400
PVC-pipe DN250 = 10"
with the following pipes drawn in:
- 2x pressure pipe from sludge pump (hose iø38mm = 1 1/2", pressure 6bar=90psi)
- 1x compressed air pipe for air flotation membrane (hose iø9mm = 3/8")
- 2x compressed air pipe for back-flush pipe (hose iø9mm = 3/8", pressure 20bar=290psi)
- 1x cable of float switch
- 2x power cable for submerged sludge pump
solenoid valves (a) and (b) are components of the washing machine and are controlled by it
ground level
B1
dry run protection for pump
submerged sludge pump with back-flush pipe
air flotation membrane with mounting platform
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")
OPTIONAL mineral-oil and residual-oil separator
air flotation membrane with mounting platform
storage tank recommended volume 10,0 m³
silt chamber recommended volume 10,0 m³
silt chamber recommended volume 10,0 m³
FREYLIT
type: CHVTP
pipe connection plan CHVTP 400
drawing no.: chvtp400-507_e
date: 09.05.11