

ECO DPM

MAIN APPLICATIONS:

- Oily emulsions, wastewater from vibratory-finishing, exhausted washings
- Wastewater from pressure die-casting (release agents, glycols, lubricants oils)
- Wastewater from galvanization (Chromium, Nickel, Copper), exhausted baths, eluates
- Recycling of exhausted baths
- Chemical/Pharmaceutical Industries (washing of reactors, wastewaters from processes)
- Treatment of water-based solutions

MAIN CHARACTERISTICS:

- Energized by hot water or steam
- Horizontal immersed heat exchanger
- Exploiting of the heat at multiple effect
- Product charge, discharge of distillate and concentrate: automatic.
- Check by PLC Siemens S7-200 with TP 170 B keyboard
- Pull-out heat exchangers
- Main frame, pipes and valves Aisi 316 made.
- Special alloys on demand
- Possibility of extension of capacity up to three stages

The concentrators by Ecotecno, DPM series, use hot water or steam to effect the evaporation process offering the possibility to recycle heat sources, already available. These units can be composed by one or more stages according to the temperature of the primary heating fluid, and according to the liquid to be treated.

In the multistage version, the heat transferred to the evaporate product, is completely recycled in following stages, producing a "cascading" effect.

The condensation of the distillate at the final stage happens by a special condenser with closed circuit and does not require water (except for a very small quantity for recovery).

These units can be increased with the simple add of evaporation modules (up to three) without increase of energy supply.

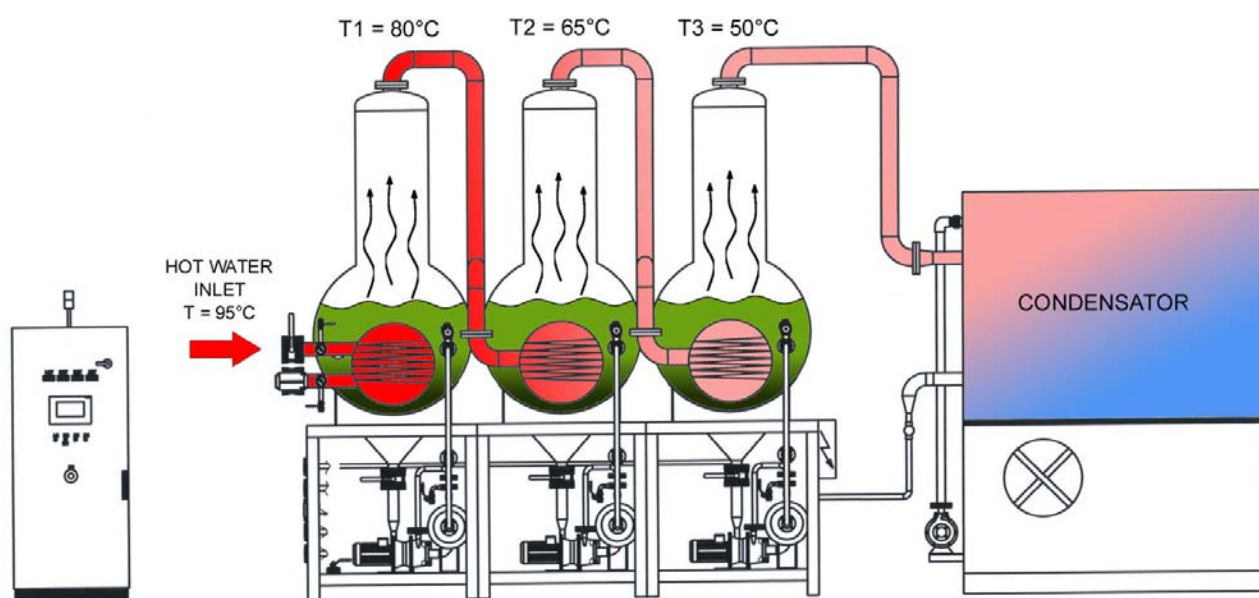
The assembling characteristics of DPM series and the lack of frigorific circuits or sophisticate devices guarantee a safety working and lower maintenance respect to all other concentration systems in the world.



The system consists of one or more vacuum evaporation modules called stages.

The first stage is energized by an external heating flow of hot water or steam. The heat transferred to the wastewater, causes the evaporation of the solution there contained. The steam rises through the central chimney and has a sufficient temperature to heat "free" the following stages (where a higher vacuum pressure will be set). The steam will be condensed in the thermal exchange section, and directed into the system of vacuum.

The final condensation of the steam produced by the last module is assigned to a special condenser with closed circuit or to a simple exchanger at plates if cool water is already avail.



SIZE	LITRES/HOUR	Kcal requirements *	DIMENSIONS* (bxl xh)
4000 DPM1	165	110.000	3200 X 1000 X 3200
8000 DPM1	330	215.000	3300 X 1200 X 3800
8000 DPM2	330	110.000	3200 X 1900 X 3200
10000 DPM1	420	250.000	3300 X 1200 X 3800
12000 DPM3	500	110.000	3100 X 2500 X 3300
16000 DPM2	665	215.000	3300 X 2300 X 3800
20000 DPM2	850	250.000	3300 X 2300 X 3800
24000 DPM3	1000	215.000	3100 X 3400 X 3800
30000 DPM3	1250	250.000	3100 X 3400 X 3800



All units by ECOTECNO conforms to "Machinery Directives" 89/392/CEE

* Ecotecno can change dimensions and technical characteristics without notice.