



## Advantages

- Recovery of pure water present in waste water
- Reduction of waste to be eliminated
- Very low energy consumption
- Adapted to scaling and fouling fluids
- Ergonomic
- Simple to install
- Autonomous operation
- Low maintenance



# Turbevap

## Evaporator for treatment of industrial waste water

Evaporation using mechanical vapour compression (MVC) is a process that separates the solvent (usually water) and concentrates the stock solution.

Used in the domain of industrial waste water treatment, waste water evaporator under vacuum allows an efficient reduction of **industrial liquid wastes**. Moreover, the water recovered during the distillation process is of industrial grade: **it can be reused in your processes**.

Turbevap is one of the rare waste water evaporators that uses mechanical vapor compression (MVC) and that operates under deep vacuum, and so, at low temperature. It exploits a unique compressor which design is inspired by automotive turbocharger. Designed to work efficiently under vacuum at very high speed, the compressor developed by Leviathan Dynamics allow the treatment of a very large quantity of waste water in a limited volume. The compacity of Turbevap allows it to be integrated easily in most industrial environment.

The excellent tightness of the compressor allows operation a low temperature. The concentrated waste is evacuated from the machine at a temperature of 35°C. It doesn't need to be cooled before storage.

Turbevap is particularly adapted for small capacity requirements. In its capacity range, Turbevap has the lowest energy consumption. It consumes 40% less energy than traditional evaporator.

## Technical data

Model	Treatment capacity*		Electrical connection	Energy consumption*	Weight
	per hour	par year**			
LD 40	40L	320 m <sup>3</sup>	3 kVA – 230V mono	45 kWh/m <sup>3</sup>	250 kg

\*for pure water, real capacity depends on the quality of the waste water

\*\*based on 8000h of annual operation

## Return on investment

Elimination method	Operating cost	Water consumption cost	Waste water elimination cost***	Total/year
TURBEVAP LD 40	2 000 €	240 €	11 040 €	<b>13 280 €</b>
Third party elimination	–	1 200 €	55 200 €	<b>56 400 €</b>
			<b>Savings</b>	<b>43 120 €</b>

Calcul based on 240 m<sup>3</sup> waste water to be eliminate per year

\*\*\* based on elimination cost of 230€/m<sup>3</sup>

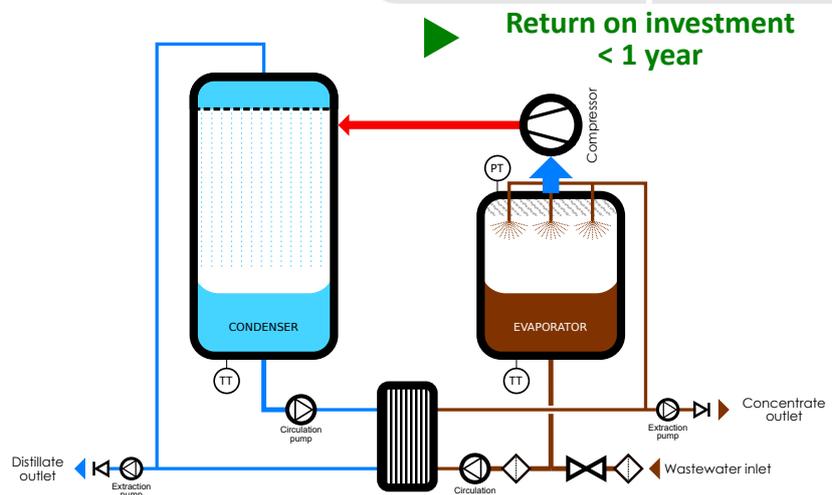
## Applications

Liquid waste of:

- machining lubricant
- mould coating

Rinsing water from:

- cleaning of machined part
- surface etching
- electroplating process
- sharpening
- thermal treatment process
- chemical passivation process
- cleaning after dye penetrant tests
- cleaning of vessels



## contact

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