

Wastewater treatment with Vacuum Evaporation Systems

Water treatment made easy!

Evaporators for the treatment of industrial wastewater.

Recognised as BAT (Best Available Technology) under European Directives for wastewater treatment. Evaporators are completely automatic with microprocessor control for continuous operation with minimum operator assistance. Evaporators provide high concentration ratios with a high quality distillate, good levels of separation with the option to recycle. Waste volumes for disposable can be reduced significantly with up to 98% of wastewater for re-use.



- ◆ Fully automatic
- ◆ Energy efficient
- ◆ Easy to install
- ◆ Easy to operate
- ◆ Saves money
- ◆ Helps the environment
- ◆ Instant reuse of recycled water
- ◆ Reduce waste disposal costs
- ◆ Meet consent limits for discharge
- ◆ Suitable for numerous applications
- ◆ Systems available from just 10 litres per hour to many thousand's.
- ◆ Wide range of options available
- ◆ Leasing plans available



The easy way to treat industrial wastewater

SAVES MONEY

Can reduce water consumption and waste disposal costs.

ENVIRONMENT FRIENDLY

Recycle water and reduce waste. Less waste for removal from site. Reduce storage of waste liquids on site. Can be part of ISO 14000.

SAFE AND EASY TO USE

All machines CE approved. Simple controls for ease of use.

FREE TEST ANALYSIS OF YOUR WASTE WATER

Send us a sample of your waste water for laboratory testing. We will provide analysis results and recommend suitable equipment.



FREE CONSULTATION

We can visit site, assess your processes and advise on the best way to treat your waste water.



Technology Overview

MICROPROCESSOR CONTROL



Total process control with fault find function.

AVAILABLE WITH HEAT PUMP (HP) SYSTEM



Heating and cooling in one single unit with low energy consumption.

QUALITY

High quality robust construction



with worldwide parts availability.

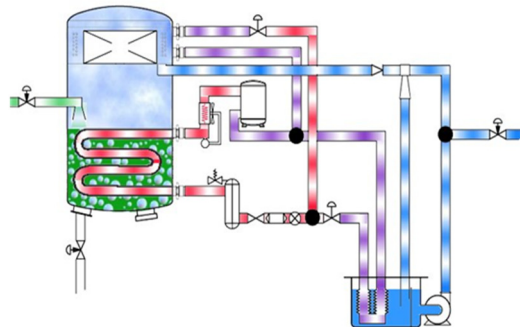
SAFE TO USE

All machines CE approved.



Vacuum evaporation can be used to efficiently treat a wide range of wastewaters from many industrial processes. Some applications include wastewater from die casting, metal treatment, printing, painting, surface treatment, degreasing, etc. Evaporators can remove suspended solids, heavy metals, colour pigments and other non volatile products producing a distillate that in most cases can go the sewer system without further treatment in compliance with local regulation or be recycled.

The Solutex range of standard and custom built equipment ensures a solution to every application. Evaporation effectively resolves the problem of the disposal of industrial polluted water, concentrating as much as possible the contaminating products such as inks, paints, oils, greases and heavy metals. The recovered distilled water can be reused in the production cycle or discharged to sewer. With increasingly stringent pollution control regulations, vacuum evaporation is an ideal way to deal with the use of natural resources and their disposal.



By exploiting the technologies of heat pump and vacuum distillation a maximum yield can be achieved with low energy consumption. Under vacuum the boiling point of water is reduced to 35 – 40° C, using heat pump technology the same circuit is used for heating and cooling and the amount of energy required is reduced considerably. Solutex has a number of different systems that can be matched to customer requirements from low volume to high volume units using forced circulation or units with internal boiler cleaning systems for encrusting liquids likes inks and paints. Multi-effect units are also available (2 or 3 chambers) for other special applications.



HPS Series—internal coil



HPR Series—internal scraper



Cf Series—forced circulation

Technology Overview

EASY INSTALLATION



Most machines are delivered fully assembled, skid mounted and ready to work.

We can install, commission and train operators providing a turnkey package if required.

Standard units constructed in stainless steel 316 but other materials are available depending on the application.

Controlled by a programmable PLC with easy process control.

Evaporators are fully automatic and can operate 24/7 unattended and only minimal intervention by personnel is required. They require no pumps for waste loading or distillate unloading. Process residues are unloaded by valve or optional pump. A synoptic panel shows all process functions. On larger models a touch screen PLC provides even greater control.

Evaporators produce a high quality distillate free of metal ions, salts and other non volatile products such as oils, greases, paints, inks, etc.

Evaporators can treat a wide range of differing waste streams without the need for any changes or modifications.

Wastewater Evaporators are supplied fully assembled and only need connection to services making them easy to install.



HIGH QUALITY DISTILLATE



All models produce a high quality distillate.



HEAT PUMP

COMPACT, SKID MOUNTED

Supplied ready to connect to your services.

INDUSTRIES

Health Care
Chemicals
Mechanical surface treatment
Biogas
Food
Oil & Gas
Power
Mining
Landfill
Printing
Painting

Model Overview



HPS Series Heat Pump System



From 240 to 6,000 litres per day

Boiler with internal boiler heating coil ideal for oil emulsions or other non encrusting liquids. Low energy and high concentration.



HPR Series Heat Pump System with scraper



From 240 to 2,400 litres per day

Boiler with internal boiler scraper system that prevents the build up of solids on the boiler surfaces. Ideal for encrusting liquids like paints, inks, adhesives etc. Low energy and high concentration.



HP Cf Series Heat Pump System



From 1,200 to 17,000 litres per day

Single boiler with forced circulation that is ideal for most liquids and high flow rates.



HP Cf Series Double effect



Heat Pump System

From 12,000 to 36,000 litres per day

Multi boiler system with forced circulation that is ideal for most liquids and high flow rates. Lower energy Consumption.



HS and HW Cf Series: Single, double and triple effect Hot water or steam system

From 9,600 to 200,000 litres per day

Utilising steam or hot water from existing customer sources. Forced circulation that is ideal for most liquids and high flow rates.



Custom Build

Various flow rates to meet requirements

Utilising heat pump, steam or hot water from existing sources with single or multi boiler systems in various materials including super duplex steel to meet the most demanding applications.

Installations

INSTALLATIONS

References in most industries with many leading companies worldwide.

You can count on our experience to help you resolve your water treatment.

For more information on any of our products or services please contact us :

Email: info@solutex.co.uk

Telephone:

+44 (0) 1691 622225

Web:

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Triple effect evaporator with dry cooler



Evaporator built in a special container.



Small evaporator With storage tanks.



Small evaporator In enclosure with active carbon filter.