Recycle dirty acetone and solvents: It gets back 100% pure and reusable

In the composite industry, the cleaning of the machines and manufacturing tools is very important and difficult. It has to be done using acetone, which is increasingly expensive.

ECO-DEC has developed a stockpiling and regeneration method which reduces by +/- 70% the acetone consumption of its users.

Working principle:
The new Eco-Dec regenerator has, as main innovation, its heater made of an electrical resistance cast in aluminium. The aluminium plate is melted on the heater to provide a direct heat exchange. Heating supervision and management are made by electronic regulation and static relay. The advantages of this are that we don’t need disposal bags, there is no oil and thus no maintenance. It is cheaper and easier.

The second main advantage is the cooling made by water and not by air. The thermal exchange is better with water than with air because of the air temperature variations due to weather.

- In the summer time, the evaporation of a part of the steam in the atmosphere is better with water than with air because of the air temperature variations due to weather.
- Also, when evaporation in the atmosphere occurs, there is a risk of condensation of the steam.
- And this evaporation is dangerous for the workers near the machine breathing these emanations.

Eco-Dec have been working in the solvent waste-processing sector for 25 years. We have developed a new distillation system, which produces a purer solvent ready for reuse in many applications. The system is suitable for a wide range of solvents such as trichloroethylene, aromatic solvents, perchloroethylene and chlorous solvents. The new system uses a heating element sandwiched in an aluminium plate and placed at the bottom of the regenerator. This allows an efficient and even transfer of heat to the solvent throughout the distillation process. The Eco-Dec recycler is capable of recycling all solvents within a mix in one cycle.

The Eco-Dec recyclers are water-cooled and virtually maintenance free! As well as the advantages above, recycling your solvent waste cuts out the need to store waste, which has associated risks and also the cost of waste removal.

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