

VINEGAR PRODUCTION PLANTS

EXHAUST AIR SCRUBBER / CONDENSER FOR THE RECOVERY OF RESOURCES FROM THE EXHAUST AIR

Cetotec exhaust air scrubber and condensers offer, especially for larger vinegar fermenters and quantities of exhaust air, the ideal solution for cleaning the air and recovering valuable resources at the same time.

Description:

The tightly arranged construction of the absorber column and absorber reservoir is equipped with a reliable automization system. The exhaust air, consisting of Ethanol and acetic acid is transported through the absorber column and thereby cleaned. By using an air scrubber, 60-80% of the resources can be recovered. In combination with a CETOTEC condenser, cross-flow heat exchanger, the amount of recovered resources can be increased to 95%.

Function:

The exhaust air scrubber functions on the basis of physical absorption. The resources contained in the exhaust air are washed out of the gas phase and gathered within the washing liquid. The special design of the filling material within the absorber column guarantees a very high surface and therefore leads to an optimal mass transfer during the cleaning. The washing liquid can be used for mash preparation or dosed back into the vinegar fermenter. In case of using the fed-batch process the liquid can be dosed into the fermenter during charge phase. The installation can be done either in one part or two parts as well as inside or outside. In case of installing the two parts separately, the absorber column is usually installed on the roof of the building and the absorber reservoir on the floor.

Advantages:

- Recovery of 60-80% of resources in exhaust air and up to 95% in combination with a condenser
- Reduction of emissions for plants in residential areas
- Suitable for both inside and outside installation



Available sizes:

Standard sizes: 600 - 2000 m3 / h air volume

Exhaust air scrubbers and condensers can be constructed based on customer requirements and tailored to local specifications.