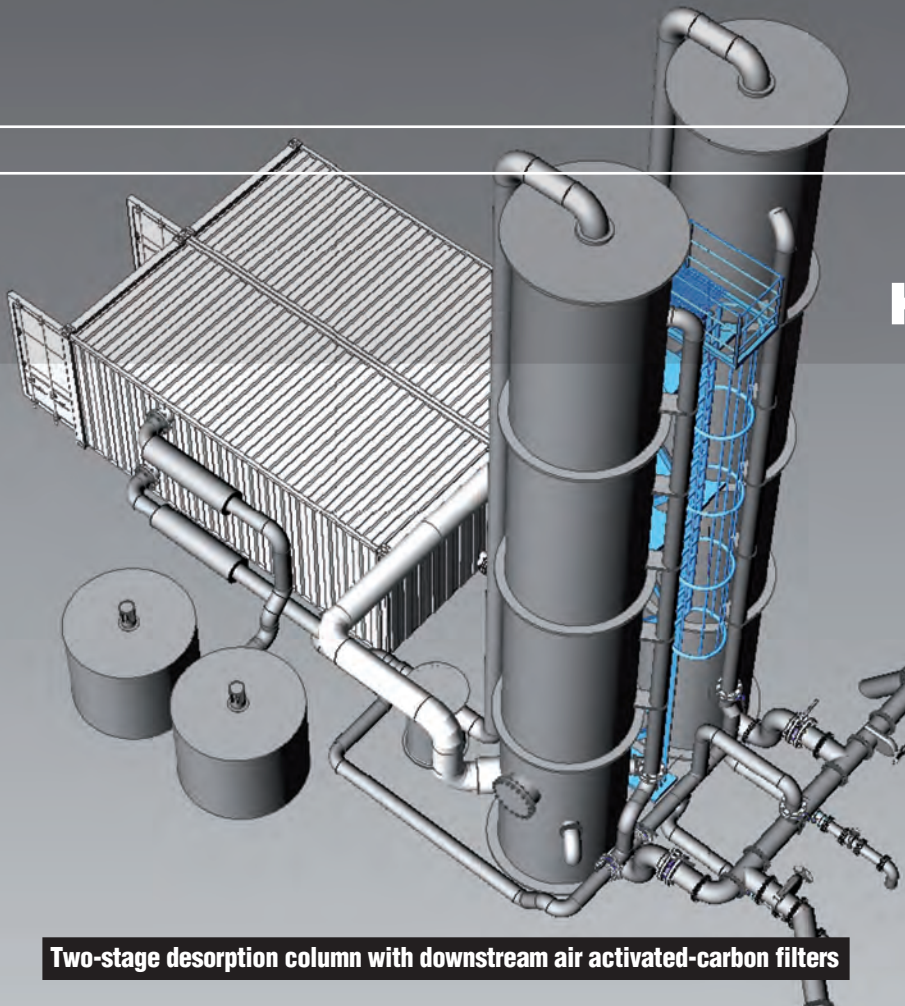




HARBAUER



Two-stage desorption column with downstream air activated-carbon filters



Desorption of highly volatile contaminants contained in water

Desorption is a particularly advantageous process, as the contaminant is passed from the liquid phase into the gas phase. The contaminated outlet air is then cost-efficiently subjected to an additional treatment in a separate purification stage.

For the removal of pollutants, the contaminated water is passed downwards through a packed column. While ambient air which usually is free from pollutants flows in countercurrent from the bottom of the column upwards to the top, the contaminants pass from the liquid phase into the gas phase.

The water comes out at the foot of the column free from highly volatile contaminants, whereas the air enriched with

contaminants comes out at the top.

If necessary, the remaining pollutants are removed from the water by means of a gravel filter combined with a wet activated carbon filter. After the process, the water is discharged into the outlet channel.

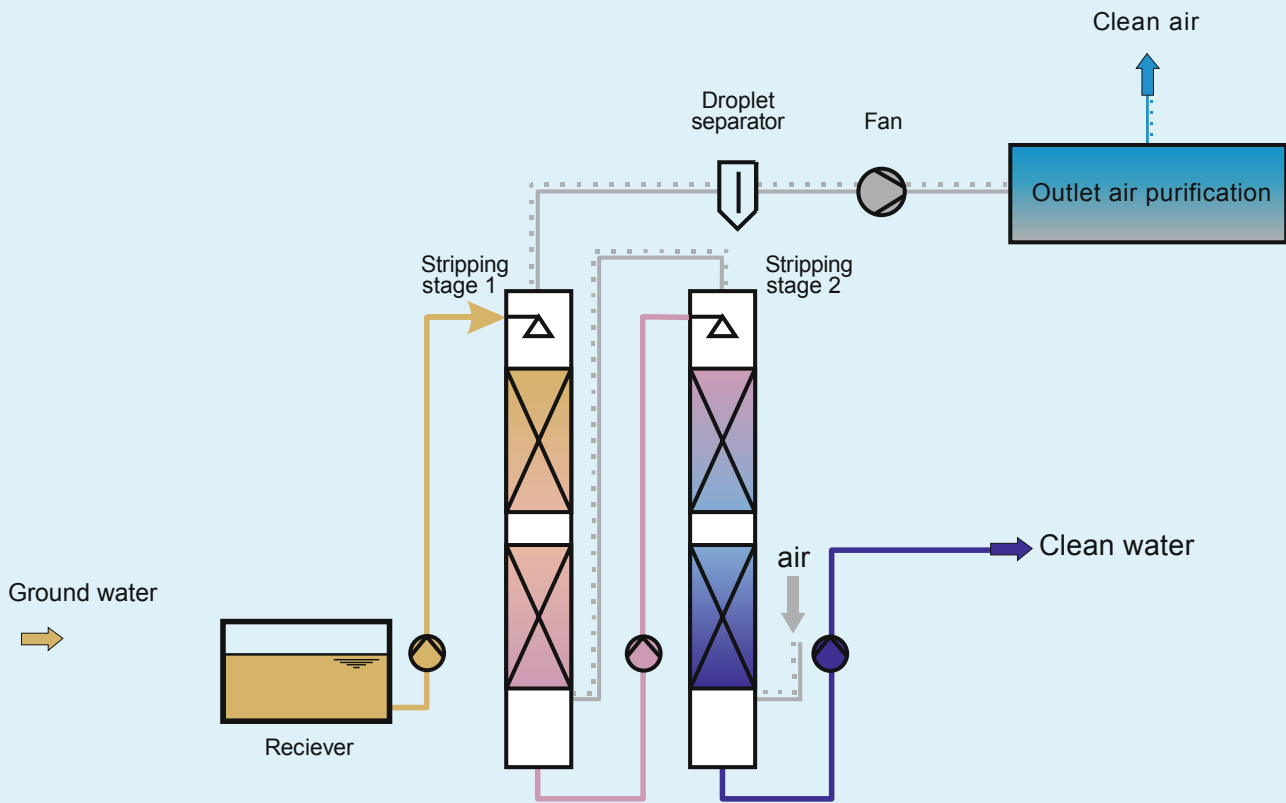
Several options are available to remove the contaminants from air.

- Activated carbon adsorbers
- Solvent recovery
- Catalytic postcombustion

At present, the columns used have a water throughput rate of between 2 and 340 m³/h. Sometimes, up to three columns in a row are used to remove even substances that do not desorb easily.

Fields of application

- benzene, toluene, xylene (BTEX)
- chlorinated hydrocarbons (CKW)
- fluorinated hydrocarbons (CFC)
- tetrahydrofuran



Removal of highly volatile contaminants from water using desorption columns

Ideas for a clean environment

Groundwater and Lake Decontamination • Drinking Water and Process Water Treatment • Air Purification
Water Worldwide • Treatment of Mineral Waste



HARBAUER GmbH
Oderstraße 188 · D-12051 Berlin
Phone +49 / (0)30 / 300 61-231 · Fax +49 / (0)30 / 300 61-230
kontakt@harbauer-berlin.de · www.harbauer-berlin.de

