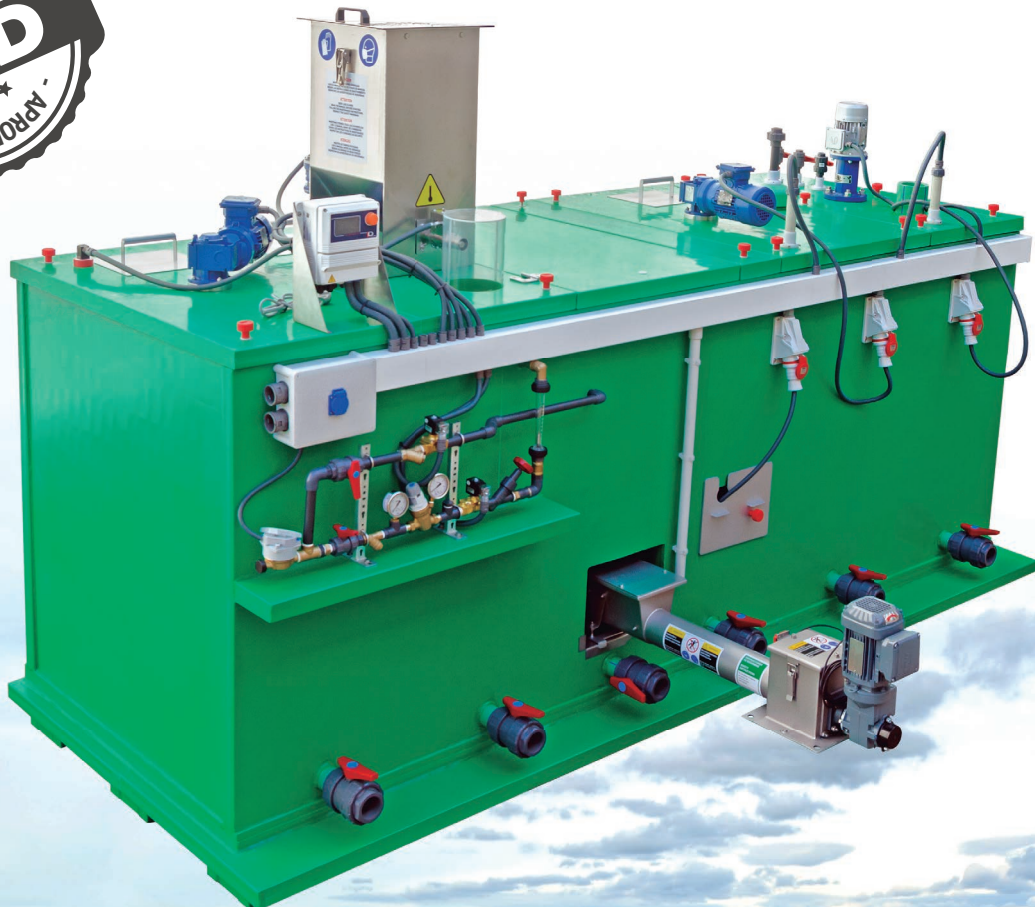
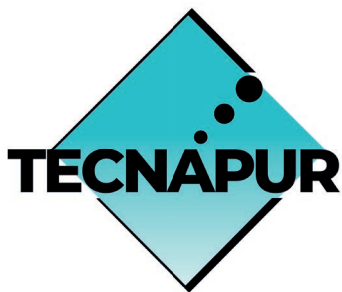


TECNAPUR

PHASE II OF TECNAPUR PIG SLURRY TREATMENT SYSTEM PHYSICO-CHEMICAL REACTOR



CERTIFIED SEPARATION EFFICIENCY OF
63% N, 74% P AND 61.5% K



PHYSICOCHEMICAL REACTOR PHASE II OF TECNAPUR SYSTEM



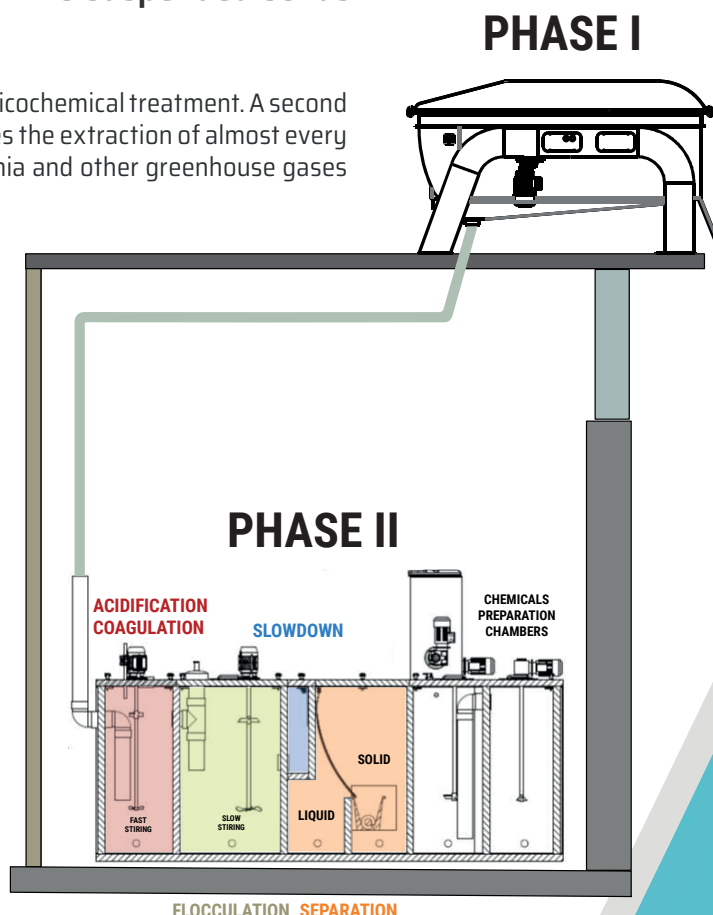
An optimal and economical solution to extract the suspended solids from the slurry without emissions.

Tecnapur designed a revolutionary coagulation-flocculation physicochemical treatment. A second phase of separation (after a mechanical filtration) that guarantees the extraction of almost every solid in suspension of the slurries, avoiding emissions of ammonia and other greenhouse gases (GHG).

WHICH ARE THE BENEFITS?

Phase I of Tecnapur, a mechanical filtration, allows to separate around 15% of the volume of the slurry. Most of the hair and particles larger than 600 microns remain in the solid fraction. With the physicochemical treatment (phase II) of Tecnapur we manage to separate the suspended particles, leaving the liquid fraction with particles with a size of less than 25 microns. With this method, a separation of 63% nitrogen, 74% phosphorus and 61.5% potassium is achieved. These percentages are retained in the solid, leaving a liquid part with a very low and acidified load of solids and nutrients.

The system performs the separation in acid PH, which allows to maintain nitrogen in the form of ammonium ion, preventing the waste on fertilizer and atmospheric pollution by gaseous ammonia.



HOW DOES IT WORK?

The physicochemical treatment system of Tecnapur is carried out in a reactor installed after the mechanical separator, it has a first coagulation chamber with fast stirring in which the separated liquid enters to be acidified and where the chemical coagulants are added. In a second chamber, the flocculation phase is carried out with slow stirring. Afterwards, the system includes a slowing chamber, which improves the aggregation and compaction of the solids, finally the filter sieve separates the flocculated solid.

ADVANTAGES AND CHARACTERISTICS

- Emissions of ammonia, odor, methane and other greenhouse gases are reduced by almost 100%.
- More than 74% of phosphorus and up to 63% of nitrogen is maintained in the solid part.
- The system is constructed of chemical-resistant materials.
- Low energy consumption.

Liquid phase applications	Solid phase applications
Fertigation	Composting
Biological purification	Fertilization
Membrane filtration	