



SOLIA™ Mix

The new generation
of solar sludge drying

WATER TECHNOLOGIES



SOLIA Mix, Solar sludge drying for small and medium installations

As a pioneer and expert in solar sludge drying, Veolia Water Technologies offers SOLIA Mix, a cost effective and environmentally friendly solution for reducing the amount of water in sludge.

This process can achieve a dry solids content up to **85%**, reducing sludge volume and removal costs. SOLIA Mix opens the way to all outlet disposal routes: **agricultural reuse, composting, landfill, incineration and co-incineration.**

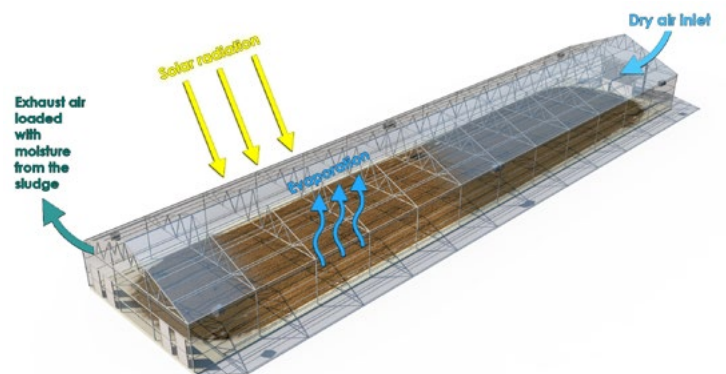
Operating principle

Based on combined solar drying and bio-drying, SOLIA Mix dries and stores sludge in a horticultural greenhouse under continuous ventilation with dry air from the outside.

Dewatered sludge and drying sludge are mixed into drying sludge and spread throughout the greenhouse as windrows by the SOLIAMIX™ windrow turner.

Specificities of the SOLIA Mix process

Bio-drying and sludge storage as windrows are specificities of the SOLIA Mix process that promote a rise in temperature in the core sludge. This way the amount of dry solids to be disposed of is reduced and the pathogens contained in the sludge to be dried is partially eliminated.



Main advantages

- Sludge volume reduced by 3 to 4 times
- Sludge storage before reuse
- Fully automated process operation
- Uses renewable energy sources
- A low carbon footprint process
- Aesthetic and easily integrated architecture
- Odor control
- Sludge sanitation

SOLIAMIX™, a unique system for turning over sludge



The innovation brought by Veolia's SOLIA Mix solar sludge drying comes from using a completely new design of windrow turner.



The benefits of the SOLIAMIX windrow turner:

- **Reliable and robust.**
- **Fully automated**, SOLIAMIX moves through the greenhouse with no need for operator intervention.
- **Highly efficient**, all of the sludge is turned in a single pass.

Our bespoke options for meeting your specific needs

Floor-heating or air-heating systems

To ensure consistent performance throughout the year, SOLIA Mix may be fitted with an additional energy source to complement solar power.

This energy input reduces both the greenhouse surface area and the drying cycle duration while maintaining the treatment capacity, regardless of adverse climatic conditions.

ACoDry, intelligent ventilation management

To optimize the greenhouse's energy performance when air renewal may represent as much as 90% of electric power use, Veolia has developed ACoDry, an

intelligent command and control system for ventilation management. By analyzing and adapting key parameters*, ACoDry halves the electric power needed to achieve a given level of drying performance.

** Like humidity, temperature, sunlight and sludge characteristics.*

Efficient odor treatment

Sludge treatment is often synonymous with bad odors. Based on the local context and characteristics, Veolia offers the Aquilair™ or Alizair™ patented solutions designed to reduce odor emissions and provide optimal comfort.

Among our 30 references

○ Bras-Panon, Réunion Island (2014) – 204 TDM/year - 680 m²

○ Belchatow, Poland (2014) – 1850 TDM/year - 6,144 m²

○ Saint-Michel-en-L'Herm, France (2013) – 120 TDM/year - 300 m²

○ Pia, France, (2011) – 242 TDM/year - 947 m²

