



# COOLING BIOSOLIDS FOR SAFE HANDLING AND STORAGE

INNOVATIVE TECHNOLOGY FOR ENERGY-EFFICIENT OPERATIONS



## Thermal stabilization of biosolids

Cooling is an important step in the production of biosolids for safe storage and handling. Solex is a worldwide provider of customized heat transfer solution for bulk solids to a wide range of industries.

## The Solex Advantage

Solex moving bed heat exchangers uses vertical plate technology to indirectly, and safely, cool and thermally stabilize the biosolids after drum, belt or fluid bed drying.

Solex's proprietary technology offers the highest heat transfer surface area against product volume. It also consumes the lowest energy, making it the most efficient moving bed heat exchanger available.

Solex's advanced thermal modeling, rich reference list and years of experience in this field makes Solex the ideal partner for your next biosolids cooling application.



# PROPRIETARY TECHNOLOGY THAT INCREASES PRODUCTION CAPACITY

## Safe biosolids production, handling & storage

After the mechanical heating and drying process, biosolids must be stabilized to prevent decomposition and possible smoldering or auto ignition. Stabilization is accomplished through cooling the biosolid indirectly via conductivity, thus preventing fires or explosions in the subsequent handling and storage stages. The Solex heat exchanger uses indirect heat transfer technology to ensure each particle is thermally stable through its core.

## Near-zero emissions

The Solex cooling unit uses process water as the heat transfer medium, resulting in no associated emissions and no requirements for blowers and fans.

## Small footprint & modular design

The vertical orientation of the Solex equipment achieves a small installation footprint, allowing for it to be easily retrofitted into existing plants or use less space within new plants. The Solex equipment can be configured with modular banks, allowing for easy upgrades. It is ideal for capacity increases within existing operations by adding modules to increase the throughput of the heat exchanger. Optimally spaced heat exchanger plates maximize efficiency while minimizing space.

## Reduced installation & operating costs

Solex technology is designed to operate without moving parts, offering simple installation, low maintenance and years of reliable operation. The custom design gives flexibility to fit available space while incorporating easy access to the heat transfer areas for cleaning.



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