



POWERED BY
BioPCM[®]

PhaseStor[™]
LATENT ENERGY STORAGE SYSTEM

Next generation thermal storage for today's HVAC systems

PhaseStor[™] technology makes it possible to integrate and retrofit bulk thermal energy storage into existing chiller systems

BioPCM[®] provides a virtually unlimited number of cycles with no change in its physical or chemical properties.

BioPCM products are easy to install solutions that yield significant operating cost savings.

How it works

BioPCM, in a PhaseStor tank, stores thermal energy within a specified temperature range (-58°F to +347°F, -50°C to 175°C).

Pressurized heat exchangers containing process fluid are fully immersed in BioPCM. Energy is absorbed or released in the form of

latent heat when the BioPCM transitions from a solid to a liquid/gel.

With BioPCM, there is very little material expansion or contraction to compensate for during the transitions. This allows for smaller foot-print tanks and eliminates system wear due to expansion.

PhaseStor Benefits

PhaseStor systems use BioPCM, a patented plant-based phase change material, to store large quantities of thermal energy in the form of latent heat.

BioPCM absorbs, stores and releases thermal energy, and is an economical solution that allows owners to add bulk thermal storage to an existing HVAC or process chilled water system without replacing the chiller.

Both operational and capital costs are reduced by downsizing the chiller. Thermal storage allows owners to charge the system during off-peak hours and turn the chillers down or off during peak demand periods, yielding savings in locales with peak demand charges.

PhaseStor can also be used in applications of waste heat recovery, reducing carbon emissions while increasing the thermal efficiency of a system.

PhaseStor adds redundancy in the system for times of scheduled chiller/boiler maintenance. These systems can be used for full peak demand shifting, and trimming the return loads.

Simplified way to add thermal storage to existing systems

Reduces carbon footprint

Responsibly manufactured

Most efficient TES system available

Reduces or eliminates glycol requirements

Reduces cost of ownership

Made in the U.S.A.

Long lifetime (100+ years)

