

# Thermal Energy Storage Solution



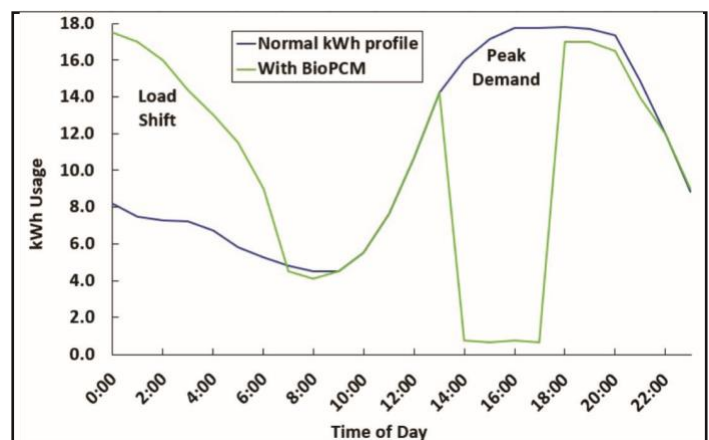
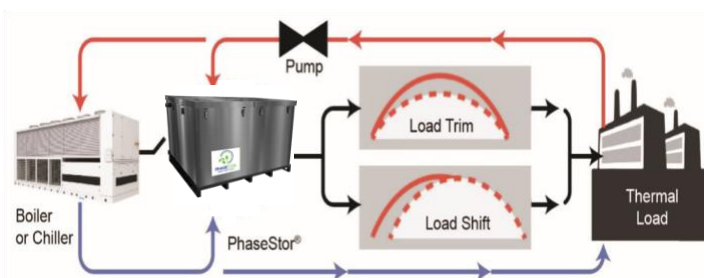
## The Problem

In many operating facilities, energy is one of the highest operating expenses. Maintaining stable temperatures 24/7 in enclosures requires a lot of energy to run the boiler/chiller equipment. Optimizing energy usage becomes imperative to reducing expenses.

## The Solution

PhaseStor® is a large-scale, hot/cold thermal storage solution that can store more than 6x the amount of energy as chilled water. Each unit includes a double wall insulated tank and is filled with PCM (phase change material) tuned to a specified temperature range (anywhere between -51°C to 100°C). Heat exchangers containing process fluid are fully immersed in PCM and energy is absorbed/released in form of latent heat when the PCM transitions. The PhaseStor® system provides the flexibility to shift energy usage to outside of high-priced peak periods. Each PhaseStor® thermal energy storage unit provides 40-45 (forty to forty-five) ton-hours of thermal storage when fully charged.

Customer Gains	FEATURES
<ul style="list-style-type: none"> <li>Reduce demand charges - reduces energy use by peak-load shifting</li> <li>Preserve equipment integrity</li> <li>Reduce operational costs</li> <li>Reduce carbon footprint</li> <li>Industrial waste heat can be captured &amp; reused</li> <li>Reduce operational and capital costs by downsizing chillers</li> </ul>	<ul style="list-style-type: none"> <li>Thermal buffer regulates temperature</li> <li>Modular- can be scaled</li> <li>Small footprint</li> <li>Stackable design- can stack up to 2 units high for efficient energy storage density</li> <li>Extends Useful Life of HVAC Equipment</li> <li>Long life of performance</li> <li>Small volume changes during phase transition avoids tank ruptures</li> </ul>



For additional information, email us at [Info@PhaseStor.com](mailto:Info@PhaseStor.com) or call us at 336-628-0088