



PCM



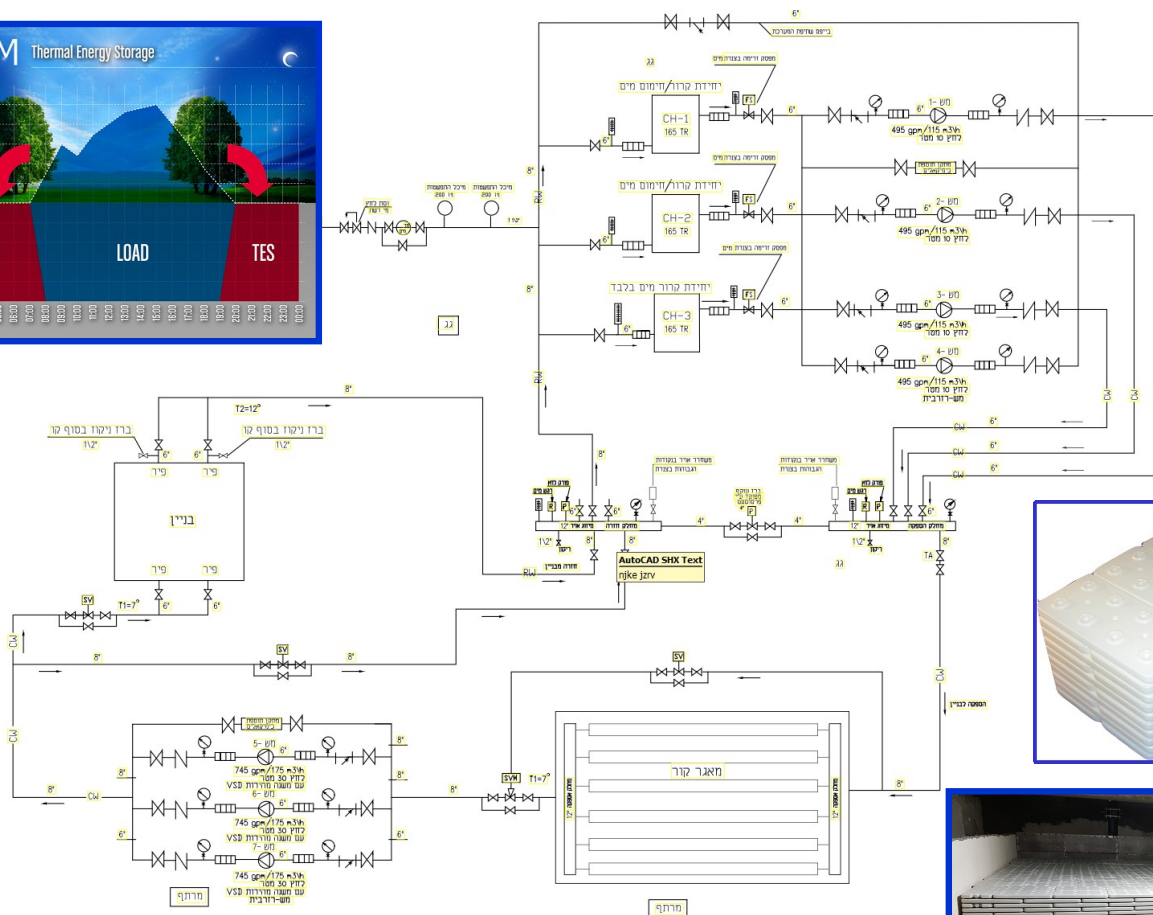
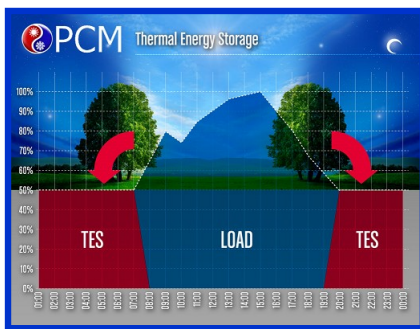
Phase Change Materials
Thermal Energy Storage

TITANIUM COMMERCIAL BUILDING A/C APPLICATION

Like any commercial building whereby a large cooling demand required during day time but very little or no cooling demand over-night, Installed PCM Thermal Energy Storage (TES) offered a great opportunity to utilise the cooling machinery over-night using lower electricity rates as well as higher efficiencies due to lower night time ambient in Israel and effectively enabling to shift the peak loads.



Hence, PCM based TES offered not only an environmentally friendly design but also provided a significant operational running cost savings. Also having a static system a PCM energy storage system can be considered as a maintenance free system providing a stand-by capability in case of power cuts or any major machinery failures.



**100 m3 (26,417 USG) TES tank loaded with
20,000 FlatICE filed with S9 (+9C/49F) PCM
Providing 4.5 MWh (1,278 RT-h) TES capacity**

