

COMMERCIAL BUILDINGS

Bank Building

Cooling capacity: 10kW
Savings: 1 787 EUR / year
ROI: 4,7 years
Aim: Energy saving in peak periods



Design parameters

Aim of HeatTank: Energy saving in peak periods

Cooling capacity: 10 kW
Cooling cost: 4 852 EUR/year
Location: Singapore
Electricity price: 0,09 EUR/kWh during day
Electricity price: 0,07 EUR/kWh during night

Solution

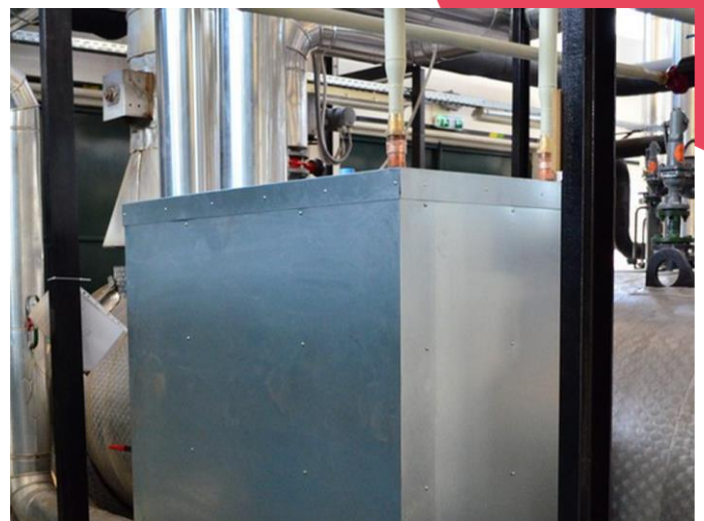
4 piece of HeatTank 25-1

Cover the needs for 2-3 hours alone
Cover the peak needs for 4-8 hours
Decrease the peak load by 20%
Total cost of the system: 10 473 EUR

HeatTank

Type: HeatTank 25-1

Capacity [kWh]: 25
Max. performance [kW]: 100
External Volume [m³]: 0,91
Connections [DN]: 28
Total weight [kg]: 717



Benefits



Electricity saving

Chiller optimization: 30,1%
Total savings: 1 464 EUR/year



Remote control & Energy reports

Remote control and visualized energy reports on monthly base to follow the energy saving.



More stable system

323 EUR/year could be saved on the maintenance of the system.



Peak reduction

Peak reduction means 1 848 EUR lower investment of the cooling system.

During our calculations, we did not take into account the estimated high scale electricity price increase, we calculated with a 7% increase in every year, which is a very optimistic scenario, due to the lately huge increases in electricity price.

1 787 EUR / year total savings
1 848 EUR lower investment
4,7 years total ROI