

INTAS PHARMACEUTICAL IN AHMEDABAD



The Situation

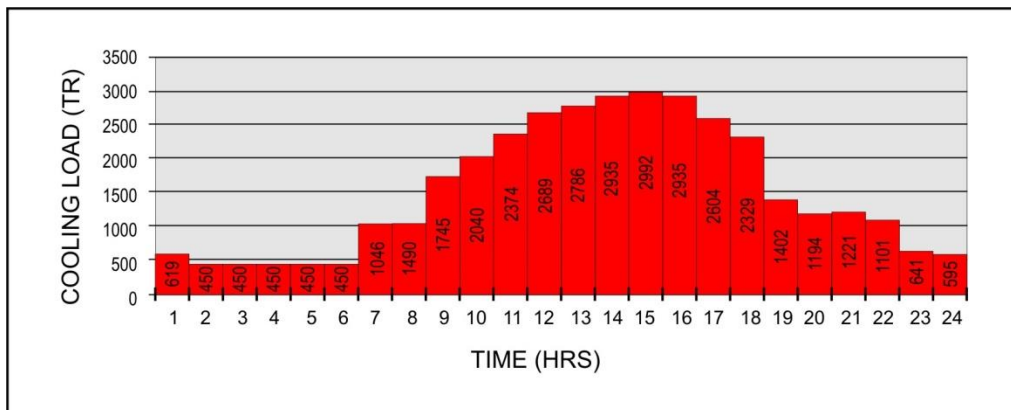
HIGH SIDE SYSTEM REVAILING PRIOR TO THE INSTALLATION OF STORAGE SYSTEM

- 700 TR Capacities each Water Cooled Centrifugal Chillers, 3 Nos.
- 700 TR Capacity Vapour Absorption Chiller, 1 No.

The System was installed with Hot and Cold well with corresponding Primary and Secondary Chilled Water Pumps. On the Condenser Water side sufficient capacity of Cooling Towers was installed.

The Solution

COOLING LOAD PROFILE CONSIDERING FUTURE LOADS



The Results

SAVINGS ENVISAGED AT THE DESIGN STAGE

Savings estimated at the design stage for the peak load of about 3000 TR with all future Energy expansions and Maximum Demand recurring costs and Capital Costs.

- Saving in Electrical Installation Cost for switch over to **33KV from 11 KV connections.**
- Savings in Operating Costs including Energy Cost and Maximum Demand Charges: **Rs. 70 Lakhs / Year**

SAVINGS BEING ACCRUED PRESENTLY

Two 700 TR Centrifugal Chillers started operating on Diesel Generator set continuously during day time.

One 700 TR Chiller stopped for 6 Hours per day after installation of Thermal Energy Storage System.

- Electrical Energy Consumption of 700 TR Chiller per Hour : 360 KWH
- Electrical Energy Consumption of 700 TR Chiller 6 Hours : 2160 KWH
- Differential Electrical Energy costs with Diesel Generator : Rs. 12 KWH
- Savings in Electrical Energy Costs due to Stoppage of 700 TR Chiller operation on D. G. set : Rs. 25,920 per day (2160 X 12)

Saving per month considering 25 working days : **Rs. 6,48,000**
(25920 X 25)

Estimated yearly savings : approx. **Rs. 78 Lacs**