

**K.C.P SUGAR AND INDUSTRIES  
CORPORATION LIMITED**  
**Vuyyuru, Krishna (Andhra Pradesh)**

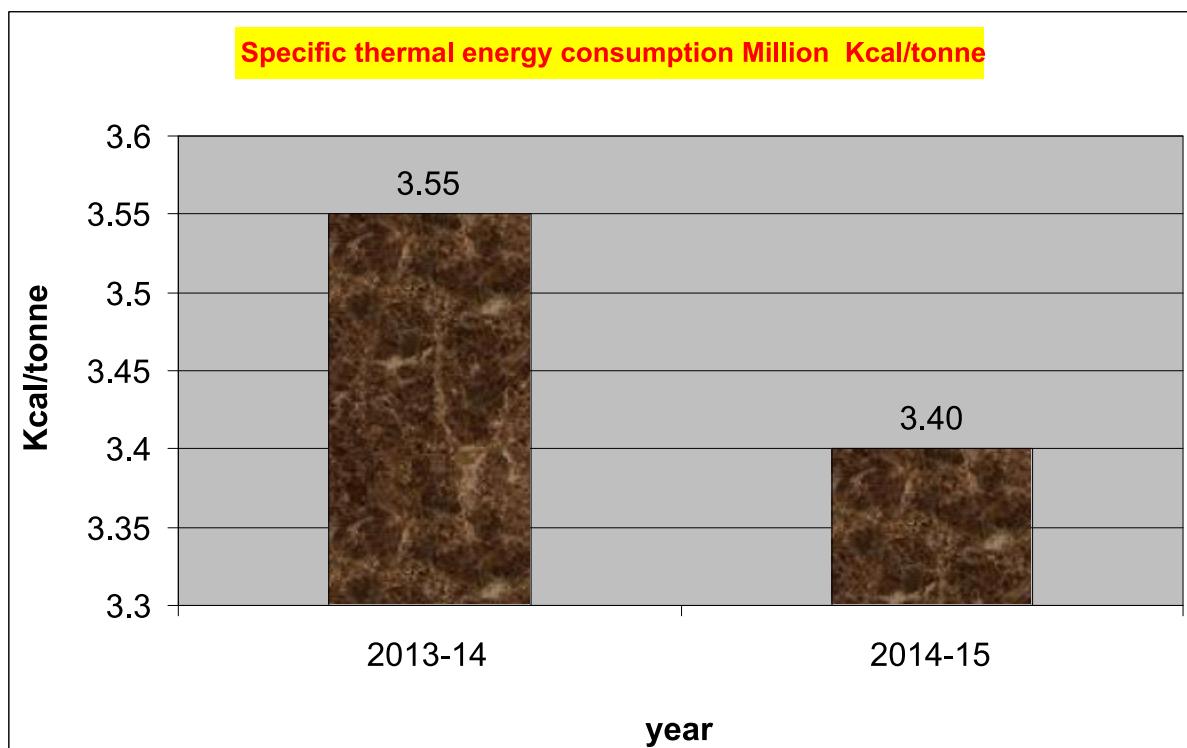
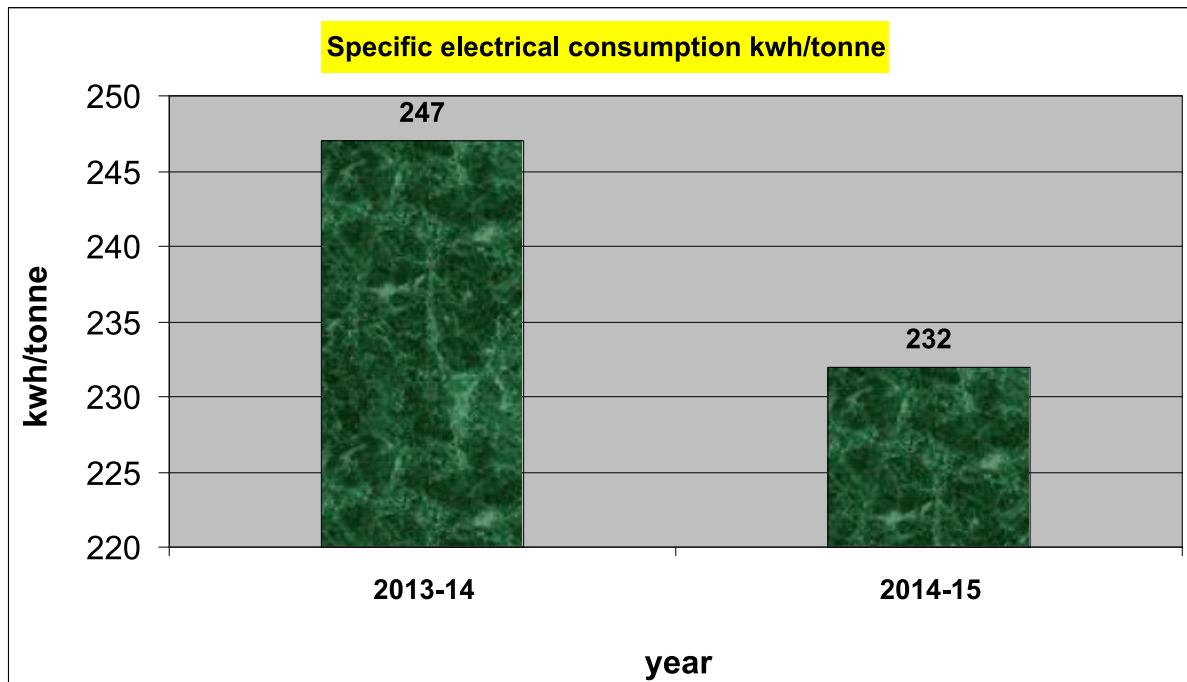
***Unit Profile***

**K.C.P. Sugar and Industries Corporation Ltd., was incorporated in the year 1996 with the following units.** Sugar and Co-generation Units at Vuyyuru and Lakshmipuram, Distillery and Workshop Units at Vuyyuru. Biotechnology unit at Vuyyuru. Mychorriza unit at Vuyyuru. Calcium Lactate plant at Vuyyuru. Main features of the unit:

- Crushing capacity : 7500 TCD
- Co-generation unit : 15 MW
- Distillery : 50 KLPD capacity
- Calcium Lactate(Pharma Grade) : 500 TPA
- Bio Fertilizer : 1200 TPA
- Mycorrizha : 1000 TPA
- Bio-Compost : 35000 TPA

***Energy Consumption***

- Bagasse which is derived from sugar cane crushing as by-product is being utilized as boiler fuel. Company has captive power generation of 15 MW capacity. The exhaust obtained from the power turbines is used for the sugar manufacturing process.
- The unit was also registered for evolution of carbon credits in the year 2008.
- In sugar industry, electrical and thermal energy consumptions play vital role. With continuous efforts and successful experiments, the specific thermal and electrical consumptions were reduced from 3.55 to 3.40 M.Kcal/Tonne and Electrical from 247 to 232 kWh /Tonne of sugar production.



## *Energy Conservation*

1. Replacement of raw juice and imbibitions water batch weighing scales with flow meters.
2. Fully automated continuous pans for A, B and C massecuites.
3. Auto star delta starters for all applicable motors.
4. Flash steam recovery from condensate.
5. PLC based automation aided by AC VF drives.
6. Extensive use of energy efficient motors.
7. Replacement of all inefficient worm gears with planetary gears and Helical gearbox.
8. Replacement of standard tube lights with CFL.
9. Automation of all batch pans.
10. Common condensate pumping.
11. Mechanical seals for all applicable pumps.
12. Usage of wind driven turbo ventilators and day lighting system.
13. Installation of effective cooling and condensing system with automation.
15. Regenerative type DC drives with interlocking for centrifugal machines.
16. Boiler furnace draft controlled by modifying the draft measuring transmitters.
17. Installation of lotus top roller for last mills.
18. Installed lighting energy saver for reduced power consumption and to Improved durability of luminaries.
19. Replaced oil lubrication with bio-degradable, non toxic grease lubrication at mills to have ecofriendly zero effluent discharge as part of ISO-22000-2005 Food safety certification.
20. Replaced old centrifugal machines 3 Nos with higher capacity, high Efficiency Continuous centrifugal machine which reduced R&M cost and power saved around 60kW/Hr.
21. Replaced high efficiency 80% injection water pump in place of 60% efficient Pump, power saved around 60kW/Hr.