

The Andhra Pradesh Paper Mills Limited, Rajahmundry

Unit Profile:

M/S. The Andhra Pradesh Paper Mills Ltd. located at Rajahmundry, in the state of Andhra Pradesh was established in 1920'2 with an initial installed capacity of 10 TPD. It was taken over by present management in the year 1964. The mill has grown in stages from 10 TPD to 300 TPD production of different grades of papers, such as printing & writing grades, packing etc. The mill has not only taken; up the expansion but also modernization, value addition and up gradation of old inefficient equipment and systems to produce good quality paper with optimum energy efficiency from time to time.

Energy Conservation – Concern, Commitment and Set up:

APPM has always been concerned and committed to improve the mill energy performance levels continuously. Basically because it realizes that natural energy resources available are finite with no way of replenishing the quantum consumed and also heavy investments are required for energy sector for meeting the demands and these resources are to be consumed with prudence to conserve the energy. For APPM, conservation of energy has become a way of life. It reflects and manifests itself in all the endeavors. APPM realizes that this not only is a means to improve competitiveness, enhance profitability but also is a source of moral responsibility.

To achieve the above objectives of energy performance, APPM has constituted an independent Energy Conservation Department and engaged reputed proven “Energy Consultants” M/s. MK Raju Consultants Ltd., Chennai, as early as in 1987 for energy audit, 1990-91, 1996-97 for detailed energy audit with mass; and energy balance and in 2001-02 for energy audit. These studies are conducted for identification and implementation of energy saving proposals, reduction in energy cost and wastage with improved housekeeping and monitoring practices. The department is bestowed with the functions of bringing awareness of; importance of energy to the employees by conducting in house training programs, by organizing energy conservation week celebrations, Energy Conferences, etc.

The Energy Conservation department prepares and monitors daily energy performance of the mills through computerized daily energy performance reporting system. APPM has installed energy meters and measurement devices for all energy inputs like power, water, steam, fuels, compressed air and condensate return. The energy performance report indicates the figures of today and till date against best achieved norms for immediate comparison and for identification of variances on total and specific energy consumption figures of various sections of the mill for all the above energy inputs.

These daily reports are put for specific discussions on energy performance in daily production meetings, for taking effective corrective actions. The detailed monthly energy performance reports are also presented in monthly executive performance review meetings for identifying areas of improvement and for making; necessary exclusive decisions.

III. Energy Consumption:

The Andhra Pradesh Paper Mills Ltd. Unit:APPM, being an integrated pulp and paper mill, consumes steam and power for the production. Steam is generated not only for the process, but also captive power generation. The fuel for steam generation is coal. In addition, the solid waste, wood/bamboo dust generated in the process is also used as fuel.

The fuel oil, LSHS/furnace oil is used as a fuel in the like kiln for lime mud re-burning. It is also used in chemical recovery boiler as supporting fuel as and when required.

The Mills has operating TG sets for co-generation, Double-Extraction-Condensing type of 12 MW capacity and fully condensing set of 5 MW capacity. The 12 MW and 5 MW steam turbo generator sets are operated continuously.

In the year 2004-2005 the coal consumed in the boilers for process steam requirements and the power generation is a total of 189325 Tons out of which 107566 tons is used for process steam 81759 tons for power generation. The consumption of LSHS oil is 7775 KL out of which 1072 KL is used for process.

The mill also imports power from State electricity Board grid and the consumed grid power is 315.31 lakh KWH in addition to total co-generation/captive power utilized is 1222.61 lakh KWH.

The mills have implemented energy conservation schemes and details of investment and savings are given in the annexure. Energy cost as % of manufacturing cost during 2002-2003, 2003-2004 and 2004-1005; is 15.8, 13.3 and 13.04% respectively. The reduction in energy cost could be achieved due to implementation of energy saving schemes during 2002-2005.

Energy Conservation is an ongoing process. Realizing the need for energy conservation, APPM puts its efforts for improving the energy performance on continuous basis.