

## **JK PAPER LIMITED**

**Unit : JKPM Jaykaypur, Rayagada (Odisha)**

### *Unit Profile*

J K Paper Limited, Unit: JK Paper Mills - is located at Jaykaypur, Dist: Rayagada, Odisha which is approachable by Air / train from Vizag / Bhubaneswar to Rayagada. JK Paper Mills is the flagship company of JK Organization was established in 1938 (6th August) and JK Paper Mills, an integrated Pulp & Paper Mills was setup in the year 1962 (18th October) with initial capacity of 18000 TPA at Jaykaypur in the District of Rayagada (Odisha).

JK Paper Mills is a manufacturer of Pulp, uncoated and coated quality writing and printing papers. It is the First Pulp & Paper Industry in the country to certify with ISO-9001 Quality Management System and ISO-14001 Environment Management Systems by M/s. DNV, Netherlands and also certified with OHSAS-18001. The Mill has now adopted an integrated Quality, Environment, and Occupational Health & Safety Management System. And also J.K. Paper Mills has adopted TPM concept from JIPM, Japan as a management tool for continual improvements in all the systems. JKPM has achieved Excellence TPM Award in category 'A' in 2006 and Excellence in Consistent TPM Commitment Award in 2009.

It was expanded in stages and present capacity is 2,95,000TPA of coated and uncoated paper with addition of paper machine - 6 of capacity 1,65,000 TPA.



## *Energy consumption*

The Energy requirement of the plant is met by various fuels i.e.

**Primary energy** such as Indian Coal, Imported coal, HSD and Furnace Oil.

**Energy Generated from waste:** The Black Liquor generated from the chemical pulp mill is being used by recovery boiler for generation of steam for turbine. The bamboo dust generated from chipper house is used as fuel in the boiler for steam generation. Rice husk is also used in coal fired boiler for resource conservation.

**Secondary Energy:** M/s. J K Paper Ltd. JKPM Draws power from Southern Electricity Company Ltd. And has the contract demand of 10,000 KVA. The power requirement of the plant is mainly met by own captive power generation and DG set. The plant is also draws power from the grid. The applicable tariff for the plant is under Large Industry HT - 2 (a) (ii). The plant is maintaining its power factor above 0.95 with the grid.

Plant is self-generating its energy from 25MW & 30MW TG's and 4MW DG-set. Plant produced 96.5% of its total power consumption from both the Turbo generators.

### **Major factors contributed for increased energy efficiency during 2014-15:**

- Major investment for capacity enhancement with a focus for improving plant energy efficiency.
- Installed new plant with state of art technology Pulp mill, High speed 165000TPA Voith paper machine, and latest technology power block.
- Phased out less energy efficient facilities including old Pulp mill, old Recovery section, Paper machine-2 and utilities sections.
- Scale of operation for energy efficiency.
- Less water consumption of 44 m<sup>3</sup>/Ton of paper due to closed water circuits and latest technology.
- Energy share from green energy by firing black liquor in recovery boiler increased from 38% to 59%.

### Energy Conservation projects for 2014-15

S. No.	Project description	Electricity (kWh)	Fuels* Coal (tonnes)	Total savings (Rs. Lacs)
1	Reduction in power by changing TAP position from 3 to 2 in New Plant transformers (reduction of voltage)	1142857		40
2	Through some minor modifications & Operational tuning, total Raw water pumps running hours reduced.	1060000		37.1
3	Reduction in power used for lighting by small changes like providing master switch, change in work practice etc.	114285		4
4	Bypassed paper machine dump chest by directly sending pulp from mixing chest to machine chest	50400		1.8
5	Reduction in power consumption by decreasing conveying air pressure in ash handling.	165000		5.36
6	Power savings by decreasing conveying air pressure of drag chain feeders.	478800		15.6
7	Replaced Lime kiln ESP bottom screws with drag chain conveyors	29090		1.6
8	Replaced Drag chain conveyor with belt conveyors for conveying lime sludge below LMDF	110880		6.1
9	Reduction in power consumption with new state of art technology pulp mill	16047212		802.3
10	Decrease in power consumption with new state of art technology paper machine	8541258		427
11	Decrease in power consumption of utilities with energy efficient power block and less specific water consumption due to closed water circuits with new plant, better influent characteristics	6470650		323.5
12	Reduction in steam consumption with continuous digester & by phasing out RDH batch digesters.		43487.7	1522
13	Increase in steam generation with new high energy efficient recovery boiler & by phasing out old less energy efficient boilers.		73917.1	2590
14	Decrease in steam consumption with state of art technology Voith paper machine.		43926.1	1537
15	Identified and rectified faulty traps, effectively insulated steam lines and isolated idle steam lines and headers.		13409.4	554
16	Increase in steam generation with new CFBC boiler & by phasing out old AFBC Boilers.		25798.3	903

## Energy Policy

**JK PAPER LTD.**  
Unit: JK Paper Mills, Jekapur, Distt. Rayagada, Orissa-765017



### Energy Conservation Policy

We are committed to reduce the energy consumption and cost by :

- Optimization of plant and equipment efficiency
- Elimination and prevention of all type of losses in the use of water, power, steam, coal, compressed air
- Maximizing condensate recovery and use, process heat recovery, waste minimization
- Increasing the co-generation of steam and power
- Improved utilization of natural resources leading to environmental benefits
- Energy conservation through total employee involvement.

We believe that  
**“Energy Saved is Profit Earned”**

  
(HARSH PATI SINGHANIA)  
MANAGING DIRECTOR

January 25, 2002

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