

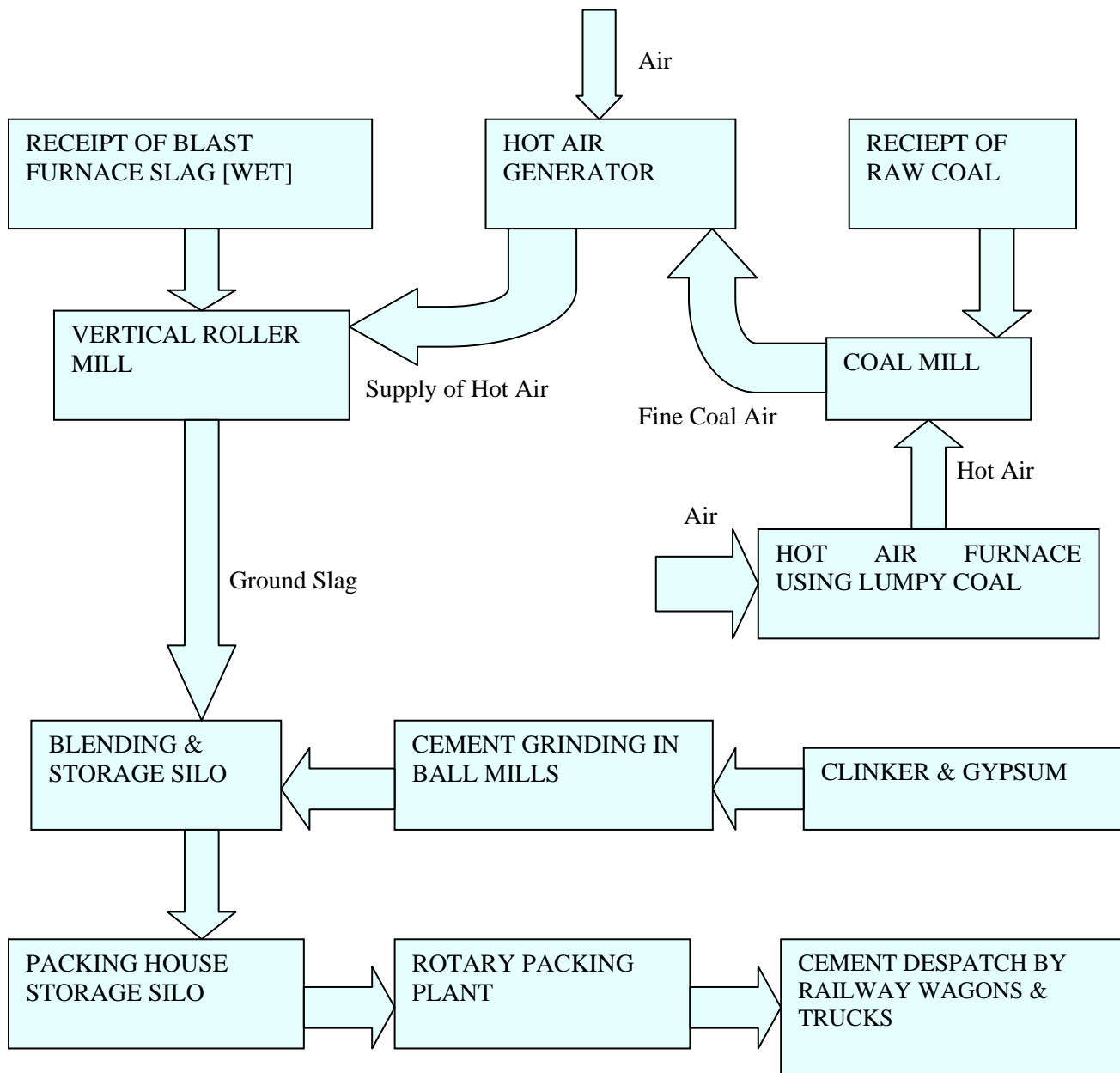
**THE ACC LIMITED**  
**Sindri Cement Works, Sindri, Dhanbad, Jharkhand**

**Unit Profile**

Sindri Cement Works, a part of The Associated Cement Companies Limited, is the manufacturer of Blended Cement (**Portland Slag Cement**). The total annual sales turnover of the works for the financial year 2006-2007 is Rs. 32266.15 Lakhs. It is situated in Sindri, Dist. Dhanbad in Jharkhand state. It is an ISO 9001 & ISO 14001 certified unit. It got ISO 9001 certificate in February 2000 and ISO 14001 certificate in July 2002.



## Process Flow Chart



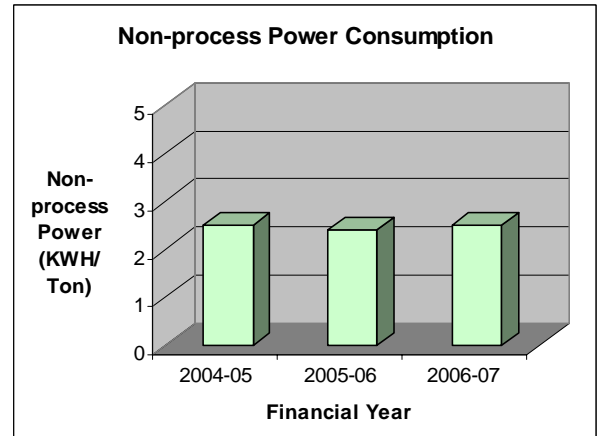
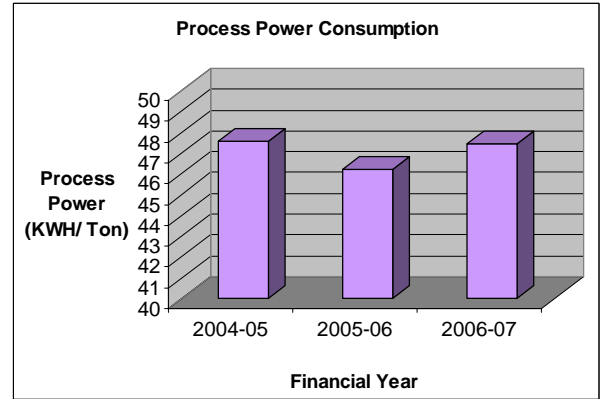
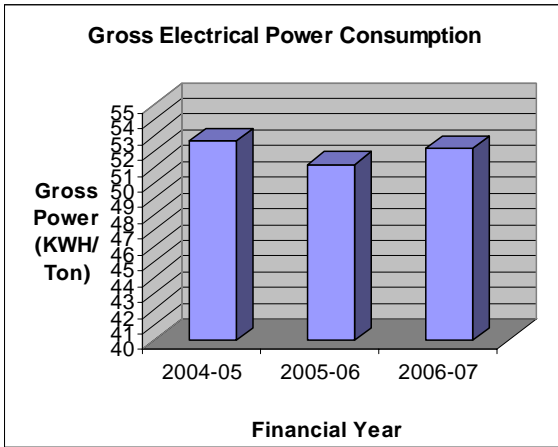
## Energy Consumption

There has been a steady decrease in the Electrical Energy Consumption over the last few years, which is very much clear by looking into the graphs given below.

DESCRIPTION	UNIT	2004-05	2005-06	2006-07
Annual Production	Lakhs Ton	7.38	8.6	8.55
Total Electrical Energy Consumption per annum	Lakhs KWH	388.97	444.76	446.28
Specific Electrical Energy Consumption	KWH/ Ton	47.57	46.81	47.44

\* Increase in kwh/ton of the year 2006-07 is mainly due to more usage of slag percentage as compared to 2005-06

YEAR	ELECTRICITY CONSUMPTION (KWH/ Ton)	% REDUCTION OVER 2004-05
2004-2005	52.70	--
2005-2006	51.71	1.87
2006-2007	52.19	0.96



## **Energy Conservation Commitment, Policy and Set up**

The ACC considers Energy Saving as a multi – disciplinary approach. Although the company's energy profile consists of mainly electrical energy, energy conservation projects still are being taken exclusively and budget is provided if required.

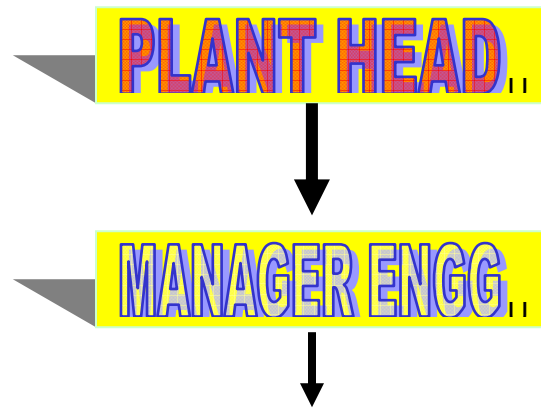
Energy Conservation week is celebrated every year from 14<sup>th</sup> December to 21<sup>st</sup> December. A poster, slogan and rangoli competition for children and ladies on energy saving and in – house programmes for employees are conducted. Suggestions on the energy saving are asked from the employees and the best ones are handsomely rewarded. One unique activity during this week is the honoring the housewife of the family having the least power consumption or best power saving record. The importance of the energy saving is emphasized through various SHE activities and TPM forum.

### **Energy Management Policy**

- Promote & encourage Energy Saving & conservation of natural resources.
- Create awareness among all people concerned with organization for Energy Saving.
- Encourage involvement through various training programme for conservation of Energy.
- Minimize wastage of any kind in daily activities in and around plant & colony.
- To make an effort to reduce the Energy cost on continual basis by adopting effective Energy Management.

## **ENCON Cell Structure**

EC Cell is headed by Manager Engineering & all the functional heads are member of the EC Cell. This cell meets everyday to monitor the power consumption pattern of previous day. Apart from this, monthly power consumption is also reviewed in meeting of all management staffs. This meeting is held every second Saturday and is chaired by Plant Head. Projects evolved out of theses meetings are executed in the departments by the departmental QC groups. The structure of the EC Cell is given below.



**EC cell headed by Manager Engg & all functional heads are members.**

**Activities are -**

- **Brainstorming**
- **Identification of Projects**
- **Cost Benefit Analysis**
- **Implementation**
- **Monitoring of Project Execution**
- **Monitoring of Energy Conservation Trend**

**Various departmental small groups in the following areas for implementation of projects**

- **Cement Mills**
- **VRM**
- **Packing House**

## **Energy Conservation Plans & Targets**

<b>Energy Conservation Plans</b>	<b>Anticipated Savings (Rs. Lakhs per annum)</b>	<b>Approximate Investment (Rs. Lakhs)</b>	<b>Completion year</b>
Changing of CM-4 Separator DC drive to AC drive	2.12	10	2008
INSTALLED NEW CAPACITOR BANK	4.38	15	2008
CM OLD MOTOR REPLACE BY NEW HIGH EFFECIENCE MOTOR	16.89	21	2008
ADDITION OF ADDITIVE IN CM FEDDING MATARIAL	6.09	NIL	2008
Installed separator in cm 1&2	2.26	40	2008
REPLACEMENT OF CM-3 AC VVF Drive of separator	2.12	8	2008

### **Environment & Safety**

The ACC Limited is committed to the protection and betterment of the environment by Prevention of Pollution (emanating from all known sources of our process) and continual improvement in its environment performance by regular review of objectives and targets. The ACC Limited is also committed to conserve water, energy, and natural resources, minimize and reutilize waste generation. The policy is communicated to all our employees and the same is being made available to public on request.

### **Envirnment**

The company has successfully installed Environmental Management System (EMS – IS/ISO 14001:2004) and got the certification in July 2002 & maintained it. The company has installed Wastewater Treatment Plant to treat the water coming out of our colony. The company has also installed four nos. Rain Water Harvesting projects in plant and colony areas to conserve the water for catchments area 140000 sqm and taken a forestation projects in the same area to make the environment better. We have won the Greentech Environment Excellence Bronze Award 2006.

## **Green belt Development**

SCW has planted about 2700 saplings and planned to plant further 1300 saplings inside the factory, in the colony area and in the area nearby of various species like neem, eucalyptus, tamarind, gulmohar, teak, babul, asoka & 11000 saplings of Jatropha is planted. SCW is regularly carrying out green belt development programme. This year we put a target of plantation of 8000 trees Jatropha. Till date around 2700 trees/ saplings have already been planted/ distributed.

## **Rain Water Harvesting**

SCW is regularly working out in the field of water conservation. For this it had already developed 4 nos. rain water harvesting pond in colony and plant area. We are regularly deepening the existing ponds so as to increase the storage capacity of the ponds. The following list is showing the rain water harvesting pond developed in SCW.

### **RAIN WATER HARVESTING PONDS**

<b>Sr.No.</b>	<b>Location</b>	<b>Approx. Size of Pond Catchment Area</b>
1	In factory near load center 1	5,000 cum.
2	In factory near railway crossing	5,000 cum.
3	In colony near Inspection Bungalow	10,000 cum.
4	In colony in front of D type quarters	1,20,000 cum.

## **Safety**

Industrial Safety is an essential and integral part of every operation at ACC. The ACC Sindri Cement Work has a tremendous record in the field of safety and it has received the prestigious National Safety Award for three consecutive years i.e. 2003, 2004 & 2005. It follows the British Safety Council's 5 Star rating system for auditing. Objective of the Safety dept. is to ensure and attain a target to achieve zero accident. The company has also successfully installed Occupational Health & Safety Management System (OHSMS – IS 18001:2000) and got the certification in June 2006 & maintained it

## **Safety, fire fighting and Disaster management**

SCW has implementing safety, fire fighting and disaster management plan regularly. The plant has been rated FIVE STAR (\*\*\*\*\*) from consecutive FOUR years as per British Safety Council's 5-star audit system by National Safety Council.