

## Kesoram Cement Basantnagar

### PROJECTS IMPLEMENTED DURING THE YEAR 2004-05

#### PROJECT:

Combining the existing 4-stage pre-heaters of kiln-1 and kiln-2 by adding an additional cyclone and calciner to enhance output and reduce specific energy consumption.

#### OBSERVATION MADE:

Kiln-1 was consuming thermal energy of 848 kcal / kg clinker and Kiln-2 was consuming 911 kcal / kg clinker, which are very high.

#### TECHNICAL & FINANCIAL ANALYSIS MADE:

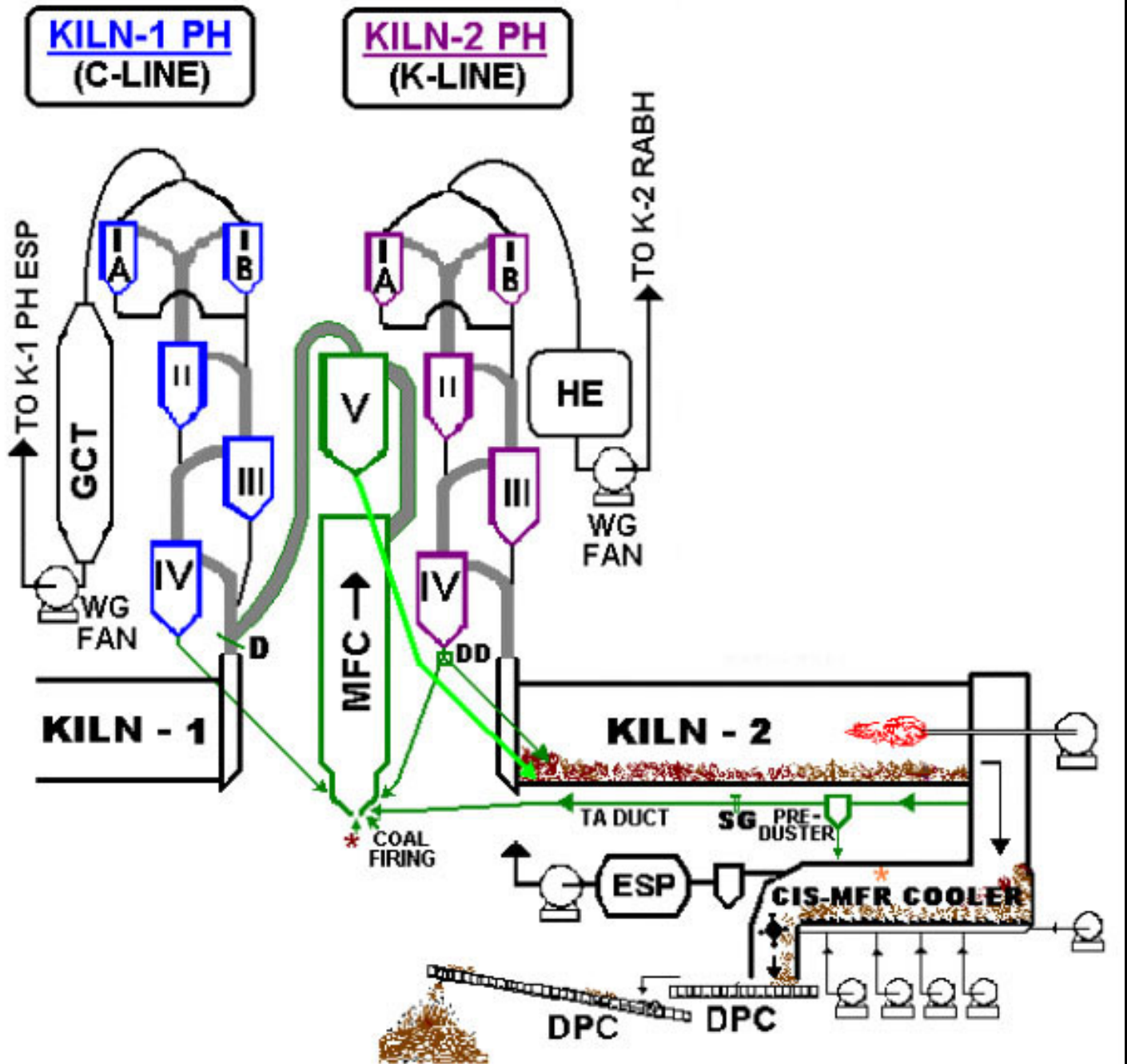
As the Kiln-2 is known to have sufficient volumetric capacity to produce higher output, we modified the circuit by making it double string unit. This was achieved **without constructing any new additional Preheater**. The existing Kiln-1 pre-heater was connected to the newly installed fluidized calciner and the additional 5<sup>th</sup> cyclone above it.

Sketch showing the modification is also enclosed.

#### IMPACT OF IMPLEMENTATION:

1. Thermal energy saving of 27886.58 Million Kcal, equivalent to 6115.48 tonnes of coal
2. Electrical saving of 5.97 lakhs kWh.
3. Considerable savings from reduction of Stores, Spares, Refractory & Maintenance Cost.

# KILN-1&2 DOUBLE STRING WITH MFC



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### PROJECTS IMPLEMENTED DURING THE YEAR 2004-05

#### PROJECT:

Conversion of Diesel Drilling Machine into Electrical driven Drill.

#### OBSERVATION MADE:

The cost of drilling was increasing every year due to rise in diesel prices.

#### TECHNICAL & FINANCIAL ANALYSIS MADE:

Cost of drilling per hour with diesel drill	:	Rs. 700 (25 Ltrs. @ Rs. 28 / Ltr)
Cost of drilling with electrical drill per hour	:	Rs. 279 (155 kWh @ Rs.1.8/kWh)
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Saving per hour	:	Rs. 421
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#### IMPACT OF IMPLEMENTATION:

1. The drilling operation was successfully converted into electrical mode and the system is working satisfactorily.
2. About Rs. 8.42 lakhs saving is obtained for 2000 hours of drilling.