



# CASE STUDIES

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**Triveni**  
TURBINES

# Case Study 1

## Cement Plant in Satna, Madhya Pradesh



### Turbine Details

**22.5 MWe Injection Condensing Steam Turbine with Air Cooled Condenser**

**Steam Parameters :**

**Main Steam : 12 ATA, 425 Deg C**

**Injection Steam : 3 ATA, 200 Deg C**

### Challenge

Commercial usage of waste heat from cement kiln and After quenching cooler to generate power for energy sensitive cement plant as energy cost is almost 40% of the total production cost.

### Solution

Triveni offered 22.5MW injection and Condensing STG (one of the largest in Indian cement industry) suitable for air cooled condenser with new generation blade design and reaction stages.

### Customer Benefit

Waste gas at around 400° C is cooled to 130° C, thus safeguarding environment and simultaneously utilizing the waste heat to generate power which is almost free.

## Case Study 2

### Cement Plant in Guntur, Andhra Pradesh



#### Turbine Details

**6.8 MWe Axial Exhaust Steam Turbine**

**Steam Parameter :  
15 ATA , 387 Deg C**

#### Challenge

Transforming a Brownfield project to Greenfield at Guntur, Andhra Pradesh by installing a 6.8MW Cement WHR system to Improve the overall efficiency of the existing plant. The waste heat collected from the cement kiln will generate the required power for the cement plant

#### Solution

Triveni offered an Axial Exhaust Injection Condensing turbine which met the customer requirement for the supply of required power to facilitate the various process at the cement plant

#### Customer Benefit

Higher returns and Fuel savings



**POWER TO SUSTAIN  
DREAMS**

**THANK YOU**



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