

As fuel costs surge, cement producers turn to waste heat recovery systems

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Cement is an energy-intensive sector, so a sharp rise in fuel prices severely crimps profit margins, as power and fuel expenses account for 25-30% of total operating cost.

The problem is that, in the current fiscal year, prices of petroleum coke (petcoke) and coal have risen by around 30% year-on-year. Prices of these key inputs are driven by local and global factors, so cement companies are going in for waste heat recovery systems (WHRS) in order to lower costs.

Of course, WHRS is not new for the sector as some large cement makers are already using these systems. But in the current

environment of surging input costs and rising emphasis on adopting environment-friendly manufacturing processes, the importance of WHRS for this sector is increasing by leaps and bounds.

Recall that the Supreme Court had banned petcoke usage in a few northern states in a bid to curb pollution last November. Though the restriction was relaxed later, it was followed by an import duty hike on petcoke from 2.5% to 10%.

So, WHRS helps serve a dual purpose—it is not only the cheapest source of power generation, it also helps in reducing the carbon footprint. In simple terms, WHRS uses the heat emitted during cement/clinker production and converts it into power. This process does not

require any extra input to generate power, thus making the process cost-efficient.

“While it is not mandatory for cement companies to install a WHRS plant, companies do so to save on operational costs. Power generation cost through WHRS usually comes to Rs0.5-0.7/unit as against Rs6-8/unit of grid power and Rs3-4/unit of thermal power,” said Binod Modi, an analyst at Reliance Securities Ltd.

As a result, there are numerous examples of companies going in for WHRS-led cost saving.

For example, HeidelbergCement Ltd saw a significant decline in power and fuel cost/tonne in the December quarter thanks to its 12 megawatts (MW) WHRS plant. In a post-earnings conference call, its management said the blended cost/unit for

power stood at Rs6.25 with 20% share from WHRS.

South-based Sagar Cements Ltd too saved Rs4 crore in the December quarter and in the subsequent quarters higher savings are foreseen on the back of WHRS, the management said in a post-earnings conference call.

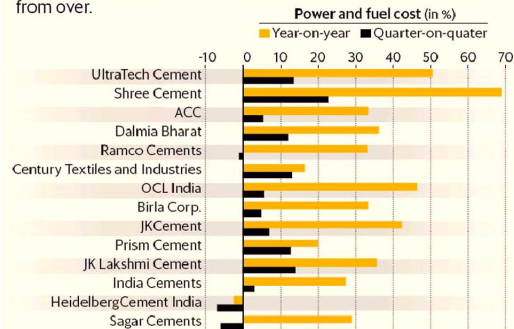
JK Lakshmi Cement Ltd’s WHRS plant started commercial production in the previous quarter and the company said that savings of around Rs100 per tonne is already being delivered.

Pan-India producer UltraTech Cement Ltd will be investing in two more WHRS plants in the next fiscal year, adding 26MW of additional WHRS capacity from the current 59MW, the management said.

JK Cement Ltd is also setting up a 13MW WHRS plant in Man-

Costs pinch

Cement companies’ concerns over surging costs seem to be far from over.



Source: Capitaline

SUBRATA JANA/MINT

grol, Gujarat. Meanwhile, India Cements Ltd will take a formal decision on setting up a WHRS at its Chilamakur (Andhra Pradesh) plant after the fiscal year ends.

While this does make a compelling case for WHRS as a cost optimization technique, there are some restraints as well.

Only one-third of the total power requirement can be generated through WHRS. Second,

installation could require a capital expenditure of around Rs10-12 crore per MW. Also, there are some technical challenges—if the quality of heat produced is poor, WHRS may not be fruitful, say analysts.

Since a significant cement demand revival, which will improve realizations, is not in sight yet, cost savings are welcome.