COPELAND HEAT PUMPS

Copeland Heat Pump Solutions Drive Sustainable Transformation At Krushnai Hotel

Background

Krushnai Hotel, a 25-room mid-sized property located in Maharashtra, India, operates at full capacity throughout the year. Its location near a popular pilgrimage site ensures high occupancy, but the hotel faced persistent operational challenges stemming from its reliance on a wood-fired boiler as the primary source of hot water for guests.

Challenge

The hotel requires a steady supply of 1,500 liters of hot water daily but faced significant challenges with its unreliable wood-fired boiler. Frequent monsoon disruptions, high costs, temperature inconsistencies causing pipe failures, and heavy air pollution strained finances and drew neighbor complaints, limiting the hotel's ability to deliver efficient, sustainable service.





Solution

To address these challenges, Copeland collaborated with a system integrator to deliver a sustainable, highperformance sanitary heat pump solution. The 200 LPH (7kW) Copeland heat pump, paired with a 1,500-liter mixing tank insulated with rockwool insulation, offered a cutting-edge alternative to the outdated wood-fired boiler. Specifically designed for the Indian climate, the Copeland system not only met the hotel's water heating needs but continued to surpass expectations across key performance areas.



Cost savings

The hotel experienced annual running saving of approximately INR 0.1 million (\$1.2K) by using Copeland heat pump as compared to the wood-fired boiler, improved efficiency and a return on investment (ROI) of about 2 years.*



Operational improvements

The installation of the Copeland sanitary heat pump revolutionized the hotel's operations by ensuring a reliable, round-the-clock hot water supply. This improvement eliminated disruptions during peak seasons, significantly enhancing both customer satisfaction and staff efficiency. Consistent water temperatures further prevented pipe joint failures, delivering long-term reliability and durability for the system.



Sustainability improvements

It reduced air pollution, addressing neighborhood complaints and contributing to a cleaner environment.



Enhanced guest experience

With the Copeland heat pump solution, Krushnai Hotel has transformed its hot water system into a standout feature. Management now markets the green, reliable, and high-quality hot water supply as a unique selling proposition (USP), appealing to guests seeking an environmentally conscious and modern lodging experience.



Krushnai Hotel's success story demonstrates how sustainable technology can drive drastic improvements in both business operations and environmental impact. With its locally manufactured, GreenPro Certified, and highly efficient product range, Copeland stands out as a pioneer in addressing India's sanitary water heating needs. Backed by a robust distribution network and reliable service support, Copeland delivers sustainable and dependable solutions tailored to the unique demands of the Indian market, ensuring both excellent performance and sustainable responsibility.

Learn more about Copeland's heat pump solutions at Copeland.com.

*Note: All data provided is based on operational figures from the client. Actual results may vary depending on conditions and practices.

Hotel operation data overview

Parameter	Value	Unit
Daily hot water consumption	1,500	Ltr/Day
Wood cost for 1500 Ltr boiler	500	Rs/Day
	1,82,500	Rs/Year
Total input power to run 7kW Copeland Heat Pump with 1500 Liter tank	16.5	kW
Electricity rate	12	Rs/Unit
Total running cost of heat pump for 52°C output	72,270	Rs/Year
Total running cost saving per year	1,10,230	Rs/Year
Copeland HP initial cost premium versus wood fire boiler - 2,20,000		
ROI	2.0	Years

