

Corrugator, Rajkot

~15 % fuel saved with a steam-system retrofit

A Rajkot plant producing high-volume corrugated sheets for packaging faced rising fuel costs and pressure on margins. i-Kcal engineered and commissioned Jetomat TurboHeat® in place of the corrugator's pressure-reducing station and steam traps, with no downtime: fuel per ton held about 15 % lower over seven months.

~15 %
fuel saved
held over seven months

136 → 108
kg fuel per ton of product
baseline to August 2025

0
steam traps
traps and their losses
eliminated

No
downtime
production continued
uninterrupted

01 The plant and the duty

PLANT

Corrugator plant (name withheld), Rajkot, Gujarat, India: high-volume corrugated sheets for packaging

BASELINE

136 kg of fuel per ton of product, November 2024 to June 2025

EQUIPMENT

Jetomat TurboHeat®, engineered and commissioned by i-Kcal as a retrofit for the corrugator line

02 Before

Steam traps and control valves caused condensate build-up, uneven heat transfer and energy losses. The plant needed to cut energy use without disrupting production. Its objectives:

- Reduce fuel cost per ton.
- Ensure consistent quality and drying.
- Implement the solution with no downtime.

03 What changed

- Jetomat TurboHeat® in place of the pressure-reducing station and steam traps; the five zone control valves stay.
- Steam traps and steam losses eliminated.
- Higher internal steam velocity and heat transfer, for a uniform surface temperature in the dryers and hot plates.
- Installed with no downtime, so production continued uninterrupted.

04 Results

FUEL PER TON OF PRODUCT

Period	Fuel (kg/ton)	Saving vs baseline
Baseline (Nov 2024 – Jun 2025)	136	–
July 2025	113	16.9 %
August 2025	108	20.6 %

- ~15 % fuel savings held over seven months (20.6 % in the best month), elimination of steam traps, complete automation of heating and better drying quality.
- Fuel use cut from 136 to 108 kg/ton while maintaining consistent output and quality.

05 The retrofit

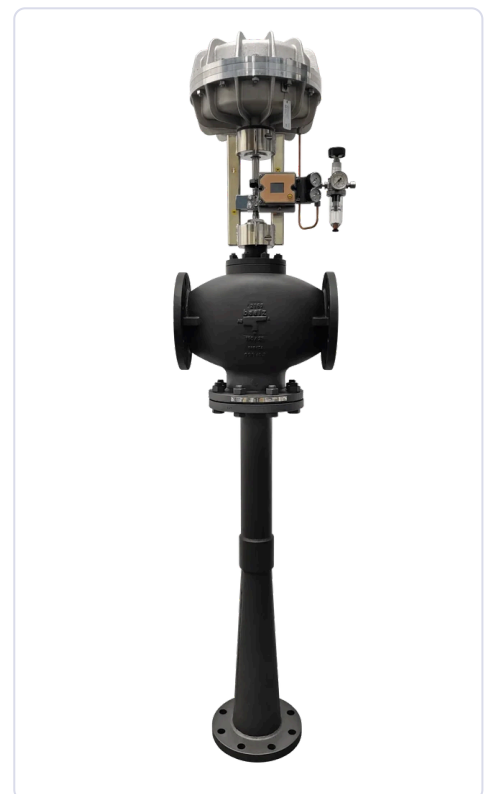


The corrugator line after the Jetomat TurboHeat® steam-system retrofit.

06 Conclusion

This project shows that proven technology plus expert engineering gives a measurable return. Jetomat TurboHeat, delivered by i-Kcal Systems, cut fuel use from 136 to 108 kg/ton while maintaining consistent output and quality.

For corrugators, this is more than an efficiency upgrade: it is a step towards sustainable, cost-competitive growth.



Jetomat TurboHeat® controlled steam ejector, with pneumatic actuator and positioner.

Product photo: Baelz



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