Heat and Control Energy Saving Systems

Looking for an edge to reduce manufacturing costs? Heat and Control offers proven systems that reduce fuel costs, air pollution and water usage.

Booster Heater
Mounted in the stack of most any heat exchanger, the Booster Heater uses normally wasted exhaust gases to preheat cooking oil. Without using additional fuel, it will increase heat exchanger efficiency by up to 11-15%.

Heat Recovery for sustainable production
Ovens waste millions of BTUs in exhaust emissions that can be utilized with our Energy Recovery Heat Exchanger (ERHX). Pre-heat your fryer system’s cooking oil, heat water for sanitation, or heat your building using energy you normally throw away. (see back page)

KleenHeat® pollution control heat exchanger
As it heats cooking oil, our High-Efficiency KleenHeat heat exchanger incinerates and removes virtually all odors, oil and other particulates from fryer stack exhaust that would normally pollute the air and area around your plant. As an added bonus, our latest graduated density oil heating tube bundle provides 10% greater thermal efficiency than existing models - far exceeding the performance of heat exchangers that do not remove pollutants.

Fryer Stack Heat Recovery System
Recover millions of BTU’s of heat from the fryer exhaust stack. This system condenses otherwise wasted steam to make hot water for blanching, sanitation, or even building heat.

AirSweep® water removal system
Removing of surface water from just-washed potato slices and vegetables reduces the energy used for frying or freezing... up to 8% for potato chip fryers.

Gentle Wash™ potato slice washing system
Reduce fresh water usage up to 80% over conventional slice washing systems. Our 3-stage Gentle Wash process cleans and reuses wash water. It concentrates starch and fines for more efficient removal and reduces sewer loading.

Burner mixture management
Increase heat exchanger efficiency up to 4% by maintaining a precise fuel-to-air mixture ratio through the full firing range of the burner.

Alternate fuel systems
Reduce energy costs by using less costly methane or other gas from landfills, digesters, or other sources.

Sustainable processing is a win-win scenario. Greater production efficiency reduces the environmental impact of processing and cuts the cost-per-pound of finished product. Currently your return-on-investment is very attractive for these systems. When you consider future increases in fuel, water, and waste water costs, your savings will continue to grow in years to come.

www.heatandcontrol.com
Right now, your processing line is generating unused heat that can significantly reduce your production costs. Ovens waste millions of BTUs in exhaust emissions that can be utilized with our Energy Recovery Heat Exchanger (ERHX) to pre-heat your fryer system’s cooking oil, heat water for sanitation, or heat your building.

A leading tortilla chip processor using the ERHX has **reduced annual fuel costs 20%** on one processing line (about 20 billion BTUs per year) and dramatically reduced heat exchanger CO₂ emissions. Contact us to learn how to improve the sustainability of your production line.

**How the ERHX cuts fuel costs**

1. Oven exhaust enters the ERHX at 700-900°F.
2. Cooking oil is preheated by exhaust gases before entering the heat exchanger for final heating.
3. Pre-heated cooking oil is heated to the desired operating temperature, reducing the firing rate, fuel consumption, and CO₂ emissions of the heat exchanger.
4. Heated oil enters the fryer.
5. Cooking oil from the fryer returns to the ERHX for pre-heating.

**Fast Service Worldwide**
Contact Heat and Control today to improve the efficiency and sustainability of your production line.