

What Is a Heat Recovery System?

Heat recovery systems use the heat energy from outgoing exhaust air to heat fresh incoming air. They typically consist of a heat exchanging unit, blower fans, and separate air flow channels (e.g., ducting or piping). The heat exchanging unit facilitates the extraction and transfer of heat from the outgoing air to the incoming air, the blower fans move the outgoing and incoming air through the channels, and the separate channels prevent cross-contamination between outgoing air and incoming air.

PRE-heat Offers Several Systems



Dimple Plate Heat Exchangers

The most versatile, sturdy, and cleanable plate heat exchanger is the Dimple-Plate (DPL) unit. The DPL uses dimples on each plate to maintain plate spacing and increase turbulence while operating at lower pressure drops. Our DPL is an all-welded, plate-type heat exchanger with the strongest primary-seal weld in the industry.

The welded design eliminates cross-contamination (leakage) between the gases. DPL also has a high percentile heat transfer efficiency.



Shell & Tube Units

All types of VOC abatement or fume incineration, including catalytic, thermal recuperative, and thermal regenerative incinerators, make use of our high quality shell and tube heat exchangers as their primary and secondary heat exchangers. They are also utilized to take away the heat energy from industrial furnaces, kilns, ovens, and dryers of all kinds.

Shell and tube heat exchangers are used for many different applications. Shell and tube heat exchangers are available in vertical or horizontal design.



Vertical Cooling Towers

Our air-to-air cooling tower heat exchangers are commonly seen in industries that incorporate dryers, incinerators, and any oven, dryer, kiln cupola, or incinerator with a particulate exhaust emission that needs to be cooled or dried out before going into a more stringent, temperature sensitive, particulate collection device.

Benefits of Heat Recovery Systems

✓ Almost complete segregation of the air streams

✓ No moving components

✓ No wear, thus no maintenance required

✓ Long life and resistance to breakdowns

Our Partners



This partnership allows PRE-heat to be open to liquid-to-liquid requests with the backing of an expert in the liquid-to-liquid heat exchanger industry.



PRE-heat is the exclusive fabricator and seller of the Warmatic Super Cell line of gas fired heat modules for the NAFTA (North American Free Trade Agreement) region, which encompasses Canada, the United States, and Mexico.