

Waste Heat Integrated Recompression (WHIR)

Patent Pending



Waste heat is an excellent way to reduce operational costs in industrial facilities.

The WHIR system combines waste heat recovery with either mechanical or thermal vapor recompression, or a combination of both systems to generate process steam suitable for use in a number of areas around the plant.

At Kinergetics, we are confident in the results we provide customers. Therefore, we are happy to provide thermal performance guarantees for a number of projects, including installation of the WHIR system.



Heat Pump Technology

Operates as a heat pump to allow conversion of low grade waste heat to useable steam.



Waste Heat Recovery

Any suitable waste heat source. Examples include: RTO exhaust, dryer exhaust, and certain vapors in distillation.



Improves water balance

Potential to reduce the need for live steam injection for slurry, desolventizing toasting (DT) in seed oil recovery, and other several components of operations.



A number of the "WHIR" system components waiting to be installed at a large ethanol plant in Iowa.

Startup expected in Q2 2025 with expected* plant efficiency gains of **5,700 btu/gal or more**

Applicable Industries:

- ✓ Oil Seeds
 - ✓ Dairy
 - ✓ Ethanol & Biofuels
 - ✓ Pulp & Paper
- & more!

*Plant situation dependent