

Gas-to-gas heat exchangers

MECS, Inc. is proud to introduce the MECS-ThermoZ "fully-welded" plate heat exchanger, specifically designed for use in stable gas-to-gas heat transfer applications to recover heat from energy-consuming processes up to ~760°C.







MECS-ThermoZ consists of a series of stacked, parallel plates that provide a smooth, continuous path for minimum gas resistance. The heat transfer plates are completely seam welded to ensure against cross-contamination. Spacing is typically achieved with raised and depressed truncated conical dimples, providing uniform plate pitch and an improved heat transfer coefficient. The height of these dimples can be varied at the time of manufacture to establish the desired plate spacing necessary to meet exact performance requirements. Prior to shipment, each module is leak tested and is rated for 0.05% maximum leakage at the design differential pressure.

The MECS-ThermoZ heat exchanger is designed and constructed to handle even the most difficult applications. A module can be fabricated with heavy gauge carbon steel, corten steel, or 304L stainless steel plates to provide superior performance in high termperature or corrosive environments. Optional materials are available to meet specific needs.

MECS-ThermoZ is a highly efficient heat exchanger, which is inherently compact in size and weight. The unit has no moving parts, rendering it maintenance free.

Advantages/Benefits:

- Seam welded plate pack ensures zero leakage
- Generous plate clearances
- Ability to inspect and clean both sides of the unit
- Modular design can accommodate future incremental capacity increases
- Rigid heavy duty frame assembly
- Dimple design improves HEX efficiency

Applications:

Fired Heaters
Air Preheating
Dryers
Boilers
Gas Coolers
DeNOx
Ovens
Reformers



