

# MECS®-THERMO Z™ WELDED PLATE HEAT EXCHANGERS



Modules may be bundled for increased capacity.

## FEATURES AND BENEFITS:

- Seam welded plate pack ensures zero leakage.
- Custom designed to your application for maximum heat recovery.
- Modular design can accommodate future capacity increases.
- Materials of construction selected for temperature and process conditions to minimize corrosion.
- Rigid, heavy duty frame assembly for long service life.
- Plate dimple design results in out-standing heat exchange efficiency.
- Eliminate cold side corrosion on heat transfer plates with the Optimum-h™ technology.
- Design of the streamlined gas flow paths through the stacked parallel plates results in minimum resistance and very low pressure drop.

## PLANT ENGINEERS IN THE KNOW CHOOSE MECS®-THERMO Z™ FOR MAXIMUM WASTE HEAT RECOVERY AND THE BEST DELIVERED VALUE.

MECS®-ThermoZ™ is a highly efficient heat exchanger suitable for many industrial processes where gas temperatures may be up to 1500°F (816°C). It is inherently compact in size and weight which makes installation and field set up much simpler than conventional heat exchangers. Since MECS®-ThermoZ™ has no moving parts, it results in virtually no maintenance and long service life. Having a heavy duty modular design and robust construction, the MECS®-ThermoZ™ welded plate heat exchanger will handle the most demanding and difficult heat recovery applications. Each module can be fabricated from a variety of heavy gauge carbon steel and stainless steel plates, including COR-TEN®, 304L, 316L and 309S. MECS®-ThermoZ™ is the plant engineer's best choice for reliable and efficient performance in high temperature and corrosive applications.

COR-TEN® is a registered trademark of U.S. Steel Corporation.



Shop fabrication results in better quality, reduced field expenses and fast-track schedules.

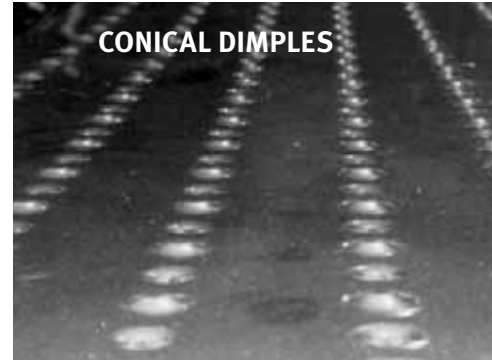
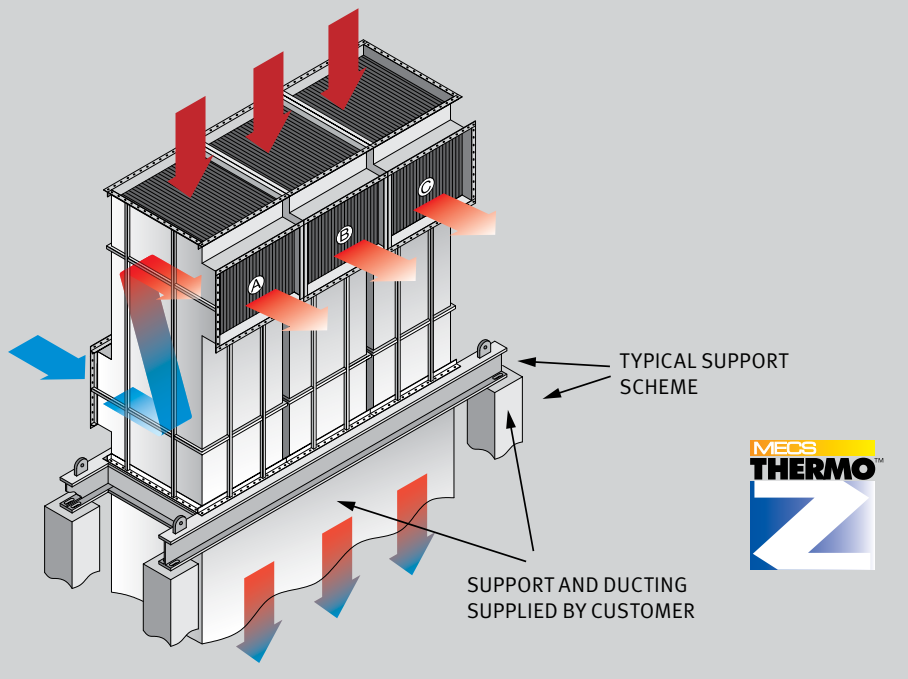
HEAT EXCHANGERS

Learn more at [www.mecsglobal.com](http://www.mecsglobal.com)

# MECS®-THERMO Z™ WELDED PLATE HEAT EXCHANGERS

## HOW IT WORKS

The combination of raised and depressed conical dimples provides uniform plate pitch and an improved heat transfer coefficient.



CONICAL DIMPLES



[www.mecs.dupont.com](http://www.mecs.dupont.com)

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## DESIGN, OPERATIONAL AND QUALITY ADVANTAGES

The MECS®-ThermoZ™ consists of a series of stacked, parallel plates that provide a smooth, continuous path for minimum air resistance. The heat transfer plates are completely seam welded to ensure against cross contamination. Spacing is typically achieved with a combination of raised and depressed conical dimples, providing uniform plate pitch and an improved heat transfer coefficient. The height of these dimples can be varied during shop fabrication to establish the desired plate spacing necessary to meet specific performance parameters. When gas temperatures and dew point conditions require maximum corrosion protection from cold spots, the Optimum-h™ system can provide a value engineered approach to raising the minimum metal temperature in near condensing applications AND allow for less expensive materials of construction. Prior to shipment, each module is leak tested and rated for 0.05% maximum leakage at the design differential pressure, ensuring straightforward start-up and long service life.

## WELL SUITED FOR CRITICAL APPLICATIONS

Heavy duty design, robust fabrication and the right materials of construction results in high reliability for MECS®-ThermoZ™ in demanding applications like these:

- Fired Heaters
- Boilers
- Air Preheating
- Gas Coolers
- Dryers
- Ovens
- Oxidizers
- DeNOx

*MECS®-ThermoZ™ is a member of the MECS® family of Heat Exchanger product technologies.*