



MONPLEX II™ GAS-TO-GAS HEAT EXCHANGER IS HIGHLY EFFICIENT AND PROVIDES THE HEAT TRANSFER NEEDED TO MAINTAIN OPTIMUM CATALYST BED TEMPERATURES FOR BEST CONVERSION EFFICIENCY.

New design—welded strong

MonPlex II™ heat exchanger incorporates design improvements that result in a new fully welded plate configuration that is both compact and highly efficient. MonPlex II™ heat exchanger is well suited for a variety of difficult gas-to-gas heat transfer applications in a sulfuric acid plant, offering the designer greater flexibility to select options for arranging the modular units to fit a particular layout. Since the units are fully shop-fabricated, consistent high quality and low field costs can be attained. MonPlex II™ welded plate heat exchangers allow up to 40% less footprint than traditional acid plant shell and tube units. In addition, since the units are constructed in modules, they require lighter crane lifts and are easier to install. The MonPlex II™ modular design can be readily expanded with parallel units to decrease pressure drop and increase heat duty for capacity increase and debottlenecking projects. MonPlex II™ gas-to-gas welded plate heat exchanger is the right design for your acid plant requirements today and can grow to meet your capacity needs of tomorrow.



MONPLEX II™ GAS-TO-GAS WELDED PLATE HEAT EXCHANGERS

FEATURES AND BENEFITS:

- Seam-welded plate pack ensures zero leakage, with no tubes to vibrate and cause acoustic resonances
- Generous plate clearances allow for ease of inspection and ability to clean both sides of the heat exchanger
- Modular design can accommodate future incremental sulfuric acid plant capacity increases
- Lower in weight and more compact in size when compared to traditional gas-to-gas heat exchangers for acid plants
- Modules are truck-transportable, allowing for high-quality shop fabrication while minimizing costly field labor expenses and expedited schedules
- The frame assembly benefits from a very rigid, robust design that results in long service life
- Plate dimple design results in outstanding heat exchange efficiency and lower surface area requirements than traditional shell and tube heat exchanger designs



**MONPLEX II™
GAS-TO-GAS
WELDED PLATE
HEAT EXCHANGER**

MONPLEX II™ GAS-TO-GAS WELDED PLATE HEAT EXCHANGERS

HOW IT WORKS

MonPlex II™ gas-to-gas welded plate heat exchanger is designed for optimum heat transfer while standing up to the harsh conditions of a sulfuric acid plant.

Designed specifically for sulfuric acid plants

MonPlex II™ heat exchanger 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 (FIG. 1) 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. Prior to shipment, each module is leak-tested and rated for 0.01% maximum leakage at the design differential pressure, ensuring straightforward start-up and long service life.

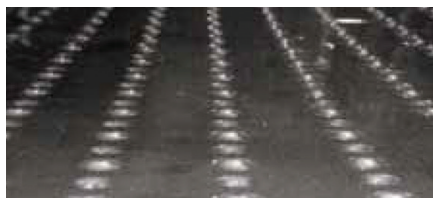


FIG 1: Conical dimples

SULFURIC ACID EXPERIENCE—UNMATCHED WORLDWIDE

Since 1925, MECS, Inc. (MECS) has offered process technology and high-performance products for the sulfuric acid industry. MECS overall acid plant design and construction experience, combined with extensive corrosion research and development and process engineering expertise, has led to numerous technology breakthroughs for the sulfuric acid industry. MECS has sales and engineering offices worldwide that can assist you in specifying the MonPlex II™ unit best suited to fit your needs.



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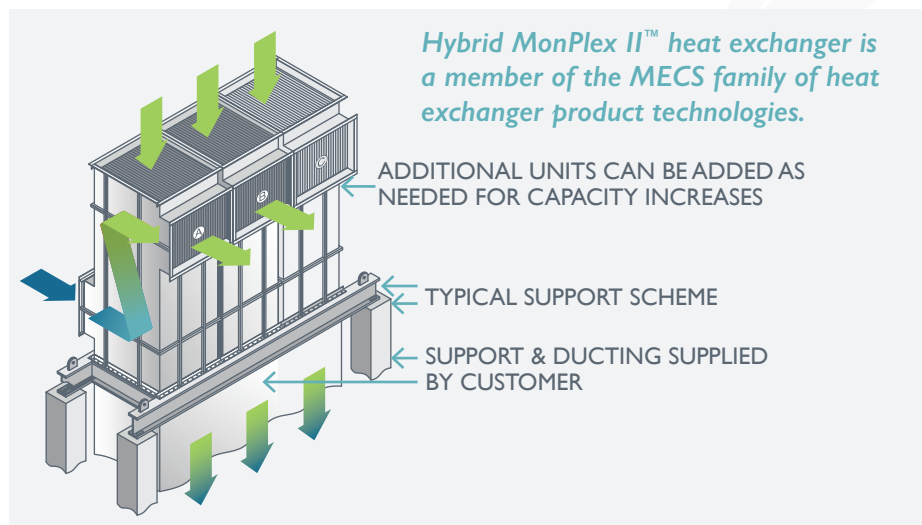
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