

MONPLEX II™ GAS TO GAS WELDED PLATE HEAT EXCHANGERS



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

NEW DESIGN – WELDED STRONG

MonPlex II™ incorporates design improvements that result in a new fully welded plate configuration that is both compact and highly efficient. MonPlex II™ 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 foot print 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 de-bottlenecking projects. MonPlex II™ is the right design for your acid plant requirements today and can grow to meet your capacity needs of tomorrow.

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.



MECS®

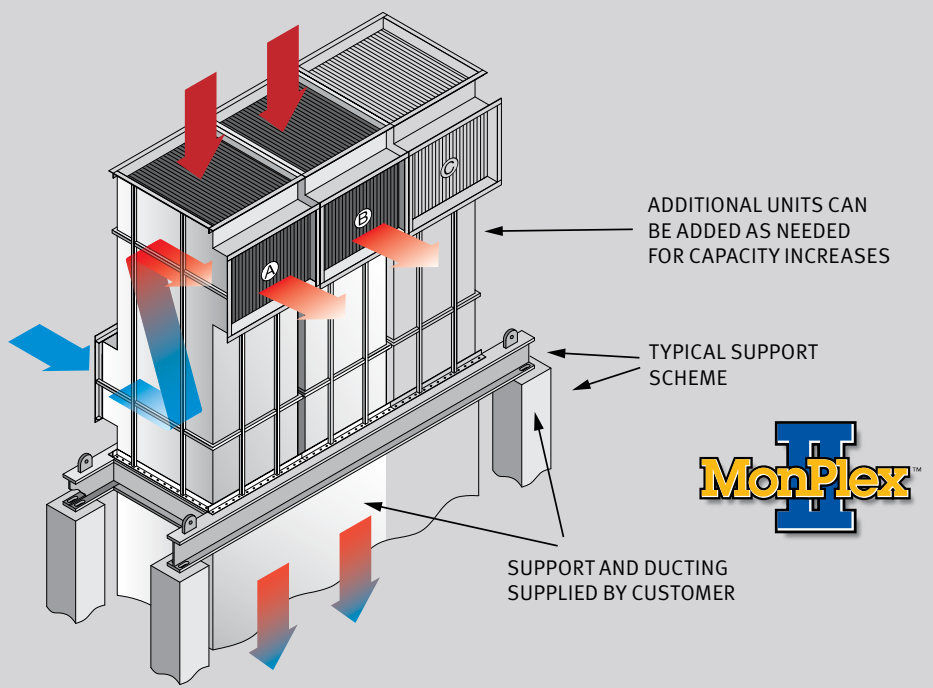
HEAT EXCHANGERS

Learn more at www.mecs.dupont.com

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HOW IT WORKS

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



www.mecs.dupont.com

North America

MECS Headquarters

Chesterfield, Missouri, USA

Tel: +1-314-275 5700

northamerica@mecsglobal.com

Europe/Africa

Brussels, Belgium

Tel: +32-2-658 2620

europafrica@mecsglobal.com

Milan, Italy

Phone: +39-02-8969 0658

italy@mecsglobal.com

Johannesburg, South Africa

Tel: +27-11-708 9860

southafrica@mecsglobal.com

Asia/Pacific

Hong Kong, China

MECS Far East Limited

Tel: +852-2734 5388

hongkong@mecsglobal.com

Shanghai, China

MECS Chemical Plants

Equipment (Shanghai) Co., Ltd

Tel: +86-21-6182 1111

shanghai@mecsglobal.com

Mumbai, India

MECS India Private Ltd.

Tel: +91-22-6774 9500

india@mecsglobal.com

South America

Barueri, Sao Paulo, Brazil

Tel: +27-11-218 8618

brazil@mecsglobal.com

DESIGNED SPECIFICALLY FOR SULFURIC ACID PLANTS

MonPlex II™ 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, (photo below) 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.



MECS® SULFURIC ACID EXPERIENCE — UNMATCHED WORLDWIDE

Since 1925, 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.

MonPlex II™ is a member of the MECS® family of Heat Exchanger product technologies.