

# Clear Solutions

Custom Engineered for your  
Separation and Emission Control Needs



**Kimre**

# A Clear Solution for Optimum Operation

For more than 30 years, **KIMRE** product engineers and application specialists have been solving process gas stream and emission problems in plants around the world. This experience results in a superior understanding of gas and vapor stream separation and mass and heat transfer. We have a special insight into the effects of these dynamics on system energy consumption and separation effectiveness.

Process engineers, environmental engineers and production managers in operations as diverse as fertilizer, sulfuric acid, waste-to-energy and power plants recognize **KIMRE** as a valuable resource. We are respected as a resource that is not only knowledgeable, but also one that is responsive and committed to boosting production and efficiency in the chemical processing industry.

**KIMRE** engineers routinely analyze gas-stream applications and help customers determine the optimal, cost-effective separation solution. Based on consideration of gas-stream parameters — such as size and nature of mist or solid particles to be removed, temperature and chemical compatibility of materials, and open area necessary for effective liquid handling — **KIMRE** designs and recommends custom solution which minimize pressure drop and system energy costs while increasing throughput.

Maximizing the effectiveness and productivity of the process by incorporating the **KIMRE** separation solution requires selection of the right ancillary components such as spray equipment, nozzles, and pumps. **KIMRE** can recommend the appropriate choice of components to ensure optimal, overall system performance.

**You are an expert in your process.**

We are experts in optimizing your process. **KIMRE** can retrofit your equipment with minimum investment and increased savings in operation.



# A **Clear** **Solution** to Superior Separation

The introduction of **KIMRE** high-performance, interlaced mesh structure revolutionized the technology of process fluid separation and air pollution control.

This unique, innovative concept is far superior to the usual tower packing, chevrons, and mesh pads used for mass and heat transfer, particulate removal and mist elimination.

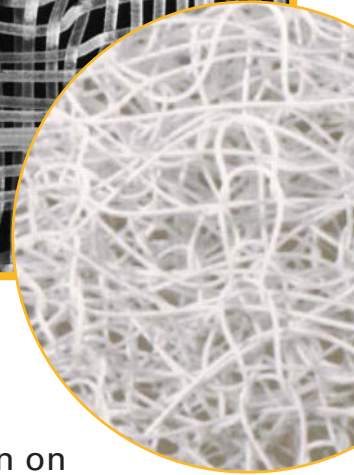
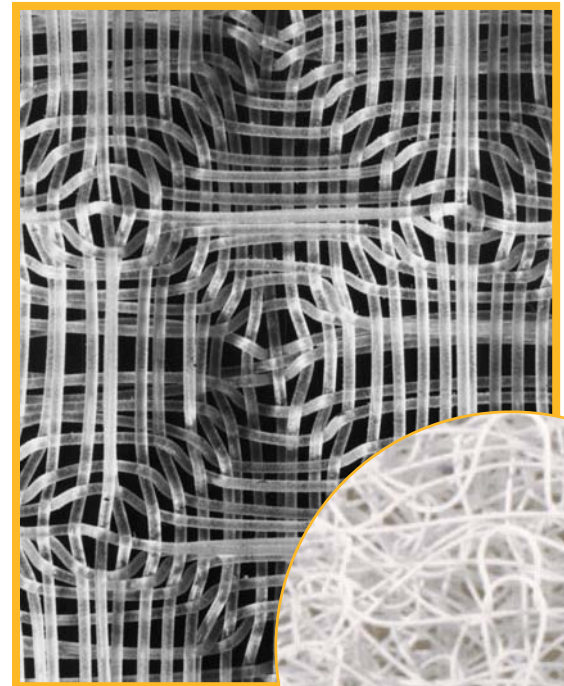
As a result, industries around the world have increased production, reduced energy and maintenance costs, and reduced emissions to comply with ever more stringent air and water pollution control standards.

The KIMRE interlaced mesh structure is simple, yet surprisingly effective. The basic structure of the mesh forms a ladder-like arrangement of thermoplastic filaments, forming double-V systems that intersect each other at right angles.

Our engineered mesh construction has a large surface area and void space. The choice of filament diameter and the physical arrangement of mesh layers optimize the effectiveness and range of solid or liquid particle removal. A variety of thermoplastic filament materials allows for continuous service from -320° F to 400° F (-195° C to 204° C).

The thermoplastic media eliminates problems associated with corrosion, contamination, and erosion. The lightweight material is flexible, offers exact fit and is easy to install, remove, and maintain.

KIMRE offers a range of products, all based on its unique media that effectively removes solid and liquid particles below one micron while draining large volumes of liquid. KIMRE products are so effective they make traditional tower packing and metal pads obsolete.



**KIMRE's** interlocking structure shown on the left leads to many advantages over the traditional knitted mesh structure shown on the right.

Our team of experienced engineers will work with you in designing a cost effective and efficient solution.



**A sample of KIMRE customers:**

- Fertilizer Producers
- Sulfuric Acid Producers
- Semiconductor Manufacturers
- Marine Vessels
- Power Plants
- Pulp and Paper Plants
- Animal Feed Plants
- Chlor-Alkali Plants
- Petrochemical Plants
- General Chemical Plants
- High Purity Chemical Producers
- Waste Water Treatment Plants
- Utilities
- Automotive Plants
- Rendering Plants
- Surface Finishers
- Incinerators
- Food and Agricultural Plants
- Metallurgical Industry
- Remediation Plants

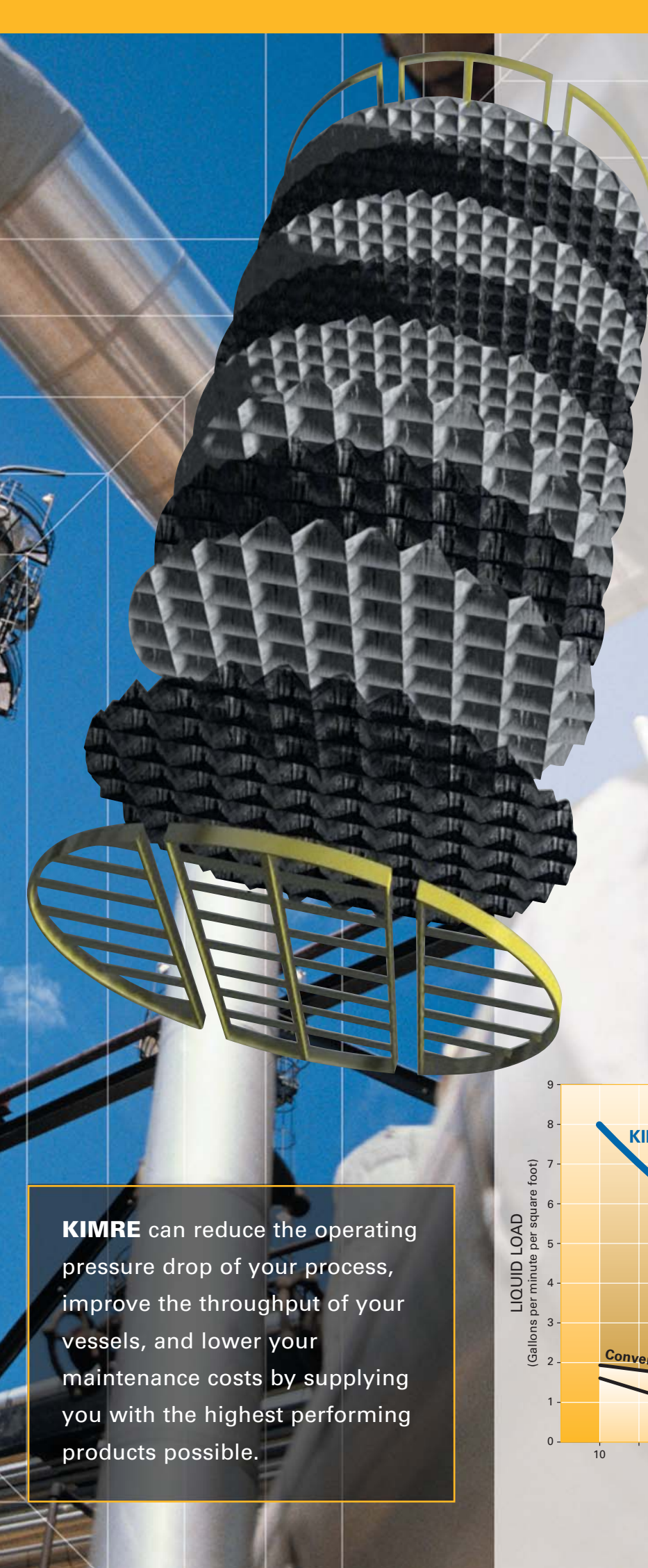
**KIMRE™ Technology offers solutions:**

- bed supports
- tower packing
- mist eliminators
- fog collectors
- aerosol collectors
- coalescers
- drift eliminators
- dust masks
- air intake filters
- candle protectors
- prefilters

**KIMRE™ Technology improves:**

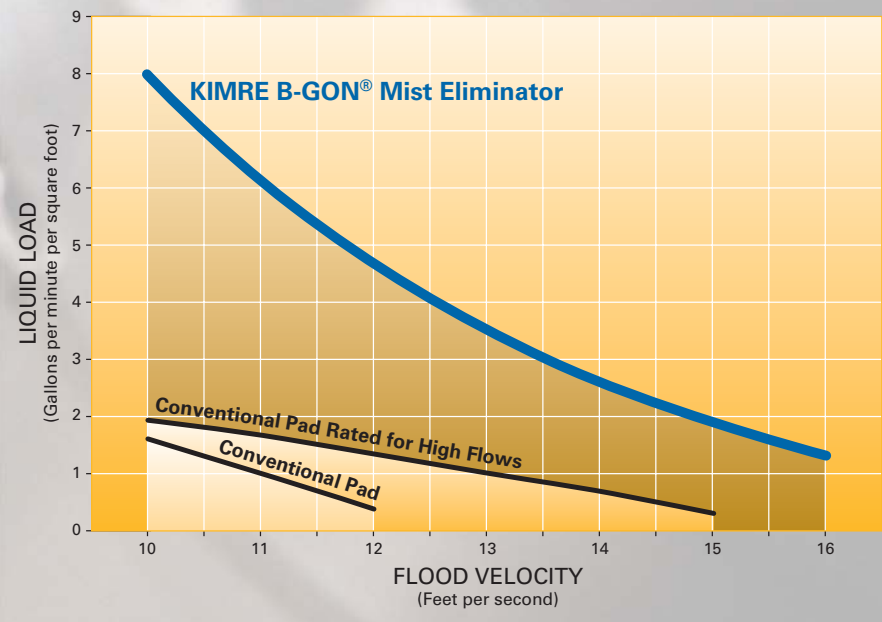
- Evaporators
- Concentrators
- Wet Scrubbers
- Drying Towers
- Knock Out Pots
- Absorption Towers
- Separators
- Distillation Columns
- Strippers
- Cooling Towers
- Air Intakes
- Gas Coolers
- Emergency Scrubbers
- Dust Scrubbers
- Electrostatic Precipitators
- Oil Mist Collectors
- Oil-Water Separators
- Liquid-Liquid Separators
- Extraction Columns
- Paint Spray Booths
- Humidifiers
- Vacuum Scrubbers
- Flash Coolers
- Calciners
- Prill Towers
- Tank Vents
- Laboratory Hoods
- Condensers





The engineering expertise provided by **KIMRE** is recognized by our customers throughout the world. Our technical team is always available to discuss your installation and provide you with suggestions and support.

**KIMRE** can reduce the operating pressure drop of your process, improve the throughput of your vessels, and lower your maintenance costs by supplying you with the highest performing products possible.



## **KIMRE: Your *Clear Solution* to Phase Separation, Mass and Heat Transfer, and Air Pollution Control.**

We are ready to assist you with any gas-liquid, gas-solid, and liquid-liquid separation question. We offer proven world-class products and a commitment to responding to your needs. Our practical, experience-based team is knowledgeable in all areas of emission control.

You will find we never lose sight of the ultimate goal: increasing process effectiveness and productivity while minimizing operating and maintenance costs.



Visit us at [www.Kimre.com](http://www.Kimre.com)

### **Kimre Inc.**

P.O. Box 571240  
Miami, FL 33257-1240 USA  
Tel: (305) 233-4249  
Fax: (305) 233-8687

### **Kimre Europe NV**

Koolmijnlaan 201  
B-3582 Beringen  
Belgium  
Tel: +32 (0) 11 450-758  
Fax: +32 (0) 11 450-759