

## KIMRE™ MIST ELIMINATORS

PHASE SEPARATION TECHNOLOGIES FOR DUST AND MIST ELIMINATION



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#### SOLUTIONS WITH PROCESS KNOWLEDGE

Through its exclusive distribution agreement with KIMRE Inc. for dust and mist eliminators, and more than 40 years of experience, Waterleau France (previously known as Socrematic) has developed a unique experience in the use of KIMRE™ products.

From supply of engineered process component to complete turnkey solutions, Waterleau offers proven solutions through its experienced team and its knowledge in all areas of emission control.

# SUPERIOR MIST ELIMINATION AND PARTICULATE REMOVAL BY KIMRE<sup>TM</sup>

The unique design of the KIMRE™ packing and demister media offers superior particulate removal and mist elimination compared to traditional tower packing, chevron and knitted wire mesh pads, subject to fouling or corrosion.

# UNIQUE FILAMENT DESIGN FOR MAXIMUM DEMISTING CAPACITY

The KIMRE™ patented interlaced pyramidal mesh structure offers a unique organized 3-D material composed of thermoplastic filaments maximizing surface area and void space. The high percentage of filaments perpendicular to the gas flow guarantees higher collection efficiencies and lower pressure drops compared to standard equipment.

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



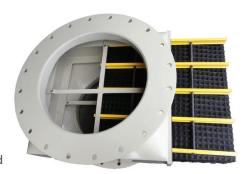
#### **B-GON® MIST ELIMINATOR**

B-GON® mist eliminator pads were introduced utilizing a unique structured media developed to address the deficiencies inherent in existing demisting technologies.

The B-GON® demister is comprised of three-dimensionally interlocked plastic monofilaments. The ladder arrangement causes a change in the direction of the vapor flow enhancing droplet removal by impaction, interception and centrifugal actions. B-GON® pads provide the highest performance of any mesh-type mist eliminator with efficiencies as high as 99 % for the removal of 1µm mists.

#### FEATURES AND BENEFITS MIST ELIMINATOR

- Highest collection efficiency of ANY mesh-type media:  $> 99 \% @ 1 \mu m$
- Composite pads of various mesh styles process optimization
- Handling of widest range of gas velocities and contaminant levels
- High resistance to fouling
- Lower pressure drops compared to traditional knitted mesh
- Custom fabrication for any vessel configuration and orientation
- Cleanable & reusable
- Wide range of materials available, to meet any level of temperature and corrosion requirements



#### KON-TANE® SCRUBBER PACKING

KON-TANE® packing is a structured interlaced monofilament material, designed to facilitate breakup of the liquid phase, creating maximum surface area for mass transfer with the vapor phase. KON-TANE® packing produces low pressure drop, prevents liquid holdup on and within the packing and curtails excessive energy use. Due to its inherent rigidity and strength, KON-TANE® can be installed in layered pads using relatively simple supports

#### FEATURES AND ADVANTAGES KON-TANE®

- Highest liquid to gas ratio available
- Exceptional mass transfer properties contained in minimal thickness
- One-piece construction; easy to remove for maintenance
- Easy installation
- Maintains uniform volume and flow
- Exceptional transfer in cross-flow scrubbers with minimal pressure drops
- Can easily be retrofitted in existing equipment



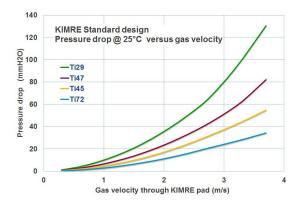
#### WIDE RANGE OF APPLICATIONS

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 • Rotary Kiln • Granulators • Spray Dryers • Extraction Columns • Paint Spray Booths • Humidifiers • Vacuum Scrubbers • Flash Coolers • Calciners • Prill Towers • Tank Vents • Laboratory Hoods • Condensers

#### A DESIGN THAT SUITS THE PROCESS

## DESIGN TO SITE CONSTRAINTS FOR HIGHEST PERFORMANCES

Depending on your site-specific flow and pressure drop characteristics, B-GON® and KON-TANE® demisters are available in filament diameters from the finest 0.005 mm to the coarsest 0.94mm and various void fractions for the highest level of performance at any particle or mist size across a wide range of operating conditions. Composite pads mist eliminators combining layers with differing mesh coarseness allows achieving the highest particulate removal and demisting efficiency at the lowest pressure drop.

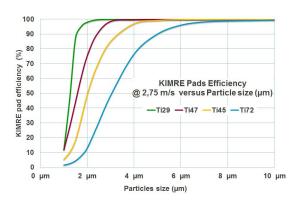


#### **MODULAR AND UPGRADABLE SYSTEM**

By adding layers of material, changing the filament diameters, or using a different type of thermoplastic, the systems are easily adapted to new challenges or changing process conditions.

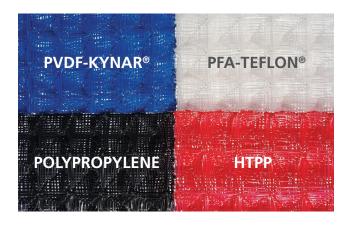
## EASY MAINTENANCE AND INSTALLATION

Often build in a single piece; Pads are made to fit any vessel lay-out. The flexible design allows access through almost any entryway.



### MATERIAL ADAPTED TO HIGH TEMPERATURE AND CORROSION

B-GON® mist eliminators and KON-TANE® packing are available in different materials ranging from polypropylene to PVDF-Kynar®, PFA-Teflon®, ETFE-Tefzel®, HTPP and PET for high temperatures up to 230°C or more aggressive chemicals applications.





#### A PROVEN SOLUTION IN ALL INDUSTRIES

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 • Desalination • Food and Agricultural Plants • Metallurgical Industry • Remediation Plants



### WATERLEAU FRANCE 50 YEARS OF EXPERTISE IN AIR TREATMENT TECHNOLOGY

# DESIGN ENGINEERING CONSTRUCTION OPERATION MAINTENANCE

#### PROTECTING THE 4 ELEMENTS









We all have the responsibility to handle our natural resources in a careful and sustainable way. Waterleau develops environmental technologies and offers sustainable solutions for water, air and waste treatment, as well as for energy recovery. As an EPC contractor and operator, Waterleau counts more than 2500 references for municipal and industrial clients around the world.

