

Tri-Mer® Technology

Solves Industry's Toughest Air Pollution Problems!



CCS® for Submicron Particulate PM10, PM2.5 . . .

Removes Particulate Down to 0.1 Micron and Below with Very High Efficiency, Also Ultrafine Particulate and Condensables

- Simultaneously removes HCl, HF, HNO₃, H₂SO₄, SO₂/SO₃, Cl₂, NH₃, H₂S, other soluble gases
- Low total energy use: less than 1.5" w.g. pressure drop
- Smoothly handles changes in flow volume; can be turned down over a wide range, typically 10:1 or better
- Easily accommodates changes in particle loading



Tri-Mer MultiPhase BioSystem™ for VOC Emissions . . .

Tri-Mer MultiPhase BioSystem™ is Superior Alternative to RTO, RCO or Conventional Biofilter

- Gas and liquid phase treatment integrated into one technology
- Treats wide spectrum of VOCs with high efficiency; handles tars, waxes, heavy VOC compounds
- Handles high particulate loadings
- Proprietary synthetic ceramic biomedica; no media bed clogging, automatically self-cleaning and **no media replacement ever required**
- Compatible with high inlet temperatures
- Minimal waste, minimal wastewater; creates no NO_x compounds



Tri-NO_x® Multi-Chem® Scrubber Systems . . .

For Any NO/NO₂ Ratio; Guaranteed Zero NO₂ Opacity at Stack

- 40-250,000+ CFM/hundreds of installations
- Non-catalytic system will not blind or poison.
- Concurrent scrubbing of SO₂, HCl, HF, HNO₃, Cl₂ and other residuals
- Polypropylene, PVC, 316L stainless steel, or fiberglass construction
- Can be integrated into particulate control technology if required
- Process instrumentation fully automated
- Inlet temperatures to 1100°F and above



Whirl/Wet® Dust Collector . . .

For Soluble or Insoluble Particulate

- Medium-energy scrubber for 3 microns or larger
- 99% efficient over wide range of micron sizes
- Available in individual units constructed of mild steel, 304L and 316L stainless steel, and all-polypropylene (unique to industry); 100-50,000 CFM
- Low water use; low maintenance, no pumps or bags to clean

High Efficiency Fume Scrubbers . . .

For HCl, HF, HNO₃, Cl₂, H₂S, Metal Finishing and Other Corrosive Applications

- Deep pack/high liquid recirculation rate units can achieve ppb level outputs
- Packed Bed Scrubbers with built-in mist elimination
- Crossflow Scrubbers: single or multiple stage



Packed Bed Tower Scrubbers . . .

For Gaseous Emissions

- NO₂, Cl₂, SO₂, also acid fumes, including H₂SO₄, HCl, HNO₃, and HF
- Can incorporate particulate control, gas quench, venturis, cartridge filters, carbon systems
- Combination systems for hot and cold gases



C/E-1 Chrome Scrubber . . .

99.5%+ Efficiency for Cr₆, Cr₃ Regardless of Loading

- All-mechanical pad system design does not use chemicals or generate waste.
- Capable of handling other fumes simultaneously



Fan/Separator® . . .

For H₂SO₄ and Other Corrosive Fumes

- Packaged, stand-alone system
- Ideal for steel pickling plants or battery charging operations
- Low capital and operational costs – requires less than 10% of water used by competitive scrubbers and operates with 25% lower BHP requirement



Odor Control Scrubbers . . .

For Food Processing, Industrial and Municipal Applications

- 35-500,000 CFM
- Wet scrubber process
- Zero odor at the stack



Custom-Fabricated Polypropylene Tanks . . .

Lengths to 100 ft.

- For pickling, plating, etching, anodizing
- Also fume hoods, consoles
- Polypropylene, PVC, PVDF, stainless steel



Fans and Ventilation . . .

Ductwork, Hoods, Fans, Blowers

- PVC • Polypropylene
- FRP
- Direct or belt drive



Downdraft Grinding Table . . .

For Metal Fines, Aerospace Metals

- Work surface is FRP, polypropylene, PVC, mild steel or stainless steel.
- Grinding table has integral Whirl/Wet® dust collector which provides 99%+ collection for metal fines and dusts, and is self-cleaning.
- Several tables can be ducted to one Whirl/Wet.



Tri-Packs Tower Media . . .

- Tri-Packs is the ultimate in random dump tower packing, providing maximum surface contact between gas and scrubbing liquid by facilitating continuous droplet formation throughout the packed bed. Low pressure drop non plugging.



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