

Air Pollution Control

Monroe Environmental® provides air pollution control technologies for a variety of air/gas treatment processes at nearly every type of industrial manufacturing plant and municipal treatment works, including those in the following fields:

Automotive Manufacturing | Chemical Processing | Food Processing | Glass & Plastics
Mining & Metals | Oil & Gas | Pulp & Paper | Steel Processing | Utilities/Energy | Waste Management



Packed Bed Scrubbers

Fume Scrubbers remove acids, soluble gasses, chemicals, and odor

- FRP, PVC, CPVC, polypropylene, PVDF, stainless steel, and specialty alloys
- Removal of H₂S, HCl, HF, SO₂, NH₃, HCN, HNO₃, formaldehyde, and many other soluble pollutants
- Vertical tower and cross-flow designs



Venturi Scrubbers

Wet-type Dust Collectors for PM (Particulate Matter) reduction

- Boiler, kiln, incinerator, and dryer gas
- Glass fiber and synthetic resins
- Explosive dusts/metals
- Machining or grinding dusts
- Wet, tacky, sticky solids
- Low profile Dual Throat Venturi Scrubber available



Multi-Stage Wet Scrubbers

Complete scrubbing solutions for multi-pollutant emissions reduction

- High temperature and volatile chemical processes
- RTO, boiler, dryer, kiln, and incinerator exhaust scrubbing
- PM (Particulate Matter) removal and acid gas neutralization



Quench Towers

Temperature control and conditioning of process gasses

- Evaporative cooling, condensing, and heat transfer
- Thermal treatment exhaust from incinerators, reactors, kilns, boilers, furnaces, and oxidizers
- Stainless steel, nickel alloys, and refractory linings



Carbon Adsorbers

Physical and chemical adsorption of VOCs and other gas-phase pollutants

- Industrial emissions from paint spraying, paper coating, plastic film coating, metal foil coating, rubber coating, and printing
- Odor control for food processing, industrial process applications, and wastewater treatment operations



Dust Collectors

High performance fabric filtration with reverse pulse cleaning

- Bulk solids handling
- Dry machining and grinding
- MQL machining
- CNC operations
- Welding/metal cutting operations
- NFPA compliant designs available



Mist Collectors

Mist, oil, smoke, and vapor removal from metal cutting fluids, metal processing coolants, processing oils, and other mist applications

- Metal cutting, forming, machining
- Parts washer exhaust
- Steel and aluminum processing
- Rolling mill exhaust
- Synthetic fiber processing



Wet Electrostatic Precipitators (WESPs)

Effective control of fine particulate matter emissions

- PM_{2.5} and sub-micron particulate
- Condensables and aerosols
- Opacity reduction and elimination
- Boiler and dryer emissions

Water & Wastewater Treatment

Monroe Environmental® provides liquid clarification technologies for a variety of water treatment processes at nearly every type of industrial manufacturing plant and municipal treatment works, including those in the following fields:

Automotive Manufacturing | Chemical Processing | Food Processing | Glass & Plastics
Mining & Metals | Oil & Gas | Pulp & Paper | Steel Processing | Utilities/Energy | Waste Management



Circular Clarifiers and Thickeners

New, rebuild, and retrofit designs

- Scraper and spiral scrapers
- Suction header and riser pipes
- Solids contact/high rate clarifier
- Flocculating clarifiers
- Sludge thickeners
- Variety of tank design options



Vertical Plate Clarifiers

Inclined Plate Clarifier for increased flow and reduced footprint

- Suspended solids and dissolved metals removal
- Industrial wastewater clarification
- Filter backwash clarification
- River water treatment
- Plate settler modules available



Horizontal Plate Clarifiers

Solids separation AND oil recovery in one tank

- TSS/TDS/metals removal
- Oil/water/FOG separation
- Can replace CPI Separators
- Cross-flow separator plates, non-clogging design
- Option for enhanced DAF separation



API Oil/Water Separators

Oil/water separation and recovery at industrial treatment plants

- Oil refineries
- Power plants
- Steel manufacturing
- Chemical manufacturing
- New, rebuild, and retrofit designs
- Variety of sludge collector designs



Oil Recovery Units

Belt-type oil skimmers for removal of free oils from wastewater at steel mills, refineries, petrochemical, and other heavy industrial plants

- Tramp oil from process liquids
- Recovers valuable oil products
- Endless belt design
- Heavy duty construction



Air Strippers

Removes VOCs, ammonia, odorous compounds, and other pollutants from contaminated water streams

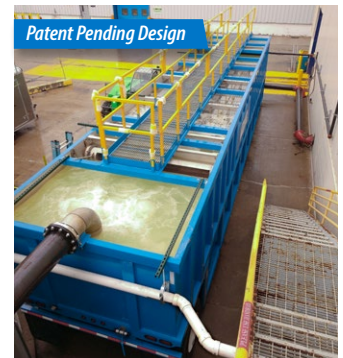
- Groundwater remediation at water treatment plants to remove VOCs
- Remediation of surface or ground water for use in industrial manufacturing processes
- Packed tower technology



Sludge Collectors

Efficient collection of separated solids/sludge with many designs available

- Chain and flight collectors
- Drag conveyors
- Hoseless sludge collectors
- Screw augers and mechanical agitators
- Mud valves
- Sludge rakes/pipes



X-Flo Mobile Clarifiers™

A complete solution for mobile wastewater treatment that removes solids and free oils

- High efficiency, non-clogging X-Flo plate separator cartridges
- Perfect for temporary job sites and/or bypass operations
- Produced water treatment
- Screw auger/sludge pump manifold