



ADVANCED AIR QUALITY SOLUTIONS FOR INDUSTRIAL APPLICATIONS



**CLEANER AIR.
SAFER WORKPLACES.
BETTER OUTCOMES.**



CLEANER AIR STARTS HERE.

At CECO Environmental, we make industrial operations safer, smarter, and more sustainable—one clean air system at a time.

We've installed more than 32,000 pollution control systems, removing over 4.4 billion pounds of harmful emissions each year—equivalent to 50 million cars off the road. From VOCs and CO to acid gases and particulate matter, our technologies help customers reduce emissions, reclaim valuable byproducts, and stay compliant. With a comprehensive portfolio of air pollution control technologies, CECO delivers tailored solutions to meet diverse industrial needs.

Industries We Serve

We partner with manufacturers and processors across sectors including:



**Metals
(Iron, Steel, Aluminum)**



**Chemicals, Fertilizers
and Pharmaceuticals**



Wood, Pulp and Paper



**Electronics and
Semiconductors**



**Electrical Equipment
and Batteries**



Food Production



Plastics and Rubber



**Mining and
Building Materials**



**Automotive and
Metal Finishing**



COMPREHENSIVE TECHNOLOGIES TO CONTROL & TREAT AIR EMISSIONS

Particulate Matter (PM) Control

We help industries go beyond compliance by capturing dust, recovering valuable materials, and improving in-plant air quality. From compact collectors to large-scale systems, our PM solutions are tailored to your operational and regulatory needs.

Products:

- **Cyclones:** Separate large dust particles using centrifugal force; ideal for high-volume dust applications and explosive environments.
- **Pulse Jet and Cartridge Dust Collectors:** Capture and contain airborne dust with customizable systems, HEPA filters, and PLC controls for optimal plant safety and compliance.
- **Wet Electrostatic Precipitators (WESP):** Remove fine particulates and acid aerosols with over 99.9% efficiency in space-constrained installations.





Volatile Organic Compounds (VOC), Hazardous Air Pollutants (HAP), Nitrogen Oxides (NOx), Carbon Monoxide (CO) and Odor Control

Our oxidation technologies eliminate VOCs, CO, odors, and HAPs from industrial exhaust streams—ensuring environmental compliance, safer workspaces, and lower operating costs.

Products:

- **Regenerative Thermal Oxidizers (RTOs):** Capture and destroy VOCs with 99% DRE and over 95% thermal energy recovery through ceramic heat exchangers
- **Direct-Fired Thermal Oxidizers (DFTOs):** Incinerate hazardous waste at high temperatures with advanced emission control and reduced fuel usage.
- **Rotor VOC Concentrators:** Increase oxidation efficiency and reduce operational costs for high-volume, low-solvent concentration exhaust streams.
- **Catalytic Oxidizers:** Enable lower-temperature combustion of VOCs using catalysts, reducing energy consumption.
- **Activated Carbon Towers:** Remove VOC's, HAPs, odors down to part per billion level.





NON-THERMAL VOC & ODOR ABATEMENT SOLUTIONS

Acids and Alkaline Gases, Nitrogen Oxides (NOx)

Scrubber systems are critical for managing air pollutants like acidic gases, nitrogen. Our scrubbing systems safely remove corrosive gases, mists, and NOx from challenging exhaust streams—even under explosive, sticky, or high-humidity conditions. Wet and dry options deliver efficient, reliable performance.

Products:

- **Packed Wet Scrubbers:** Dissolve and remove Acid and Alkali gases from heavily contaminated air streams using liquid-phase absorption.
- **Dry Scrubbers:** Remove acid gases, heavy metals, VOC's, Dioxins and Furans without water use.
- **Wet Mercury Scrubbers:** Eradicate toxic mercury at high efficiencies with high-efficiency sorbent polymer composite modules, ensuring compliance and seamless integration.
- **Beta NOx (r) Multi-stage Wet Scrubbers:** Chemically abate NOx gases from air streams using liquid-phase absorption.
- **Tray Scrubbers:** Maximize removal of volatile, water-soluble compounds such as alcohols and ketones while minimizing water usage.
- **Ionizing Wet Scrubbers:** Unique technology that combines the benefits of a WESP and a Packed bed scrubber to remove solids, liquids and contaminant gases, in a compact footprint.
- **Aerators & Degasifiers:** Strip VOCs, H2S, CO₂, and ammonia from process water and wastewater for cleaner discharge and improved safety.



Condensable Particulate Matter (CPM)

CPM forms when hot exhaust cools, creating fine particles that evade conventional controls. Our advanced scrubbers effectively remove these emissions to protect air quality and meet evolving standards.

Products:

- **Fiber Bed Mist Eliminators:** Removal of submicron condensable mist using Brownian diffusion, to meet the smallest ranges of mist.
- **Venturi Scrubbers:** Capture fine particulate and gaseous pollutants using high-velocity streams—compact and ideal for limited-space installations.
- **MicroMist Scrubbers:** Remove submicron particulate, condensables, and trace metals with low energy use and reduced liquid waste—engineered for process-intensive industries.





Mists and Aerosol

Liquid mists and aerosols can cause corrosion, health hazards, and equipment damage. Our mist elimination technologies ensure clean gas output and regulatory compliance.

Products:

- **Mist Eliminators:** Remove entrained liquid droplets and aerosols from gas streams to meet environmental compliance and reduce corrosion.
- **MicroMist Scrubbers:** Target submicron particles and condensables using low-energy, high-efficiency operation—ideal for chemical and electronics applications.
- **Wet Electrostatic Precipitators (WESP):** Eliminate submicron aerosols and particulates with over 99.9% efficiency.





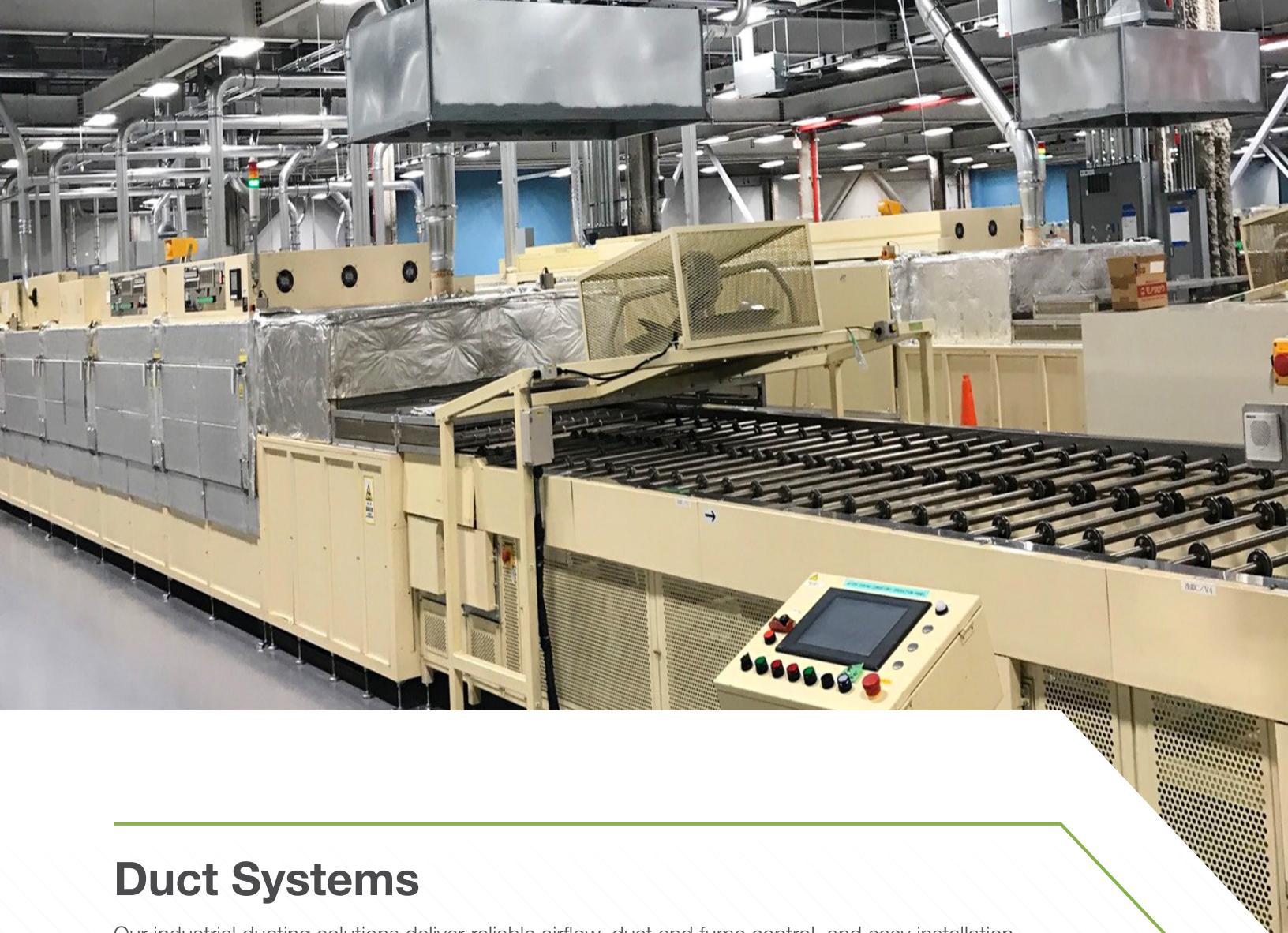
Custom Solutions for the Metals Industry

We engineer air-handling systems for the metals industry that improve process control, reduce emissions, and optimize strip cooling and drying for better product quality and efficiency.

Products:

- **Fume Exhaust Systems:** Control oil mist, VOCs, and particulate emissions from rolling mills and process lines—enhancing compliance and plant uptime.
- **JetStar® Strip Cooling and Drying:** Accelerate cooling and ensure uniform drying of heavy-gauge metal strips—reducing corrosion and improving product quality.
- **Heavy Oil Scrubbers:** Product recovery and VOC abatement for rolling mill oils.





Duct Systems

Our industrial ducting solutions deliver reliable airflow, dust and fume control, and easy installation—even in harsh or abrasive environments.

Products:

- **Modular Clamp-Together Duct Systems:** Fast-install, tool-free assemblies designed for flexible layouts and quick reconfiguration.
- **FM Approved and Fluoropolymer Ducting:** Corrosion and fire-resistant ducting for harshest conditions.
- **Flanged Duct Systems:** Rugged, heavy-gauge systems for abrasive or high-load environments requiring durable air-handling infrastructure.





CECO TURNKEY SERVICES

From design to maintenance, CECO offers full-service support to maximize system performance and uptime.

Experience a seamless project journey with our fully integrated solutions—one contract, one team, and complete engineering alignment under a single, responsible partner. With dedicated project management, unified warranties, and a focus on efficiency, we deliver measurable cost savings, optimized performance, and the dependable, long-term support you expect from an industry leader.



Design, integration, and installation



Preventive maintenance to avoid downtime



Retrofits and performance upgrades



Fast repairs and parts when you need them

Ready to achieve cleaner, more efficient operations?
Explore our advanced air quality solutions at cecoenviro.com.

CECO
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