

# **Industrial Environmental Solutions**

Gas Cleaning and Solvent Purification













#### **Our Focus**

Dürr Megtec is a long-recognized world-class supplier of environmental solutions for virtually any application where air pollution control is required. With a strong heritage of technological development and innovative solutions, Dürr Megtec provides reliable and energy-saving systems for new or upgrade applications, simple or complex projects.

#### **Our Experience**

With a full suite of multi-pollutant control solutions, Dürr Megtec's experience covers a truly wide spectrum of industrial manufacturing processes, including:

- Automotive/Industrial Painting
- Cement & Minerals
- Chemical
- Coating & Laminating
- Composites & Carbon Fiber
- Electronics
- Energy Storage
- Ethanol & Biofuels
- Food
- Incineration
- Iron & Steel

- Membranes
- Mining & Metallurgical
- Oil & gas
- Petrochemical/Refining
- Pharmaceutical
- Printing & Packaging
- Pulp & Paper
- Wastewater Treatment
- Wood Products.

#### **Our Support**

The Dürr Megtec Energy and Aftermarket Services team brings decades of engineering, manufacturing, and service experience to a broad range of process and manufacturing industries. Because people are our most valuable asset, we make sure we have the best engineering minds available for you. Whether it is providing equipment upgrades, additions, refurbishing, or relocation, our engineering experts are ready to assist you.

Our team of experts provide process optimization services that can help you reduce operating costs and more effectively meet environmental requirements. They can also recommend equipment replacement or upgrades that extend the life of your equipment. And, with more than 150 service professionals located worldwide, Dürr Megtec is available to provide excellence in customer service, keeping you stocked with the right parts for your inventory or 24/7 availability to handle any emergency.

### **Complete Systems For Multi-Pollutant Emissions Control**



Turnkey supply: RTO, rotary drum dryers, cooler, cyclones and interconnecting ductwork and supports

As a single-source supplier, Dürr Megtec can provide a complete project, combining design, engineering, procurement, supply and construction into one seamless and integrated project. For our customers, this means single-point accountability and overall project risk reduction.

A key to continued success of Dürr Megtec is the depth and breadth of our applications engineers and cross-disciplinary teams. Whatever your environmental solution requirement, however complex it may be, our engineers will work to find the right solution — a solution that can be implemented within the constraints of your business goals.

In addition to the functional disciplines of engineering, our team is deep in applications and process knowhow. From distillation systems to gas purification, by adsorption with zeolites or carbon beds, or by wet, dry or semi-dry absorbers for acid gas removal, or with fabric filters or electrostatic precipitators for particulate capture, our staff of engineers possess expertise in a variety of applications.

Our team of thermal air specialists can provide you with a full menu of heat recovery options to ensure that your oxidation systems and production plants are operated in the most energy efficient and cost effective manner possible. Whether your process uses electricity, steam, hot air, or thermal fluids, Dürr Megtec can integrate the equipment you need to help reduce your operating costs and carbon footprint.

We do not just stop with technology solutions. We help implement them at your plant through our expert project management teams. Our proven experience is demonstrated by the execution of thousands of projects — meeting performance objectives on time and within budget.

We have executed multi-pollutant control driven complex projects in the fossil, biomass, chemical waste, sewage sludge and municipal waste combustion applications.

If solutions require outside technologies or equipment, Dürr Megtec draws upon a long list of trusted suppliers, integrating these into the a total solution with seamless project management.

### **Oxidation Systems**



Regenerative thermal oxidizers with switch valve

When volatile organic compounds (VOCs) exist in a solvent-laden exhaust air stream of a manufacturing process, they are either collected for recovery for potential re-use or they need to be destroyed. When the solvents have little or no recovery value or where there are concerns for disposal of toxic compounds, a destruction technology such as thermal or catalytic oxidation may be the best option.

#### Regenerative thermal oxidizers (RTO)

Dürr Megtec offers a range of RTO designs and configurations to meet your needs and provide the best solution for your application.

Our designs include a two-chamber, single vessel RTO with a switch valve that keeps cleaned air totally separate from dirty process air.

We offer an economically designed RTO for low air flows that incorporates two individual poppet valves in a two-chamber, single vessel design. The unique, compact system meets the needs of a wide variety of applications while providing efficiency and reliability at an affordable capital investment.

Where a multi-canister oxidizer is required, we offer a modular, highly flexible design for certain applications. With its innovative compact design, the unit features low operating and capital costs with effective VOC destruction.

We also offer a unique, modularly designed singlebed, compact, flameless RTO with low operating costs. The oxidation reactions which purify the process exhaust occur entirely within the heat exchange media. There is no open flame and therefore, none of the unwanted by-products of flame combustion.

Our RTOs are designed for low to high volume air flows with high thermal and VOC destruction efficiencies. In many applications, the system will run in a self-sustaining mode whereby no additional fuel is required to destroy VOCs.

We also accommodate customized application design needs, with extended residence times, gas scrubbers for off-gas clean-up, concentrators, and exotic materials of construction.



RTO with switch valve



Multi-canister RTO

#### Regenerative catalytic oxidizers

Regenerative catalytic oxidizers (RCOs) combine the low operating temperature of catalytic oxidizers with the heat storage and recovery characteristics of a regenerative thermal oxidizer (RTO). This combination provides the lowest operating cost VOC oxidation technology available for applications with low VOC concentrations.

Dürr Megtec uses its years of experience in catalyst development, application and testing to help you determine if an RCO is the correct equipment for your application.

#### RTO to RCO retrofit

While your existing RTO system may have been designed for optimum thermal efficiency at the time it was manufactured, new advances in media and catalysts now give us more options for many exhaust streams that lend themselves to catalytic technology. In some cases, by converting from RTO to RCO, our customers can recognize a 50% reduction in fuel usage. Many actually achieve an operating condition (self-sustain) with no additional fuel required for oxidation.

#### Catalytic recuperative oxidizers

Dürr Megtec offers catalytic recuperative oxidizers as a solution for certain process industrial applications.

The use of catalysts can reduce the temperature at which chemical reactions occur that convert VOCs into carbon dioxide and water. The result is lower temperature operation which not only reduces operating costs, but also extends the useful life of the equipment. Dürr Megtec offers flexible designs and field-tested, proprietary catalyst formulations.



Economical RTO design with poppet valves



Single-bed RTO with concentrator



Thermal and catalytic oxidation are the best options to destroy VOCs.



Catalytic recuperative oxidizer

### Wet and Dry Electrostatic Precipitators

Dürr Megtec offers proven, reliable, highly efficient wet and dry electrostatic precipitators (ESPs) for metallurgical, coal, oil and biomass combustion, as well as waste incineration applications.

With our complete suite of emissions control solutions, we can recommend wet ESPs or scrubbers for achieving effective multi-pollutant control, as well as the optimum locations for dry ESPs as efficient, low pressure drop particle separators, in conjunction with downstream baghouses.

#### Wet electrostatic precipitators capture submicron particulate, heavy metals, acid mists and fumes from process gas streams

Wet electrostatic precipitators are a proven polishing filter for the reduction of sulfuric acid mist and fine particulates, condensed metal fumes and organics, especially where a wet solution is preferred for the maximization of condensible particulate capture. Our experience includes wood products and pelletization applications, petrochemical plants, acid regeneration and metallurgical sulfuric acid plants, petroleum refineries and other waste-to-energy applications.

We offer all-steel and all-alloy designs with materials chosen based on specific applications. Our rigid discharge electrodes (RDE) are designed based on years of research and commercial experience to match the specific application. Our modular designs are shop fabricated, allowing for easy transport of wet ESP modules.

A mobile gas cleaning pilot system is available for on-site performance demonstrations and data collection. It is designed to analyze outlet emissions at various operating conditions. The wet ESP pilot includes advanced switch mode power supply (SMPS) technology, variable frequency drive and fully automated PLC and HMI controls.

# Dry electrostatic precipitators for efficient particulate control

Dry electrostatic precipitators are one of the most effective and reliable ways to control particulate emissions in diverse applications, such as cement, minerals, ethanol and biofuels, chemical, iron and steel, mining and metallurgical, and wood products, among others.

Our ESP technologies feature reliable discharge electrode designs, allowing our customers to operate modern ESPs with high reliability and outstanding emissions control performance.

Our aftermarket experience includes upgrades and improvements of dry ESPs of various commercial designs. Reliable rapper systems, collector plates and discharge electrodes are designed to provide optimum collection efficiency. And our automatic voltage controllers (AVC) are some of the fastest reacting power supply controllers in the market today.



Wet ESP on mineral wool production

### **Pulse Jet Fabric Filters**

#### Pulse jet fabric filters (baghouses) for costeffective particulate emissions control

Dürr Megtec provides cost-effective control of particulate emissions with pulse jet fabric filter technology.

Long-bag technology has been in commercial operation for more than ten years, with bags often reaching a length of ten meters. In applications where an existing ESP can no longer meet plant emissions requirements, long bag technology has enabled successful conversion of an existing dry ESP to a pulse jet fabric filter.



Fabric filter for particulate control

#### Fabric filters for multi-pollutant control

Our focus on providing systems solutions for multipollutant control has led to such innovative designs as locating a clean-side SCR for nitrogen oxides ( $NO_X$ ) control after a spray dryer absorber and fabric filter for sulfur dioxide ( $SO_2$ ) and particulate control. This strategy includes both the traditional collection of ash or particulates, as well as hazardous air pollutants (HAPs).

Integrating fabric filters with our sorbent injection and flue gas desulfurization (FGD) technologies also provides low HAP emissions in a variety of applications. Examples of sorbents used with fabric filters include powdered activated carbon for mercury control and trona or lime for control of SO<sub>2</sub>. Trona or lime may also be the economic choice for SO<sub>2</sub> control on certain applications.

# Low-cost solution for reduction of acid gas levels

Dürr Megtec offers dry sorbent injection (DSI) systems in combination with a downstream fabric filter or dry ESP to support a multi-pollutant control strategy.

# Simple and efficient method for dust collection

Dürr Megtec offers multiple-tube cyclonic dust collectors that combine low maintenance, long collecting tube life, reliable operation and a modular design with the versatility for use in a variety of applications requiring a reduction in particulate, or can be used as a pre-cleaner to lighten the dust load on a secondary collector.

We provide complete systems, replacement parts and component rebuilds.

### **Spray Dryer Absorbers and Wet Scrubbers**

## Treatment of industrial process gas streams for the removal of particulate and acid gases

Dürr Megtec offers spray dryer absorber (SDA) technology for SO<sub>X</sub>, HCl and HF removal, with applications in biofuels, incineration, iron and steel, mining and metallurgical, cement and waste-to-energy, among others.. When integrated with our pulse jet fabric filter and dry sorbent injection (DSI) technologies utilizing powdered activated carbon (PAC) injection, our SDAs are part of an integrated approach to high-performance particulate, mercury and acid gas emissions control. With dozens of reference plants, our SDA is especially effective in municipal and solid waste incineration, power generation, cement and metals applications.

Our SDAs provide effective control of  $SO_X$  and HCl by the injection of calcium, potassium or sodium-based slurries. Unlike wet scrubbers, all water evaporates, with no liquid waste stream generated. The dry materials often can be recycled back into the system, avoiding the generation of a waste stream. We offer a variety of proven acid gas absorber designs, specifically suited for high-efficiency removal of acid gases of high, medium or low concentrations. Spray tower, packed tower or tray tower designs are available. The goal is optimum emissions reduction and sorbent utilization at affordable pressure drop.

For gas streams containing acid gas and particulate, the Turbotak™ scrubber controls these contaminants in a single system with minimal pressure drop, low water usage and low maintenance.

We have considerable experience with wet particulate scrubbers for separating relatively coarse particulate from a flue-gas stream at affordable pressure drops. For applications with high particulate loading, the venturi scrubber offers constant pressure drop, which equates to constant removal efficiency. A variety of venturi scrubber designs are available to suit a wide range of applications, including hot or corrosive gases and abrasive or sticky dust.

We offer pilot equipment rentals and test programs designed to optimize full-scale equipment performance, customized for your specific application. The pilot plant rental includes a pilot control room, venturi scrubber and separator.

Our wet scrubbing expertise includes many reference plants, including waste-to-energy, hazardous waste combustion, chemical, mining and metallurgical applications.

To meet stringent requirements for fine particulate, heavy metals and opacity control, these wet scrubbers or acid gas absorbers are often combined with a wet electrostatic precipitator.



Packed towers for gas absorption



Venturi scrubber on coal-fired boiler

### **Solvent Recovery Systems**

#### Regenerative carbon adsorption systems for removal, recovery and purification of solvents from process exhaust air streams

Dürr Megtec supplies proprietary systems for high efficiency removal, recovery and purification of solvents from process exhaust air streams.

Solvent recovery using carbon adsorption offers an alternative to destruction technologies for VOC emissions control. Solvent recovery is particularly advantageous in applications where the quantity of solvents is large, the value of the solvents is high, or the solvents contain chlorine, bromine, fluorine or nitrogen as no secondary pollutants are produced. Dürr Megtec solvent recovery systems offer an economical way to reduce emissions and address emissions control requirements.

Dürr Megtec solvent recovery systems include steam regenerated carbon adsorption, condensation, and packed bed fluid scrubbing systems to remove and recover the solvents from the process stream.

Gas purification is another application of the regenerative adsorption technology. Dürr Megtec provides systems to remove benzene, toluene and xylenes from acid gas, and also for removing unwanted organics from process exhaust gases upstream of catalysts.

#### Non-regenerative carbon adsorbers

Dürr Megtec offers a range of non-regenerative carbon adsorbers suitable for treating low mass emissions of a wide range of pollutants, from volatile organic compounds/hazardous air pollutants/solvents to odors and hydrogen sulfide. Once the carbon is saturated with the contaminants, the carbon is replaced with new carbon.

Non-regenerative carbon adsorbers can provide a low capital cost solution in applications where total annual emissions is less than 10 tons.



Regenerative carbon adsorption system



Large carbon adsorption solvent recovery system



Non-regenerative carbon adsorber

### **Evaporative Gas Cooling and Conditioning Systems**

# Systems for improvement of baghouse performance, enhanced ESP performance and protection of process and air pollution control equipment

The Dürr Megtec evaporative gas cooling and conditioning system helps to protect your downstream equipment, enhance air pollution control performance, reduce gas volumes and increase production capacity.

Dürr Megtec's Turbotak™ atomizing nozzles introduce a controlled amount of finely atomized water into the hot gas stream to reduce and/or maintain gas temperature. The water evaporates, while absorbing heat from the gases, for free-flowing dust, zero liquid discharge, and minimal or no wall buildup.

Our proven design has been used in hundreds of installations. Incinerator, kiln or furnace exhaust gases are cooled prior to baghouse filtration, reducing the volume of exhaust gas to be filtered and thereby protecting the baghouse.

The Dürr Megtec systems condition high resistivity dust particulates (glass, cement, etc.) by raising humidity, enhancing the collection efficiency of baghouses/electrostatic precipitators.

Dürr Megtec can provide new installations or retrofits and upgrades to existing systems, as well as other components and services such as spray nozzles, controls, pumps and cooling tower fabrication.

#### Turbotak<sup>™</sup> and SoniCore<sup>™</sup> atomizing nozzles

Used in hundreds of industrial applications, Turbotak<sup>TM</sup> and SoniCore<sup>TM</sup> nozzles atomize liquids to fine (5  $\mu$ m to 60  $\mu$ m SMD) droplets. The air-atomized nozzles feature a proprietary, two-phase design for superior control of droplet size and spray distribution.

The combination of the small droplets, the distribution pattern and rugged construction make them ideal for a wide variety of applications, including evaporative gas cooling, spray drying, wet and semi-dry scrubbing, performance enhancement of air pollution control systems, dust suppression, as well as combustion and incineration.



Evaporative gas cooling system in cement plant



Atomizing nozzles

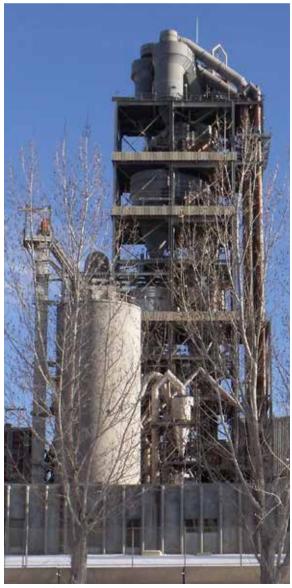
## **NO<sub>x</sub> Control Solutions**

# Selective catalytic reduction (SCR) for high performance $NO_x$ control

Dürr Megtec offers a competitive suite of  $NO_{\chi}$  control solutions.

High-performance SCR systems require thorough blending of ammonia with the  $\mathrm{NO}_{\mathrm{X}}$ -laden gas. Our ammonia injection grid and mixing systems deliver the high-performance required over the entire load range, simply and robustly, with minimal maintenance requirements.

Through our array of SCR reactor and flue design options, we can match our overall system design to the available space on site.



Cement plant

# Selective non-catalytic reduction (SNCR) for cost effective $NO_x$ control

We are sensitive to the needs of balancing capital and operating costs with optimum performance and availability. In certain applications, our selective non-catalytic reduction (SNCR) technology can be deployed as a relatively low capital cost solution. Our SNCR technology utilizes custom-designed Turbotak atomizing nozzles to inject ammonia or urea solutions directly into the hot gas to chemically reduce  $\rm NO_{\rm x}$  to nitrogen and water. In applications where site specific performance data is necessary, we can conduct a full-scale demonstration of the effectiveness of an SNCR solution.

Dürr Megtec offers pilot testing at its manufacturing facility to determine the feasibility of SNCR for the control of  $\mathrm{NO}_{\mathrm{X}}$  emissions. Testing can be conducted using urea and ammonia injection to evaluate the best choice of reagent for your process, equipment sizing for full-scale installation and injection location. Equipment provided for performance testing includes injection nozzles, pump skid and controls.

We continue to expand our database in chemical production applications such as glass and carbon black manufacturing through full-scale demonstrations. Our goals are to maximize NO<sub>X</sub> control performance while optimizing chemical utilization with low ammonia consumption and the lowest levels of ammonia slip. We utilize both predictive and scale modeling techniques to assure optimum gas flow distribution to achieve this goal.



Turbota $k^{TM}$  atomizing nozzles

### **Distillation, Separation and Purification Systems**

# Distillation systems for separation and purification of solvents

Dürr Megtec designs, builds and installs distillation systems to separate and purify solvents for reuse after recovery from the process stream. Solvents can be made suitable for recycle and reuse in a variety of applications, including pharmaceutical and other specialty industries. Continuous or batch processes are available, operating under vacuum or atmospheric pressure, depending on the solvents and purity levels required.

Systems can also be supplied to treat stand-alone purification requirements such as drying of solvents and removing organics from waste water to make the water suitable for disposal.

Systems are generally supplied preassembled on skids for ease of equipment installation, reducing installation time and cost.



Distillation system at pharmaceutical plant



Pre-assembled distillation system on skids

### **Supporting our Customers with Aftermarket Services**

# Realize the benefits of process energy solutions from our broad array of Aftermarket Services.

Dürr Megtec's team of engineers and technical support representatives bring decades of engineering, manufacturing and service experience for your application. Through every phase of the project, from engineering studies, project management, to project installation, we take the time to determine your needs and recommend the solution best suited for your application. We listen, we work to understand the challenge, and we provide the right long-term solution.

It doesn't stop at project completion. We are available to supply parts and technical support. We have more than 110 technical service professionals located worldwide. They can help to keep your existing equipment running efficiently by providing equipment upgrades, preventive maintenance, technical support and spare parts.





#### Upgrades and rebuilds

- Electrostatic precipitator upgrades
- Solvent recovery and distillation system upgrades
- Oxidizer rebuilds
- Control panel and instrumentation upgrades
- Burner/plenum retrofits

#### Parts and technical support

- Replacement and spare parts
- Technical support representatives
- 24/7 global service and parts support

#### Preventive maintenance services

- Equipment maintenance and upgrades
- Equipment performance optimization
- Operating cost reduction services
- Regulatory compliance assistance

#### Process and energy optimization services

- Custom secondary heat recovery (air, glycol, water, steam, oil)
- Energy usage analysis and energy cost reduction
- Process energy audits
- Process heating/cooling analysis

#### Catalyst and carbon testing

- Bead and monolith catalyst retrofits to any catalytic oxidizer
- In-house testing as required by MACT standards

# ProcessMonitor<sup>™</sup> data acquisition and reporting system

- Secure, managed remote RTO/RCO monitoring and support
- Observe, store and report equipment operational data

#### Thermal air management

• Air flow dampers, burner systems, controls

#### Turnkey installation services

- Installation supervision and project management services
- Rigging, piping, electrical, and assembly services
- Ductwork fabrication, insulation and installation of ductwork
- Concrete and structural steel work
- Process interface and safety systems

Emission/Process	Technology Solution	
VOCs/CO/HAPs	Oxidizers	Regenerative Thermal (RTO) Regenerative Catalytic (RCO)
		Recuperative Catalytic
	Solvent Recovery Systems	Regenerative Carbon Adsorption
		Concentrator Systems
		Condensation Systems
	Wet Scrubbers	Spray, Tray and Packed Towers
	Adsorption Systems	Non-Regenerative Carbon Adsorption
		Molecular Sieves
		Zeolite
	Biological Abatement	Bioscrubbers/Bioreactors
Particulate	Dry Electrostatic Precipitators (ESP)	
	Cyclonic Dust Collectors	
	Pulse Jet Fabric Filters (Baghouses)	
	Wet Electrostatic Precipitators	
	Wet Particulate Scrubbers	
NO <sub>x</sub>	Selective Catalytic Reduction (SCR) Systems	
	Selective Non-Catalytic Reduction (SNCR) Systems	
SO₂/Acid Gases	Dry Sorbent Injection Systems	
		yer Absorbers
	Wet Scrubbers/ Acid Gas Absorbers	Atomizing Spray Scrubbers  Spray, Tray and Packed Towers
H <sub>2</sub> S	Non-Regenerative Carbon Adsorption	
A sid Baises	Dry Sorbent	Injection Systems
Acid Mists	Wet Electros	tatic Precipitators
Mercury	Activated Carbon Injection Systems	
Dioxins & Furans	Activated Carbon Injection Systems	
Dioxilis & Lutalis	Evaporative Gas Cooling	g and Conditioning Systems
Odor	Oxidizers	Regenerative Thermal (RTO) Regenerative Catalytic (RCO)
	Oxidizers	Recuperative Catalytic
	Adsorption Systems	Non-Regenerative Carbon Adsorption
		Zeolite
	Biological Abatement	Bioscrubbers/Bioreactors
Liquid Solvents	Distillation and Purification	Stripping Columns
		Purification Columns Rectification Columns
Heat Recovery	Custom Secondary (Air, Glycol, Water, Steam, Oil)	
	Prepackaged, Stand-alone	
	Waste Heat Boilers	
Flue Gas Temperature Control	Evaporative Gas Cooling and Conditioning Systems	
Data Acquisition & Reporting	Remote RTO/RCO Monitoring & Support	
	Observe, Store and Report Equipment Operational Data	

#### Industries With Corresponding Products

#### **Automotive/Industrial Painting**

Regenerative Thermal Oxidizers
Thermal Recuperative Oxidizers
Biological Abatement Systems
Heat Recovery Systems
Concentrators
Solvent Recovery Systems
Distillation & Purification Systems
Non-Regenerative Carbon Systems
Recuperative Catalytic Oxidizers

#### **Cement & Minerals**

Evaporative Gas Cooling Systems Pulse Jet Fabric Filters (Baghouses) Activated Carbon Injection Systems Dry Sorbent Injection Systems SCR Systems SNCR Systems Spray Dryer Absorbers Waste Fuel Combustion Nozzles Dry Electrostatic Precipitators Cyclonic Dust Collectors Regenerative Thermal Oxidizers

#### Chemical

Adsorption Systems
Solvent Recovery Systems
Distillation & Purification Systems
Pulse Jet Fabric Filters (Baghouses)
Wet Electrostatic Precipitators
Wet Scrubbers/Gas Absorbers
Wet Particulate Scrubbers
Dry Electrostatic Precipitators
Regenerative Thermal Oxidizers
Recuperative Catalytic Oxidizers
Thermal Recuperative Oxidizers
Concentrators
Non-Regenerative Carbon Systems
Biofilters
Heat Recovery

#### **Coating & Laminating**

Regenerative Thermal Oxidizers
Recuperative Catalytic Oxidizers
Solvent Recovery Systems
Distillation & Purification Systems
Wet Scrubbers
Thermal Recuperative Oxidizers
Pulse Jet Fabric Filters (Baghouses)
Concentrators
Non-Regenerative Carbon Systems
Biofilters
Heat Recovery

#### **Composites & Carbon Fiber**

Regenerative Thermal Oxidizers Direct & Thermal Recuperative Oxidizers Solvent Recovery Systems Distillation & Purification Systems Heat Recovery

#### **Electronics**

Regenerative Thermal Oxidizers Solvent Recovery Systems Distillation & Purification Systems Concentrators Wet Scrubbers Thermal Recuperative Oxidizers Heat Recovery

#### **Energy Storage**

Solvent Recovery Systems
Distillation & Purification Systems
Non-Regenerative Carbon Adsorption
Regenerative Thermal Oxidizers
Concentrators
Condensers

#### **Ethanol & Biofuels**

Pulse Jet Fabric Filters (Baghouses)
Wet Electrostatic Precipitators
Wet Scrubbers/Gas Absorbers
Wet Particulate Scrubbers
Spray Dryer Absorbers
Dry Electrostatic Precipitators
Distillation & Purification Systems
Evaporative Gas Cooling Systems
Regenerative Thermal Oxidizers
Thermal Recuperative Oxidizers
Concentrators

#### Food

Regenerative Thermal Oxidizers Recuperative Catalytic Oxidizers Thermal Recuperative Oxidizers Evaporative Gas Cooling Systems Wet Electrostatic Precipitators Wet Particulate Scrubbers Wet Scrubbers/Gas Absorbers Spray Dryer Absorbers

#### Incineration

Adsorption Systems
Pulse Jet Fabric Filters (Baghouses)
Wet Electrostatic Precipitators
Wet Particulate Scrubbers
Wet Scrubbers
Dry Sorbent Injection Systems
Regenerative Thermal Oxidizers

Waste Heat Boilers

#### Iron & Steel

Evaporative Gas Cooling Systems Adsorption Systems Dry Sorbent Injection Systems Pulse Jet Fabric Filters (Baghouses) Wet Electrostatic Precipitators Dry Electrostatic Precipitators Wet Particulate Scrubbers Wet Scrubbers Spray Dryer Absorbers Cyclonic Dust Collectors Heat Recovery

#### **Membranes**

Regenerative Thermal Oxidizers Solvent Recovery Systems Distillation & Purification Systems

#### **Mining & Metallurgical**

Evaporative Gas Cooling Systems Wet Electrostatic Precipitators Wet Particulate Scrubbers Wet Scrubbers/Gas Absorbers Cyclonic Dust Collectors Spray Dryer Absorbers Dry Electrostatic Precipitators Regenerative Thermal Oxidizers Thermal Recuperative Oxidizers

#### Oil & Gas

Adsorption Systems
Wet Electrostatic Precipitators
Regenerative Thermal Oxidizers
Wet Scrubbers
Solvent Recovery Systems
Distillation & Purification Systems

#### Petrochemical/Refining

Wet Electrostatic Precipitators
Wet Scrubbers
Wet Particulate Scrubbers
Regenerative Thermal Oxidizers
Thermal Recuperative Oxidizers
Adsorption Systems
Solvent Recovery Systems
Distillation & Purification Systems
Evaporative Gas Cooling Systems
Dry Electrostatic Precipitators
Pulse Jet Fabric Filters (Baghouses)
Heat Recovery

#### **Pharmaceutical**

Adsorption Systems
Pulse Jet Fabric Filters (Baghouses)
Solvent Recovery Systems
Distillation & Purification Systems
Wet Electrostatic Precipitators
Wet Scrubbers/Gas Absorbers
Wet Particulate Scrubbers
Regenerative Thermal Oxidizers
Catalytic Oxidizers
Solvent Recovery Systems
Distillation & Purification Systems
Biofilters

#### **Printing & Packaging**

Regenerative Thermal Oxidizers
Heat Recovery Systems
Solvent Recovery Systems
Distillation & Purification Systems
Non-Regenerative Carbon Systems
Biofilters
Concentrators
Recuperative Catalytic Oxidizers
Thermal Recuperative Oxidizers

#### Pulp & Paper

Pulse Jet Fabric Filters (Baghouses)
Wet Electrostatic Precipitators
Wet Scrubbers/Gas Absorbers
Wet Particulate Scrubbers
SNCR Systems
Dry Electrostatic Precipitators
Dry Sorbent Injection Systems
Cyclonic Dust Collectors
Regenerative Thermal Oxidizers
Recuperative Catalytic Oxidizers

#### **Wastewater Treatment**

Distillation & Purification Systems Regenerative Thermal Oxidizers

#### **Wood Products**

Pulse Jet Fabric Filters (Baghouses) Wet Electrostatic Precipitators Wet Particulate Scrubbers Regenerative Catalytic Oxidizers Regenerative Thermal Oxidizers SNCR Systems Dry Electrostatic Precipitators Cyclonic Dust Collectors



#### Dürr Systems, Inc.

830 Prosper Street De Pere, Wisconsin, 54115 USA Phone: +1 920.336.5715

#### www.durr-megtec.com

Subject to change. The information in this brochure contains only general descriptions or performance characteristics which may vary in actual cases. The requested performance parameters shall be binding only if they are explicitly agreed to within the sales contract. © Dürr 2020

Turbotak and SoniCore are registered trademarks of Dürr Systems, Inc.

© Dürr 2020. All rights reserved.

For more information or to contact us, visit our website at www.durr-megtec.com