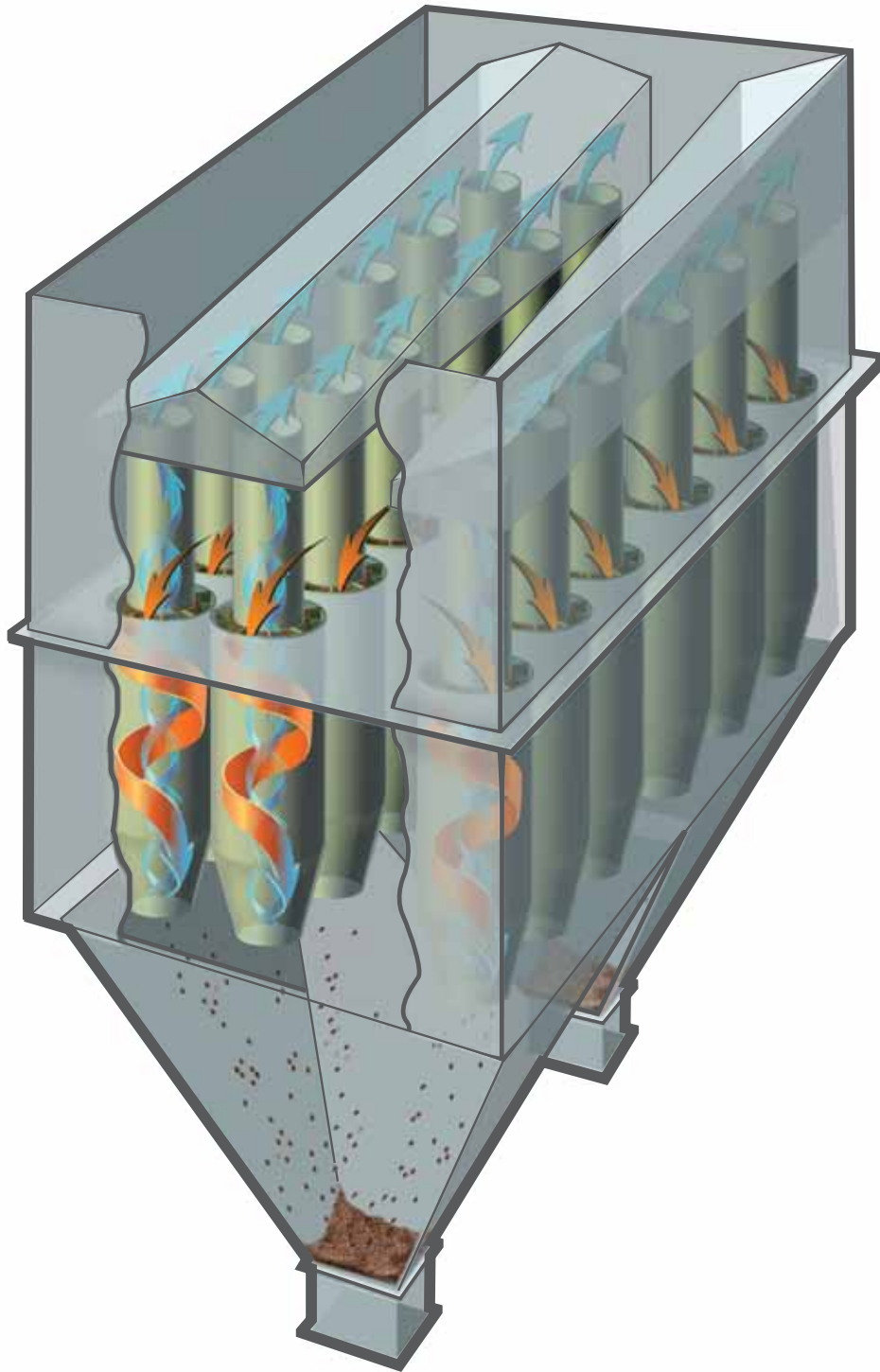


Mechanical Dust Collectors





ProcessBarron is a leader in the design, fabrication, installation, maintenance, and repair of air, flue gas and bulk materials handling system equipment. From our production facilities near Birmingham, Alabama, we offer a wide range of manufactured products and turnkey services to our customers in a variety of industries including power, biomass, pulp and paper, iron and steel, cement, lime, textile, foundry and mining.



COMPANY EXPERIENCE

Since the early 1970's, ProcessBarron has been designing, fabricating, installing and maintaining mechanical dust collectors. In that time, we have established one of the best known and widely respected reputations in the United States. Currently, there are over 600 mechanical dust collector installations in the United States and around the world that have been provided by our company. Our extensive customer list has been built by consistently providing dependable products along with industry knowledge and resourcefulness.

Although the mechanical dust collector is a simple device with few operating parts, ProcessBarron is constantly striving to improve its ability to perform. In fact, we believe that our company is the only one in the United States that is still conducting field and laboratory testing to improve the design of the mechanical dust collector.

COMPANY CAPABILITIES

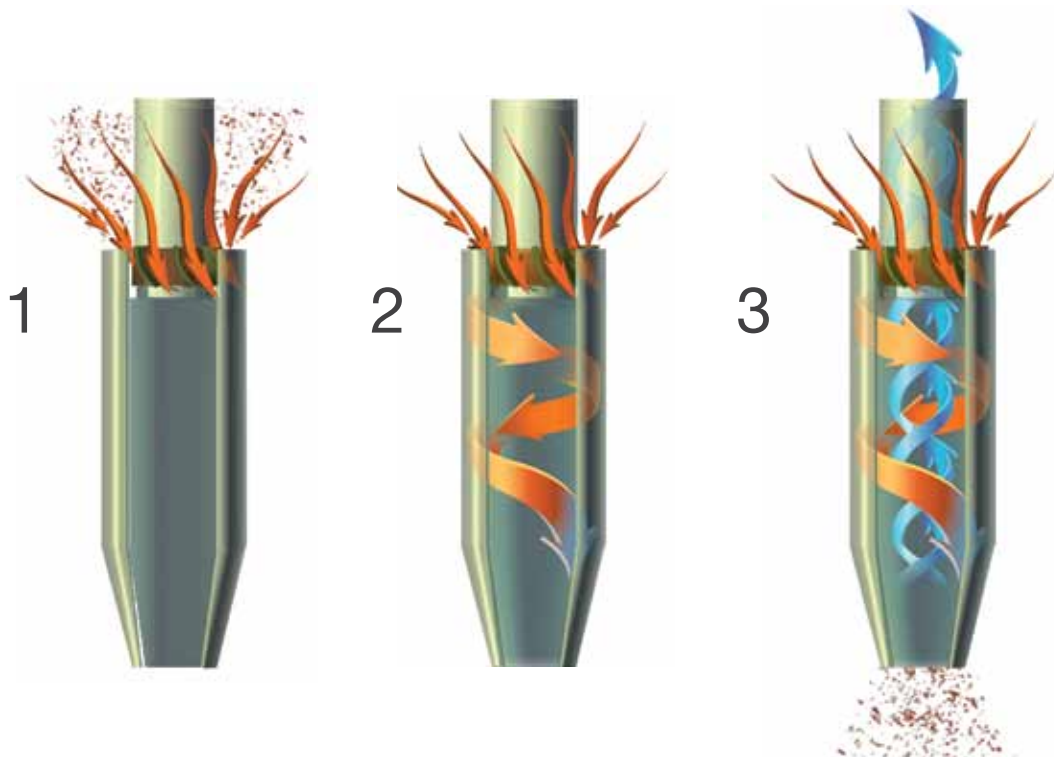
Our expertise comfortably covers complete new applications, retrofitting upgrade equipment into existing spaces and providing readily available parts for any emergency. With over thirty years of experience, ProcessBarron is just a phone call away. Make your next mechanical dust collector project a success by making the call to us today...

WHAT IS A DUST COLLECTOR?

A mechanical dust collector consists of a square or rectangular housing containing a number of collecting tube assemblies, each one acting as an individual centrifugal dust collector. The purpose of the assembly is to remove dirty particulate from the airstream that can cause erosion and premature wear to other downstream equipment.

HOW DOES IT WORK?

1. Dirty, particulate laden gases enter the top of the collecting tube at the inlet guide vanes. These vanes create a fast spiral to the gases, which produces centrifugal forces with minimal turbulence and erosion.
2. As the gas enters the inlet tube in a cyclonic pattern, the particulate is forced against the wall of the collecting tube and gravitates to the bottom. It is then expelled through an opening at the bottom of the tube.
3. A vortex forms at the bottom of the inlet tube. The cleaned gas turns and makes its way through the outlet tube.



A newly installed 24" dust collector and inlet/outlet transition ductwork at a lime plant in Kentucky

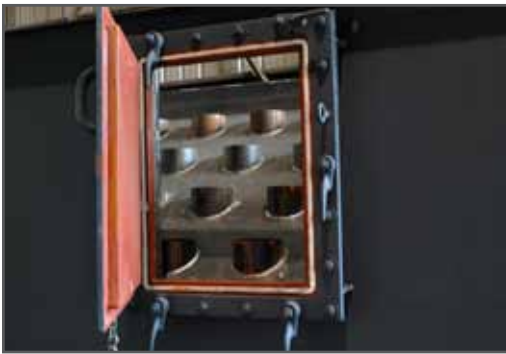




MULTIPLE TUBE SIZES

ProcessBarron offers four different tube sizes:

- 9"
- 11.5"
- 14"
- 24"



Through our extensive application experience with mechanical dust collectors, we have established an excellent track record of selecting the right size tube for a particular application. The required air volume, particulate loading and ash characteristics are all taken into consideration when making a selection.

ProcessBarron knows that “one size does NOT fit all” in real world applications.





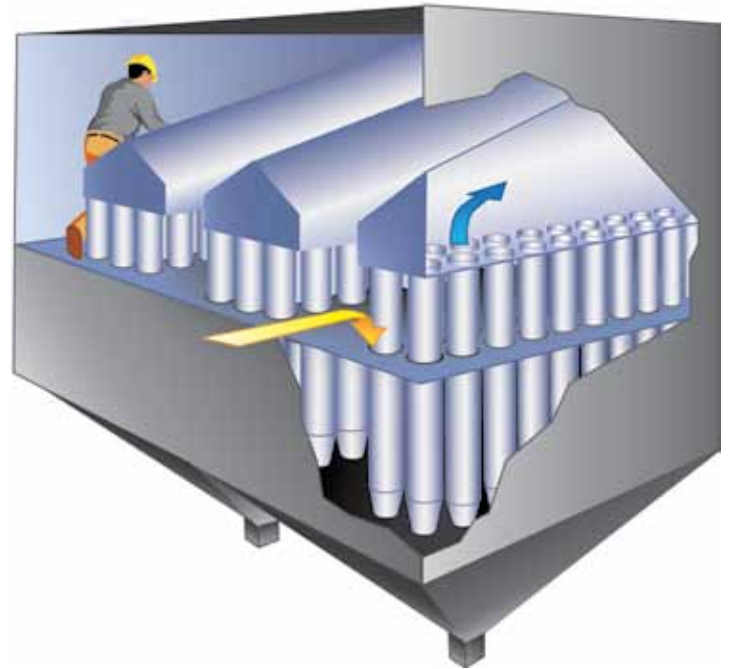
A 24" dust collector retrofit application designed so the existing support steel did not have to be modified.

ARRANGEMENT TYPES

ProcessBarron offers both AU (totally accessible) and STD (limited access) arrangements for their mechanical dust collectors. Both offer advantages that are important to consider.


AU Arrangement

- Easy access to all internal parts
- Lower velocities reduce internal part wear
- Greater flexibility with the casing arrangement
- Reduced hopper recirculation problems
- Improved overall performance & balanced flow



STD Arrangement

- Uses the least amount of space
- Lower initial cost
- Lower unit weight requires less support steel
- Less insulation & lagging required



The casing of a 90-tube 24”
dust collector being set in place
at a paper mill in Louisiana

RETROFITS AND REPLACEMENTS

One of ProcessBarron's greatest strengths is our ability to repair, modify or replace another manufacturer's mechanical dust collector. Understanding and providing solutions for the required changes to existing ductwork, structural steel and connecting material handling equipment is always considered part of the project. Commonly used upgrade design features include:

- Conical discharge boots for greater collection efficiency
- Outlet tube turning vanes to improve pressure and airflow distribution
- 2-piece drop-in guide vane assemblies for easy replacement
- Properly sized tubes for the specific application





INDUSTRY APPLICATIONS

Wood Waste | Coal | Bagasse | Lime | Sludge | Coke | Pelletizing Iron Ore | Carbon Black | Clinker Cooler

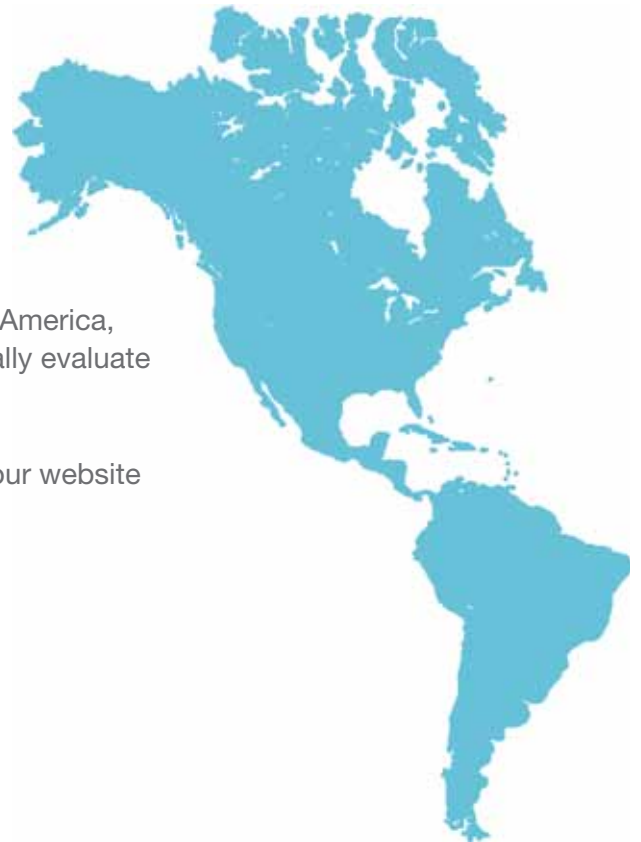
Whatever the need, ProcessBarron has probably designed a mechanical dust collector for it. Our experience, and ability to provide equipment that always improves an “existing system”, makes ProcessBarron the only choice for all your mechanical dust collector needs.

COMPANY REPRESENTATIVES

With over 60 representatives located in North America, South America, Central America and the Caribbean, ProcessBarron can typically evaluate your industrial equipment needs within 24 hours.

To contact a representative please call 888-663-2028 or visit our website at www.processbarron.com.

For emergency repair call 800-226-3267.





PO Box 1607 | Pelham, AL 35124 | 888-663-2028

www.processbarron.com

For emergency repair call 1-800-226-3267

COMPANY SERVICES

Fuel & Ash Handling Systems

- Fuel Receiving, Storage, & Delivery Systems
- Metering Bins, Screw, & Drag Reclaimers
- Screening & Hog Towers
- Custom Belt, Screw, & Drag Conveyor Designs
- Fly Ash & Bottom Ash Systems
- Custom Ash Drag & Screw Conveyors
- Fly Ash Conditioning & Truck Loading Systems
- Submerged Bottom Ash Drag Chain Conveyors
- Complete Turnkey Materials Handling Systems
- Double Dump Valves – Electric & Pneumatic
- Rotary Feeders – New & Repair
- Redesign & Retrofit

Air & Gas Handling Systems

- Mechanical Draft Fans (Induced & Forced Draft)
- Boiler Upgrades & Stokers
- Economizers & Tubular Air Heaters
- Mechanical Dust Collectors
- Custom Dampers
- Fabric & Metal Expansion Joints
- Ductwork & Exhaust Stacks
- Fan & Vibration Analysis
- Draft System Assessment
- Engineering Analysis
- Efficiency Upgrades
- Repair & Rebuild

24 hr. Emergency Repair Services Available

DESIGN • ENGINEER • FABRICATE • INSTALL • SERVICE • REPAIR • REBUILD