

Industrial Central Vacuum Systems

- Written emissions guarantees
- Wide variety of filter media, discharge and disposal methods, and filter cleaning systems
- Analysis of your particular requirements
- Efficiently sized tubing system
- Optimal hose, tool and attachment selections

Application

Designing an effective central vacuum system to meet your specific industrial cleaning needs requires an in-depth understanding of the unique factors in process design.

Our expert filtration engineers will evaluate your process and recommend the best cleaning solution to address all your needs.

Filtration TestCenter

Leveraging six different separator configurations with various filter media, and thorough particulate evaluation, Coperion engineers can design the most effective system. Best of all, we are able to offer performance guarantees.

Coperion will evaluate your process and provide a cleaning solution that will address all your needs.

Complete Coperion turnkey solutions include engineering, custom fabrication, installation and preventative maintenance.



The vacuum source

Depending on the needs of your application, the following technologies may be recommended:

- Multi-stage centrifugal exhausters (best for multi-user applications)
- Positive displacement pumps (best for bulk spill clean-up)
- Regenerative exhausters (best for smaller single-user situations)

Providing a vacuum source is only part of the solution. The best exhauster available might be rendered useless if not paired with the best separator solution, and nobody offers more than Coperion.

The separator

- Hopper-bottom or bin-vent style
- Custom-designed support frames
- Bag or cartridge filters
- Horizontal or vertical filter orientation
- Clean or dirty side filter exchange
- Tangential, radial and rock-box inlets

Clean up the dust

A dust collection system alone cannot keep a plant clean and dust free, so housekeeping must be part of any good dust collection plan or design. Manual cleaning (shoveling and sweeping) is very labor intensive and can often create additional airborne dust. Central vacuum systems are an effective way to clean industrial environments that will minimize recontamination and the labor cost of housekeeping.

Central vacuum systems can be tailored to the particular needs of a variety of plants and processes. Installed systems can be designed for multiple users in large, multi-story plants or portable, single-user systems can be moved throughout the plant by cart or forklift. A central vacuum system can efficiently handle routine floor and wall cleaning of very light dust or deal with large spills that would otherwise require heavy lifting or large machinery. A good understanding of needs is critical to the performance of the system. Forethought into plant integration and types of materials the system will handle, whether dust or bulk material, determine the type of vacuum producer used, line size, separator and discharge device selected.

Grounding of all components to prevent the buildup of a static charge is also required. This includes grounding media, flexible vacuum hoses and tools. Explosion protection must be considered in the design. Considering labor costs and the risk induced by spilled product and airborne dust, a well designed central vacuum system can pay for itself in a short period and is a good investment.



Fabricated extended motor shaft MSC exhauster

Provides a fairly constant vacuum level across a wide range of airflow to allow multiple users to come on and off line without dramatically affecting the performance at other use points. Fabricated impellers are mounted directly onto an extended motor shaft. Compact design.



Fabricated outboard motor MSC exhauster

Utilizes a standard motor coupled to an independent shaft and supported at each end by self-aligning angular bearings. This style allows more mass, resulting in deeper available vacuum.



Cast iron outboard motor MSC exhauster

Durable cast-iron housing and cast aluminum impeller design is best suited to processes where dependability is essential. Though more expensive than fabricated options, these units will provide trouble-free performance for many years.



Regenerative exhauster

Compact, light-weight design available with single or two-stage configuration. Typically used for smaller, single user or constant flow applications.



Positive displacement blower

Produce deeper vacuums than most other exhauster technologies. Ideal for the clean-up of bulk spills or applications where slugs of material are expected.



Tools and accessories

We carry a complete line of hoses and tools to match the needs of any central vacuum system application. Our stock includes a complete line of tubing and fitting components in a variety of materials. Coperion also manufactures a complete line of heavy duty, high efficiency, no shear, cast and fabricated airlocks and a matching line of accessories.

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