

# UNI-WASH

## Wet Type Dust Collectors

### Standard Features

- AMCA Rated, Integral Direct Drive Fan Assemblies with Keyless Concentric Bushings
- Heavy Duty 12 Gauge, Solid Welded Housing Construction
- 304 Stainless Steel Scrub Components
- Galvanized Mist Eliminator Filtration Packs
- Fresh Water and Drain Piping Connections
- Fork Slots & Lifting Lugs
- Rust Protective Epoxy Internal Coating
- Durethane® direct-to-metal heavy duty finish coating
- Float Type Water Level Control

### Optional Features

- Blowers for Non-Standard Airflow
- Stainless Steel Construction
- Electronic Differential Pressure Water Level Controls
- Explosion Proof Componentry
- NFPA Safety Packages
- Automatic Sludge Conveyors
- Variable Frequency Drives
- Soft Start Controllers
- Lexan Water Level Windows
- Ducting Transitions

### Applications

- Metal Finishing
- Food Processing
- Pharmaceutical Processes
- Biomedical Manufacturing
- Shot Peening • Sand Blasting



**Industrial Ventilation Professionals**  
Dust & Oil Mist Collection Equipment For Industry

**Continuously manufactured since 1938**, Uni-Wash™ dust collectors are self-contained, water recirculating type units for removal of most industrial and foundry dusts from exhaust system air. Dirt, lint, grindings, sanding, finishing dust and other contaminants that do not float in water are all thoroughly washed out and trapped as wet sludge. In most instances the cleaned air may be returned back into the plant for substantial energy savings.

Installation is simple: Units are ready for immediate hook-up to water, drain, ducts and electric power. The compact design requires minimum floor space. Shipped in sections or fully assembled, depending on size, systems are generally ready for immediate start-up.

Water is continuously agitated by the suction of the air through the machine. There are no nozzles, piping or water pumps to clean, repair or replace. The consumption of water is negligible. Only normal evaporation occurs and the water loss is replenished automatically. Collected sludge is easily removed from the sloping tank via the tank access doors, or through the use of optional automatic sludge removal equipment.

Wet type dust collectors are designed for the capture of wettable and sinkable contaminants. These systems employ a unique, patented five-stage filtration system for scrubbing particulate out of the air and collecting it as wet sludge in the following process:

- 1) by striking the turbulent water surface in the water tank section of the machine
- 2) then passing through a vertical water curtain
- 3) and scrubbed through a water cascade on cone walls
- 4) then passing through a horizontal water curtain and
- 5) buffeted through the moisture separator section before fan entry and exhaust out of the machine

AIR CLEANNING EQUIPMENT, INC.

(800) 962-0650 [www.aircleaningequipment.com](http://www.aircleaningequipment.com)

UNI-WASH Model UC-25 shown with optional Lexan Viewing Window for water, scrub, and sludge monitoring



(2) UNI-WASH Model UC-20 Wet Type Dust Collectors shown with all 304 Stainless Steel Construction, Hopper & Leg options.



UNI-WASH UC-30 3,000 CFM shown with optional electronic differential pressure automatic water level & motor controls



UNI-WASH UC-20s 2,000 CFM lined up for shipment

**Small capacity models** from 500 to 3,000 CFM (Models UC-5 to UCBD-30) provide five (5) inches water gauge (11.2 cm) external suction. Units in this range feature a small, cylindrical shape effective in removal of heavy dust concentrations at a single machine operation, or lighter dust concentrations collected from a small group of machine operations. These smaller units are ideal for tool rooms or individual installations with large milling machines, grinders, etc. The collector outlet direction can be changed by rotating the fan housing.

**Medium capacity models** from 4,000 to 12,500 CFM (Models UCBD-40 to UCBD-125) provide eight (8) inches (17.92 cm) external suction. These mid-size systems are driven by one fan assembly integral to the unit, located on the clean air side. The system size is suitable for capture of all types of wettable industrial dusts where the dust loading is moderate to heavy. The number of scrub chambers increases as a function of the unit size, based on 2,000 CFM (57 m<sup>3</sup>/min) per chamber, on Models UCBD-40 and UCBD-60. Model UCBD-50 and UCBD-75 through UCBD-125 utilize multiple scrub chambers based on 2,500 (71 m<sup>3</sup>/min) per chamber.

**Large capacity models** from 15,000 to 30,000 CFM (Models UCBD-150 to UCBD-300) provide eight (8) inches (17.92 cm) external suction and are recommended for larger installations. These systems should be utilized where unusually long ducting is required, where heavy or coarse dusts which are difficult to convey must be captured, or where hazardous or toxic materials necessitate more thorough exhaust. The inlets may be either horizontal or vertical and exhaust is of the upblast type. All large capacity units are belt driven.

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UNI-WASH Model UCBD-75 7,500 CFM Wet Type Dust Collector installed on a grinding operation



UNI-WASH Model UCBD-100 10,000 CFM Wet Type Dust Collector installed on a forging operation



UNI-WASH Model UCBD-100 10,000 CFM Wet Type Dust Collector in preparation for shipment (shown with optional sludge conveyor)