

# PRODUCT BULLETIN 4 THE PURAFIL ESD CHLORINE DRUM SCRUBBER



THE PURAFIL ESD CHLORINE DRUM SCRUBBER (CDS) is ideal for removal of chlorine gas found at industrial or water treatment plants. Recommended for small airflow applications, the CDS is available in three sizes: 100, 300 and 500 cfm.



CLOSE-UP OF BLOWER WITH ADJUSTABLE DAMPER

**CDS 100 CONSTRUCTION:** The CDS-100's vinylester canister measures 24 inches (61 cm) in diameter, 36 inches (92 cm) in height (including blower), and 3/32-inch (2.4 mm) in thickness.

**CDS 300 CONSTRUCTION:** The CDS-300's vinylester canister measures 32 inches (81.3 cm) in diameter, 48 inches (121.9 cm) in height (including blower), and 5/32-inch (4 mm) in thickness.

**CDS 500 CONSTRUCTION:** The CDS-500's vinylester canister measures 38 inches (96.5 cm) in diameter, 48 inches (121.9 cm) in height (including blower), and 5/32-inch (4 mm) in thickness.

**MEDIA:** At the core of ESD's high-efficiency scrubber systems are dry-chemical air filtration media. The CDS contains Chlorosorb® Ultra (patent-pending) media for removal of chlorine at 99.5+% efficiency.

Chlorosorb® Ultra's removal capacity for chlorine gas (Cl<sub>2</sub>) is 15% minimum by weight.

*For example, the CDS-500 with Chlorosorb® Ultra is designed to remove approximately 115 lbs. of chlorine.*

**APPLICATIONS:**

- Low level fugitive emissions
- Small chlorine releases when changing out chlorine cylinders

**SYSTEM ADVANTAGES:**

**CORROSION-RESISTANT HOUSING:** The CDS is constructed of corrosion-resistant materials and requires essentially no maintenance, making it ideal for remote outdoor applications or areas where high levels of chlorine are present.

**LOW MAINTENANCE:** The CDS has only one moving part – a blower. Other than routine service checks, no maintenance is required to ensure maximum scrubber performance.

**COMPLETE GAS REMOVAL:** Gases are adsorbed and chemically transformed into inorganic salts that remain inside the media. Chlorosorb® Ultra accommodates continuous airstreams as well as fluctuating gas concentrations and airflows. It is non-hazardous and UL Classified Class 2 for flammability. In most cases, Chlorosorb® Ultra is also landfill disposable.

**QUIET OPERATION:** The CDS is designed for quiet operation.

**LOCAL SERVICE:** Purafil ESD's network of local representatives offers convenient and timely service. These factory-trained representatives

work in conjunction with Purafil ESD's in-house laboratory to provide comprehensive technical service.

**TARGETED GASES:**

- Chlorine
- Hydrogen Chloride

**STANDARD FEATURES:**

- Reinforced fiberglass canister
- Chlorosorb® Ultra media (5, 10, or 17 ft<sup>3</sup>)
- Integrated motor housing
- Totally Enclosed Fan Cooled (TEFC) motor
- Aluminum blower
- Adjustable damper (AL)
- Stainless steel and rubber latches
- Stainless steel fasteners
- CPVC packing and FRP lid
- Vinyl-ester inlet (4 or 8-inch pipe diameter)
- Airflows up to 500 cfm

**OPTIONAL FEATURES:**

- Passive configuration
- Other Purafil media including CSO™ and Puracarb® AM
- Rainhood
- Casters for Flexible Mobility

**OTHER SYSTEM ADVANTAGES:**

- System media is UL Classified Class 2
- Spent media are landfill disposable
- Maintains superior performance in climates with fluctuating temperature and relative humidity