

# ASTEC FIBERBED MIST COLLECTORS



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## Improved Design For Clean Air

Blue smoke is the leading cause of odor complaints at an asphalt facility. Reducing fugitive blue smoke emissions will decrease the level of detectable odors from your facility and improve your work environment as well as community relations.

The Astec fiberbed mist collector is an efficient solution for capturing and cleaning blue smoke from silo or loadout operations. Our fiberbed mist collectors offer distinct advantages that ensure reliable operation, low maintenance, and long filter life.



### CLEAN EXHAUST

The existing air will have less than 5% opacity. Cleaning efficiency of the system is as high as 99.99%, based on particle size and compounds in the gas stream.



### SAFETY FEATURES

Inlet temperatures are monitored by a sensor. On the smallest unit a fresh air damper is automatically activated if temperatures exceed 120° F. Larger units pull sufficient ambient air to keep the inside of the unit cool. All units have fire suppression safeguards in case of malfunction.



### EASY MAINTENANCE

Designed with maintenance in mind, the Astec Fiberbed Mist Collector eliminates much of the mess and the hassle of filter changes and inspections.

PREFILTERS ▶



◀ CHARCOAL FILTERS

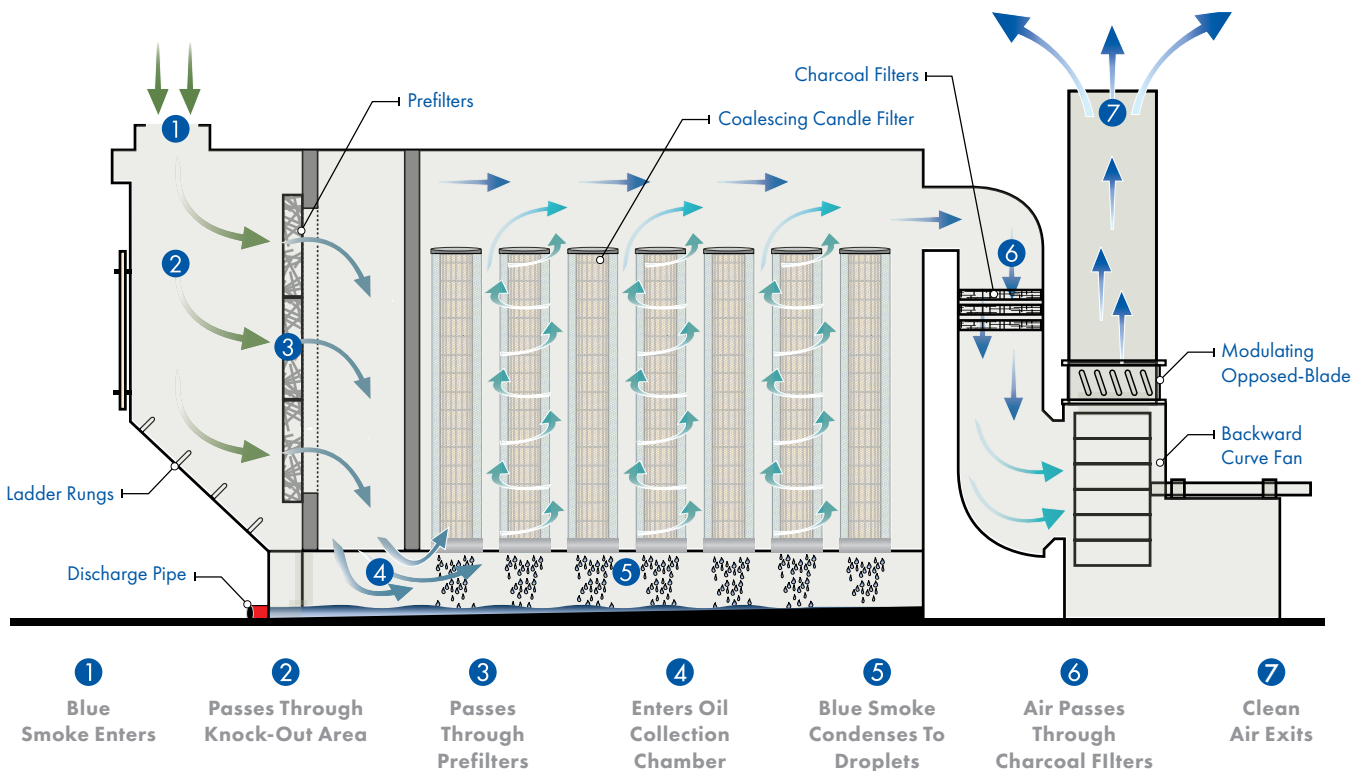
## KNOCK-OUT AREA, Prefilters and Charcoal Filters

- Blue smoke emissions from mix transfer operations are routed through ducting to the collector.
- A large knock-out area at the front of the unit allows heavy particles to drop out of the gas stream before the prefiltering process.
- The gas stream enters the enclosure and passes through prefilters.
- Solid particulate matter in the gas stream is captured by the prefilters. Removing these particles significantly lengthens the life of the filter media in the coalescing section.
- The Astec prefilter is completely washable and may be cleaned several times before needing to be replaced.
- Charcoal filters have been integrated into the Fiberbed Mist Collector, enhancing its ability to capture odor-causing compounds and improving air quality for asphalt facilities. This upgrade demonstrates Astec's commitment to providing innovative, environmentally focused solutions that benefit both customers and surrounding communities.

# ADVANTAGES of the Astec coalescing section:

After passing through the prefilters, the gas moves underneath the tubesheet and into the candle filters of the coalescing section. Draft air is created by a fan at the outlet end of the unit.

- Collects hydrocarbons on the inside of the filters. Changing filter media is less messy because filters with a buildup of oil on their outsides are not encountered.
- Filters sit on top of the tubesheet. You do not have to lift or lower the filters from the top of the enclosure when changing the filter media.
- Filter cages are capped tightly at the top. The gas stream enters the oil collection chamber from the bottom and the particles carried in it collect on the inside of the filter structure. Here, they coalesce into droplets which drain off into the bottom of the enclosure.
- No crane or lift is required for filter removal or installation, instead only a 3/4" wrench is required.
- The slanted floor of the oil reservoir lets the droplets drain toward the discharge pipe. From there, collected droplets are pumped out for disposal or recycling.
- The oil reservoir is located in a special chamber below the tubesheet. Plant personnel do not stand in condensed hydrocarbons during maintenance or filter inspection, as is the case with other designs.



## SPECIFICATIONS

\*Overall length of unit excluding fan

CFM	*Length x Width	Prefilters	Charcoal Filters	Candle Filters	Fan Size	Motor Size
12,000	18'-4" x 9"-2 <sup>5</sup> / <sub>8</sub> "	6	6	36	TC BCS-270	40hp ODP
18,000	22'-4 <sup>5</sup> / <sub>8</sub> " x 9'-2 <sup>5</sup> / <sub>8</sub> "	9	9	54	TC BCS-330	75hp ODP
24,000	22'-8 <sup>5</sup> / <sub>8</sub> " x 11'-11 <sup>5</sup> / <sub>8</sub> "	12	9	72	TC BCS-330	100hp ODP
36,000	29'-9 <sup>1</sup> / <sub>8</sub> " x 11'-11 <sup>5</sup> / <sub>8</sub> "	20	9	104	TC BCS-365	125hp ODP



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