

BRINK® AVP ASPHALT VENT PACKAGE

Efficient collection of asphalt smoke and blue haze from storage tank vents and tank car/truck loading racks



Shown in standard colors with optional stack mounted silencer.

FEATURES AND BENEFITS:

- Provides clean air/opacity control for a cleaner environment
- Simple design for minimum maintenance
- Compact layout to minimize the space required
- Proven successful for asphalt tank vent applications since 1972
- Available for flows up to 2000 ACFM (3400Am³/h)
- Shipped completely assembled, pre-engineered and pre-tested
- Flange-to-flange assembly for fast, easy installation

MECS®
BRINK®

Learn more at www.mecsglobal.com

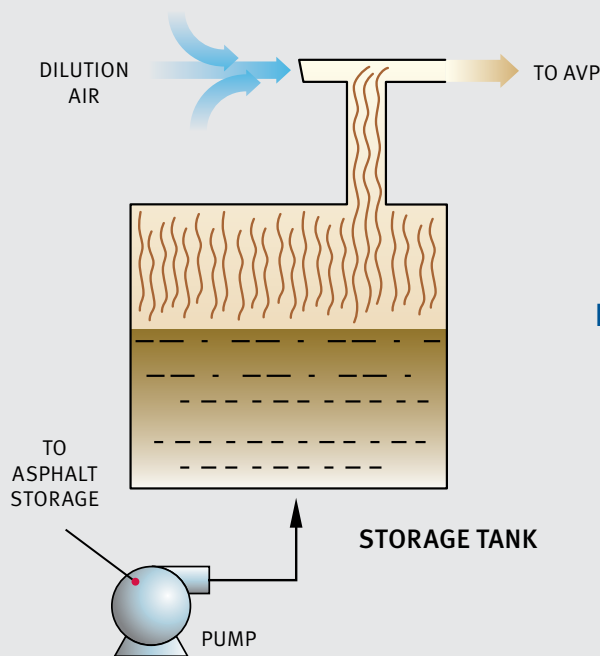
THE PROBLEM – ASPHALT STORAGE

Because asphalt must be stored hot, the lighter ends are vaporized and expelled as the tank is filled and/or vapor pressure builds up. Where tanks are vented directly to the atmosphere, these vapors condense into a visible submicron oil mist, creating problems with

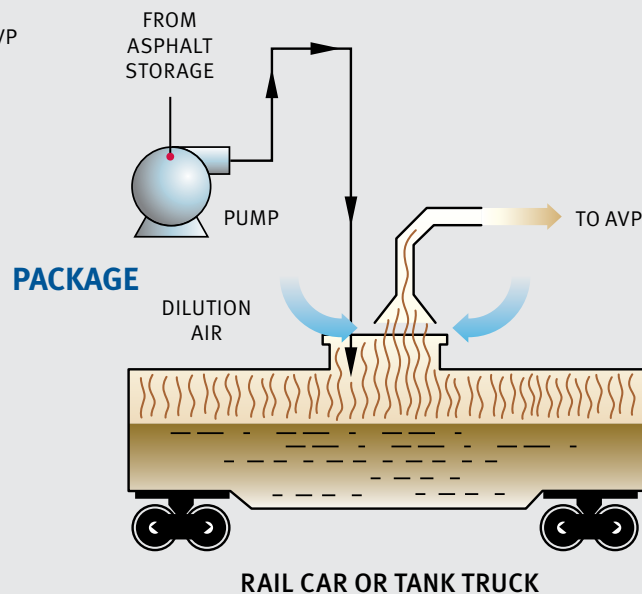
THE SOLUTION

The MECS Asphalt Vent Package is a skid mounted unit containing a pre-filter section, a housing containing a Brink® mist eliminator element, and a blower with motor. These packages are available in five sizes: 250 ACFM (425 Am³/h), 500 ACFM (850

This diagram shows a typical storage system.



This diagram shows a typical loading rack system.



air pollution compliance, safety and housekeeping.

Asphalt loading racks

When loading hot asphalt into trucks or rail tank cars, additional vapors escape and condense into visible mists. Since personnel work in these loading areas, industrial hygiene exposure problems are created in addition to pollution compliance and other problems.

Am³/h), 1,000 ACFM (1700 Am³/h), 1,500 ACFM (2550 Am³/h) and 2,000 ACFM (3400 Am³/h). They are used to collect the very fine particulate which cause visible plumes from asphalt loading and storage facilities. On storage tanks, the displaced mist is captured in a collection hood over the tank vent. In loading operations, a collection hood mounted over the filling nozzle collects the mist. Several loading nozzles and storage tank hoods can be ducted to a single Asphalt Vent Package. The package blower draws air and vapor from the hoods and ducts through a disposable pre-filter to a Brink® mist eliminator element where sub-micron organic mist is removed.

ASPHALT VENT PACKAGE

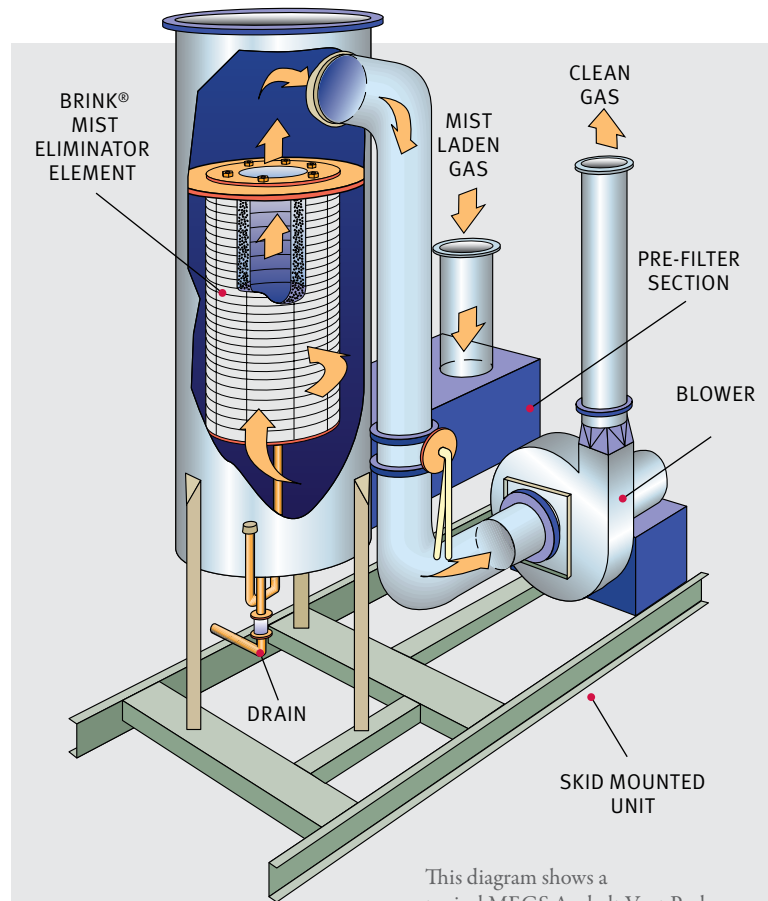
HOW THE PACKAGE WORKS

The mist laden gas is drawn into the unit through a pre-filter section. This pre-filter collects the larger particles. From the pre-filter, the gas is drawn through a vessel containing a Brink® mist eliminator element. This element traps and removes the sub-micron oil mist particles and the collected oils are drained from the bottom of the element. The clean gas exits from a stack on the fan discharge.

The MECS Asphalt Vent Package will meet or exceed government emission requirements for vent opacity associated with asphalt storage tanks and loading racks.

Package Advantages Include:

- Shipped completely assembled, pre-engineered and pre-tested
- Flange-to-flange assembly for fast, easy installation
- Compact package construction
- No moving parts, except direct drive blower, for minimum maintenance
- Compatible with existing hood systems for loading racks and storage tanks
- Coated with durable industrial grade tan paint
- Pre-filter to collect larger insoluble particulate and extend main filter element life
- On-site, field packable mist eliminator elements
- Highly efficient, bi-component fiber bed to capture sub-micron asphalt oil mist particles and minimize re-entrainment
- Blower has substantial additional pressure drop available with suction capabilities up to 27" (685mm WC)
- Liquid sight glass for drainage confirmation
- Main element options for application flexibility
- Designed for full flow rate in loaded (dirty) condition



This diagram shows a typical MECS Asphalt Vent Package.

Available Options:

- Starter pre-wired to motor
- Stack mounted silencer for sound attenuation
- Element OD-style pre-filter for additional main element protection
- For additional flexibility, various main element filter types are available:
 - HE Small diameter HE, ES
 - ES Concentric ES
 - FP Single and Double FP
- FP (Field Pack) elements re-packable on site
- Stainless steel materials of construction for corrosive and coastal environments
- Custom coatings for special applications and plant color standards
- Custom designs for even higher AVP flow rates
- Dirty Gas Inlet/Pre-filter box clean out access

BRINK® AVP ASPHALT VENT PACKAGE

WHY MECS

MECS pioneered the use of fiber bed mist eliminators for the collection of sub-micron aerosol mist particles in the late 1950's. With thousands of installations in hundreds of different applications around the world, no one has more experience in this area than MECS. In addition, MECS maintains its industry leadership with extensive R&D, patented mist eliminator performance advancements and a full complement of staff engineers available for design, advice and troubleshooting assistance. Being a full service company focused on process technology and air pollution control, MECS can easily solve your asphalt emission/blue haze problems and allow

you to focus your efforts on production, storage, loading and transporting of your asphalt products.

| FLOW ACFM/Am ³ /h | POWER – A HP/kW | HEIGHT – B Ft.-In./mm | CLEARANCE – C Ft.-In./mm | SHIPPING WT. Lbs./kg. |
|---------------------------------|--------------------|--------------------------|-----------------------------|--------------------------|
| 250/425 | 5.0/4.0 | 8'-9" /2667 | 11'- 10"/3607 | 2,080/ 943 |
| 500/850 | 7.5/5.5 | 8'-9" /2667 | 12'- 6"/3810 | 2,160/ 980 |
| 1,000/1,700 | 10.0/7.5 | 12'-8½"/3874 | 19'- 6"/5944 | 2,655/1204 |
| 1,500/2,550 | 15.0/11.0 | 16'-8¾"/5099 | 27'- 6"/8382 | 2,950/1338 |
| 2,000/3,400 | 20.0/15.0 | 19'-8" /5994 | 32'- 6"/9906 | 3,985/1808 |



www.mecsglobal.com

North America

MECS Headquarters

Chesterfield, Missouri, USA

Tel: +1-314-275 5700

northamerica@mecsglobal.com

Europe/Africa

Brussels, Belgium

Tel: +32-2-658 2620

europe-africa@mecsglobal.com

Milan, Italy

Phone: +39-02-8969 0658

italy@mecsglobal.com

Johannesburg, South Africa

Tel: +27-11-708 9860

southafrica@mecsglobal.com

Asia/Pacific

Hong Kong, China

MECS Far East Limited

Tel: +852-2734 5388

hongkong@mecsglobal.com

Shanghai, China

MECS Chemical Plants

Equipment (Shanghai) Co., Ltd

Tel: +86-21-6182 1111

shanghai@mecsglobal.com

Mumbai, India

MECS India Private Ltd.

Tel: +91-22-6774 9500

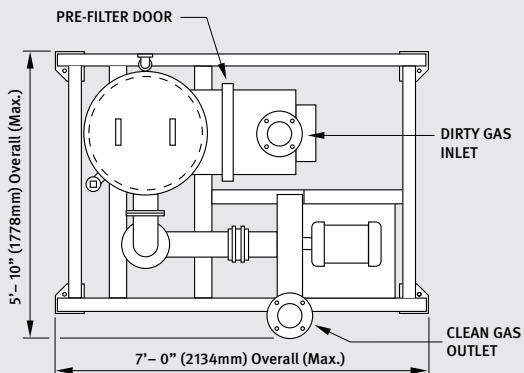
india@mecsglobal.com

South America

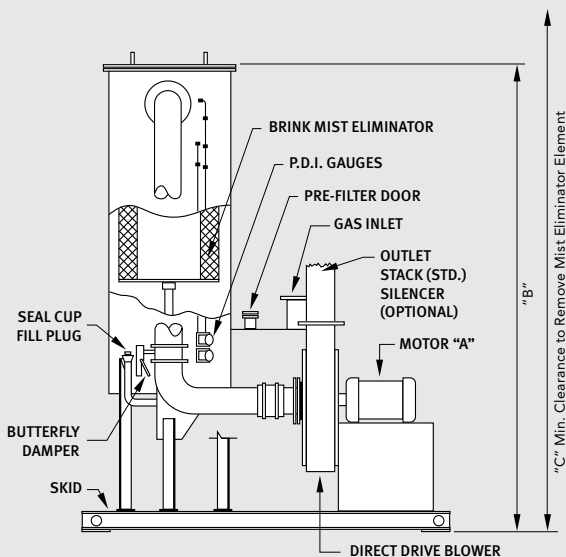
Barueri, Sao Paulo, Brazil

Tel: +27-11-218 8618

brazil@mecsglobal.com



TOP VIEW



SIDE VIEW

DO NOT USE THESE DIMENSIONS FOR CONSTRUCTION PURPOSES.

