



Asphalt Centrifuge Extractors

ASTM D-2172; AASHTO T-164.

- Available in 1,500 and 3,000 gram capacities.
- Explosion-proof motor option for added safety.
- Corrosion-resistance aluminum construction.
- Centrifuge speed in 0-3,600 rpm range.
- Predrilled holes for mounting.
- Manual braking mechanism.

The Asphalt Centrifuge Extractor is used to determine bitumen percentage in asphalt paving mixtures by extracting bitumen, using specified solvents. Available in 1,500 and 3,000 gram capacities, an "explosion-proof" motor option is offered for added operator safety.

The housing, removable bowl, cover and nut are constructed of cast aluminum to resist corrosion. The cover is designed with latches for security during the test and with handles for easy lifting and carrying. Holes are predrilled in the base for mounting to a workbench. A conveniently located dial controls the centrifuge speed in 0-3,600 rpm range. The operator can quickly stop centrifuge rotation with a manual braking mechanism. The unit is supplied with 10 filter discs.

Specifications

Control.	Variable speed, 0-3,600 rpm; brake for fast stopping.
Motor.	1/6 h.p.
Cover.	Aluminum; removable, with integral cup for adding solvent.
Housing.	Aluminum; removable, sealed.
Bowl.	Aluminum; removable.
Filter Discs.	10 included.
Dimensions	1,500 g models: 17" w. x 17" d. x 18" h. (432 x 432 x 457 mm). 3,000 g models: 18" w. x 18" d. x 19" h. (457 x 457 x 483 mm).
Weight.	Net 70 lbs. (32 kg).

Ordering Information

- EI45-3820/02. 1,500 g Centrifuge Extractor, 120vAC, 60 Hz, 1Ø.
- EI45-3820/01. 1,500 g Centrifuge Extractor, 220vAC, 50/60 Hz, 1Ø.
- EI45-3825/02. 3,000 g Centrifuge Extractor, 120vAC, 60 Hz, 1Ø.
- EI45-3825/01. 3,000 g Centrifuge Extractor, 220vAC, 50/60 Hz, 1Ø.
- EI45-3830/02. 1,500 g Centrifuge Extractor, Explosion Proof, 120vAC, 60 Hz, 1Ø.
- EI45-3830/01. 1,500 g Centrifuge Extractor, Explosion Proof, 220vAC, 50/60 Hz, 1Ø.
- EI45-3835/02. 3,000 g Centrifuge Extractor, Explosion Proof, 120vAC, 60 Hz, 1Ø.
- EI45-3835/01. 3,000 g Centrifuge Extractor, Explosion Proof, 220vAC, 50/60 Hz, 1Ø.

Accessories

- EI45-3845. Biodegradable Solvent. 5 gal. can.
- EI45-3847. Biodegradable Solvent. 55 gal. drum.

Replacement Parts

- EI45-3840. Filter Discs. For use on 1,500 g extractors, 10" (254 mm) diam. Pack of 100.
- EI45-3842. Filter Discs. For use on 3,000 g extractors, 12-1/4" (311 mm) diam. Pack of 100.



Vacuum Extractor

ASTM D-2172.

- **Lightweight aluminum alloy construction.**
- **3,000 gram sample capacity.**
- **5 gal. capacity, combination vacuum and storage tank for up to 5 tests.**
- **12" (305 mm) diameter filtering surface.**
- **Tight-fitting sample screen to prevent solvent leakage.**

The Vacuum Extractor is manufactured in accordance to method "E" of ASTM D-2172. The extractor is designed to separate the aggregate and/or the mineral matter from bituminous mixtures by means of vacuum. It can be used in either the field or laboratory as an aid in quality control of paving operations.

The extractor consists of a 5-gallon capacity, combination vacuum and storage tank, filter support, and funnel ring assembly. Also included are see-through extract gauges, a heavy-duty vacuum gauge, fluorosilicon O-ring, filter paper and connecting hose.

Specifications

Capacity.	3,000 g.
Tank.	Vacuum and storage; 5 gal. capacity (approx. 5 tests).
Extract Gauges.	Transparent sight tubes.
Vacuum Gauge.	Heavy-duty bourdon gauge.
Construction.	Metal.
Funnel Interior.	Aluminum.
O-Ring.	Fluorosilicon.
Filter Surface.	12" diam. (305 mm).
Filter Support.	12-3/16" (309.5 mm) diam.
Other Components.	Connecting hose and 100 filter papers.
Weight.	Net 49 lbs. (22 kg).

Ordering Information

Note: Vacuum pump required; model EI45-3852/02 recommended.

EI45-3850.

Accessories

- EI45-3852/02. Vacuum Pump. 115vAC, 60 Hz, 1ø.
- EI45-3852/01. Vacuum Pump. 230vAC, 50 Hz, 1ø.
- EI45-3845. Biodegradable Solvent. 5 gal. can.

Replacement Parts

- EI45-3850/10. Filter Paper. 13" (330 mm) diam. Pkg. of 100.
- EI45-3850/12. O-Ring. Fluorosilicon.



Vacuum Pump for EI45-3850 Extractor

- **Ideally suited for use with Vacuum Extractor.**
- **Heavy-duty vane type design.**
- **Long lasting composition vanes and seals.**
- **Essentially pulse free service.**

This pump is specifically selected for use with the EI45-3850 Vacuum Extractor. The vapor fumes from the vacuum extractor quickly corrode the inside parts of conventional vacuum pumps.

Specifications

Construction.	Heavy-duty rotary vane; composition vanes and seals to resist solvent vapors.
Delivery.	26.5 HG max. vacuum; 4.5 CFM open flow.
Motor.	1/4 h.p. electric.
Weight.	Net 15 lbs. (6.8 kg).

Ordering Information

- EI45-3852/02. 115vAC, 60 Hz, 1ø.
- EI45-3852/01. 230vAC, 50 Hz, 1ø.

Biodegradable Solvent

- **Removes asphalt from heavy equipment, tools and laboratory glassware.**
- **Dissolves oil and grease buildup.**
- **No unpleasant odor; naturally safe for employees and environment.**
- **DOT approved.**
- **Easy disposal of rinse water.**

This asphalt extractant cleaning solvent, approved by the state DOTs, is designed to be used with vacuum and centrifuge extractor equipment for quality control testing of bituminous paving hot mix. It is a citrus based solvent blended with surfactants. These surfactants enable it to be rinsed with water and the aggregate sample can be oven dried. When diluted, this solvent is suitable to be used as a cleaning solvent.

Ordering Information

- EI45-3845. 5 gal. Can.
- EI45-3847. 55 gal. Drum.



Reflux Extractor (4,000 Gram)

ASTM D-2172; AASHTO T-164.

- **4,000 gram capacity.**
- **Glass jar for visual observations.**
- **Thermostatically controlled hot plate.**

The 4,000 gram capacity of this Reflux Extractor means higher accuracy for acceptance testing procedures. The 4,000 g Reflex Extractor has two cone type screens holding 2,000 grams each. The unit consists of two cone screens, water condenser, pyrex reflux jar, a thermostatically controlled hot plate and a supply of filter paper.

Specifications

Capacity.	4,000 g.
Baskets.	Stainless steel wire, mounted; 2,000 g capacity, 2 included.
Condenser.	Copper.
Jar.	Pyrex glass; 8-3/4" (222 mm) diam. x 18" (457 mm) h.
Hot Plate.	Thermostatically controlled.
Filter Paper.	Coarse-textured (Grade 617); 40 cm diam.
Weight.	Net 18 lbs. (8.2 kg).

Ordering Information

- EI45-3855/02.** 110vAC, 50/60 Hz, 1ø.
EI45-3855/01. 220vAC, 50/60 Hz, 1ø.

Replacement Parts

- EI45-3855/10.** Basket Assembly.
EI45-3855/12. Condenser.
EI45-3855/14. Glass Jar.
EI45-3857. Filter Paper. Pkg. of 50.
EI88-0510/02. Hot Plate. 110vAC, 50/60 Hz, 1ø.
EI88-0510/01. Hot Plate. 220vAC, 50/60 Hz, 1ø.



Reflux Extractor (1,000 Gram)

ASTM D-2172; AASHTO T-164.

- **1,000 gram capacity.**
- **Thermostatically controlled hot plate.**
- **Copper condenser and stainless steel baskets for rust resistance.**

The Reflux Extractor is used to determine the percent of bitumen in asphalt mixes. Its features include automatic operation and absence of transfer losses.

The apparatus has a total capacity of 1,000 grams of bituminous mixture and consists of two cone type screens (500 grams capacity) each, a water condenser, a pyrex reflux jar, a thermostatically controlled hot plate and filter paper.

In operation, the heated solvent vaporizes and passes around and through the sample. It then condenses and falls back on the sample, percolating through it and dissolving out the bitumen. Depending on the material and filter paper used, a test can be performed in 2-4 hours.

Specifications

Capacity.	1,000 g.
Baskets.	Stainless steel wire, mounted; 500 g capacity; 2 included.
Condenser.	Copper.
Jar.	Pyrex glass; 6" (152 mm) diam. x 18" (457 mm) h.
Hot Plate.	Thermostatically controlled.
Filter Paper.	Coarse-textured; 33 cm diam.
Weight.	Net 14 lbs. (6.4 kg).

Ordering Information

- EI45-3860/02.** 110vAC, 50/60 Hz, 1ø.
EI45-3860/01. 220vAC, 50/60 Hz, 1ø.

Replacement Parts

- EI45-3860/10.** Basket Assembly.
EI45-3860/12. Condenser.
EI45-3860/14. Glass Jar.
EI45-3862. Filter Paper. Pkg. of 50.
EI88-0500/02. Hot Plate. 110vAC, 50/60 Hz, 1ø.
EI88-0500/01. Hot Plate. 220vAC, 50/60 Hz, 1ø.