

## AIR-VAC® TRUCK / TRAILER



The AIR-VAC® Truck/Trailer is a skid mounted vacuum that is powered by an air injector . The AIR-VAC® Truck/Trailer :

- Runs from a standard air compressor using 150 to 330 scfm depending on hose size
- Holds 1 cubic yard of material, enough spoil for about 4 pot holes each 12 inches in diameter by 6 ft deep
- Readily vacuums 1 to 2 cubic feet per minute of materials such as dirt, sand, gravel, rocks, or water
- Hydraulically elevates tank to dump material
- Has a durable powder coated steel tank
- Has replaceable UHMW wear plates at dirt impact points
- Has a large dump door that opens to allow easy emptying back into hole
- Has a removable injector for easy transportation and storage
- Offers a range of suction hose sizes from 2.5 to 4 inches

## AIR-VACUUM EXCAVATION

Although its roots reach back to the 1950 and 60's, in the last decade vacuum excavation has come to the forefront as a recognized means of safely uncovering buried utilities. Vacuum excavators are typically used to dig potholes to expose utilities when directional boring or to provide access for keyhole type repair work.

Concept Engineering Group Inc. manufactures a range of air-vacuum excavation equipment that use supersonic jets of air either alone or with high flow, pneumatic vacuum transport to dislodge and remove soil. Air-vacuum excavation has a number of advantages over other systems including:

- Unlike using water jets, air jets do not create a spoil disposal problem.
- Supersonic air jets break the soil into small pieces ideally suited for compacting back into the hole.
- The unit is lighter and more compact since air jets do not need a large water storage tank on board.
- Unlike high-pressure water jets that can actually cut a plastic gas line, air jets are harmless to buried utilities.
- Air jets are two to three times faster than hand excavation and can excavate rocky types of soils where a shovel cannot be used.
- Air excavation requires less vacuum because dry rather than wet material is being conveyed.

## Air-Vacuum Excavation Systems



**CONCEPT ENGINEERING GROUP INC.**

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## AIR-SPADE®

The AIR-SPADE® is the premier air digging tool in use today for:

- Pot holing
- Utility line Locating
- Valve box debris removal
- Utility Installation
- Line spotting for backhoe
- Vacuum excavation
- Trench rescue
- Pavement crack repair
- Meter locating (shown below)



### Features / Benefits

- Digs up to 50% faster and digs harder soils than other air tools or lances
- Offers interchangeable, wear resistant stainless steel nozzles from 15 to 225 scfm sized to match a wide range of air compressors
- Has an ergonomic handle with safety "dead man" trigger, guard, thermal shield and pressure gauge
- Has an electrically insulating barrel and offers extensions to 8 ft and reducers to 2 ft
- Offers numerous accessories including 45° angle adapter, lightweight and durable air hose, and dirt shields

## SAFEX® UTILITY PICKUP / TRAILER



SAFEX® is CEG's line of stand alone air vacuum excavation systems. SAFEX® systems are ideal for potholing for utility line location. SAFEX® systems make a perfect, more flexible, and cost effective companion to a large vacuum truck.

SAFEX® offers:

- Compact foot prints to fit into utility vehicles, pickup trucks or small trailers
- Unique off road capability with a utility vehicle
- Excavation rates from 1/4 to 1/2 cubic foot per minute in a moderate soil
- Reliable, easy to use, air cooled gasoline engines
- Runs AIR-SPADE® digging tool with 25 or 60 scfm / 90 psig nozzles
- Washable polyester filter 99.5% efficient at 0.2 to 2 micron
- Options include a blow back system to self-clean the air filter.



	Utility	Pickup / Trailer
Compressor		
Air Flow (scfm)	30	70
Pressure (psig)	100	100
Vacuum		
Air flow (scfm)	360 max	520 max
Suction (in Hg)	12 max	12 max
Hose ID (in)	2.5	3.0
Engine (hp)	20	35
Spoil Tank (cu yds)	0.25	0.5 to 1.0
Weight Empty / Full (lbs)	700 / 1300	2100 / 4800
Size W by L by H (ft)	3.5 x 4 x 5	4 x 6.5 to 8 x 6

