



UltraVac Model T-475 Specifications

GENERAL

The UltraVac Model T-475 is a powerful, efficient, heavy duty, dust free, vacuum module designed to be mounted on any single axle, medium duty truck chassis of suitable capacity. The T-475 provides easy collection and disposal of virtually any dry materials, sludges, slurries, and liquids from remote and inaccessible locations. The unit has a payload capacity of 4 cubic yards (3 cubic meters) for dry material and 800 gallons (3028 liters) for liquids. Utilizing all new equipment, the unit is designed and manufactured to withstand the abuses associated with 100% off road use.

VACUUM MODEL SPECIFICATIONS

Vacuum Pump:

The UltraVac T-475 utilizes a positive displacement, roots type vacuum pump with high temperature viton seals and is capable of achieving 2150 CFM (61 m³/min.) at atmosphere and 1800 CFM (51 m³/min.) at 15" Hg (0.52 kg/cm²) at standard temperature and pressure.

Drive:

The UltraVac T-475 utilizes a 75 horsepower separate diesel engine with a V-Belt drive to power the blower. The engine is equipped with an integral clutch allowing it to be started under a "no load" condition. The clutch is automatically engaged from the operators console after the engine is started and automatically disengages when the T-475 is shutdown for any reason.

Collector Body:

The UltraVac T-475 collector body is a square configuration and is equipped with a high level shutdown for dry and wet material. For ease of cleaning, all air flow paths are accessed through the same plenum doors that access the filtration system. The collector body is capable of achieving a 50 degree dump angle via a hydraulic lift cylinder. All collected material discharges through tailgate. The standard collector body is constructed of 3/16" carbon steel with hinged access doors. Optional materials of construction include Coreten and stainless steel.

Tailgate:

The tailgate is hydraulic over mechanical with separate cylinders for opening/closing and locking/unlocking. The seal between the tailgate and collector body is an oil resistant, replaceable, heavy duty D-ring style.

Hydraulics:

Hydraulic power for opening/closing/sealing the tailgate and tipping the collector body is provided by a hydraulic pump mounted integrally on the T-475 engine. No connections to the truck engine are required. The hydraulic system is a high pressure, closed circuit design and includes a surge tank and full flow disposable filters on the suction side of the pump.

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UltraVac Model T-475 Specifications (cont.)

Filtration System:

The filtration system is a parallel design utilizing separate baghouses and air flow paths for wet and dry applications. The baghouses are located on both sides of the main collector compartment and dump integrally with the body. All baghouses have clean out doors and require no tools to open. All filter bags utilize a snaplock retaining system with a venturied cage for maximum cleaning efficiency. No tools are required to access or replace the filter bags or cages. Bag cleaning is achieved via continuous reverse pulse jets of compressed air while vacuuming. An engine mounted air compressor provides a suitable supply of compressed air at a pressure of up to 100 psi. The compressed air system is equipped with a surge tank and water trap to prevent moisture in the air pulse. Sequencing of the reverse pulse jets of compressed air is controlled by adjustable solid state timer boards. All solid state timer boards and solenoids are mounted in NEMA 4 enclosures located in the nose compartment of the collector body to prevent damage.

Instrumentation:

The instrumentation to safely operate and monitor the UltraVac T-475 includes a filter bag differential pressure gauge, vacuum gauge, hydraulic pressure gauge, engine tachometer with elapsed time meter, air pressure gauge, oil pressure gauge, water temperature gauge, amp meter and fuel gauge. All instrumentation is mounted in a NEMA 4 control panel with a replaceable, clear plexiglass front for ease of monitoring. The control panel is located on the driver's side and is mounted above the frame of the chassis for easy access.

Wet-Dry Mode Operation:

The unit is capable of wet or dry mode operation utilizing separate baghouses and filtration systems. Switch-over is done at the control panel eliminating the need to enter or climb on top of the collector body.

Painting:

The vacuum module is painted using one coat of primer and two coats of a two part polyurethane finish. The standard color is white. Other colors are available to suit customer requirements.

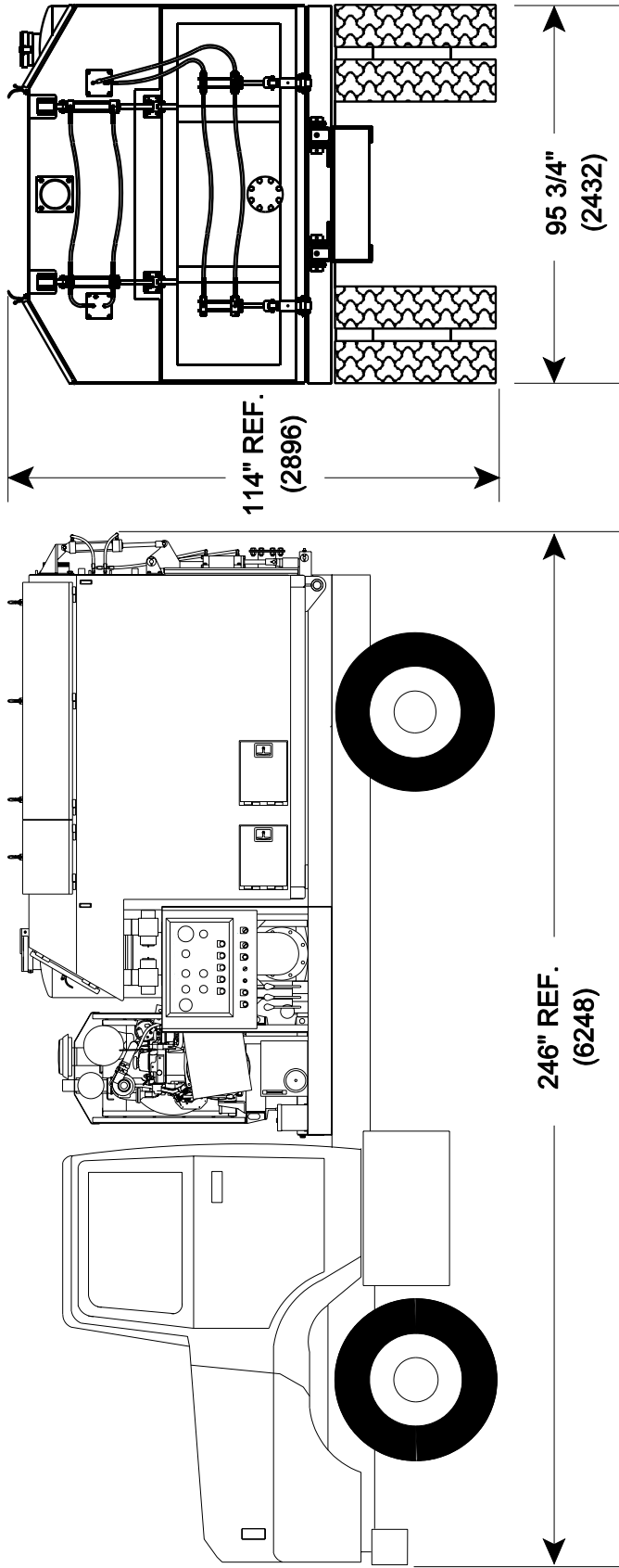
Installation:

The vacuum loader can be mounted by the customer on a suitable truck chassis. All materials are included for installation by the customer to assure legal use both on and off highway.



**Minimum Truck Chassis Requirements
UltraVac Model T-475**

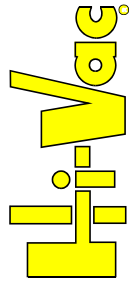
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| Wheelbase: | 178 inches |
| Cab to Axle: | 110 inches |
| Axle to Frame End: | 43 inches |
| Engine: | 175 HP, 2500 RPM (Ford FD-1060 ATA or equivalent) |
| Transmission: | 5 Speed Direct (Eaton FS-4005A or equivalent) |
| Rear Axle: | 19,000 LB., Ratio 4.56:1 (Rockwell RS-19-145 Steel 1S or equivalent) |
| Front Axle: | 9,000 LB. |
| Front Suspension: | 9,000 LB. Capacity Multi-Leaf Spring |
| Rear Suspension: | 19,000 LB. Capacity with 4,500 LB. Single Leaf Auxiliary Spring |
| Frame: | 18.0 Section Modulus, 50,000 PSI |
| Equivalent U. S. Model: | Ford F-650 |



SPECIFICATIONS:

| | | | |
|--|---|---|--|
| <p>FILTRATION SYSTEM: WET: 8 - 5" X 44" 9 OZ. MONOFILAMENT POLYPROP YLENE FILTER BAG AIR-TO-CLOTH RATIO = 30:1</p> <p>DRY: 28 - 5" X 44" 21 OZ. DACRON POLYESTER FILTER BAG AIR-TO-CLOTH RATIO = 8.9:1</p> | <p>FILTRATION SYSTEM: RETAINING METHOD: SNAP-LOCK STYLE</p> <p>CLEANING METHOD: CONTINUOUS REVERSE PULSE AIR WHILE VACUUMING</p> | <p>VACUUM PUMP: SUTORBILT 616 POSITIVE DISPLACEMENT 1800 CFM @ FULL VACUUM 2150 CFM @ ATMOSPHERE VACUUM: 15" Hg. DRIVE METHOD V-BELT</p> <p>POWER SOURCE: JOHN DEERE 4039T DIESEL ENGINE HORSE POWER: 95 CONTINUOUS RPM: 2000</p> | <p>COLLECTOR BODY: SIZE: 4 CU. YD. CONSTRUCTION: REINFORCED CARBON STEEL BAGHOUSE SELECTION: LEFT AND RIGHT SIDE</p> <p>NOTE: DIMENSIONS ARE FOR REFERENCE ONLY.</p> |
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HI-VAC CORPORATION
 114 INDUSTRIY ROAD
 MARIETTA, OH 45750
 PHONE: 740-374-2308
 FAX: 740-374-5447

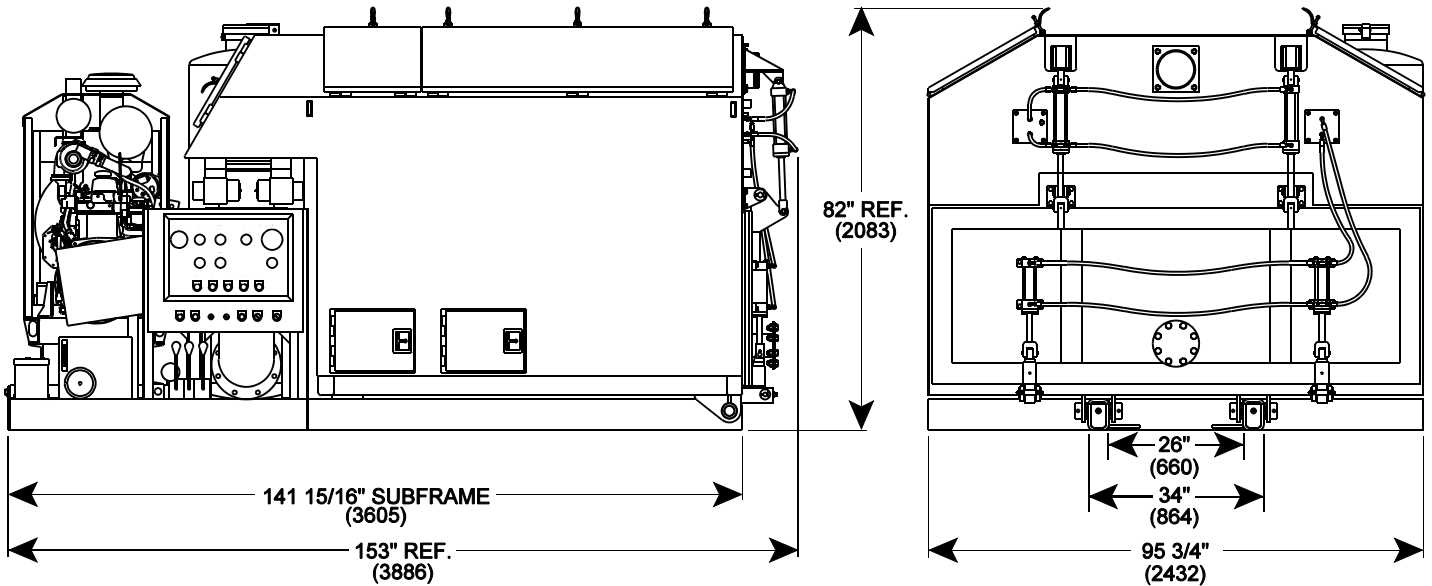
TITLE:

**ULTRAVAC MODEL T-475SE MOUNTED ON
 TYPICAL TRUCK CHASSIS**

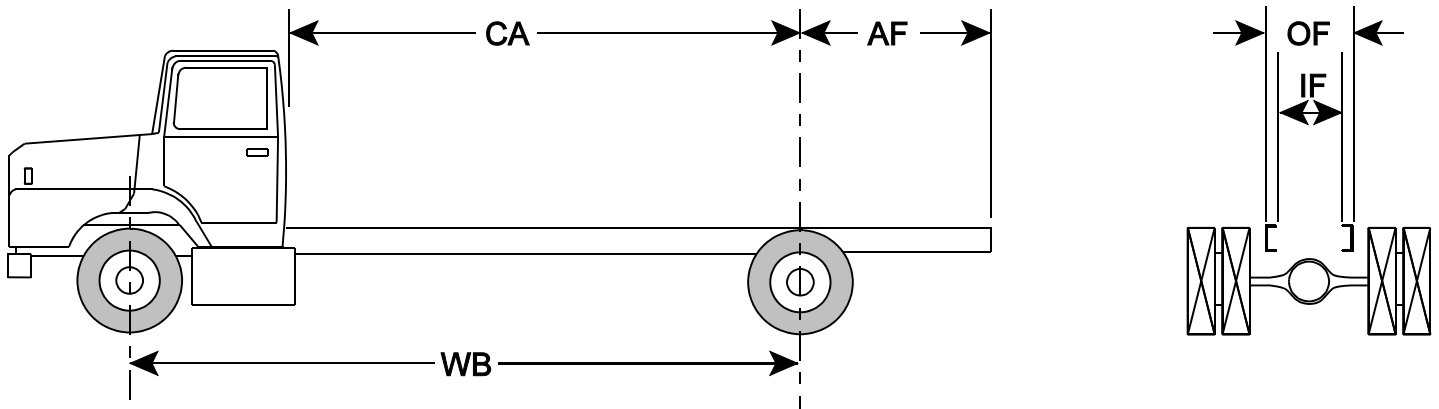
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Model T-475SE



TRUCK CHASSIS SPECIFICATIONS 4 CUBIC YARD COLLECTOR BODY



| MODEL | CARRYING CAPACITY POUNDS (Kg.) | SUSPENSION POUNDS (Kg.) | | ENGINE HP (KW) | WB* IN. (mm) | CA* IN. (mm) | AF IN. (mm) | IF IN. (mm) | OF IN. (mm) |
|---------|--------------------------------|-------------------------|----------------------------------|----------------|--------------|--------------|-------------|-------------|-------------|
| | | FRONT | REAR | | | | | | |
| T-475SE | MIN. | 16,000 (7,256) | 7,000 (3,175) / 19,000 (8,617) | 175 (130) | 176 (3962) | 110 (2794) | 43 (1093) | 26.75 (679) | 34.75 (883) |
| | MAX. | 26,000 (11,791) | 13,200 (5,986) / 23,000 (10,431) | 250 (186) | 188 (4775) | 116 (2946) | 37 (940) | 25.25 (641) | 33.25 (845) |

***NOTE:** WB dimension is approximate and will vary depending on the model of truck selected.
CA dimension must be clear and unobstructed for the full length and width