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## Zenith Vacuum Tanker for Waste Oil Collection



Secondary cyclone filter with auto shut-off

Zenith single compartment 15,000 ltr Vacuum Tanker with baffles . In compliance to ASME Section VIII Division 1/ADR having working pressure 2.65 bar (tested to 4 bar).

Made of ABS grade A ship plate.  
Internally coated with coal-tar epoxy resin (or equivalent) .



Vacuum Pressure relief valves

Zenith Vacuum Tankers are often designed to suit the specific operations and needs of the clients, be it a municipal organisation which would normally require all the features for a "multi-purpose, all-in-one" COMBI unit or for a owner-driver operation fitted with the most basic equipment to meet their tight budget but still able to work efficiently.

It is important that the client talks to the Zenith Engineers to understand what are the latest and most cost effective available options before one commits on such an expensive capital equipment.



Lockable control panel

With Emergency shut-off switch



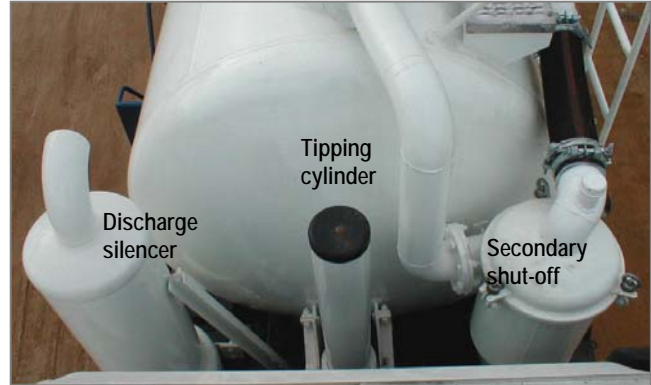
Earthing Strap (mandatory for refinery operation)



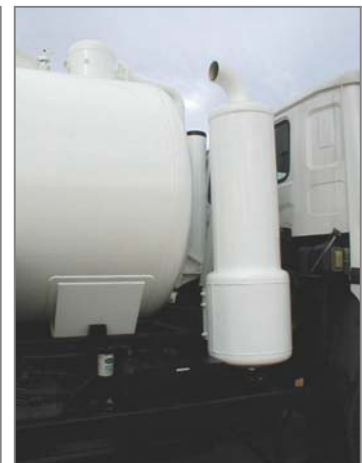
Combustible Gas detector & Alarm (Audio & Visual).



Hydraulic control levers for tipping and rear-door opening.

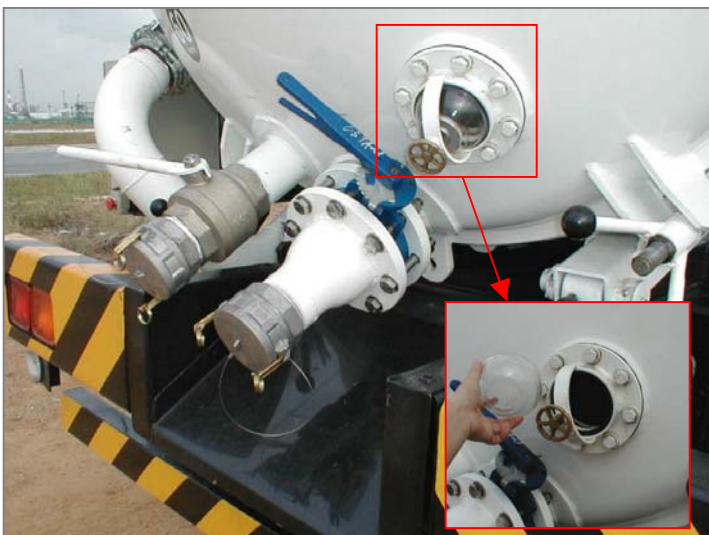


Efforts are made to ensure major components are arranged in the most practical, aesthetical and functional manner.



An effective discharge silencer is mandatory especially if operations are to be carried out at night.

Open hose trays are ideal for easy access and fast to clean, provided that vehicles are parked at a secured area when not in used to prevent piferage.

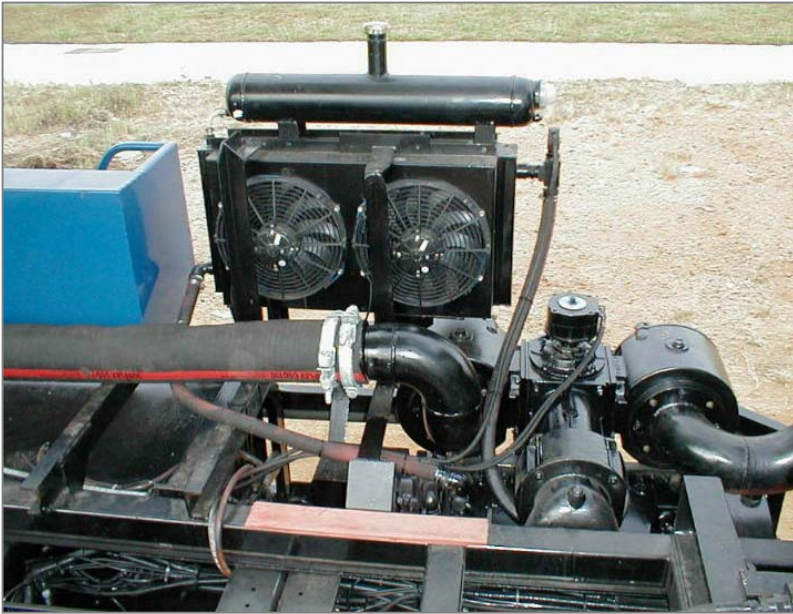


Large 3" suction ball valves & 3" butterfly discharge valve were fitted onto this particular unit for efficient operation. Discharge valve is always positioned at its lowest point to ensure full discharge of sludge.

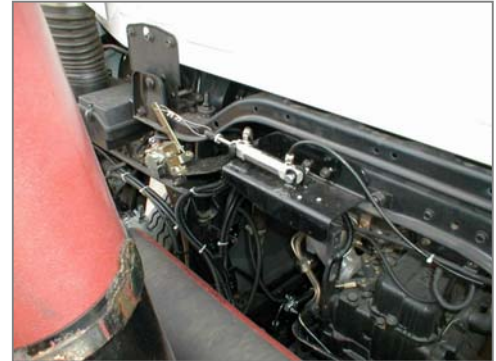
Option available for pneumatic operated valves (to ensure fully open / close positions).

3 X sight glasses were provided, at top, middle and bottom of the dish-end.

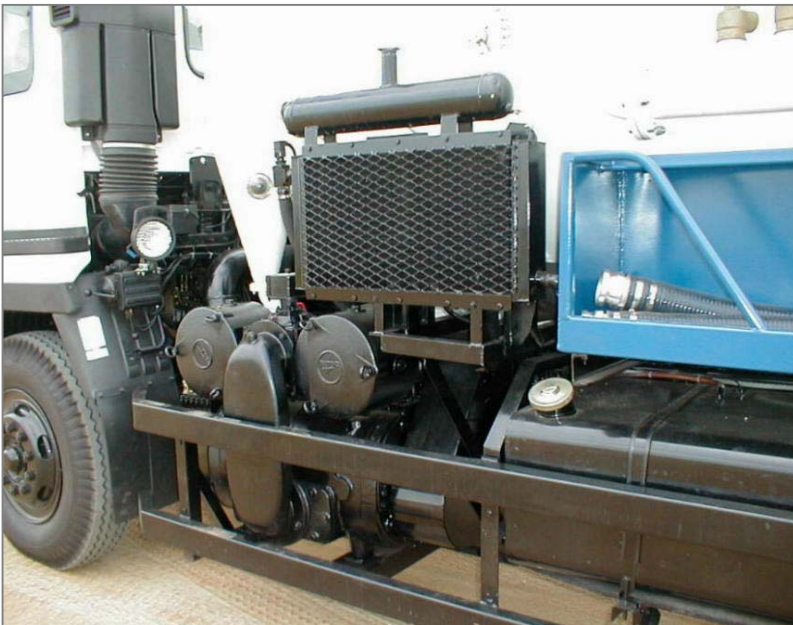
Sight glass are easily removed for cleaning and replaced within minutes (see picture left) .



Pictures show the pump model PR330 and its drive system  
 Air-liquid cooling vacuum pump with 33,000 ltr/min (2000 M3/hr) flow rate  
 (rotor @ 1,000 rpm) .  
 Maximum pressure = 2.0 bar      Vacuum efficiency = 95%  
 BHP at full vacuum = 50 kW      BHP at operating Pressure = 60 kW



Pneumatic operated throttling to bring the pump to the required rotor speed.



- Selection of pump size depends a few factors :
- 1) the size of the tank and the mounting space available
  - 2) on the level of efficiency and productivity level the user wants
  - 3) the budget

Typically we would recommend a free-air flowrate (in ltr per min) to be 1 to 1.5 times the volume of the tank , but do note that there are instances (like in this case) the flow-rate is more then twice the volume of the tank .



Driven by Split-shaft PTO  
 a) vacuum pump via pulley  
 b) hydraulic pump via direct drive