

Using the Solids Recovery Package “Shot House Package”



Triton[®] White Paper



(From left-to-right, a Collection Tank, Baghouse, and Triton Vacuum unit)

Triton Vacuum Systems can be used to collect solid product, such as sand, blasting media, grain, limestone, cement dust, coal dust, etc. These solids products are collected through the use of the Triton Solids Recovery Package, which includes a Collection Tank, Baghouse, and Triton Vacuum Unit, at rates of 500-750 lbs/min (30,000-45,000 lbs/hr).

Product is vacuumed through a hose that is connected to the Collection Tank. A wand or other attachment may be used on the working end of the hose to facilitate product intake. The product falls out of the airstream into the Collection Tank, and the airflow continues through the Baghouse to clean up any dust, and then through the Vacuum Unit to exhaust.

The Collection Tank is a 475 gallon vessel that has a 6” camlock on the bottom where an optional valve can be installed to discharge product. Once the Collection Tank is full, the vacuum is broken, the bottom valve manually opened, and the product dumped into a supersack, open top drum, or down an optional slide so that a backhoe can pick up the product for disposal. (The Collection Tank also has a 4” drain valve that can be used to remove liquid

The Baghouse is a set of 30 sock filters that have a pulsating air stream to periodically clean the filters and prevent blinding. A 110 volt electrical supply and a 90 psi air supply are required. The bags are disposed of at the conclusion of the job.

The Triton Vacuum Unit is one of the liquid ring systems...the Triton 1500, 2000, or 2500...either electric or diesel driven, skid- or trailer-based. Solids conveyance depends on airflow, and the largest systems provide the largest airflow, as indicated by the product series (i.e., the Triton 2500 produces 2500 cubic feet per minute). The intention is to have all product removed by the Collection Tank and Baghouse, so that no product actually “sees” the Vacuum Unit.

As part of our standard rental, we supply a 25' length of camlocked 4" hose (or 6" hose on the largest system) to pull into the Collection Tank (or other vacuum container), one section between the Tank and Baghouse, and one between the Baghouse and the Vacuum Unit. Additional hose is available for rental or purchase.

The Collection Tank is normally supplied on a stand which bolts underneath and allows product collection below the tank (see picture). Alternatively, the Tank could be mounted above an open-top rolloff container (e.g., on beams across the rolloff), the valve manually opened, and the product dumped into the rolloff as the tank is filled. The tank has a tare weight of 1750 lbs and holds ~600 gallons, so weight must be considered in adequately mounting the tank. Use of a rotolock to automate dumping is possible.

At the end of the job, the vacuum unit would be disconnected, and the collection tank and Baghouse rinsed out. The 30 bags would be discarded, and the units returned to Triton.

Please contact us to discuss your specific requirements.