

*Triton® White Paper***Tips for Picking up Sand, Abrasive Blast Media, Steel Shot, etc.**

Triton's Solids Recovery Package is widely used to pick up a variety of solid materials. (See our related whitepaper "Using the Solids Recovery Package" for information on how the equipment is connected and the purpose of each piece). Triton recommends our liquid ring pump systems (T1500, T2000, or T2500) because the pump is very forgiving if any solid particles get into it, compared to other technologies such as blowers. Blowers also operate at high noise levels and generate a lot of heat. Liquid ring systems are inherently safe, spinning water to create vacuum, avoiding any metal-to-metal contact, and operating at low temperatures (~170F max)...well suited for working inside chemical plants and other hazardous environments. See our whitepaper "Advantages of Triton Liquid Ring Vacuum Systems".



Material ranging from sand to steel shot can easily be conveyed 200-400 feet or more. It is best to have horizontal, flat runs using smooth bore hose such as "Ureflex", or hard PVC or other piping. Any dips in the line create friction. For that reason, minimize the use of 90 degree turns. A proper setup with Triton vacuums can easily pull several hundred feet, allowing placement of the equipment outside of a dike wall or other hazardous area.

A balance of airspeed is best. Too high an airspeed (too powerful a vacuum for the density of the material being picked up, or too small hose size) can erode the hose and equipment. Too low an airspeed can prevent adequate conveyance. Discuss with your Triton representative the best recommendation for your system. The "vacuum break" on our liquid ring system can be opened to reduce the vacuum and slow down the air speed through the system.

On the work end, it is generally best to move the work to the hose, using shovels, rakes, etc.

On the collection end, a vacuum box is often an ideal container, if the product being collected is being discarded. A vacuum box is an air-tight container that minimizes dust and keeps the product from being exposed to the elements, which means that a maximum weight can be loaded without fear of additional weight being added due to rain water. The box is then winched onto a truck, transported to the waste site, and dumped out through a dump door. See our related whitepaper "Product Collection Vessels".

Material that must be recovered and reused due to cost, such as steel shot, can be collected in Triton's cone-bottom Collection Tank. A slide valve on the bottom of the tank allows the product to be manually dumped to a supersack or drums.

Further information may be found in our whitepaper "Effective Use of Triton Vacuum Systems", and by talking to your Triton representative.

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