



# Sludge Vacuum Pump



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## Introduction



Sludge Vacuum Pump is a high load strong suction Pneumatic vacuum transfer pump, also known as solid conveying pump or drilling cuttings conveying pump. Capable of pumping solids, powders, liquids, and solid-liquid mixtures. The depth of suction is 8 meters, and the head of the discharged water is 80 meters. Its unique structural design enables it to operate in the most difficult environments, with low maintenance rates, and can transport more than 80% of solid phase materials and high-gravity materials at high speeds. It has the following characteristics: The high-efficiency Venturi device can generate a vacuum of up to 25 "HG (Hg) in strong airflow to suction the material, and then transport it through positive pressure, with virtually no wear parts. Commonly used for drilling cuttings, oily sludge transport, tank cleaning operations, waste suction long-distance transport, as well as mineral and waste transport, vacuum pumps are 100% aerodynamic, intrinsically safe pneumatic transport solutions capable of transporting solids up to 80% of the maximum inlet diameter. The unique patented Venturi tube design creates a strong vacuum and high airflow that can recover materials up to 25 meters (82 ft) and discharge materials up to 1,000 meters (3,280 ft). With no internal working principle and no rotating wearing parts, it provides a very cost effective solution for controlling the recovery and transfer of materials considered unpumpable.

## Technical Parameter

Model	TRSP-40L	TRSP-25W	TRSP-20L	TRSP-10L
Maximum throughput	40m <sup>3</sup> /h	25m <sup>3</sup> /h	20m <sup>3</sup> /h	10m <sup>3</sup> /h
Inlet/outlet diameter	4 "DN100	3"DN80	3"DN80	3"DN80
Suction distance	≤50m	≤50m	≤50m	≤50m
Discharge distance	≤1000m	≤550m	≤550m	≤500
Walking form	固定	移动	移动	移动
Control form	手自一体	自动	手自一体	自动
Overflow diameter	≤70mm	≤50mm	≤50mm	≤50mm
Atmospheric pressure	650-800Kpa	550-700Kpa	550-700Kpa	550-700Kpa
Air supply	13m <sup>3</sup> /min	6.5m <sup>3</sup> /min	6.5m <sup>3</sup> /min	5.2m <sup>3</sup> /min
Dimension	1600×1500×2000mm	2000×1000×1100mm	1000×800×1400mm	900×800×1400mm
Weight	910kg	300kg	270kg	230kg
Applicable material	High viscosity material/Powder solid material/high solid material			
Vacuum degree	25inch HG/85Kpa			



## Technical Characteristics :

- The pump can be operated by a single person;
- Ultra-large vacuum can absorb 50m material;
- Almost no wear on all flow parts of the pump;
- Super suction can absorb more than 7cm diameter material;
- Compressed air can be centralized supply, long-distance transport;
- Ultra-long distance transmission, can achieve ultra-long distance of more than 1000m;
- The pump can be unlimited working time, ultra-long time unlimited cycle operation;
- High degree of application to materials: powder, thinner, viscous material, sewage, oil pollution, etc.
- Full pneumatic control with fire, explosion-proof, moisture-proof ability, can be used in high temperature occasions;
- The pump adopts manual, automatic, remote control and other three ways to control, to meet more scenarios;
- High reliability of pneumatic control, long service life, the number of effective actions of electrical components is about one million times, the life of the solenoid valve is more than 200 million times;

## Applicable Material Category:

- Drilling waste mud and drilling cuttings discharged by vibrating screen;
  - Jam, peanut butter, ketchup, pickles
- ;● Metal mine, coal mine mud and tail slurry;
- Material handling of bulk tanks and silos;
  - Chemical, pharmaceutical granule powder transportation;
  - HDD/TBM urban construction sludge;
  - Sedimentation tank, soaking tank desilting;
  - Recycling of toxic and hazardous waste;
  - Storage tank sludge, tank bottom slag;
  - Sand, fine sand and fracturing sand;
  - Large-scale municipal pipeline desilting;
  - Bilge cleaning of transport ships;
  - Animal manure;