



Technical resources

Vacuum feeder

Model: ZKS

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Industrial vacuum feeder for dry powders and granules. Dust-free, efficient conveying for pharma, food, and chemical industries.

Technical specifications

Air consumption	8~10L/Min
Air supply pressure	0.6Mpa
Conveying capacity	400~6000Kg/h

These specifications describe the series. Confirm the selected model, power supply and configuration before ordering.



The ZKS series vacuum feeder uses a vortex air pump to pump air, so that the inlet of the suction nozzle and the entire system are in a certain negative pressure state. The powder and granular materials are sucked into the feed nozzle along with the outside air, forming a material airflow, which reaches the hopper through the suction pipe, where the air and material are separated. The separated materials enter the receiving equipment. Feeding and discharging are accomplished by continuously opening and closing the pneumatic reversing valve, and the opening and closing of the pneumatic reversing valve is controlled by the control center. Vacuum feeders are widely used in pharmaceutical, food, fine chemical and other industries.

ZKS系列

产品介绍

ZKS 系列真空上料机是用旋涡气泵抽气，使吸料嘴进口处及整个系统处于一定的负压状态，粉粒料随同外界空气被吸入料嘴，形成料气流，经过吸料管到达料斗，在料斗中进行气、料分离。分离后的物料进入受料设备。送料和放料是通过气动换向阀不断地开、闭来完成的，而气动换向阀的开闭是由控制中心来控制的。

ZKS系列

产品特点

- 1.不易生锈。
- 2不易变形。
- 3.使用寿命长。
- 4.304高强度不锈钢制作。

ZKS系列

产品用途

应用领域：真空上料机广泛适用于医药、食品、精细化工等行业。



医药



食品



化工



医药



The vacuum feeder is a material conveying equipment designed based on the principle of vacuum negative pressure. It is mainly used for the airtight and dust-free conveying of dry materials such as powders and granules. Its core components include vacuum pumps, filters, conveying pipes, suction ports and control systems, which realize rapid suction and transfer of materials through air pressure differences. This equipment is widely used in chemical, pharmaceutical, food, electronics and other industries, and is suitable for scenarios with high requirements on hygiene, safety and automation, such as raw material transportation, production line docking, toxic and hazardous material handling, etc.

- **Pharmaceutical industry** : Transporting pharmaceutical powders, capsules, and tablet raw materials to ensure the cleanliness and purity of pharmaceuticals
- **food industry**: Transfer flour, sugar, food additives, etc. to meet health and safety requirements
- **Chemical industry**: Conveying corrosive or flammable materials such as pigments, dyes, and metal oxide powders
- **New energy and electronics industry**: Dust-free transportation of battery materials (such

as lithium iron phosphate) and semiconductor powder

- **Building materials and metallurgical industry:** Automatic feeding of cement, mineral powder and metal powder
- **Environmental protection field:** Recycle powder resources from industrial waste to reduce pollution

Technical parameters

model	Conveying capacity (Kg/h)	Motor power (kw)	Air consumption (L/Min)	Air supply pressure (Mpa)	Overall dimensions (mm)	Weight (Kg)
ZKS-1	400	1.5	8	0.6	F 220*570	10
ZKS-2	600	2.2	8	0.6	F 220*780	21
ZKS-3	1200	3	8	0.6	F 290*850	30
ZKS-4	2000	5.5	10	0.6	F 420*1150	40
ZKS-5	3000	4.0 (Roots blower)	10	0.6	F 420*1250	55
ZKS-6	4000	5.5 (Roots blower)	10	0.6	F 420*1350	70
ZKS-7	6000	5.5 (Roots blower)	10	0.6	F 420*1450	85

- **Negative pressure generation :** Start the vacuum pump or pneumatic generator to form a negative pressure environment in the system
 - **Material inhalation:** The material enters the conveying pipe through the suction nozzle under the influence of external air pressure difference.
 - **Gas material separation:** The mixture of material and air enters the hopper and is separated by a high-efficiency filter. The dust is trapped and clean air is discharged.
 - **Material transportation:** The separated materials fall into the target container through gravity or air pressure difference, completing the conveying cycle.
 - **automatic cleaning:** The backflush system regularly removes dust on the filter element to maintain filtration efficiency.
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- **Efficient and dust-free :** Fully sealed pipeline transportation, dust leakage is close to zero, and the filtration accuracy can reach 0.2 microns.
 - **Energy saving and environmental protection:** Driven by compressed air or electric energy, the unit energy consumption is as low as 20 degrees/ton, and there is no oil pollution.
 - **Intelligent control:** Support PLC to automatically adjust suction/discharge time, material level sensing and fault warning to achieve unmanned operation
 - **Material diversity:** The parts in contact with materials are made of 304/316L stainless steel or wear-resistant coating, which is corrosion-resistant and easy to clean.

- **Flexible adaptation:** Modular design, can be connected to a variety of equipment (such as tablet press, mixer), the conveying distance can reach more than 50 meters
- **Easy maintenance:** Split filter element (such as Ti sintered filter element, PTFE filter membrane) supports quick replacement, and the backflush system extends the service life

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Before operation, review the selected model's instructions and the material requirements.