

# **ELECTROMAGNETIC FEEDER**

Ideal for improving production efficiency and saving labor

The electromagnetic feeder is a piece of equipment that automates flow operations. It is mainly used to feed materials evenly or quantitatively from storage silos or other storage equipment to the receiving equipment. This kind of equipment is widely used in mining, metallurgy, coal, power, chemical industry, food, glass, refractory materials and other industries, realizing the automation requirements of the production process. Electromagnetic feeders are divided into two types: open type and closed type. They have the advantages of simple structure, easy operation and no need for lubrication.

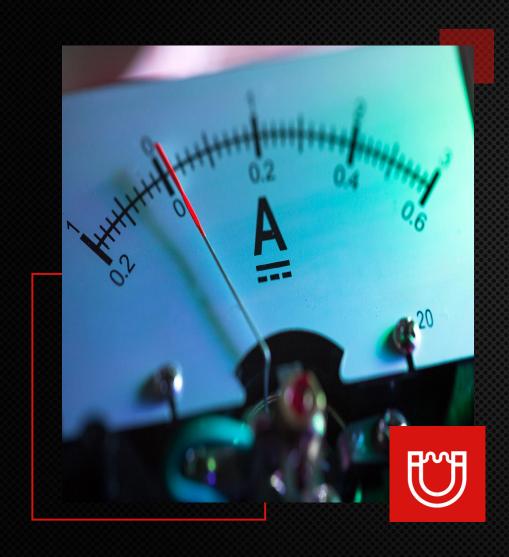








# **WORKING PRINCIPLE**

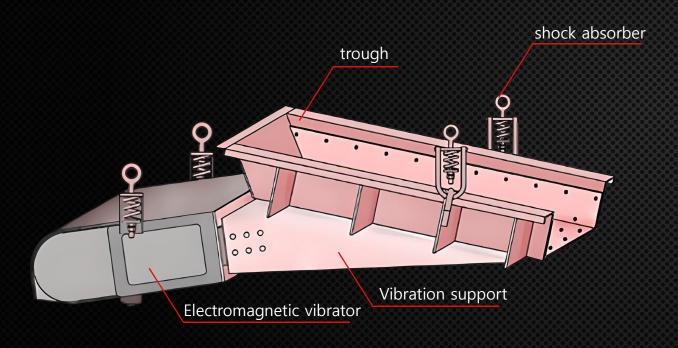


The working principle of the electromagnetic feeder is to use electromagnets to generate magnetic fields to adsorb materials to the conveyor belt. By controlling the start and stop of the electromagnets, quantitative transmission of materials is achieved.

The electromagnetic feeder uses electromagnets to generate a magnetic field. This magnetic field can absorb block, granular and powdery materials. Through the control device, the start and stop of the electromagnet can be accurately controlled, so as to achieve quantitative transmission of materials. Specifically, the controller will calculate the adsorption force required by the electromagnet based on the material thickness information fed back by the sensor, and then realize the adsorption and release of the material by turning the electromagnet on and off.



## STRUCTURE



### 01 Tank body:

The trough of the electromagnetic vibrating feeder is a working part. It is shaped like a dustpan and is usually welded by -5mm steel plates. It can also be made of other materials. The main function of the trough is to transport materials through it. Materials are usually transported through the trough after being unloaded from the silo.

#### 02 Electromagnetic exciter:

This is the power source of the electromagnetic vibrating feeder, which is mainly composed of connecting forks, electromagnets, armatures, subjects, leaf springs, etc. The electromagnetic exciter generates vibration through electromagnetic force, drives the tank for material transportation.

#### 03 Damper:

It consists of four coil springs, two of which are connected to the tank body, and the other two are connected to the vibrator, which are used to suspend the entire vibrating feeder and play a role in reducing vibration. Effect of vibration on equipment.



### **FEATURES**

#### manual control adjustment

The electromagnetic feeder can adjust the speed manually according to the production or application conditions to meet different production needs.

# Sensitive electromagnetic response

The electromagnetic feeder has sensitive electromagnetic response and can realize instantaneous stop and instantaneous start, so as to achieve the purpose of precise feeding.

#### Reduce product damage rate

Compared with commonly used screw feeders, the electromagnetic feeder's feeding method is softer and can effectively reduce product damage rate by about 50%.

### Large feeding capacity

Suitable for handling fragile or large irregular materials. Compared with screw feeders, The feeding capacity of electromagnetic feeders is larger and more direct.

#### Short-distance feeding

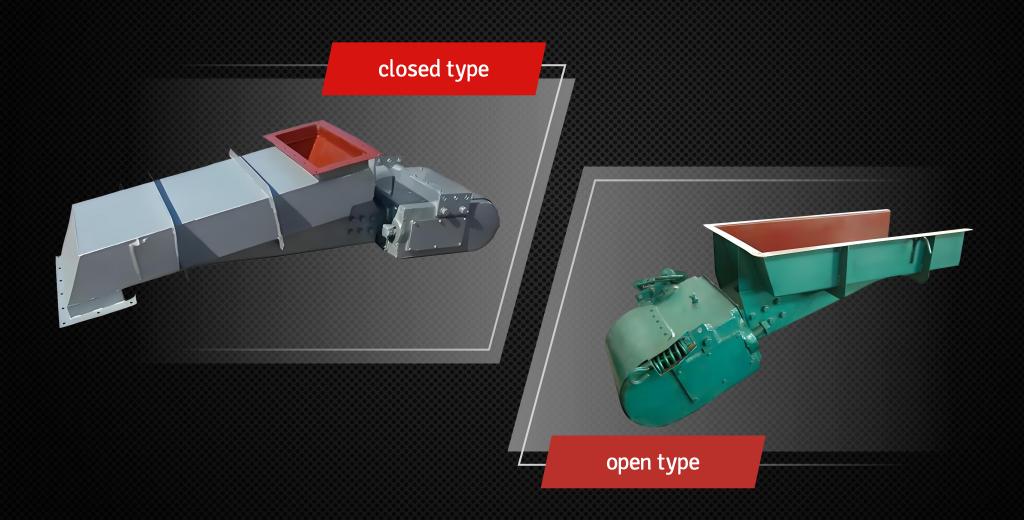
It is usually used for shortdistance feeding between two devices to fill the connection gap.

#### Wide range of applications

Electromagnetic vibrating feeders are widely used in packaging, weighing and batching, laboratories and other scenarios, and are often used in conjunction with weighing systems.



# TYPES OF ELECTROMAGNETIC FEEDERS



# TYPES OF ELECTROMAGNETIC FEEDERS

### Basic dimensions (mm)

Model	В	B <sub>1</sub>	B <sub>2</sub>	B <sub>3</sub>	B <sub>4</sub>	L	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	Н	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>
GZ1	200	280	340	296	376	600	209	550	910	100	350	360	485
GZ2	300	388	456	400	506	800	310	660	1171	120	430	450	600
GZ3	400	496	518	452	574	900	311	790	1325	150	480	520	675
GZ4	500	620	682	581	762	1100	413	965	1615	200	550	645	814
GZ5	700	761	850	650	840	1200	465	1050	1815	250	647	765	980

Model	В	B <sub>1</sub>	B <sub>2</sub>	Вз	B <sub>4</sub>	L	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	L <sub>4</sub>	Н	H <sub>1</sub>	H <sub>2</sub>	Нз	H <sub>4</sub>	R
GZ6	900	1057	720	860	1092	1600	500	1360	2410	1409	250	1090	1030	1530	460	1800
GZ7	1100	1257	840	1030	1332	1800	650	1465	2800	1585	250	1300	1130	1740	500	2200
GZ8	1300	1476	1000	1166	1556	2200	750	1800	3302	1938	300	1460	1340	1695	607	2600
GZ9	1500	1676	1010	1228	1776	2400	800	2000	3515	2100	300	1520	1440	2200	660	3500



# TYPES OF ELECTROMAGNETIC FEEDERS

	Groove size(mm)	Productivity (t/h)		Feeding	Vibration	vibration amplitude	Voltage	nower		Weight
Model	length*width*height	Level	-10%	particle size	frequency times/minute	dearee	(V)	power (kw)	Dimensions(mm)	(kg)
GZ1	200*600*100	5	7	50				0.06	376*910*360	73
GZ2	300*800*120	10	14	50				0.15	506*1175*450	146
GZ3	400*900*150	25	35	70		1.75	220	0.2	574*1325*520	217
GZ4	500*1100*200	50	70	100				0.45	762*1615*645	412
GZ5	700*1200*250	100	140	150				0.65	840*1815*765	656
GZ6	900*1800*250	150	210	200	3000		380	1.5	1092*2410*1030	1252
GZ7	1100*1800*250	250	350	250				3	1332*2800*1130	1920
GZ8	1300*2200*300	400	560	300		1.5		4	1556*3302*1343	3040
GZ9	1500*2400*300	600	840	350		1.5		5.5	1776*3515*1440	3750
GZ10	1800*2500*375	750	1050	500				4*2	2550*3630*1500	6491
GZ11	2000*2800*375	1000 1400 500					5.5*2	2640*4060*1580	7680	



### **APPLICATION**

Chemical Industry

Resin, alkali coating, rubber powder, industrial drugs, traditional Chinese medicine powder rubber particles, cosmetics, aluminum chloride solution, paint, etc.

Food Industry

Sugar powder, soy starch, steviol glycosides, salt, rice flour, rapeseed, milk powder, soy milk, egg powder, soy sauce, juice, etc.

**Metallurgical Mining** 

Limestone, metalore, cryolite, kyanite, magnesite, mica, quartz sand, quartzite, dolomite, kaolin, silica, graphite, diabase

**Pollution Treatment** 

Resin, alkali coating, rubber powder, industrial drugs, traditional Chinese medicine powder rubber particles, cosmetics, aluminum chloride solution, paint, etc.



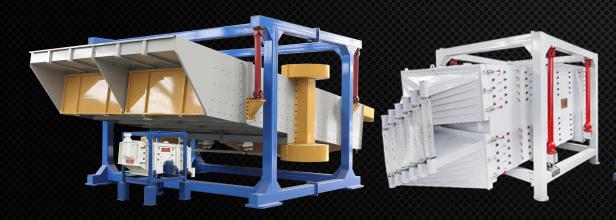


### THE SERVICES WE CAN PROVIDE

Sanyuantang Machine Co., Ltd. has been engaged in foreign trade export for more than 10 years. Its rich export experience ensures that you have worry-free purchasing.

When you cooperate with us, you can enjoy:

- ① Timely response through various communication tools.
- 2 Professional technical guidance to choose the most suitable product for you.
- 3 Economical transportation scheme to cut down transportation cost.
- 4) Thoughful after-sales tracking service from the installation to the daily maintanence.





Xinxiang Sanyuantang Machine Co., Ltd.

website:www.vibrationsieve.com

Add:No.811, Qingnian Road, Qiliying Town,Xinxiang County,

Henan Province China.

Email:info@sanyuantang.com

Whatsapp/ Wechat: 0086 18639095165