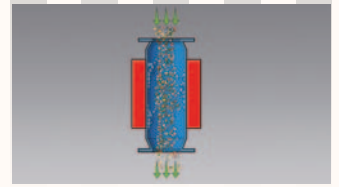
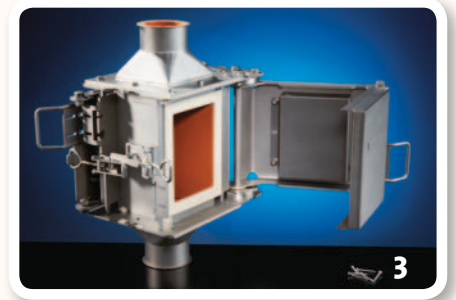
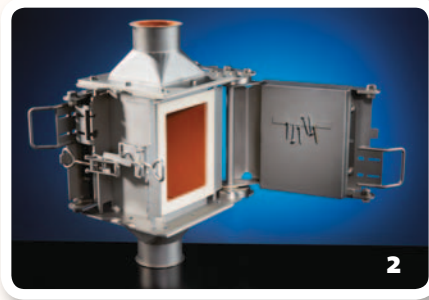


External pole magnets



External pole magnets filter unwanted ferromagnetic particles – such as iron and steel – from 50 µm to 50 mm out of food, powders and granulates in free-fall lines. Cleaning is possible without interrupting the product flow. They are used in the bulk, animal feed, plastics, ceramic and recycling industries, among others. External pole magnets are very robust. They offer the advantage of being located outside the product channel, so the product can fall through freely, making it possible to process large quantities while keeping bridging to a minimum. Versions are available with either ferrite or neodymium (Neoflux®) magnets.



Construction

For external pole magnets the plate magnets are placed on the outside of a stainless steel tube (photo 1). The magnets attract the Fe particles, which are held in place against the stainless steel plate. For cleaning, the stainless steel plate with the magnets must be swung outwards (photo 2). This moves the iron particles out of the product flow. Then the stainless steel (extractor) plate must be pulled away from the magnet, which removes the magnetic field so the iron falls off (photo 3). The construction is made in such a way that it is impossible for the iron particles to fall back into the product channel.

Self-cleaning external pole magnet

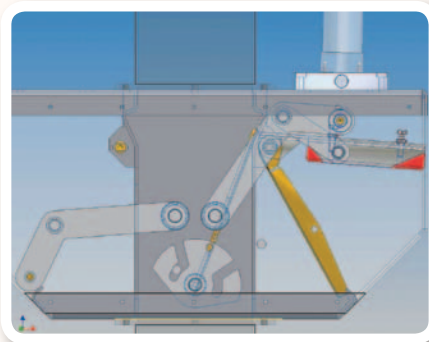
The self-cleaning external pole magnet contains two magnets. Each magnet is cleaned separately so that production can continue without interruption. There is a valve in the middle of the product flow. During cleaning of the magnet on the right, the valve interrupts the product flow for that magnet. A pneumatic cylinder moves the magnet and extractor plate outward. The plate is held stationary at the midway point, and the magnet continues further. The iron is released and falls downward. When the magnet is placed back in the production position, these cleaning steps take place on the other side. The controller requires a 6 bar compressed air connection and a 24V DC signal.

External pole magnets Ferrite		
Type number	Intake/outlet mm	Capacity m ³ /hr
SBPF180001	□ 180	50
SBPF260001	□ 260	100
SPBF360001	□ 360	200

External pole magnets Neodymium (Nd-Fe-B)		
Type number	Intake/outlet mm	Capacity m ³ /hr
SBPN100000	∅ 100	10
SBPN150000	∅ 150	30
SBPN200000	∅ 200	75
SBPN250000	∅ 250	100
SBPN300000	∅ 300	150
SBPN252500	□ 250	100
SBPN353500	□ 350	190



Manually cleanable external pole magnet.



Self-cleaning external pole magnet in cleaning position.