



Eccentric Eddy Current separator for fines

Separation system for recycling industries



Always ahead.

Eccentric Eddy Current separators

Our newest Eccentric Eddy Current with 104 pole changes, is specially designed and engineered for separating fines out of, for example, bottom ashes, electronic waste of small metal fractions. The high speed magnetic rotor inside this machine has the highest number of poles available in the market, 104 (!) and operating at a speed of 3.600rpm the 104 pole rotor generates an astonishing field frequency of 1.56kHz.

Key feature of the eccentric setup is the self-cleaning mechanism of the magnetic rotor. This results in less wear on the rotor which in turn lead to less downtime of the machine. The big diameter of the Bakker Magnetics eccentric rotor makes sure that, despite of this eccentric execution there is a big angle of magnetic influence for optimal separation results. The working principle of an eddy current separating systems is based on the difference in electric conductivity of nonferrous metals. A conveyor belt leads the product flow towards a magnetic rotor rotating at high speed. This magnetic rotor produces a rapidly alternating magnetic field, causing any nonferrous metals to be ejected from the product flow.

Bakker Magnetics rotors utilize radius-shaped magnets to eliminate the excessive air gap, which results in the maximum amount of magnetic force transferred into the nonferrous metals.

- Execution : Including separation unit
Including control cabinet
- Driving drum : Ø295mm, crowned
Powered by 4kW SEW engine
- Magnetic rotor : Ø610mm, cylindrical
Powered by 9,2kW SEW engine
Built up with extreme strong neodymium magnets;
quality BM52
Adjustable rotor speed; 500 - 3.600 rpm.
(2.000mm max 3.200 rpm).
- Belt : Wear resistant PU belt, 2 side guards
Self-adjusting belt track, 2 misalignment switches
Manually adjustable belt tension
Adjustable belt speed; 0,5 - 3 m/s
- Surface treatment : Anti-corrosion primer
Painted blue RAL 5015
Stainless steel parts untreated

On request:

- Neodymium separating drum
- Vibrating feeder

Article number	A	B	C	D	E	F	G	H	I
29.733/...	800	1610	4020	1500	1135	1462	1175	480	2175
29.734/...	1000	1810	4020	1500	1135	1462	1175	480	2175
29.736/...	1500	2310	4020	1500	1135	1462	1175	480	2175
29.737/...	2000	2810	4020	1500	1135	1462	1175	480	2175

Sizes mentioned based on a feeder length of 1500mm. Sizes and dimensions (in mm) as shown in the drawing.

