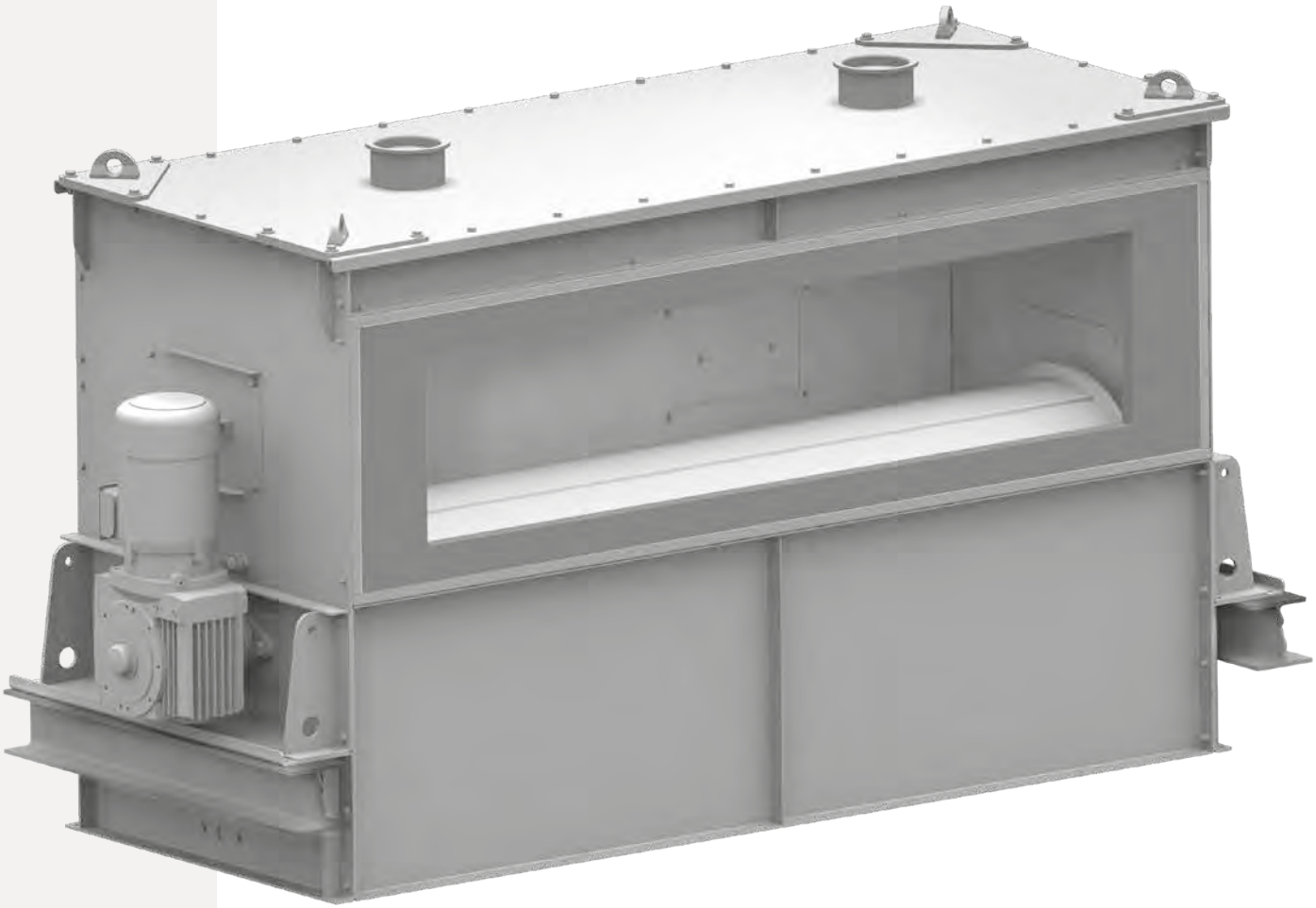
IFE
Material Handling

Magnetic Drum Separators



Magnetic drum separators

Range of application

IFE magnetic drum separators are versatile and have proven themselves for the separation of ferromagnetic, but also weak and medium magnetizable materials.

They are used for:

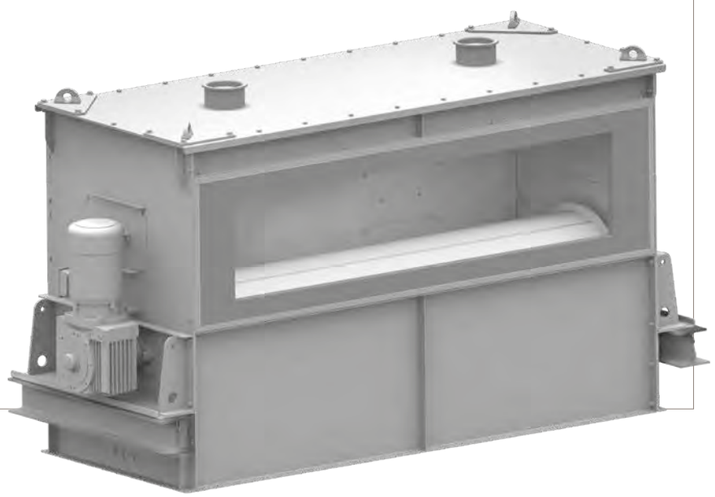
- Iron separation
- Enriching products
- Separation of strong, medium and weak magnetizable fractions
- Cleaning products
- Protection of downstream units

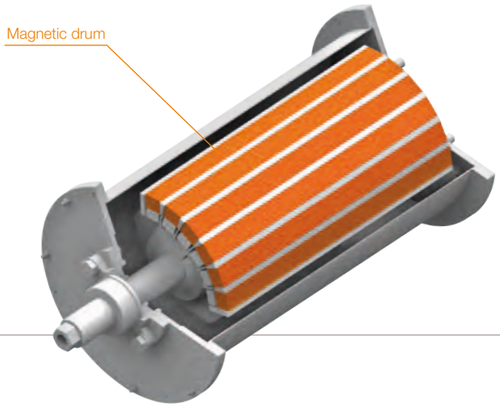
Industries

+ Scrap processing
+ Food and chemical industry
+ Waste recycling
+ Mining
+ Glass, ceramics and refractory industries

Selection criteria

+ Base material
+ Type and adhesion of impurities
+ Concentration of the components of the material mixture
+ Grain sizes





Installation variants

Top feed
+ feed directly
+ free fall

Bottom feed
+ feed directly

Permanent magnetic drum TPG

Construction

Magnets made of high-performance barium ferrite and flow guide discs are strung together axially and thus form a deep magnetic field. This system is particularly suitable for loose material.

Range of application

Separation of iron and steel scrap in simple applications:

- Separation of ferromagnetic particles from material flows of homogeneous grain size distributions
- Cleaning of ferromagnetic abrasion
- Processing of cubic material flows
- For small particle sizes which overband magnetic separators cannot handle optimally

Magnetic drum separator for the treatment of foundry sand

Standard scope of supply

+ Magnetic drum with drive
+ Housing with splitter (adjustable)

Optional features

+ Various housing options available
+ Feeder
+ Wear drum shell for longer service lives
+ Different splitter variants
+ Heating/Cooling for special applications
+ ATEX

Advantages

+ Simple design of the magnetic drum
+ Rather insensitive to external influences
+ No pre-cleaning of the feed material necessary
+ Easy shielding
+ Low dust dispersion
+ Easy integration into existing systems
+ Low energy consumption
+ High conveying capacities can be achieved
+ Easy removal and reinstallation for maintenance

Magnetic drum separators for the extraction of Fe abrasion

High performance permanent magnetic drum HPG

Construction

Magnets made of high-performance barium ferrite and pole bars are strung together radially and thus form a deep magnetic field that changes over the circumference. Magnetic drums with radial pole arrangement are ideal for adhesive materials. Magnetizable parts are circulated on the drum surface by changing poles and non-magnetizable substances are released.

Treatment of slag and scrap metal

Range of application

Extraction of iron and steel scrap in almost all applications:

- Separation of ferromagnetic particles from material flows of homogeneous grain size distributions
- Cleaning of ferromagnetic abrasion
- Processing of cubic and flat material flows

Standard scope of supply

+ Magnetic drum with drive
+ Housing with splitter (adjustable)
+ Drum shell with material bar (application-specific)

Optional features

+ Various housing options available
+ Feeder
+ Wear drum shell for longer service lives
+ Different splitter variants
+ ATEX

Advantages

+ Simple design of the magnetic drum
+ Rather insensitive to external influences
+ No pre-cleaning of the feed material necessary
+ Easy shielding
+ Low dust dispersion
+ Wide applicability due to a wide speed range
+ Low energy consumption
+ High conveying capacities can be achieved
+ Easy removal and reinstallation for maintenance

Treatment of scrap metal

Neodymium permanent magnetic drum KHP

Construction

Magnets made of high-performance iron-neodymium-boron alloys and pole bars are strung together radially and thus form a deep magnetic field that changes over the circumference. Magnetizable parts are circulated on the drum surface by changing poles and non-magnetizable substances are released.

Field lines KHP

Range of application

Separation of weak and medium magnetizable materials from non-magnetizable materials:

- Separation of rust (iron oxide) or ores
- Separation of non-ferrous metals (e.g. zinc, brass, stainless steel)
- Processing of cubic and flat material flows

Magnetic drum separator KHP for the extraction of Fe from a WEEE-small appliances-fraction

Standard scope of supply

+ Magnetic drum with drive
+ Housing with splitter (adjustable)
+ Drum shell with material bar (application-specific)

Optional features

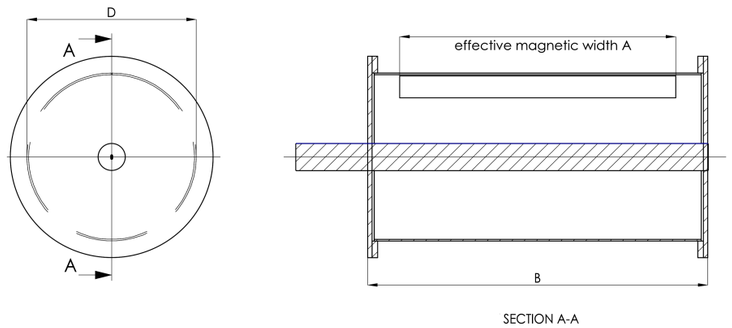
+ Various housing options available
+ Feeder
+ Wear drum shell for longer service lives
+ Different splitter variants
+ ATEX

Advantages

+ High flux densities achievable
+ High separation / cleaning performance achievable
+ Simple design of the magnetic drum
+ Pre-cleaning of the feed material is necessary
+ Easy shielding
+ Low dust dispersion
+ Low energy consumption
+ Easy removal and reinstallation for maintenance

Magnetic drum separator KHP for a station separating Fe, stainless steel and NF

Dimensions



SECTION A-A

Permanent magnetic drum TPG

Model	Ø Drum D [mm]	Magnet width A [mm]	Magnetic drum width B [mm]
TPG 320x250	320	250	360
TPG 320x300	320	300	410
TPG 320x400	320	400	520
TPG 320x500	320	500	600
TPG 320x650	320	650	730
TPG 320x800	320	800	920
TPG 320x900	320	900	1020
TPG 320x1000	320	1000	1110
TPG 320x1250	320	1250	1350
TPG 320x1400	320	1400	1510
TPG 400x500	400	500	600
TPG 400x650	400	650	730
TPG 400x800	400	800	920
TPG 400x900	400	900	1020
TPG 400x1000	400	1000	1110
TPG 400x1250	400	1250	1350
TPG 400x1400	400	1400	1510
TPG 500x650	500	650	730
TPG 500x800	500	800	920
TPG 500x900	500	900	1020
TPG 500x1000	500	1000	1110
TPG 500x1250	500	1250	1350
TPG 500x1400	500	1400	1510
TPG 500x1500	500	1500	1610
TPG 500x1900	500	1900	1980

High performance permanent magnetic drum HPG

Model	Ø Drum D [mm]	Magnet width A [mm]	Magnetic drum width B [mm]
HPG 500x300	500	300	410
HPG 500x650	500	650	730
HPG 500x900	500	900	1020
HPG 500x1250	500	1250	1350
HPG 500x1400	500	1400	1510
HPG 500x1500	500	1500	1610
HPG 500x1900	500	1900	1980

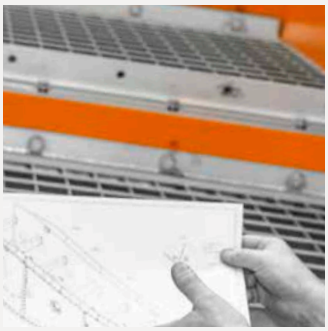
Neodymium permanent magnetic drum KHP

Model	Ø Drum D [mm]	Magnet width A [mm]	Magnetic drum width B [mm]
KHP 300x250	300	250	360
KHP 300x500	300	500	600
KHP 300x800	300	800	920
KHP 300x900	300	900	1020
KHP 300x1000	300	1000	1110
KHP 300x1250	300	1250	1350
KHP 300x1400	300	1400	1510
KHP 300x1500	300	1500	1610
KHP 500x650	500	650	730
KHP 500x900	500	900	1020
KHP 500x1000	500	1000	1110
KHP 500x1400	500	1400	1510
KHP 500x1500	500	1500	1610
KHP 500x1900	500	1900	1980

committed

iFE
Material Handling

competent



experienced

partnership

THE ORANGE WAY INTO THE FUTURE

IFE has a history, has a tradition. We explore, develop, collect experiences, work hard, deliver highest quality and keep our promises.
But all that would be worth nothing – without OUR CUSTOMERS!

IFE Aufbereitungstechnik GmbH

Patertal 20
3340 Waidhofen/Ybbs
Austria

Phone
+43 7442 515-0

Fax
+43 7442 515-15

Mail
office@ife-bulk.com

www.ife-bulk.com

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