

Leiblein

world of liquids



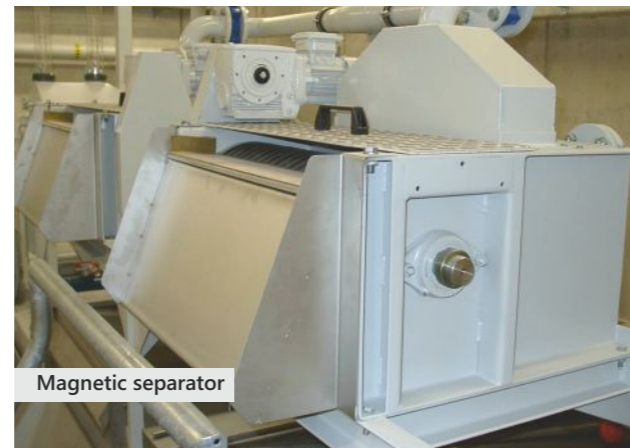
Magnetic separator
Technologies for solid/liquid separation

The magnetic separator

For the filtration of ferromagnetic particles

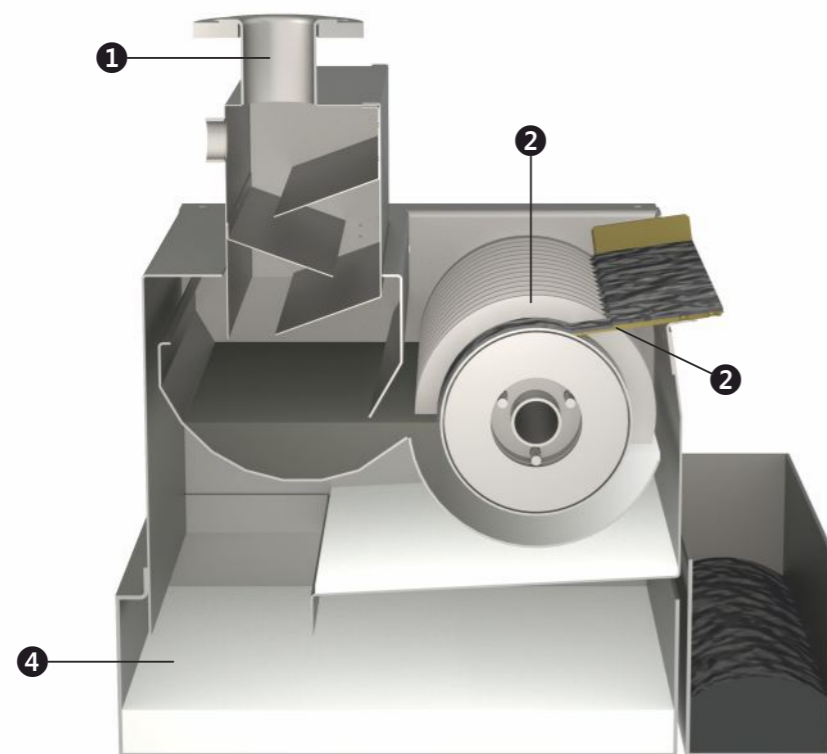
The magnetic separator segregates the ferromagnetic particles from liquids e.g. cooling lubricants. It is intensified with emulsions from grinding processes, which are contaminated with fine particles, and are used to prevent blocking of subsequent filters.

The permanent magnet used ensures a higher degree of separation in connection to the robust stainless-steel design and also a long service life. For each magnetic separator up to 900 l/min throughputs with different contaminations are possible.



Functional principle of the magnetic separator

Technology made by Leiblein



Filter with magnetic force

The contaminated liquid is fed into the magnetic separator from above (1). The ferromagnetic particles are retracted by the extremely strong permanent magnets of a magnetic cylinder (2) and remain adhered here.

By turning the roll, they are transported out of the liquid and separated on a deflector plate (3). The cleaned liquid flows to the outlet (4).

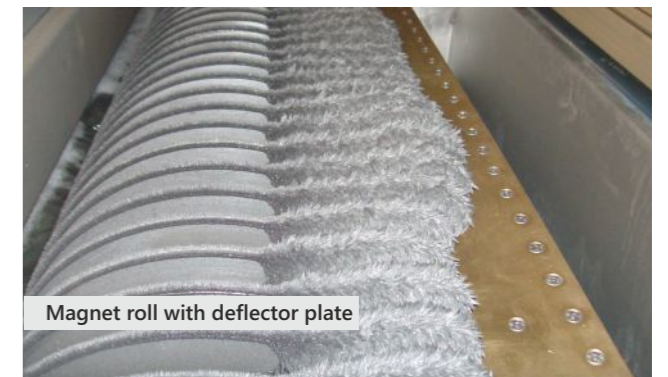
Fields of application of the magnetic separator

Multiple applications

The magnetic separator is especially for the separation of ferromagnetic material from cooling lubricants. But it can be also used for other liquids.

- Cooling lubricant maintenance in the metal processing industry and in the automotive field
- Use in machine tools
- As pre-separator of a cooling lubricant filter
- For the treatment of a coolant central system

Frequently the magnetic separator is paired with an inclined filter for pre-separating or integrated as a component in the central systems. The subsequent filters are hence delimed which leads to a lower material use (e.g. filter fleece).



Higher efficiency

Your advantages with our magnet separator

- High filtration efficiency by 360° ring magnets, pole rings and cyclic operations as well as incident flow of the entire roll width
- Effective magnet roll: double surface due to the pole rings between the ring magnets
- Optimal separation of ferritic residues as residual magnetism is avoided through the brass-scraper blades.
- Optimal separation of liquid as the scraper inclines slightly outwards
- Long service life and lower deterioration due to robust stainless steel construction and slow rotation of the magnet roll
- No chemical changes of the medium as the separation takes place purely mechanically
- Lower energy costs
- Use in the bypass or full current operation possible
- Clean environment due to inner emergency overflow and lateral drain plug
- Flexible and individual adjustment to environment:
 - > Assembly with superstructure with cramped installation situation
 - > concealed installation possible
 - > power unit is optionally on the left or right



Design

Types and materials

Magnetic separators can be used as an independent compact device or as component in the central filter system.

The chain magnetic separator is a version of the magnet separator, which is especially suitable for large throughputs.

Material: Stainless steel 1.4301 / 1.4404

Magnets: Ferrite magnets

Alternative materials upon request.

Each magnetic separator is designed for your specific use. In addition, all products are provided to you as test and/or rental system.



Magnet roll with brass scraper



Chain magnetic separator

You have questions about the treatment of your medium?
Do not hesitate and contact us!
We would be pleased to advise you.



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