

Product overview

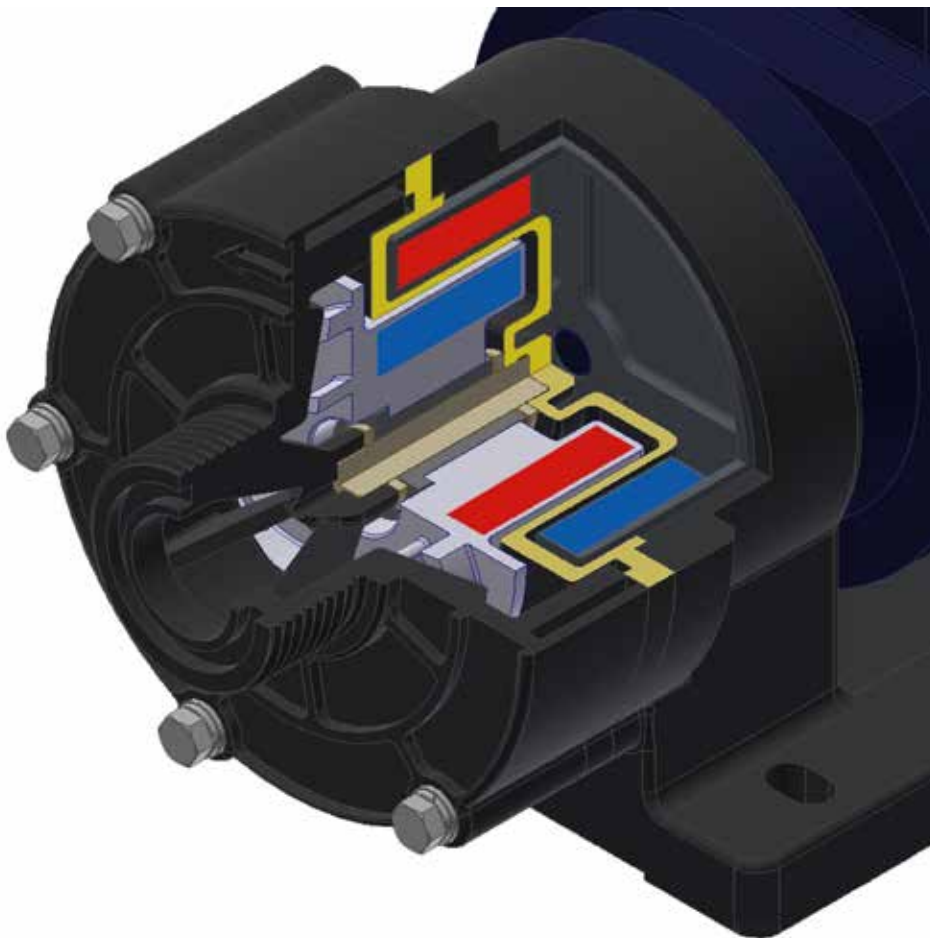
Process Pumps & Systems



More than just pumps

- **Magdrive centrifugal pumps**
- **Vertical immersion pumps**
- **Filters and filtration equipment**
- **Submersible pumps**
- **Accessories**





MAGSON – Always on the safe side!

No matter how acidic or basic, MAGSON pumps are perfectly suited to transfer highly aggressive fluids.

Conventional centrifugal pumps are equipped with mechanical shaft which are subject to wear and possible failure. When transferring highly corrosive liquids or fluids containing solids, the mechanical seal may require additional support systems to run safely which then also need to be maintained. The need to replace worn mechanical seals reduces the availability of the pump for operation. **Magnetically coupled pumps**, however, do not use a mechanical seal providing the benefit of being hermetically sealed and maintenance-free. The pump motor turns the outer drive magnet which then turns the inner magnet and impeller. There is no need for a continuous shaft or a mechanical seal prone to wear. Instead, a rear casing completely seals the pumping area from the drive motor. As a result, leakage is impossible and the pump does not require maintenance.

MAGSON sets the standard of safety

MAGSON magnetically coupled centrifugal pumps go even one step further: Their rugged design and a **series of smart details** further enhance their resistance to highly concentrated acids and bases, ensuring safe operation in critical applications.



MA – injection molded plastics

Our flagship with the best price / performance ratio. Advantages of these design (e.g. short delivery times, modular system, exchangeable parts, energy efficiency, LCC, and much more).

Main materials in **PP** and **ETFE**

Characteristics:

Q up to 950 l/min
209 gal[UK]/min
251 gal[US]/min
H up to 42 mWS (138 ft)



MAS – injection molded plastics, self-priming

These pumps are capable of **pulling liquids** from below with the help of the **integrated priming chamber**. The MAS pump can pull a prime up to 5mWC in less than 2 minutes.

Main materials in **PP** and **ETFE**

Characteristics:

Q up to 470 l/min
103 gal[UK]/min
124 gal[US]/min
H up to 27 mWS (88 ft)

MML – stainless steel

The metallic versions cover all areas in which plastic cannot be used. Different impeller designs available. Also in **ATEX** version.

Main materials in **1.4401 (CF8M, 316L)**

Characteristics:

Q up to 500 l/min
110 gal[UK]/min
132 gal[US]/min
H up to 24 mWS (79 ft)



MPT – machined plastics, side channel

The MPT series is specifically designed for applications requiring low flow at high pressures. This pump is also available in an **ATEX** version.

Main materials in **PP** and **PVDF**

Characteristics:

Q up to 215 l/min
47 gal[UK]/min
57 gal[US]/min
H up to 55 mWS (180 ft)

P – machined plastics

The MP series made of massive plastics is the right pump if higher performance conditions are needed. It can also be manufactured in an **ATEX** version.

Main materials in **PP** and **PVDF**

Characteristics:

Q up to 2000 l/min
440 gal[UK]/min
528 gal[US]/min
H up to 44 mWS (144 ft)



MMT – Stainless steel

Side channel pumps constructed of stainless steel for both high pressures and elevated temperatures up to 300 °C. Different impeller designs and an **ATEX** version.

Main materials in **1.4401 (CF8M, 316L)**

Characteristics:

Q up to 170 l/min
37 gal[UK]/min
45 gal[US]/min
H up to 90 mWS (295 ft)

MAU – Submersible, plastics

If your application requires a submersible pump, the magnetically coupled pump type MAU is the perfect choice. The pump can be completely submerged into the liquid and operate without any issues.

Main material in **PP**

Characteristics:

Q up to 950 l/min
209 gal[UK]/min
251 gal[US]/min
H up to 42 mWS (138 ft)



GM – plastic lined

The GM series is a standard duty chemical pump which has a non-metallic lining and is used in applications where high pressures exceed what pure plastic design pumps can handle.

Main material in **GG/PFA**

Characteristics:

Q up to 3000 l/min
660 gal[UK]/min
793 gal[US]/min
H up to 80 mWS (262 ft)



SONCO – the clean side!

A new generation of filters housing, filter systems and complete pump/ filter skids constructed in PP and PVDF

One of our fundamental principles is to **think a step ahead**. So we have not just developed a new filter system, but closely analyzed each components of the entire system for the benefit of our customers. The result: the new **SONCO** filters.

SONCO filters should be used whenever perfect fit and leak-free reliability or of utmost importance. They are suitable for a **wide range of liquids** including highly aggressive acids and bases, degreasing fluids, general chemicals, highly corrosive liquids and fluids that tend to crystallize.

High quality and innovative design assure maximum efficiency and durability in your process. In conjunction with FLUX's comprehensive after-sale service and support, you can always depend on our products to keep your plant running trouble-free. Benefit from the more than 60 years of experience, specialist know-how and customer oriented service in person. Whatever the industry - engineering, surface finishing, chemical industry, solar panels, printed circuit boards or electrop- lating, we will design the optimal filtration system to meet your specific needs.



Filter housings made of PP or PVDF

SONCO-Filter housings are available in two designs.

Type **FKX** filters are universal which means they can accept a variety of filter media with different inserts. This makes it incredibly easy to change the method of filtration between **cartridges, plate filters, activated carbon or oil absorbent filters**.

Only the insert need to be changed while the filter housing and other components remain the same - **a very big advantage!**

The filter chambers **FKB**, on the other hand, are only suitable for bag filters, since here the direction of flow must take place directly from above via the cover to ensure filtration. It also makes it easy to change the bag.

Filter technology – filter devises

SONCO-Filtration system consists of:

- A polypropylene constructed baseplate / stand to hold all components
- A **filter housing** with filter insert and filter media
- Complete **pipng** of all components
- as well as a **MAGSON pump**

Filter technology – Skids

Special tasks require special solutions. That is why we design, plan and build filter systems according to your **requirements**. We will discuss the task with you on site and thus develop an **optimal solution**. Measurement, planning, 3D simulation and construction as well as the assembly come from a single source - the best possible guarantee that all interfaces fit together and that the system is ergonomically easy to operate.

- The best possible way to guarantee that all system components fit properly and that the system is simple to operate



Cartridge Filter

Insert for filter cartridges with an outer diameter of 63 mm. Particularly easy handling by cartridge tie rod with large, easy to handle clamping screws.

- Versatile **depth filter**
- Filtration direction from outside to inside
- **Easy handling**, quick cartridge change
- High particle capacity for long service life
- Suitable for the **FKX** universal filter housing

Bag Filter

Filter bags are surface filters. As an **absolute filter**, 100% of all particles larger than the nominal filter fineness are retained. Filter finenesses from 1 - 500.

- Filter cake stays in the bag and does not fall back into the bath
- Filtration direction from top to bottom
- Easy to use
- The **filter cloth is easy to wash off**
- The filter bag can be used several times depending on the nature of the contamination
- Suitable for **FKB** bag filter housing

Activated Carbon

Activated Carbon is a highly porous, pure carbon with a high surface area (up to 300 m² per Gramm). Activated carbon is used to absorb organic substances, odors and flavors.

- Easy and clean charcoal treatment possible thanks to **canister insert**
- **increases efficiency** from long contact time due to low flow rates within the canister
- Filter cartridge as a retaining element prevents the activated carbon from washing out
- Suitable for universal filter housing **FKX**

Oil absorbens

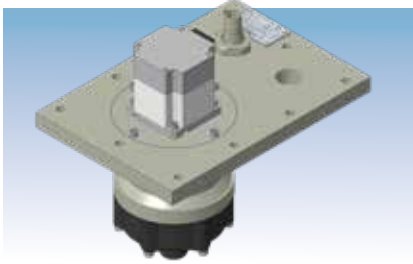
For absorption of oils and fats e.g. from degreasing baths. This reduces the use of surfactants and will extend bath life. **Special fibers** are used in the canister as the filtration media.

- **Canister insert** with extractor makes it clean and easy to change filter
- Suitable for universal filter housing **FKX**

Plate filter

Plate filter insert with filter paper for surface filtration.

- Filter cake builds on the paper discs between the filter plates
- Average particle capacity
- **Low waste volume**
- Inexpensive consumables
- Suitable for universal filter housing **FKX**
- Easy removal of the insert by means of a pull-out handle



And much more

Pump sets, Customised solutions and individual accessories complete the FLUX range.

Over time, we have developed a complete range of **accessories** for the **centrifugal pump** and **filtration products**. This provides added value for our customers and helps to increase efficiency, reduce life cycle costs, safety and ease of use.

Here, you will find some examples of these items.

FLUX is also a specialist for customised solutions

Thanks to our modular system and decades of experience in pump and filter technology, we also offer customer-specific special solutions for all your needs, such as:

- Special filter skids
- SAFETEC pump set for emptying IBCs and cans
- Pump controls, dry run protection, frequency converters
- Filling systems
- Mobile Pump stations
- Mobile Filter devices
- Customized solutions for pumps and with filter devices
- And even more



SAFETEC pumpset

All over the world, the requirements for environmental protection and **sustainability** are steadily increasing. At the same time, the **safety requirements** for handling hazardous chemicals are increasing accordingly.

For these reasons, more and more chemical packaging is being brought onto the market in drums or IBC containers that are sealed and that are emptied using a permanently installed immersion tube using a suction process.

With classic drum or container pumps, it is not possible to empty **full containment IBC's**, as there are no openings for inserting a drum pump. A **self-priming pump** is needed for emptying the container through an immersion tube. For this purpose, FLUX has developed the SAFETEC pump set. The pump set contains all the components required for safe emptying of the container.

Main material pump in **PP** or **ETFE**,
Piping in **PVC** or **PVDF**



Volumentric filling system SAFETEC FILL VM

In addition to the **SAFETEC pump set**, we have developed a compact and simple volumetric filling system based on our self-priming magnetic centrifugal pump type MAS and the SAFETEC control so that you can fill containers quickly and easily.

The filling system is available in a manual, semi-automatic or fully automatic version. It can be operated intuitively via the SAFETEC control panel. Various liquid information and filling volumes can easily be accessed. Different designs (fixed installations or on a portable cart) are possible depending on customer requirements. An effective and inexpensive solution for your filling needs.

Main materials pump in **PP** or **ETFE**,
Piping in **PVC** or **PVDF**

Accessories

In addition to **pumps** and filter technology, we also offer **accessories** that are tailored to our products. E.g. our dry-running sensor type **TLS**, which detects air bubbles in the medium in the case of conductive media and so you can protect the pump from running dry or detect an empty container. The TLS is available in two versions; for installation in the pipeline or for clamping over existing piping or hose.

Or the **frequency converter** of the type **SFU**, which will allow you to adjust the speed of the pump to your specific requirement which results in a longer lasting system and reduced power consumption, saving you money in the long run.

We can also provide you with all the parts you need to connect the pumps to your system.

Vertical immersion pumps

Vertical immersion pumps are always used when coolants, lubricants, non-flammable solvents and, above all, acids and alkalis as well as other liquids mixed with chemicals have to be conveyed or circulated and the pump is to be „immersed“ in a tank or container. The main areas of application are in the chemical industry, process technology, surface treatment, circuit board production, electroplating, water treatment and wastewater technology.

Main material in **PP** or **PVDF**

Characteristics:

Q up to 250 m³/h
916 gal[UK]/min
1.100 gal[US]/min
H up to 35 mWC (115 ft)





More than just pumps

Today the FLUX name is recognised around the globe as the trademark for top standards in pump technology. Everything started with the invention of the electric drum pump in 1950. Nowadays FLUX has an extensive range of products each of which can be customized. FLUX pumps are used for example in the chemical and pharmaceutical industries; in machinery and plant engineering as well as companies in electroplating, effluent treatment and the foodstuffs sector.

Whether single-product or system solution – FLUX quality is synonymous with a long service life, excellent economy and maximum safety.

In addition to the excellent product quality FLUX customers appreciate the superb level of expertise our staff has to offer as well as their genuine customer focus.

These days FLUX-GERÄTE GMBH supplies pumps to almost 100 countries around the globe.

FLUX-GERÄTE GMBH

Process Pumps & Systems

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