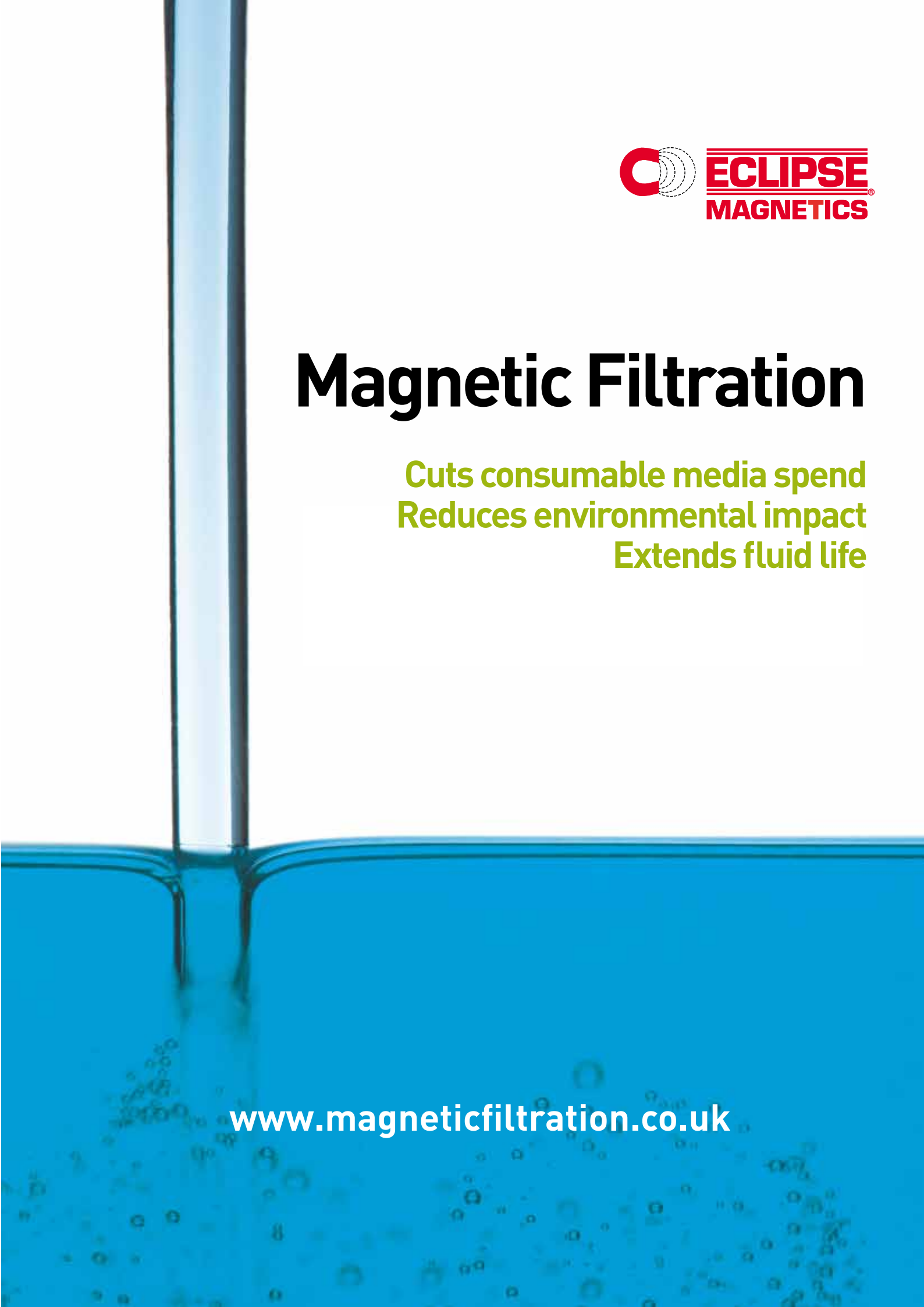


ECLIPSE MAGNETICS

Magnetic Filtration

Cuts consumable media spend
Reduces environmental impact
Extends fluid life

www.magneticfiltration.co.uk

Why use magnetic filtration?

Significantly lower operating costs

Longer lasting fluids
Magnetic filters remove particles smaller than one micron in size. Traditional barrier filters leave particles smaller than 5 microns circulating in the fluid. These particles significantly affect the performance of fluids and also act as a focus for bacterial build up.

NO consumables
Once installed there is nothing else you need to buy to ensure effective filtration over the filter's lifetime.

Minimal fluid loss
Contamination is removed from the filter as a semi-dry 'cake'. Fluid loss is considerably less than that of traditional filter media.

NO disposal costs
The cake itself can be recycled, eliminating specialist disposal costs.

Minimal running costs
Manually cleaned magnetic filters require no additional power. Self-cleaning filters only require a small amount of power for the cleaning process.

More environmentally responsible

Less fluid used
More efficient filtration means fluids retain their essential properties for longer giving extended fluid life.

Contamination can be recycled
Ferrous contamination is collected and can be easily recycled as a single material.

Reduced pollution
No contaminated filter media ends up in landfill.

Increased productivity

Maintain flow rates
High flow rates can be maintained without affecting filtration efficiency. Fluid does not flow through filter media so flow is uninterrupted. Flow rates are determined by your process requirements, not by your filter.

No back pressure up
Even when the filter is 'full' there is no blinding or risk of burst filters, reducing downtime.

Reduced wear
Particles that pass through traditional filters act as an abrasive, wearing parts, machinery and product. Magnetic filters remove these particles.

Fine filtration
Conventional filtration media 5 microns and below can strip oils of anti-foaming, anti-bacteria and other additives. Micromag enables sub-micron filtration without affecting the oil's characteristics.

Where to use magnetic filtration

Magnetic filtration can be used in almost any environment where ferrous, para-magnetic and grinding medium contamination of a liquid is a problem.

Metalworking / finishing
Liquids Coolants
Applications Grinding, milling, honing, lapping, fine finishing, Wire & EDM, laser cutting, CNC

Liquids Cleaning fluids
Applications Part washing, cleaning stations

Hydraulic systems
Liquids Fluid/oil
Location Hydraulic systems, test beds

Fuel storage and handling
Liquids Oil, diesel, petrol, bio-fuels
Applications Tank cleaning, storage inlet and outlet points, fuel dispensers

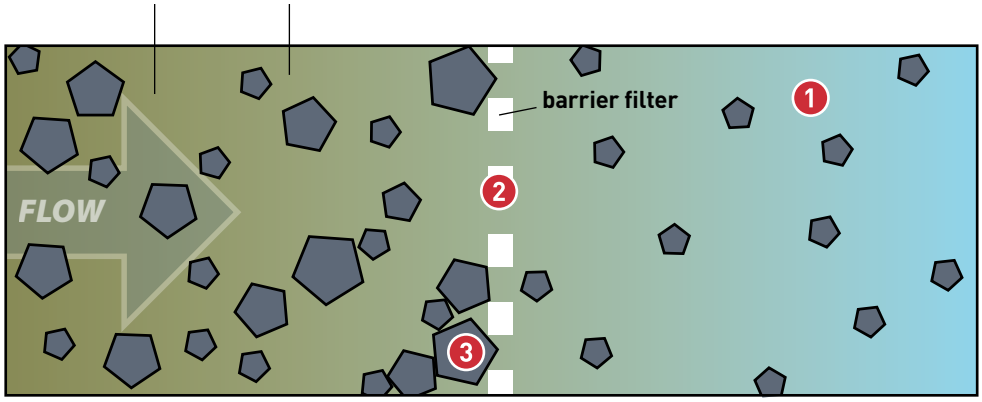
Gearboxes
Liquids Oil
Location General, gearbox maintenance

Heating systems
Liquids Hydronic fluids
Applications Domestic and industrial heating

Filters in action

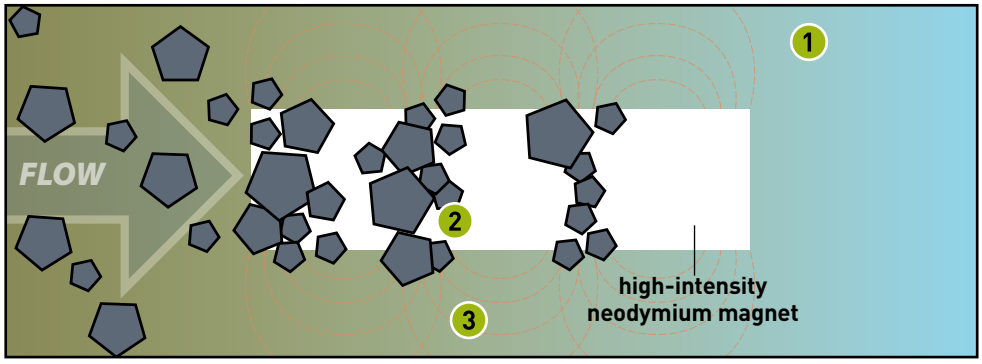
Barrier filtration

contamination particles | fluid



1. Particles smaller than media rating remain in the fluid reducing its efficiency and increasing wear on machinery and cutting tools
2. Once full, the contaminated media is disposed of along with fluid held in the filter medium
3. The filter becomes clogged causing blinding and back pressure

Magnetic filtration



1. All particles are removed
2. Once full, the contamination is removed from the magnet and can be recycled with little loss of fluid and can be recycled
3. Patented magnet configuration means that even when the filter is full, flow channels remain open so there is no blinding or pressure build up

CASE STUDIES Magnetic filtration in use

Reduced environmental impact

Elite Tooling installed a Filtramag magnetic filter on a Walter Heliotronic Power Grinder, used for manufacturing carbide cutting tools, and were able cut consumable costs and sell removed contamination for recycling.

Increased production efficiency

Honda installed a Micromag on a bespoke machine used for manufacturing engine valve seats – where accuracy and finish quality is critical. Not only was part quality improved but the filter's minimal maintenance requirements meant that machine downtime was significantly reduced.

Significant savings made

Auto parts manufacturer ThyssenKrup was having to replace one pump per week in its de-greasing plant due to inefficient filtration. After installing an Eclipse Magnetics filter before the pumps this figure was reduced dramatically. The cost of the filter was paid back within weeks.

Magnetic filter range Product data

MICROMAG

Standard machine filtration. Smaller wash stations. Non-chemical environments.

Inline/offline filtration
Manually cleaned
Styrene Acrylo Nitrile (SAN)
Temp range: 5°C to 50°C.
Stock item

Product number	flow rate ltrs/min	contam. capacity kgs	max. operating pressure bar	connection ″ BSP
MM5	70	1	12	1
MM10	100	2	12	1
MM20	150	4	12	1½

MICROMAG HP

Micromag for high pressure applications – up to 80 bar.

Full stainless steel construction
Temp range: 5°C to 70°C.
Stock item

Product number	flow rate ltrs/min	contam. capacity kgs	max. operating pressure bar	connection ″ BSP
MM5/HP	70	1	80	1
MM10/HP	100	2	80	1
MM20/HP	150	4	80	1½

FILTRAMAG

Higher flow, higher contamination. Applications with less magnetic contamination e.g. grinding medium, para-magnetic steel, carbide. Harsh chemical environments.

Inline/offline filtration
Manually cleaned
Full stainless steel construction
11000 Gauss high-intensity magnet
Temp range: 5°C to 70°C
Stock item

Product number	flow rate ltrs/min	contam. capacity kgs	max. operating pressure bar	connection ″ BSP
FM1.5M	250	3	10	1½
FM2.5	500	6	10	2½

AUTOMAG

Higher flow, higher contamination. Non-stop operations. Harsh chemical environments.

Inline/offline filtration
Automated self-purging (air operated)
Full stainless steel construction
Temp. range: 5°C to 70°C
Multiple units can be grouped for higher capacity
Stock item

Product number	flow rate ltrs/min	contam. capacity kgs	max. operating pressure bar	connection ″ BSP
AM6	450	7	10	2
AM12	900	14	10	3 PN16 flange

AUTOFILTREX

Highest flow, highest contamination. Non-stop operations.

Offline filtration system
Free-standing, automated self -cleaning
Non-stop filtration
Full stainless steel construction (PTFE coated as an option)
Touch-screen programming
Supplied as a turnkey package
Temp range: 5°C to 70°C
Made to order.

Product number	flow rate ltrs/min	contam. capacity kgs	max. operating pressure bar
AF4	400	8	10
AF8	800	16	10
AF12	1200	24	10

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