GOVONI S.R.L. HANDLING Systems

YOUR EXPERTS
IN METAL CHIPS

MAGNETIC FILTERS

Filtration systems

SMALL AND EFFICIENT SYSTEMS

TO CAPTURE FERROUS POLLUTANTS
WITHOUT ANY DISPOSABLE WASTE

WITH A LIMITED INVESTMENT

FLOW RATES:

emulsion: from 80 to 500 l/min
oil: from 40 to 250 l/min

TECHNICAL DESCRIPTION AND OPERATION

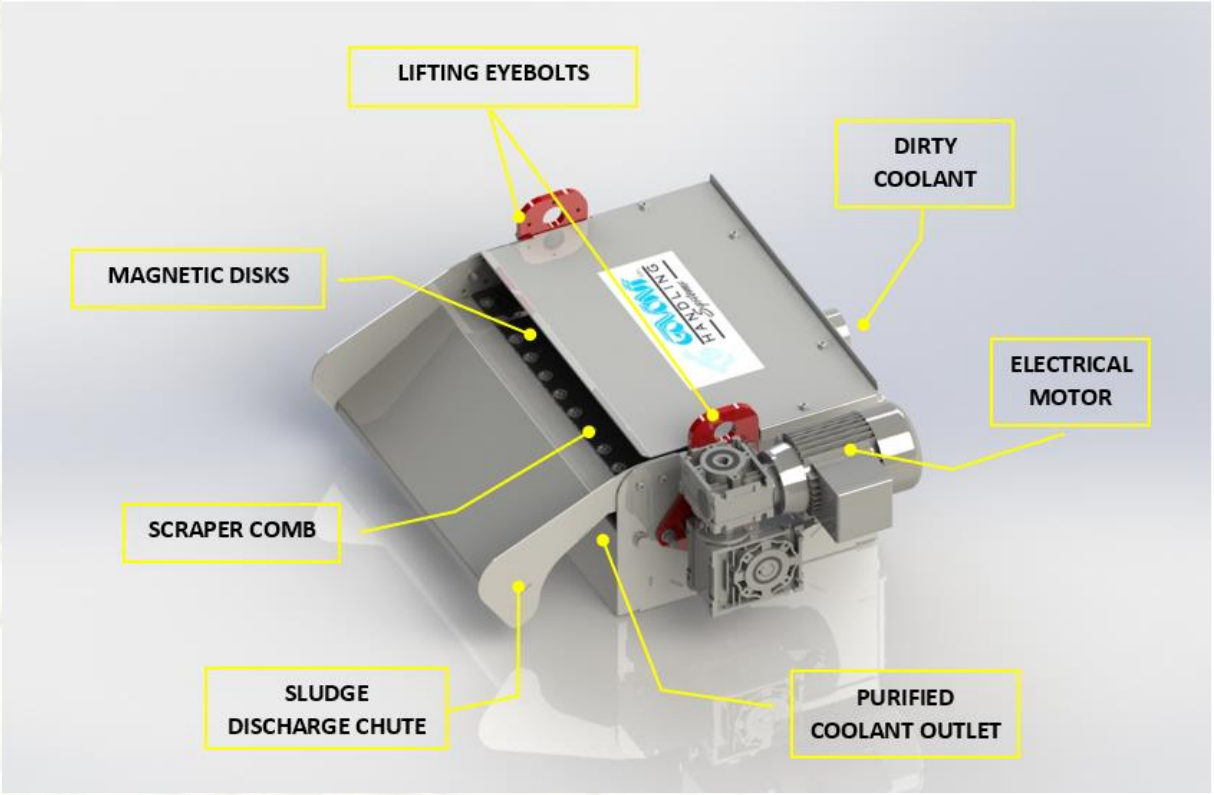
Consisting of a **rotating drum** with a core of powerful **permanent ring magnets**, alternated by steel disks mounted on a sturdy shaft supported by two flanges complete with bearings. Most of the ferrous particles in the fluid are captured by the high-intensity magnetic field and separated from the fluid as drum rotates.

Contaminated liquid is conveyed by gravity or pressure into the filter. The rotating magnet unit retains most of magnetic particles, which are then removed by a **scraper comb** that discharges the nearly dry sludge into a proper **box** through an adjustable-angle chute. The purified liquid passes into the **collecting tank** and then, depending on its intended use, is relaunched to machine tool or to a barrel by a **booster pump**. Magnetic disc filter does not use filter media to waste and allows for an easy separate disposal of recovered sludge.

Simplicity and **self-cleaning** of this filter make this machine free from maintenance and disposable waste.

This system comes standard with a **scraper comb,** variable-angle **chute, flow breaker, lifting eyebolts,** and an **electrical control panel**. As available **optionals** there are: chute casing, **sludge box**, and a **filtered coolant collecting tank** with **booster pump and levels.**

Magnetic filter can be combined with gravity band filter, self-cleaning drum filter and microfiltering cartridges up to 5 µ. It can even be installed in a simple dredged tank for better sludge removal.



Magnetic filters, made of sturdy galvanized sheet metal, consist of a supporting frame housing a group of **permanent magnets** connected by a drive shaft to a gearmotor and **scraper comb** for sludge removal.

Suitable to separate magnetic particles from emulsified and neat oils having a maximum viscosity of 20°cSt at 40°C, for flow rates from 40 to 500 l/min.

It can be combined with many other series of filters, increasing their efficiency and savings.

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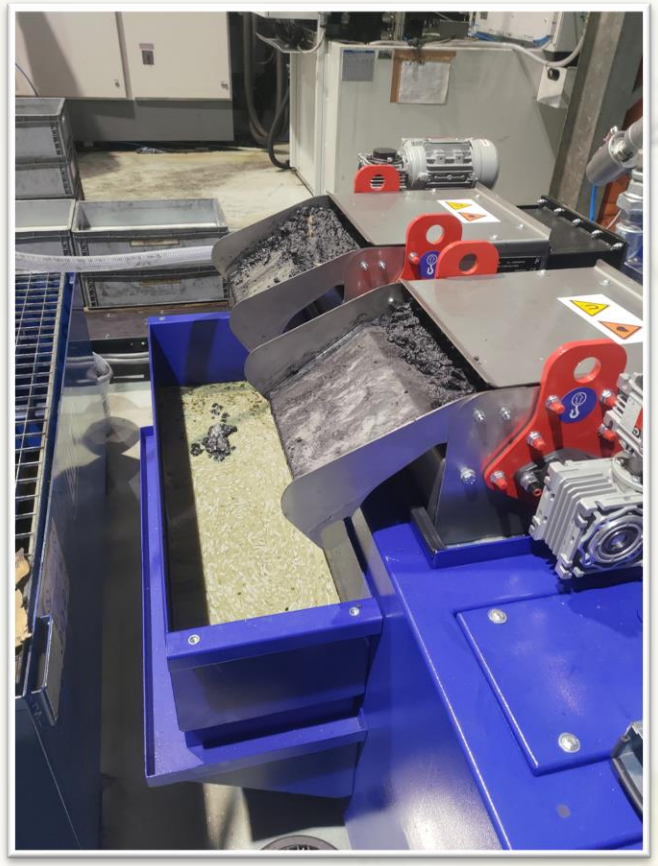
MAGNETIC FILTERS - BENEFITS

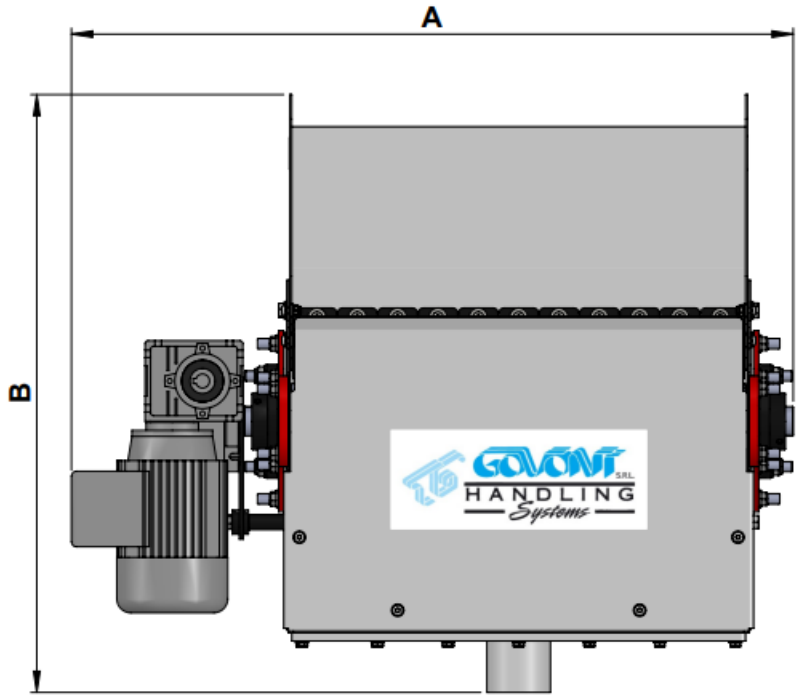
- HIGH QUANTITIES CAPTURE OF LARGE-GRAINED POLLUTING PARTICLES
- INEXPENSIVE
- HIGH PERFORMANCE EVEN WITH PURE NEAT OIL
- SELF-CLEANING
- MINIMUM MAINTENANCE
- NO WASTE MATERIAL
- COMBINABLE WITH OTHER FILTRATION SYSTEMS
- MODULAR: TWO OR MORE FILTERS CAN BE INSTALLED IN LINE
- LOW ENERGY CONSUMPTION



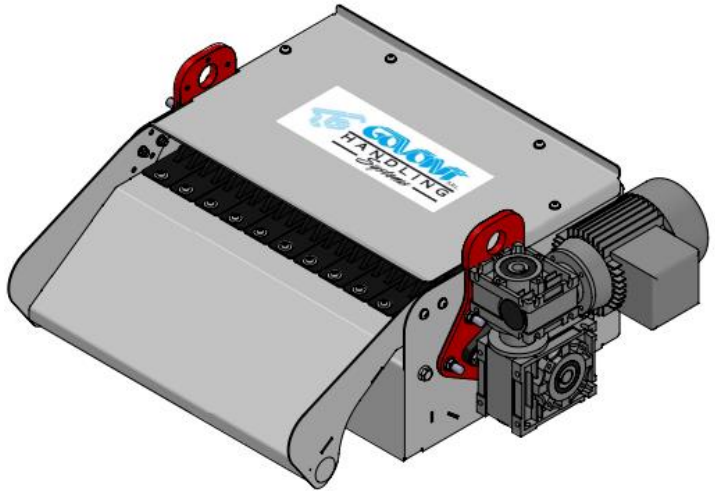
SERIES	MODELS				
MAGNETIC FILTER	**DM1**	**DM2**	**DM3**	**DM4**	**DM5**
MAX EMULSION FLOW RATE (l/min)*	**80**	**150**	**250**	**350**	**500**
MAX OIL FLOW RATE (l/min)*	**40**	**75**	**125**	**175**	**250**
GEARMOTOR (kW)	0.12	0.12	0.12	0.12	0.12
MAGNETIC DISKS	√	√	√	√	√
SCRAPER COMB	√	√	√	√	√
SLUDGE DISCHARGE CHUTE	√	√	√	√	√
FLOW BREAKER	√	√	√	√	√
LIFTING EYEBOLTS	√	√	√	√	√
LOGO ELECTRICAL PANEL AND WIRING	√	√	√	√	√
CHUTE CASING	optional	optional	optional	optional	optional
SLUDGE BOX	optional	optional	optional	optional	optional
COLLECTING TANK	optional	optional	optional	optional	optional
PUMP AND LEVELS	optional	optional	optional	optional	optional
WASTE MATERIALS	no	no	no	no	no
COMBINABLE WITH DREDGED TANK	yes	yes	yes	yes	yes
COMBINABLE WITH GRAVITY BAND FILTER	yes	yes	yes	yes	yes
COMBINABLE WITH DRUM FILTER	yes	yes	yes	yes	yes
COMBINABLE WITH MICROFILTERING CARTRIDGES UP TO 5 µ	yes	yes	yes	yes	yes

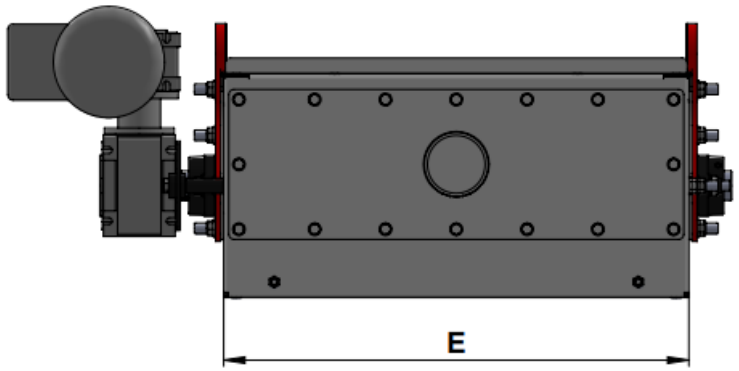
* Valid for neat oil with a maximum viscosity of 20 cSt at 40°C. The data may vary for different oil viscosity values.
For flow rates higher than those mentioned above, please send a specific request.

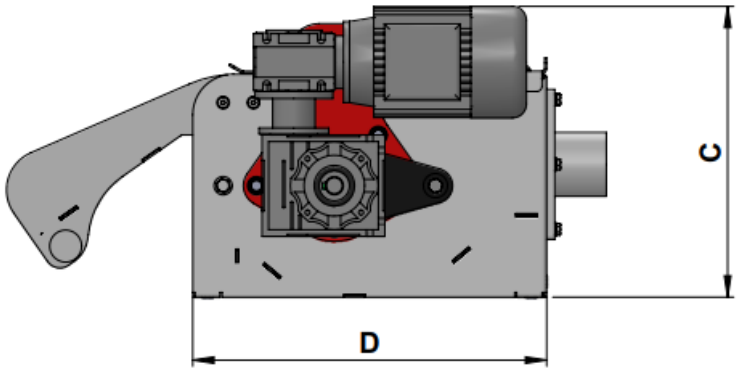
MAGNETIC FILTER – DM SERIES

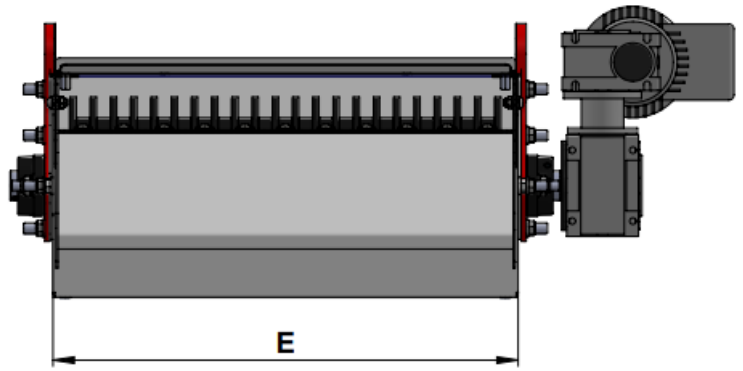


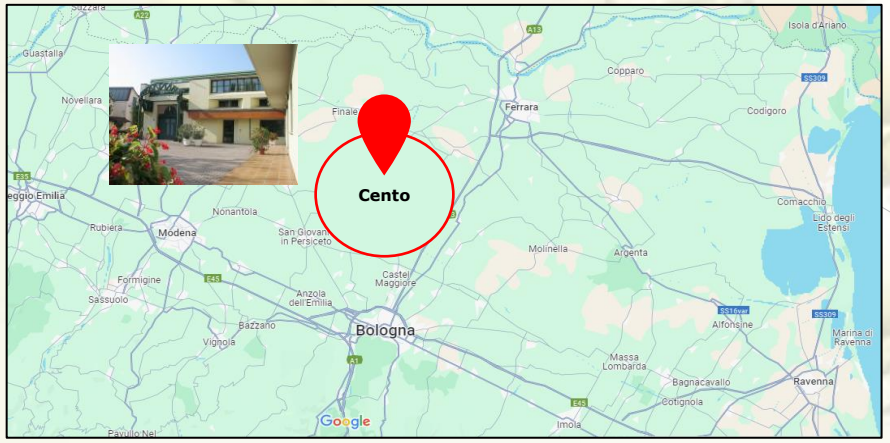
TECHNICAL DATA	DM1	DM2	DM3	DM4	DM5
A (mm)	440	560	720	920	1200
B (mm)	600	600	600	600	600
C (mm)	290	290	290	290	290
D (mm)	350	350	350	350	350
E (mm)	180	300	460	660	940
Weight (kg)	40	60	90	110	150
Power (kW)	0.12	0.12	0.12	0.12	0.12











Products

- Centralized screw systems for metal chips transport
- Centralized pneumatic vacuum systems for metal chips transport
- Chips treatment and oil recovery kits
- Apron belt conveyors
- Hinged belt conveyors
- Machine tools evacuators
  - Hinged belt evacuators
  - Screw evacuators
  - DUO evacuators
- Coolant filtration
  - **Magnetic filters**
  - Gravity band filters
  - Self-cleaning drum filters
  - Centralized filtration systems
- Shredders
  - Single-shaft shredders
  - Double-shaft shredders
  - Vertical shredders
- Centrifuges
- Cart lift dumpers
- Chip storage silos

GOVONI S.R.L. HANDLING Systems

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YOUR EXPERT IN METAL CHIPS