

ESSELENTsolutions



Q-Mag[®] Automatic Magnetic separator

Q-Mag® is the solution to effectively use magnet technology in your process.

Remove chips and metal particles from your cleaning fluid or coolant easily, without having to clean the magnet every time. With Q-Mag® it is all automatic!

- Fully automatic
- Efficient
- Self-draining
- Maximum effectiveness
- · Continuous separation
- Concentrated sludge
- Easy integration

Automatic

The particles, attracted by the magnet system, are forced down to the bottom section continuously and collected in the sludge chamber, which is emptied automatically.

Efficient

The medium spirals around the magnet, that way bringing every particle within the magnetic field for at least 2 seconds. The result is an extremely efficient separation of even the finest magnetisable particles.

Maximal effectiveness

Metal particles do not get a chance to build up on the magnet and cover it completely. The magnetic field can stretch out fully, into the medium circling around the magnet, at all times.

Continuously

The sludge chamber is emptied automatically, without interrupting the flow or removing the magnet. The separation continues all the time.

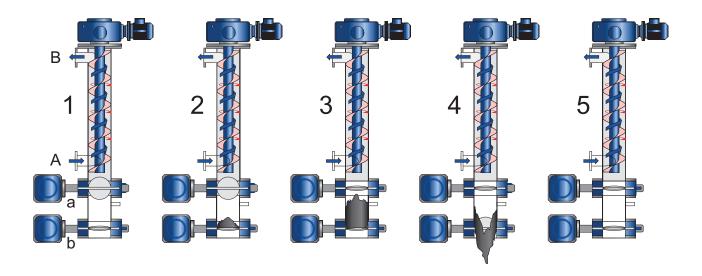


Concentrated sludge

A sensor detects when the sludge chamber is full and starts emptying it, thereby discharging only very little medium with the sludge. There is no need for further de-watering of the sludge.

The Q-Mag® can easily be integrated in the existing piping. The pressure drop is negligible which means it can be installed on the suction side of a pump without any problems. It is even possible to run the medium through the Q-Mag® under gravity. If there is already a pump, there is no need to replace it for a more powerful model.

Model	QM-05	QM-10	QM-20*
capacity	$0 - 5 \text{ m}^3/\text{h}$	0 – 10 m³/h	0 – 20 m ³ /h
	(max 10 m³/h)	(max 15 m³/h)	(max 25 m³/h)
length	1310 mm	1310 mm	1310 mm
width (maximal)	400 mm	400 mm	400 mm
weight	100 kg	110 kg	115 kg
power	400 VAC-50 Hz	400 VAC-50 Hz	400 VAC-50 Hz
inlet	DN40	DN40	DN80
outlet	DN40	DN40	DN80
sludge outlet	90 mm	90 mm	90 mm
temperature (max)	70°C	70°C	70°C
			(*) available 2024



OPERATION:

Medium enters at A, spirals upwards around the magnet (blue arrows) and leaves the body at B.

The magnet rotates in the opposite direction (red arrows). The screw-shaped insert in the housing causes any material, which has deposited on the magnet, to be forced to the bottom section of the housing.

At the end of the magnet the dirt falls into the sludge chamber (between valves a and b) from where it is discharged automatically (see description hereafter).

SLUDGE DISCHARGE:

- 1. The sludge chamber is empty; valve a is open, valve b is closed
- 2. The sludge falls from the magnet into the sludge chamber, onto valve b.
- 3. The sensor detects that the sludge chamber is full; valve a is closed.
- 4. Valve b is opened and the sludge chamber is emptied by blowing out any material, using pressurized air.
- 5. Valve b closes and valve a can be opened again.

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