



Experts in contamination control of aqueous media

# News Letter 2024-1

Oil separation

**Filtration** 

Magnetic separation

#### Items

- Contamination Control, in full operation at PaintExpo.
- Precoat for Q-Filter®
- Introduction Q-Mag® Type 20
- Case study Sustainable pretreatment
- Separation of solvent with Suparator®

## Contamination control, in full operation at PaintExpo 2024. Seeing is believing!!

We are thrilled to invite you to our new stand! We will again be present at the PaintExpo Trade Fair, but this year in a completely new set-up. Come and see the unique LIVE demonstration of Suparator®, Q-Mag® and Q-Filter® including Precoat. Not just as static separate devices but as running equipment in full operation, all three in one closed loop, actually separating dirt and oil in real time!

What do we show? We have simulated an industrial pre-treatment / parts cleaning process on our stand. Here we mix oil, dirt and metal particles with water in a plexiglass tank and then separate it again in a unique and distinctive way. You can see in practice how the dirt dissolves in the water and how clean water returns to the tank.



What is in it for you? You have the opportunity to see what cleverly designed, high-end equipment can do for you. You can think of a constant cleaning quality, significant savings on water and energy costs, or a way to help you to reduce your carbon footprint.



# Introduction of redesign and expansion of the Q-Mag® range with Type 20. Higher capacity!

Q-Mag® is a fully automatic, self-cleaning magnetic separator and has been successfully on the market for almost 10 years. Until now, in 2 versions (QM05 and QM10) with a capacity of 5 and 10m3/h.

Listening to market demand and based on our own experiences, the Q-Mag® range has now been expanded with the QM20, which has a capacity of 20m3/h. And because we had started a design process anyway, we took the opportunity to look at other aspects as well such as ease of maintenance. This has led to a redesign of the existing Q-Mag® types QM05 and QM10 as well, making the entire range of the same design.

One of the improvements is that the control system is now based on the Siemens S7/1200 Series PLC, same as used in our other devices. Also, the replacement of wearing parts has been simplified thanks to less disassembly effort.

The total result is that we have made Q-Mag® more maintenance friendly which will save on maintenance costs.

Have you become curious? The Q-Mag® QM20 will be introduced at PaintExpo 2024!



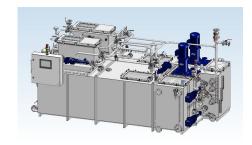
# Project- and Process enginering: Separation of solvent from water with Suparator®

In close cooperation with the customer's project team we have successfully finished the redesign of a special 'solvent separation system'. This system is based on a previously supplied Suparator® System but has been completely redesigned, following the current state of technology, local requirements and lessons learned.

After final approval of the design we agreed for manufacturing and supply of this system in Q3-2024.

This specific Suparator® System will separate a solvent from water in a closed continuous process. The separated solvents will be partially re-used and the water is prepared for re-use as well. Our solution will contribute to the customers' sustainability goals.

The required high quality material standards, in combination with the highly demanding technical process standards, made the design a real challenge. This



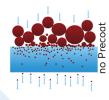
Suparator® System contains many specific features and controls to enable the process to run stable and continuous.

### Precoat for Q-Filter®, for filtration down to 2µm!

Q-Filter® itself already has an impressive 5µm filter efficiency. However, for specific applications the requirements are higher. To meet these requirements we have developed an option using Precoat Filtration. This is a high-end filtration method for removal of small particles from contaminated media. Cellulose fibers are injected into the medium inside the Q-Filter®, building an additional filter layer on top of the filter cloth. This layer improves the filtration significantly because it enhances the formation of the so called 'filter cake'. As a result, filtration down to 2µm will be

achieved with only a limited increase in filter cloth consumption.

The Precoat Filtration System is very easy to operate and can be added to a Q-Filter® by simply placing a standard module next to, or near the Q-Filter. Dosing the fibers happens automatically and the Q-Filter® control system is prepared for this add-on as standard.







# Sustainable pretreatment, case study

Nowadaus. responsibility for the environment is getting more and more important; it concerns all of us. Do you know that we can help you in reaching your environmental targets?

Whether it concerns pretreatment or parts cleaning, effective bath maintenance is the key, as shown in the following case study. A well-known German supplier of steering systems modified 4 existing machines, each with a Suparator® System Type 86 and monitored them for a year. The results are amazing... In one year €100,000 was saved on 4 production lines, of which €60,000 in energy and €10,000 thanks to an increase in bath life.

This was possible because with a Suparator® System, the oil content is

so low and this low level can also be controlled. This allowed to use a different cleaning chemistry, because it was possible to lower the cleaning temperature from 70°C to 60°C. This lead to an annual saving of 285,000 kWh! Just think of the positive impact this has on your carbon footprint and on the environment. The other savings and results at a glance:

- Improvement of the washing and rinsing medium quality (reduction of the oil content)
- Increase in bath life from 3-4 weeks to 8-9 weeks, resulting in:
  - o Reduction of media consumption, expenses for external services and disposal costs
  - o Increase in system availability
- · Reduction of the additional cleaning effort by maintenance staff.

Thanks to the savings, the investment paid for itself within a year and reduced the carbon footprint.

We can help you in taking your responsibility, because we can offer the solution: the combination of cost reduction and reduction of your environmental footprint.



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