

## Water Treatment Optimisation for a Circular Economy Leader



### THE CUSTOMER

A well-established French player in the waste management and circular economy sector, committed to accelerating the ecological transition for industrials and municipalities. Their offering includes a wide range of innovative environmental solutions. As part of their operations, the company was tasked with managing the water treatment process for a steel industry client where filtration efficiency was critical.

### THE CHALLENGE

Initially, filtration cartridges had to be replaced every 3 to 4 days, leading to several operational challenges :

- **An unprofitable maintenance contract** due to high consumption of consumables.
- **Technicians frequently mobilised**, including weekends, for maintenance operations.
- **Long lead times** and high costs for cartridge supplies.

### THE SOLUTION

We proposed 50-inch polypropylene wound filter cartridges, designed to handle a flow rate of 185 m<sup>3</sup>/h with a retention threshold of 5 µm. These higher-quality cartridges allowed for improved filtration efficiency and operational performance.

### THE RESULTS

- **Extended replacement interval :** Cartridges now last up to one month instead of 3 to 4 days.
- **Reduced technician workload :** Teams are now available to focus on other tasks.
- **Lower costs :** Higher quality at a lower unit price

#### Estimated Economic Benefits :

- **Labour cost savings :**
  - Replacement time reduced from 180 hours/year to just 18 hours/year.
  - Estimated annual savings : €6,500 (based on €40/hour labour cost).

- Consumables savings :
  - Annual cartridge costs reduced from €50,000 to €10,500.
  - Estimated annual savings : €39,500.
- **Total Estimated Savings : €46,000 per year**

These figures do not include the additional value of improved technician availability for other customer projects, or enhanced satisfaction at the steel plant.

### LOOKING AHEAD

This collaboration with a major circular economy stakeholder demonstrates the measurable impact of our filtration solutions on profitability, service quality, and customer satisfaction. By optimising their water treatment process, we helped strengthen their position as a trusted partner in the steel industry.

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Global Filter is ready to collaborate with you to enhance your products and streamline the processes that fuel your success.

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