

#### Flocell XFM 5

### Modular Filtration System

## **Specification Document**

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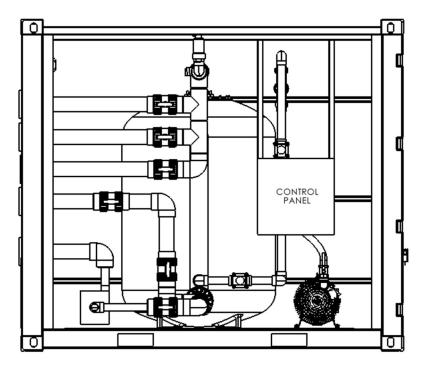
#### **VERSION CONTROL**

ISSUE	DETAIL	APPROVED	DATE
1	First Release	ZB	15-11-2024



Flocell XFM 5

Modular Filtration System



(IMAGE SHOWN WITH SIDE ACESS DOORS REMOVED FOR CLARITY)

### 1. General Overview

Aspect	Description
Overall Dimensions	Length: 10FT, Width: 8FT, Height: 9.6FT
Container Type	10FT High Cube, ISO Certified
Maximum Operating Pressure	2 bar
Flow Rates	Feed: 5 L/s, Sludge: 5 L/s
Total Liquid Volume	1,250 L
<b>Total Filtration Bed Surface Area</b>	1.09 m <sup>2</sup>
Weight	Dry 1,980kg ≈ Wet 2,050kg ≈



## 2. Power Consumption

Mode of Operation	Normal Usage (kWh/day)	Winter Usage (kWh/day)
With Sludge & Feed Pump	42 kWh/day	46.0 kWh/day
Gravity Operation	16.9 kWh/day	20.9 kWh/day

# 3. Key Components

#### **Filtration System**

Component	Specification	Details
Filter Housing	1200mm diameter	High-capacity design with minimal hydraulic loss and low cleaning frequency
Feed Pump	Single phase electric pump, 1.1 kW, operates 24 hours/day (if pumped feed)	High efficiency, operates continuously
Gravity Fed Option	No pump required	Operates without the pump, saving energy
Sludge Pump	Single phase, 0.94 kW, operates at 5 L/s	Used for sludge removal during backwash
Air Blower	1.5 kW, 4.3A, delivers 43 m³/hr	Ensures effective air sparging for cleaning media
Ventilation Fan	Axial fan, IP54, single phase	Provides continuous airflow
Heater	0.5 kW Tube Heater, IP66	Provides frost protection and heating
Lighting	Single LED, 240V	Energy-efficient



## 4. Control System

Component	Specification	Details
Control Panel	Centralised control	Manages feed pump, sludge pump, air blower, ventilation, and heating with automatic and manual override
Cleaning Cycle	Manual	Requires manual initiation; air sparging for 10 minutes weekly.

### 5. Connection Sizes

Connection Type	Description
Inlet	4" PN16 flange, reduced to 2" Bauer
Outlet	4" PN16 flange, reduced to 2" Bauer
Air Vent	4" PN16 flange, reduced to 2" Bauer
Head of Works	4" PN16 flange, reduced to 2" Bauer
Sludge Outlet	4" PN16 flange, reduced to 2" Bauer

**Note:** All connections will be supplied with a 2" Bauer connection for the customer to connect to.



## 6. General Arrangement Drawing

