

FLOCELL XFM FILTRATION SYSTEM

Tertiary Solids And Phosphorus Removal

Floccell XFM is an ultra-low maintenance solution, sustainable solution that consumes significantly less power and water than traditional filtration systems, which often require frequent backwashing, chemical cleaning, and part replacements.

Scalable and modular in design, it offers flexible integration across various process stages. Available for hire and containerised for rapid deployment, the XFM system can be delivered, installed and commissioned quickly.



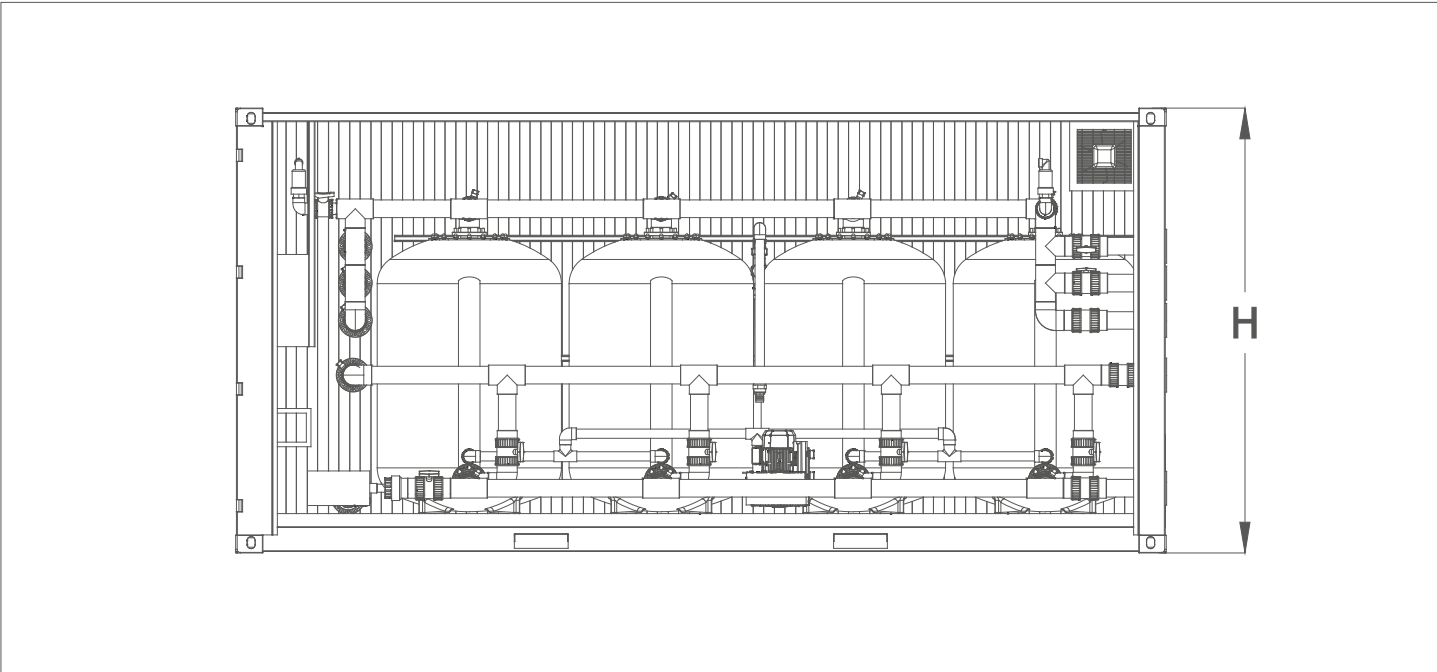
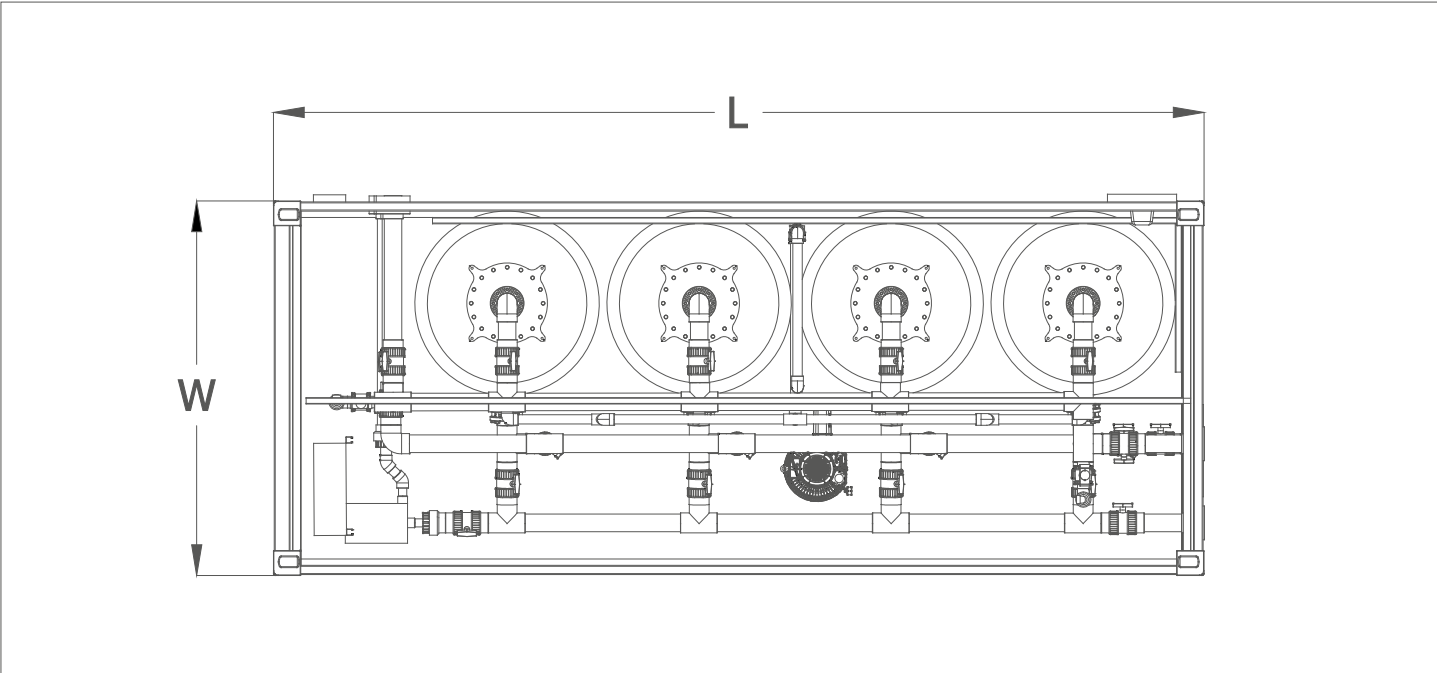
Key features:

- **High solids loading capacity**
 - Single-pass: <10 mg/L TSS discharge
 - Bio-dialysis (multi-pass): <5 mg/L TSS discharge
- **Phosphorus removal: <0.25 mg/L TP discharge with chemical dosing**
- **No backwashing required**
- **Filter clean cycle: up to 30 minutes per week – no chemical cleans required**
- **Uses up to 94% less power and over 99% more water efficient than conventional filters**
- **Commissioning in just 1 hour with <30 mins of on-site operator training**
- **Flexible integration across different process stages**
- **Standardised design – no concrete base required on flat surfaces**
- **20-year lifespan for the XFM housing and media**
 - Blowers, pumps, valves and other components are as per the original manufacturer's warranty
- **Manufactured in the UK**



Technical Specification

Technical Drawings



Modular container options

MODEL	PHASE	CONTAINER SIZE	DIMENSIONS (MM)			WEIGHT (KG)		No. OF XFM FILTERS	FLOW RATE
			L	W	H	Dry	Wet		
XFM5	1ph	10ft	3050	2440	2590	2330	3850	1	5lt/sec
XFM5	3ph	10ft	3050	2440	2590	2330	3850	1	5lt/sec
XFM10	3ph	10ft	3050	2440	2590	3200	6150	2	10lt/sec
XFM20	3ph	20ft-Side Opening Door	6096	2440	2900	5750	11700	4	20lt/sec
XFM40	3ph	40ft-Side Opening Door	12192	2440	2900	11000	23500	8	40lt/sec

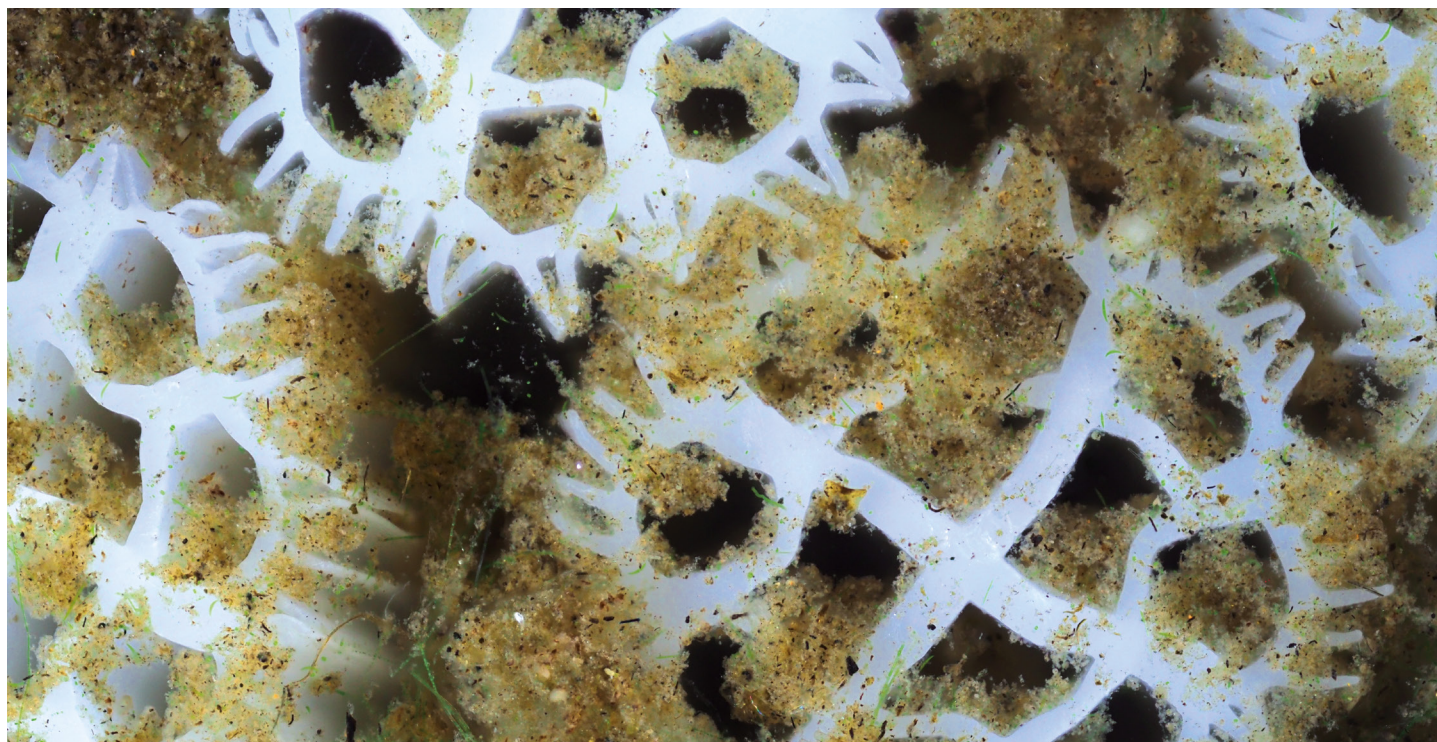
MODEL	BLOWER SPEC	No. OF BLOWERS	AIR m3/hr	CONTROL PANEL FEED	FEED PUMP - (SUBMERSIBLE)
XFM5	2BH7420, 1Ph VSD, 1.75kW 6A	1	43	Panel Mounted Appliance socket, 32A	DW M 150 VOX A, 1Ph, 1.1kW, 7.3A
XFM5	2BH7420, 3Ph, 1.75kW 3.45A	1	43	Panel Mounted Appliance socket, 32A	DW M 150 VOX A, 1Ph, 1.1kW, 7.3A
XFM10	2BH1510, 3.45kW, 6.7A	1	95	Panel Mounted Appliance socket, 32A	JST22SV4, 3Ph, 2.2kW, 3" Outlet
XFM20	2BH1610, 4.6kW, 8.6A	1	190	Panel Mounted Appliance socket, 32A	JST55SV4, 3Ph, 5.5kW, 4" Outlet
XFM40	2BH1610, 4.6kW, 8.6A	2	380	Panel Mounted Appliance socket, 32A	JST75SV4, 3Ph, 7.5kW, 4" Outlet

MODEL	SLUDGE PUMP	PIPEWORK SIZES (INTERNAL)	FLANGE SIZES	BAUER CONNECTION SIZES			
				INLET	OUTLET	SLUDGE	RETURN
XFM5	Turboflow 100, 1ph, 0.94kW	4"	4"	2"	2"	2"	2"
XFM5	Turboflow 100, 1ph, 0.94kW	4"	4"	2"	2"	2"	2"
XFM10	Waterco Hydrostar MKIV 550, 4.26kW, 8.1A	4"	4"	4"	4"	4"	4"
XFM20	Waterco Hydrostar MKIV 550, 4.26kW, 8.1A	4"	4"	4"	4"	4"	4"
XFM40	Waterco Hydrostar MKIV 550, 4.26kW, 8.1A	4"	4"	4"	4"	4"	4"

Power consumption

MODEL	PHASE	BLOWER POWER CONSUMPTION	HEATER
XFM5	1ph	1.75kW, 20min/week=0.58kW/week	0.5kW when running
XFM10	3ph	3.45kW, 20min/week=1.15kW/week	0.5kW when running
XFM20	3ph	4.6kW, 20min/week=1.53kW/week	0.5kW when running
XFM40	3ph	9.2kW, 20min/week=3.06kW/week	0.5kW when running

MODEL	FAN	SLUDGE PUMP	FEED PUMP
XFM5	0.15kW when running	0.94kW, 15min/week=0.24kW/week	1.1kW
XFM10	0.15kW when running	4.26kW, 10min/week=0.71kW/week	2.2kW
XFM20	0.15kW when running	4.26kW, 20min/week=1.42kW/week	5.5kW
XFM40	0.15kW when running	4.26kW, 40 min/week=2.84kW/week	7.5kW



WCS Environmental
Engineering
MARLOWE Environmental Services

Floccell
Sustainable Filtration Technology

- UK manufactured from 100% virgin HDPE
- 20-year media life – compliance tested
- Low hydraulic retention time (HRT)
- Biofilm enhances Mechanical Filtration efficiency
- Ability to manage a wide variety of load scenarios
- Only needs cleaning with system water

The media in the Floccell XFM filtration system has been specifically engineered to optimise mechanical filtration performance.

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Disclaimer

WCS Environmental Engineering has a policy of continual product development and the above information may be subject to change without notice. Errors and omissions excepted. Technical drawings are indicative only. WCS Environmental Engineering Ltd is a portfolio company of Marlowe PLC.

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