

FLOCELL XFM FILTRATION SYSTEM

Tertiary Solids And Phosphorus Removal

The modular range of filtration systems for Tertiary Solids and Phosphorus Removal in wastewater treatment is an ideal replacement for cloth, disc and sand filters.

The open-cell media has been designed to efficiently reduce water turbidity and retain particulate without increasing the pressure within the filter or reducing the flow.



Key features:

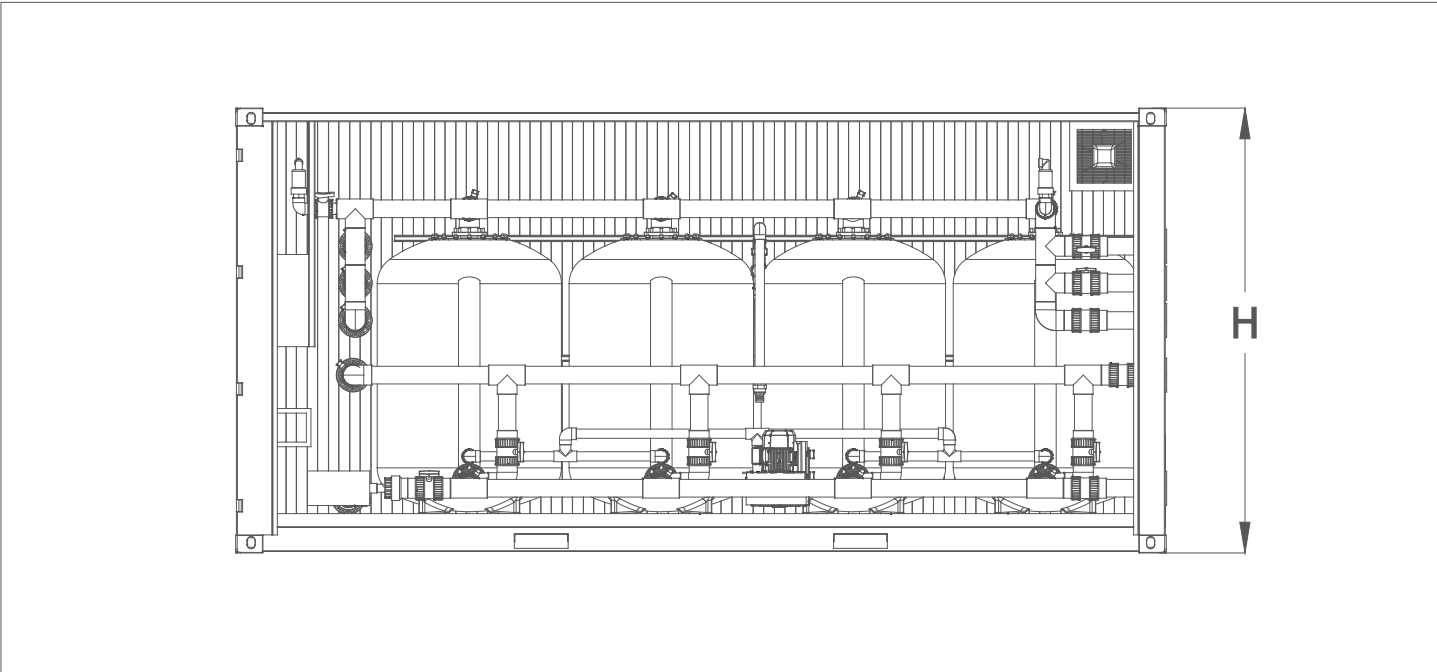
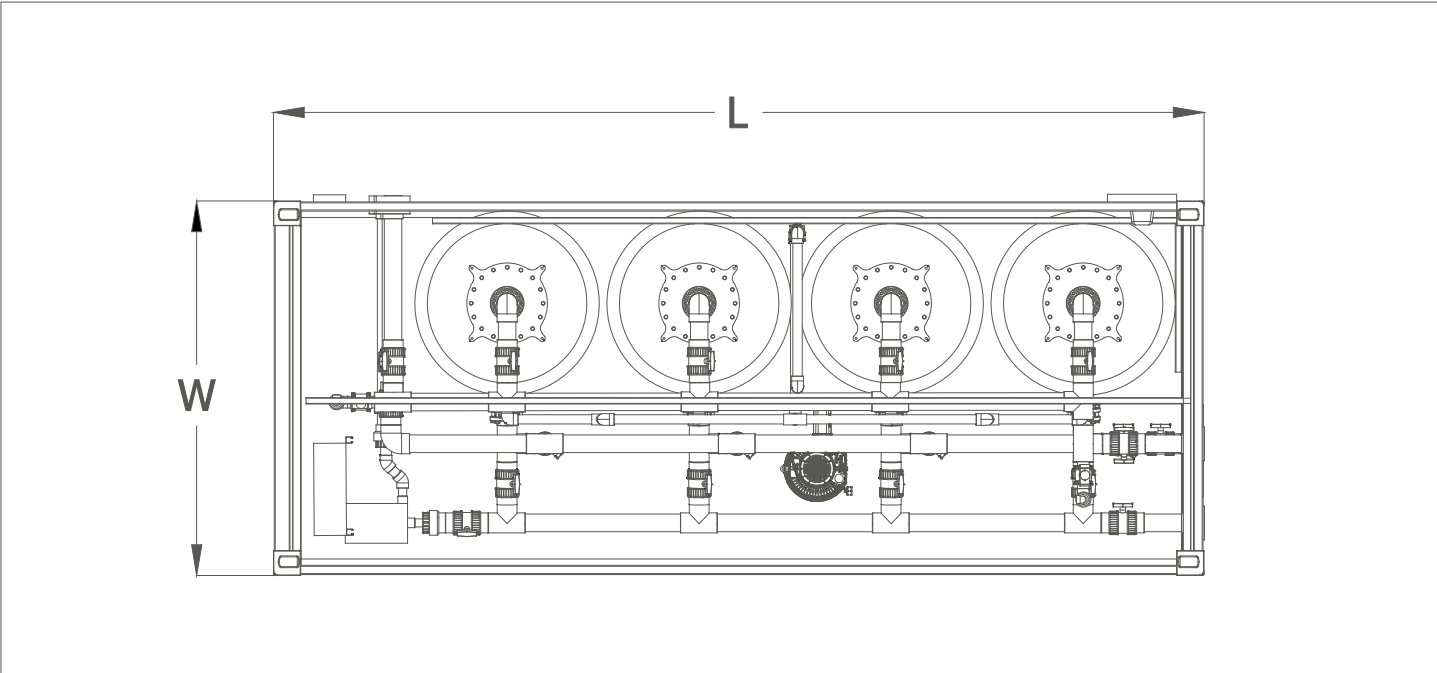
- Effluent quality <0.25 mg/l total 'P' discharge when combined with chemical dosing
- High solids loading capacity:
 - single pass <10 mg/l s.s discharge
 - dialysis mode <5 mg/l s.s discharge
- Up to 94% less power than a cloth filter*
- 100 times more retention capacity than a sand filter*
- 99% less water used in backwashing when compared to a cloth filter
- Filter cleaning cycle – max. once a week up to 30 mins
- System design life is 20 years and over 10 years for the media

*Compared to sand and / or cloth filters of the same size on a typical installation



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	2700	5650	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

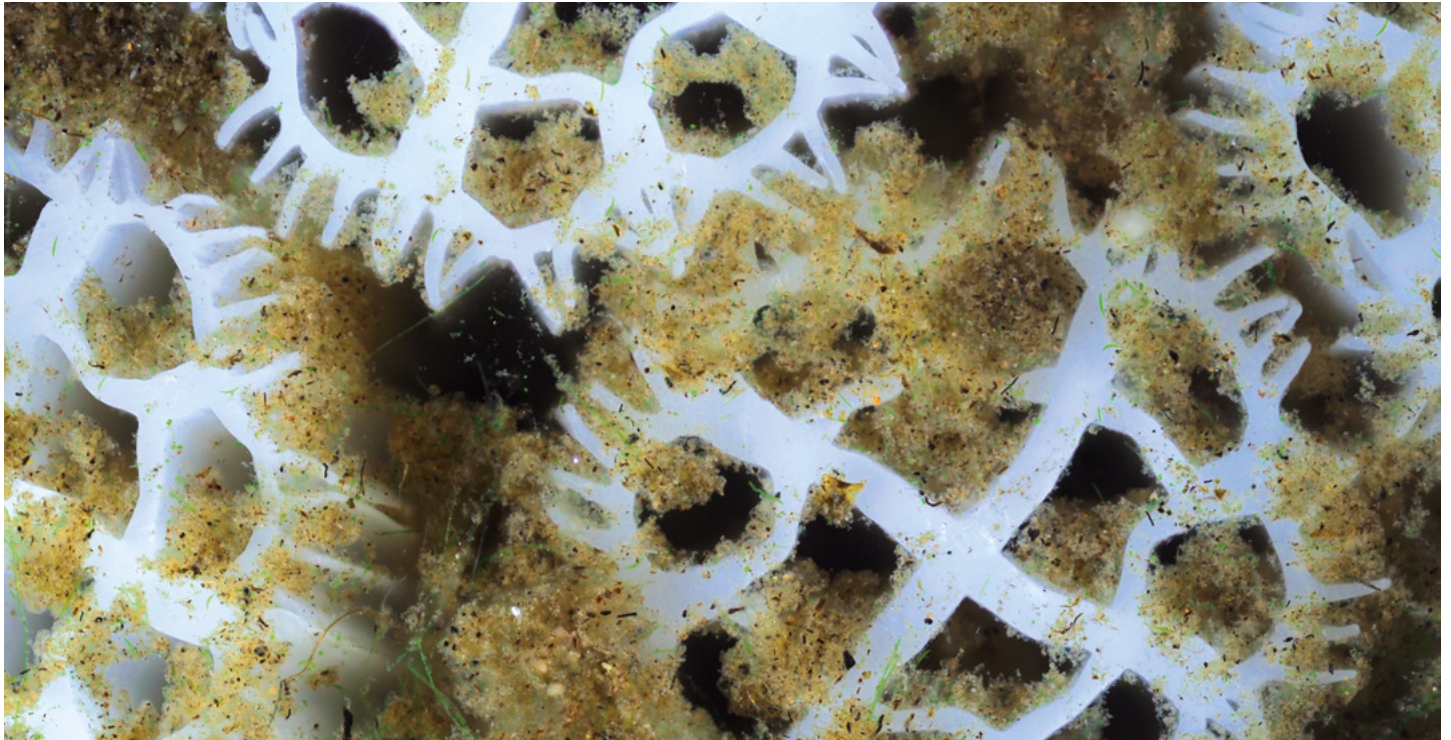
MODEL	BLOWER SPEC	No. OF BLOWERS	AIR m3/hr	CONTROL PANEL FEED	FEED PUMP - (SUBMERSIBLE)
XFM5	2BH7420, 1Ph VSD, 1.75kW 6A	1	43	Panel Mounted Appliance socket, 32A	DW M 150 VOX A, 1Ph, 1.1kW, 7.3A
XFM5	2BH7420, 3Ph, 1.75kW 3.45A	1	43	Panel Mounted Appliance socket, 32A	DW M 150 VOX A, 1Ph, 1.1kW, 7.3A
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
- Media life is over 10 years
- 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.

WCS Environmental Engineering Ltd

Unit 1 Aston Road
Waterlooville
Hampshire
PO7 7UX
United Kingdom
+44 (0)1454 299 310

info@wcs-group.co.uk
wcs-group.co.uk

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.

Updated February 2025