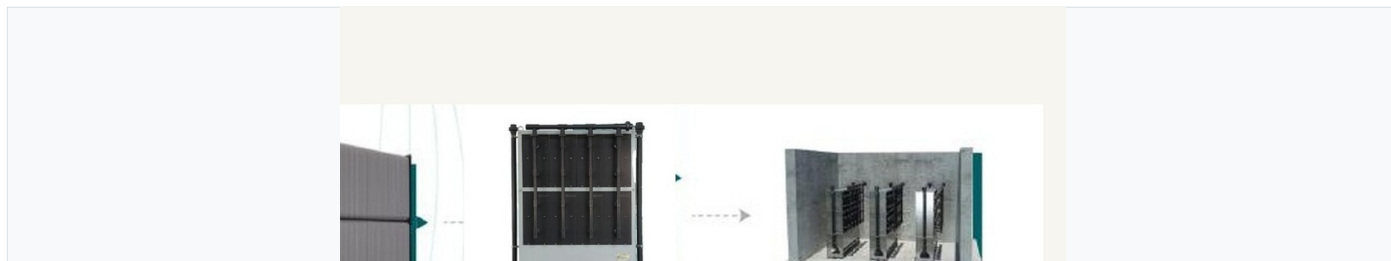


Swing8

Thin-film composite MBR module

EPS8-2-4 (example) | Thin-film composite flat sheet



Product overview

The Swing8 is a thin-film composite flat-sheet MBR module. Permanently wetted dry film, PVDF or PVDF with graphene. High packing density in a rectangular footprint that often retrofits close to hollow fiber, usually with plumbing and guide rails. CIP with sodium hypochlorite and citric acid in reverse flow plus relaxation — not a pressurized backwash. Coarse-bubble air scour, not fine bubble.

Key features

- Thin-film composite flat-sheet membranes (permanently wetted dry film)
- PVDF or PVDF with graphene (PES option coming)
- Compact rectangular footprint; often near 1:1 hollow-fiber retrofit
- Coarse-bubble air scour (not fine bubble); deck-dependent air rate
- CIP with NaClO + citric acid in reverse flow + relaxation — not pressurized backwash
- Cartridge replacement: Swing 8 = 114 sheets/cartridge (12.5 m²)
- Tall builds: typically 4 decks/section, then gap + 4-sided enclosure
- BABA path at the module (project-specific)
- Example EPS8-2-4: 2 decks × 4 columns = 8 cartridges, 100 m² · SUS304 frame included

Technical specifications

Parameter	Value	Unit
Membrane area per cartridge	12.5	m ²
Sheets per cartridge (Swing 8)	114	—
Sheet size	250 × 250	mm
Cartridge dimensions	528 × 520 × 252	mm
Cartridge dry weight	11.3	kg
Membrane material	PVDF or PVDF + graphene (PES option coming)	—
Design flux, municipal (guidance)	15–25 LMH (15 long-life / 20 avg / 25 peak; ~20% net derate)	LMH
Industrial flux guidance	Typically <15; leachate ~5, pharma ~6, ordinary ~10, light ~12	LMH
CIP recovery, municipal	NaClO 3000–5000 mg/L then citric 1–2%, each 2.5 L/m ² , >4 h	—
CIP maintenance, municipal	NaClO 300–500 mg/L or citric 500–1000 mg/L, 2.0 L/m ² , >30 min / 7–10 d	—
CIP recovery, industrial	NaClO 5000 mg/L then citric 2%, each 2.5 L/m ² , >4 h	—
CIP method / trigger	Reverse flow + relaxation; purge NaClO before acid; ~20 kPa TMP or 6 mo	—
Air scour	Coarse bubble, continuous MBR; intermittent ~2× MBR for UF (project-specific)	—
Specific air, EPS8-2-Y	9.0 L/min·m ² (total ≈ 13×Y m ³ /h)	L/min·m ²
Specific air by deck (approx.)	1-dk ~13.5; 1.5 ~10; 2 ~9; 2.5 ~7.5; 3 ~6.5–7; 4 ~5.5–6	L/min·m ²
Air / filtrate, EPS8-2-4	DN40-ANSI / DN40-ANSI	—
Module envelope, EPS8-2-4	1250 × 700 × 1830 (L×W×H)	mm
Uncrated dry weight, EPS8-2-4	171.76	kg
Min. installed height, ~250 m ²	2.0	m
Air / filtrate, ~250 m ² module	DN65 / DN50	—
Model coding	EPS8-X-Y: X=decks, Y=columns; area = 12.5×X×Y m ²	—
Module spacing (outer legs)	40–60 cm (headers not included)	cm

Operating notes

CIP chemicals: sodium hypochlorite (organics/biofilm), then citric acid (inorganics/scale). Purge residual NaClO before the acid step. Confirm site dose with Zyramic. Flux = design guidance only.

Swing8 · EPS8-2-4 dimensional drawing

Front elevation

100 m² total · 12.5 m² per cartridge
2 decks × 4 columns = 8 cartridges

1830 mm

1250 mm

Air DN40 Filtrate DN40

Plan (top)

700 mm

1250 mm

Key data

Model: EPS8-2-4

Decks × columns: 2 × 4

Cartridges: 8 × EPS8

Area: 100 m² total

Cartridge: 12.5 m² / 114 sheets

Sheet: 250 × 250 mm

Cartridge env: 528 × 520 × 252 mm

Cartridge dry: 11.3 kg

Module dry (uncrated): 171.76 kg

Frame: SUS304

Air / filtrate: DN40 / DN40 ANSI

Air scour: coarse bubble, ~9.0 L/min·m²

Membrane: PVDF or PVDF+graphene

Zyramic · www.zyramic.com · October 9, 2026 · Dimensions for example configuration EPS8-2-4

Dimension	Value	Unit
Overall length	1250	mm
Overall width	700	mm
Overall height	1830	mm
Cartridges	8 × EPS8 (2 decks × 4 columns)	—
Total membrane area	100	m²
Uncrated dry weight	171.76	kg

Example configuration. Other EPS8-X-Y builds scale by decks (X) and columns (Y). Area = $12.5 \times X \times Y \text{ m}^2$. Schematic for sales use; confirm with certified DWG for fabrication.