SRP Membranes
SR PARYAVARAN · A DIVISION

PRODUCT CATALOGUE

SRP HI-FLO SERIES

HI-FLO SERIES

THE MEMBRANE OF THE FUTURE

Submerged MBR Flat Sheet Cassettes

PTFE flat-sheet membrane cassettes for demanding wastewater.



PRODUCT CATALOGUE · 2026

SRP Hi-Flo Series

www.srpmembranes.com
www.srpepl.com

01 PRODUCT OVERVIEW

Product description & technical information

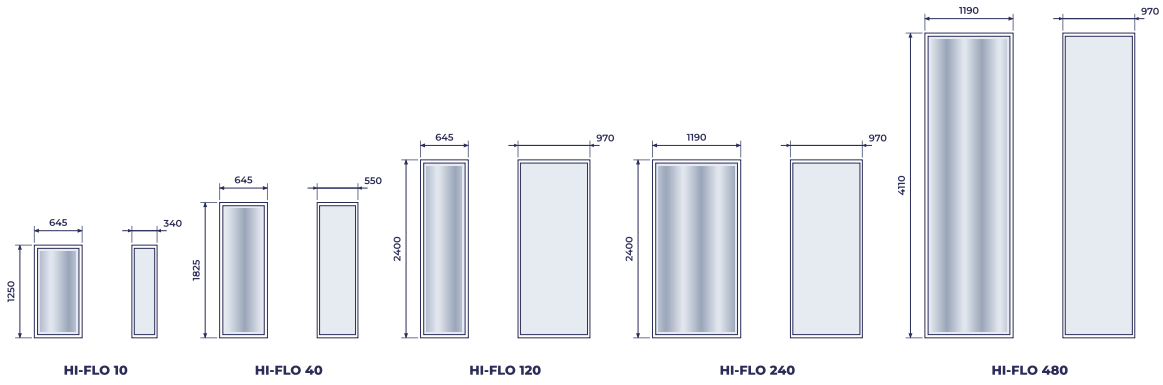
PRODUCT DESCRIPTION	
Membrane material	PTFE
Membrane configuration	Flat sheet
Nominal pore size	0.02 µm
Typical filtrate flux	15–30 L/m²h

TECHNICAL INFORMATION	
Backwash flux	15–30 L/m²h
CIP frequency	Variable
Chemical cleaning	NaOCl / citric acid

Figures are taken from the SRP HI-FLO datasheet. Specifications may change as improvements are made.

02 DIMENSIONS

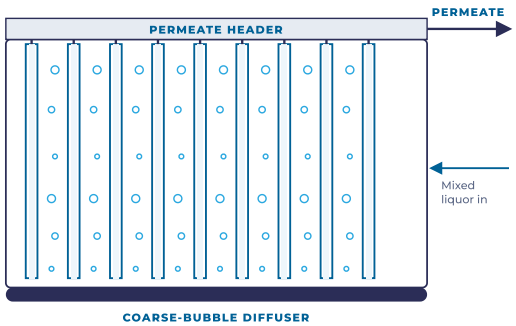
GENERAL ARRANGEMENT



Front view shows length × height, side view shows width. Other sizes: HI-FLO 20 (645 × 340 × 1825), 80 (645 × 970 × 1825), 160 (1190 × 970 × 1825), 320 (1190 × 970 × 2970) and 400 (1190 × 970 × 3540).

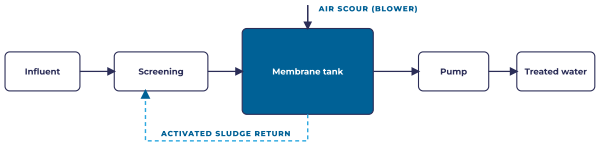
03 MEMBRANE ILLUSTRATIONS

PTFE SHEET CASSETTE



PTFE flat sheets in a cassette, sectional view

MBR PROCESS





04 MODEL SPECIFICATIONS

Models and specifications

CASSETTE MODEL	Dimensions L × W × H (mm)	Total area (m²)	Array (H × V)	Suitable flow (KLD)	Air scouring (Nm³/hr)
SRP HI-FLO 10	645 × 340 × 1250	10	1 × 1	4–5	10–12
SRP HI-FLO 20	645 × 340 × 1825	20	1 × 2	8–10	10–12
SRP HI-FLO 40	645 × 550 × 1825	40	1 × 2	15–20	20–25
SRP HI-FLO 80	645 × 970 × 1825	80	1 × 2	35–40	40–50
SRP HI-FLO 120	645 × 970 × 2400	120	1 × 3	50–60	40–50
SRP HI-FLO 160	1190 × 970 × 1825	160	2 × 2	65–80	80–100
SRP HI-FLO 240	1190 × 970 × 2400	240	2 × 3	100–120	90–110
SRP HI-FLO 320	1190 × 970 × 2970	320	2 × 4	100–120	100–110
SRP HI-FLO 400	1190 × 970 × 3540	400	2 × 5	160–200	110–120
SRP HI-FLO 480	1190 × 970 × 4110	480	2 × 6	200–250	120–130

PTFE
Material

0.02 µm
Pore

2–12
pH

10–480 m² per cassette
Area

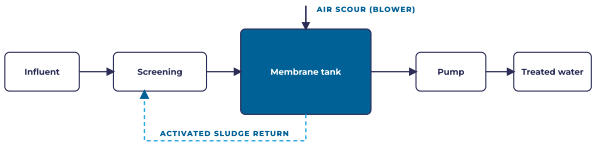
05 MEMBRANE STRUCTURE

PTFE flat sheet that can run on gravity

SRP HI-FLO cassettes use a PTFE flat sheet membrane with a nominal pore size of 0.02 µm. PTFE has the highest chemical stability and a surface that nothing sticks to, so the membrane tolerates strong acid, alkali and oxidant cleaning and resists fouling well.

The membrane is made by a biaxial stretching process and has a porosity above 85%. Its filtration resistance is low enough that, at common flux, the TMP stays below 0.5 m of water head. That makes gravity filtration, without a suction pump, possible.

TYPICAL SYSTEM FLOW





06 OPERATING CONDITIONS

Operating envelope

OPERATING CONDITIONS

PARAMETER	VALUE
Maximum TMP	2–10 kPa
CIP chlorine concentration	5,000 ppm
Operating temperature	5–40 °C
Operation mode	Suction filtration or gravity
pH range	2–12



07 SALIENT FEATURES

Low resistance, strong chemistry, small footprint

PTFE flat sheet membrane cassettes from 10 to 480 m², for gravity or suction filtration in demanding wastewater.

PTFE membrane

PTFE has the highest chemical stability. The membrane tolerates strong acid, alkali and oxidant cleaning, with a better cleaning effect and stronger anti-fouling capacity.

Permanently hydrophilic

A proprietary technology gives the flat sheet membrane a permanent hydrophilic property.

Gravity filtration

Porosity above 85% gives low resistance, so filtration can run by gravity without a pump.

Open cassette structure

The cassette is open at both the lower and upper ends, which avoids hair and paper fibres winding around the membrane.

High packing density

A multi-layer cassette structure raises packing density significantly.

Stacked, energy-saving layout

Cassettes stack in layers, which cuts the footprint and the aeration flow. The datasheet states a saving of at least 70% of the operating cost of a conventional flat MBR.

08 APPLICATIONS

1 **Petrochemical wastewater**
Treats petrochemical wastewater to meet discharge requirements.

2 **Oilfield wastewater**
Effective on alkali/surfactant/polymer (ASP) flooding oilfield wastewater.

3 **Saline organic wastewater**
A promising method for treating saline organic wastewater.

4 **Municipal wastewater**
Removes suspended solids and biological contaminants effectively.

09 WHY SRP

- Excellent hydrophilicity and high permeation flux.
- Resistant to extreme pH, so it suits varied industrial effluents.
- Strong anti-fouling for complex wastewater streams.
- Large cassettes available for higher flows.







SRP Membranes

REMEMBER THE FUTURE

Specify HI-FLO for your MBR

New build, retrofit or membrane replacement. Share your flow, feed water and layout, and we will recommend the product, configuration and design.

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