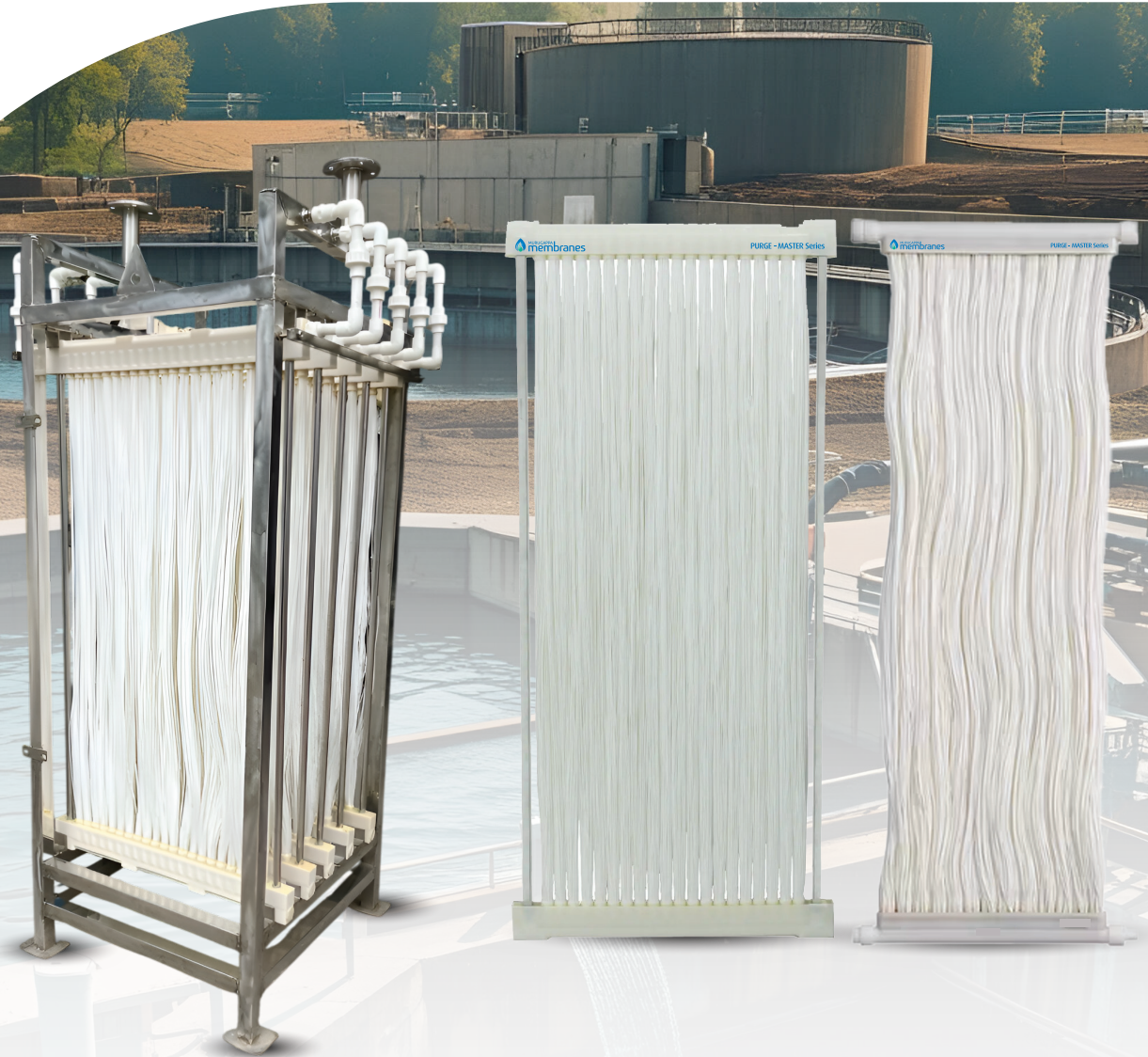




MURUGAPPA  
**membranes**



**PURGE - MASTER Series**  
**MEMBRANES**  
**Enriching Lives With Purity**

**Murugappa Membranes**  
( A Division of Parry Enterprises India Limited )

MBR Membrane Product Brochure



# About Us

**Murugappa Membranes** is the membrane manufacturing division of Parry Enterprises India Limited (PEIL), one of the oldest companies within the Murugappa Group.

PEIL has been manufacturing polymer-based products for more than 40 years in India. Murugappa Membranes has a world class HF membrane manufacturing facility located at Palej, Gujarat. Our technical expertise lies in UF, MBR, direct-NF and other membrane solutions.

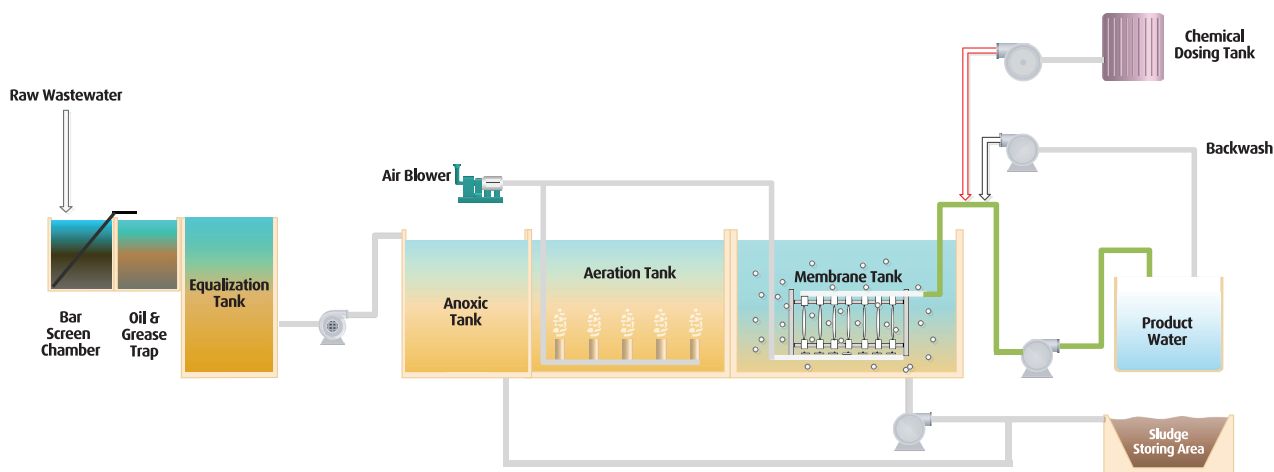
Murugappa Membranes provides Reinforced PVDF-MBR Membranes which are enhanced with PET (Polyethylene Terephthalate) for added strength and longevity and are widely accepted in sectors including water & wastewater treatment, pharmaceuticals, dairy, chemicals, oil, gas, petroleum etc due to their superior effluent quality, potential for water reuse, smaller footprint, improved process control etc

We passionately follow our moto 'Membranes-Enriching Lives with Purity' fueling our commitment to create a clean and sustainable environment. With your passion and our commitment, come, Let's create a sustainable future together; one drop at a time.

## Murugappa Purge - Master Membrane Bio Reactor



# Membrane Bioreactor System Flow Diagram



## MURUGAPPA MEMBRANES PURGE-MASTER MBR TECHNICAL SPECIFICATIONS

The following standard sizes are available for Murugappa Membranes reinforced PVDF MBR membrane modules with an ID/OD of 1/2 mm:

| Purge - Master Series           |        |         |         |         |         |
|---------------------------------|--------|---------|---------|---------|---------|
| Model No                        | X5     | X10     | X15     | X20     | X30     |
| Membrane Area (m <sup>2</sup> ) | 5      | 10      | 15      | 20      | 30      |
| Membrane Pore Size (µm)         | 0.05   | 0.05    | 0.05    | 0.05    | 0.05    |
| Module Length (mm)              | 710    | 710     | 710     | 625     | 1250    |
| Module Height (mm)              | 820    | 1300    | 1858    | 1960    | 2000    |
| Module Width (mm)               | 40     | 40      | 40      | 45      | 34      |
| Module Flow-Range (LPH)         | 50-100 | 100-200 | 150-300 | 200-400 | 300-600 |

## MURUGAPPA MEMBRANES PURGE-MASTER MBR OPERATIONAL SPECIFICATIONS

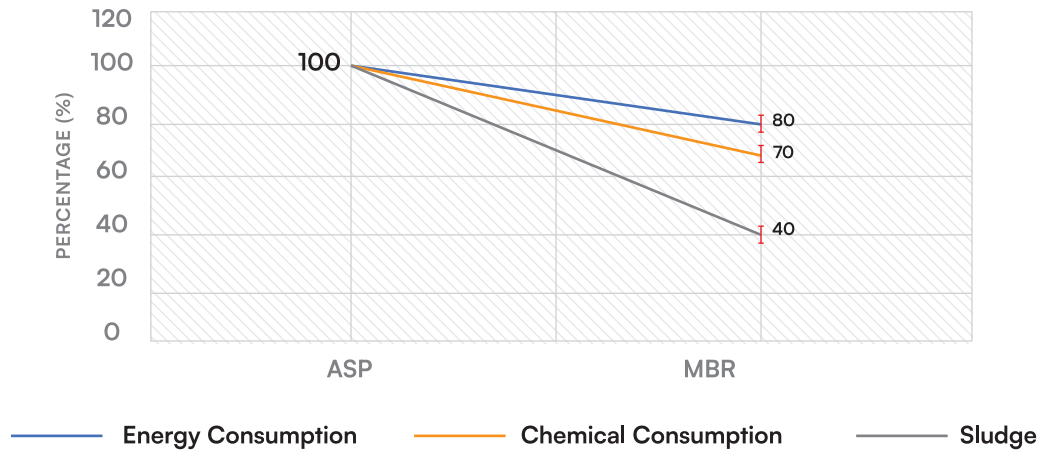
| Parameter                 | Value        |
|---------------------------|--------------|
| Operation Mode            | Out to In    |
| Filtration (Mins)         | 8-10         |
| Pause (Mins)              | 1-2          |
| Backwash Frequency (Mins) | 10-30 (once) |
| Backwash (Mins)           | 0.5-1        |
| Feed Flux (LMH)           | 10-20        |
| Backwash Flux (LMH)       | 35 (Max)     |
| Air Scouring              | Required     |

| Parameter                      | Value                                    |
|--------------------------------|--|
| Operation pH                   | 6-9                                      |
| Cleaning pH                    | 2-13                                     |
| Temperature (°C)               | 20-45                                    |
| MLSS (ppm)                     | 6000 - 12000                             |
| Operating Pressure Range (Bar) | -0.1 to -0.5                             |
| Backwash Pressure Range (Bar)  | 0.5 to 1                                 |
| CEB cleaning                   | Recommended (Depending on water quality) |

### Outlet Water Quality

| Parameter       | Outlet Water Quality |
|-----------------|----------------------|
| TSS (ppm)       | < 2                  |
| Turbidity (NTU) | < 1                  |

## Comparison of Operating Cost



## APPLICATIONS

### MEMBRANE BIO REACTOR / SUBMERGED FILTRATION SYSTEM / CLARIFICATION



Cooling Tower



Utilities



Effluent Treatment



Water Recovery and Management



Gardening & Irrigation



Downstream for Hybrid Membrane Processes

For more information or to request a quote, please contact us at

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**A Division of Parry Enterprises India Ltd**

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