



**UTM**  
UNIVERSITI TEKNOLOGI MALAYSIA

# WATER TREATMENT

Water Treatment Using Membrane System  
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## DESCRIPTION

This device is high performance membranes for industrial water and water treatment process. It was supported with high performance of Thin Film Composite (TFC), Nanofiltration (NF), and Reverse Osmosis (RO) membranes by optimising mainly top thin selective layer. The TFC membranes also provide various separation.

### *Needs*

- a) Vary the substrate properties made of different polymeric materials and/or polymer-inorganic materials.
- b) Vary the substrate characteristics to open the opportunities of using TFC membranes for various industrial applications.

### *Application*

- a) Low cost in producing commercial-scale water purification system and wastewater treatment system.

### *Benefits*

- a) Provide quality water from osmosis system.
- b) Wastewater treatment system at relatively low cost compared to other international companies.



### *Targeted Market*

- a) Drinking water industries
- b) Reverse osmosis companies
- c) Refinery industries

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