

A photograph of an industrial water treatment facility. The image shows multiple rows of large, white, cylindrical reverse osmosis membrane modules mounted on metal frames. The facility has a complex network of pipes, valves, and electrical control panels. The lighting is bright, and the overall color scheme is dominated by the white of the membranes and the metallic grey of the structure, with blue accents from the overlay.

# **Regeneration of reverse osmosis membranes**

[www.ecomemb.com](http://www.ecomemb.com)

# WOULD YOU LIKE TO PREDICT THE FUTURE?



## ECOMEMB HELPS YOU MAKE IT HAPPEN!

You may already know that at Ecomemb, we recover reverse osmosis membranes using our own patented, sustainable technology.

We offer almost immediate availability of recovered Ecomembranes at prices significantly below new membranes, while delivering performance comparable to the originals.

In other words... We extend membrane lifespan and accurately predict the water quality you'll achieve before loading them.

**You'll know exactly what your plant will produce and under what conditions.**



With detailed information on each membrane to be installed in a reverse osmosis plant, we can generate highly accurate projections. In short:

**you'll know what will happen before it happens!**

# WANT EVIDENCE?

## HERE IT IS!

We have stock of various models of recovered brackish water and seawater Ecomembranes.

Before loading the elements, we recommend a configuration and operating protocol for each facility and carry out a validation of all parameters during the startup.

These are some examples of recent brackish water Ecomembrane installations:

| PLANT DATA         |                         |                                     |                                               | AVERAGE PARAMETER<br>AS FOR INDIVIDUAL<br>CHARACTERIZATIONS | SYSTEM PROJECTION                                 |                                         | REAL START UP<br>PARAMETERS                       |                                         | REJECTION<br>DEVIATION (%) |
|--------------------|-------------------------|-------------------------------------|-----------------------------------------------|-------------------------------------------------------------|---------------------------------------------------|-----------------------------------------|---------------------------------------------------|-----------------------------------------|----------------------------|
| RO SYSTEM<br>ARRAY | MEMBRANES<br>PER VESSEL | FEED<br>FLOW<br>(m <sup>3</sup> /h) | FEED<br>CONDUCTIVITY<br>(uS/cm <sup>2</sup> ) | AVERAGE REJECTION<br>(%)                                    | PERMEATE<br>CONDUCTIVITY<br>(uS/cm <sup>2</sup> ) | REJECTION AS<br>FOR CONDUCTIVITY<br>(%) | PERMEATE<br>CONDUCTIVITY<br>(uS/cm <sup>2</sup> ) | REJECTION AS<br>FOR CONDUCTIVITY<br>(%) |                            |
| 7+4                | 6                       | 68                                  | 1.385                                         | 98,5                                                        | 50                                                | 96,4                                    | 39                                                | 97,2                                    | 0,8                        |
| 3+2                | 5                       | 30                                  | 1.000                                         | 96,3                                                        | 54                                                | 94,6                                    | 95                                                | 90,5                                    | -4,1                       |
| 2+1+1              | 3                       | 13,3                                | 1.200                                         | 99                                                          | 35                                                | 97,1                                    | 18                                                | 98,5                                    | 1,4                        |
| 6+3                | 6                       | 57,3                                | 1.200                                         | (98,1 1a y 97,1 2a)                                         | 69                                                | 94,3                                    | 67                                                | 94,4                                    | 0,2                        |
| 6+3                | 6                       | 42,8                                | 2.000                                         | (97,5 1a y 99,5 2a)                                         | 113                                               | 94,4                                    | 70                                                | 96,5                                    | 2,2                        |
| 5+4                | 5                       | 53                                  | 1.700                                         | 95                                                          | 200                                               | 88,2                                    | 138                                               | 91,9                                    | 3,6                        |
| 2+2                | 4                       | 14,9                                | 4.500                                         | 98                                                          | 365                                               | 91,9                                    | 260                                               | 94,2                                    | 2,3                        |
| 5+4                | 4                       | 51                                  | 3.335                                         | 98                                                          | 225                                               | 93,3                                    | 160                                               | 95,2                                    | 1,9                        |
| 10                 | 6                       | 68                                  | 7.500                                         | 98,9                                                        | 250                                               | 96,7                                    | 177                                               | 97,6                                    | 1,0                        |
| 20+12+4            | 6                       | 180                                 | 4.500                                         | 99,2                                                        | 94                                                | 97,9                                    | 110                                               | 97,6                                    | -0,4                       |
| 2+1+1              | 3                       | 13,3                                | 1.200                                         | 98,5                                                        | 51                                                | 95,8                                    | 18                                                | 98,5                                    | 2,8                        |
| 12+6               | 6                       | 82                                  | 1.580                                         | 97,5                                                        | 157                                               | 90,1                                    | 95                                                | 94,0                                    | 3,9                        |

¡Voilà! Predicted permeate conductivity deviations below 5%.

But it's not just about quality, **you'll know your plant's operating conditions upfront.** We provide permeability data for each Ecomembrane, so you'll know your feed pump pressure before installing anything.

And this works for both brackish water and seawater Ecomembranes.



# NO NEED FOR A CRYSTAL BALL!

|                                                      | ACTIVE<br>AREA                    | PERMEATE<br>FLOW           | SALT<br>REJECTION | FEED<br>SPACER |
|------------------------------------------------------|-----------------------------------|----------------------------|-------------------|----------------|
| ECOMEMBRANE<br>RECOVERED FROM<br>BW30XFR-<br>400/34i | ft <sup>2</sup> (m <sup>2</sup> ) | GPD<br>(m <sup>3</sup> /d) | %                 | mil            |
|                                                      | 400<br>(37)                       | >10.500<br>(>40)           | >98%              | 34             |

|                                            | ACTIVE<br>AREA                    | PERMEATE<br>FLOW           | SALT<br>REJECTION | FEED<br>SPACER |
|--------------------------------------------|-----------------------------------|----------------------------|-------------------|----------------|
| ECOMEMBRANE<br>RECOVERED FROM<br>SWC4/SWC5 | ft <sup>2</sup> (m <sup>2</sup> ) | GPD<br>(m <sup>3</sup> /d) | %                 | mil            |
|                                            | 400<br>(37)                       | >6.600<br>(>25)            | >99,4%            | 28             |



## ASK FOR ECOMEMBRANES THEY'RE IN STOCK NOW!