Water Desalination Report

The international weekly for desalination and advanced water treatment since 1965

Excertped from Volume 47, Number 45

7 November 2011

Book Review

New UF/MF Technology text

Low-pressure membranes – for ultrafiltration and microfiltration – have been commercially available since the 1920's, but it has only been in the last thirty years that they have had a serious impact on the water treatment industry. Today, by some measures, the technology has overtaken reverse osmosis in terms of popularity.

A new 387-page book entitled *UF/MF Membrane Water Treatment; Principals and Design,* by Graeme Pearce, thoroughly reviews the fragmented world of UF/MF membranes, where the lack of standardization seems to grow on a monthly basis. In fact, at last week's Aquatech Amsterdam, three new UF/MF products were introduced.

Dr Pearce's book has been written for process engineers and practitioners and is organized to help readers select the most suitable technology, develop an effective and cost-effective design and solve operational problems as they arise.

In addition to chapters reviewing membrane filtration fundamentals and system design, he devotes chapters to drinking water, wastewater reuse, desal pretreatment, project implementation and operation, as well as case histories of five notable projects.

Most importantly, Pearce helps sort through the various supplier offerings and compares membrane materials, flow configurations, performance characteristics and cleaning schemes. Although the book would have benefitted from a comprehensive glossary of technical and commercial UF/MF terms, it will go a long way to help readers understand the most commonly used terms and brand names.

The book was published by TechnoBiz Communications and is available for $200 from www.membraneconsultancy.com.

Company	Polymer	ID, mm	PD/Sub	Flow, In/Out	Designation
Aquasource	CA	0.93	PD	In	DN 450
Aquasource	PS	0.96	PD	In	–
Dow	PVDF	0.65	PD	Out	SFP 2680
Dow	PVDF	0.65	PD	Out	SFP 2880
GE-Zenon	PVDF	0.8	PD	Out	ZW 500d
GE-Zenon	PVDF	0.4/0.5	PD	Out	ZW 1000
GE-Zenon	PVDF	0.47	PD	Out	ZW1500
Hydranautics	PES	0.8	PD	In	HYDRAcap
Hyfux	PES	0.7	PD	Out	K600ER
Hyflux	PVDF	0.6	PD	In	K2000T
Inge	PES	0.9	PD	In	Dizzer 5000
Koch	PS	0.89	PD	In	PMPW-10
Membrana	PES	0.8	PD	In	Liqui-Flux 04
Memcor	PVDF	0.5	PD-Sub	Out	S10V
Memcor	PVDF	0.5	PD-Sub	Out	L20V
Memcor	PP	0.25	PD-Sub	Out	CMF-M10C PP
Norit	PES	0.8	PD	In	SXL-225
Norit	PES	0.8	PD	In	Aquaflex
Pall/Ashai	PVDF	0.7	PD	Out	USV6203
Pall/Ashai	PAN	0.8	PD	Out	LOV5210
Polymem	PS	–	PD	Out	UF120S2
Toray	PVDF	0.8	PD	Out	HFM-2020
Toray	PVDF	0.9	PD	Out	HFU&HFS 2020
Toray	PAN	–	PD	Out	PAN HF 4°

Main Product Offerings from International Suppliers
adapted from Graeme's "UF/MF Membrane Water Treatment"

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