

# MERITO



S E R I E S 4 0

*Commitment to a  
Cleaner Environment*



*Pre-Engineered Seawater Reverse Osmosis Systems*



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ince its conception in 1958, Metito has grown to become a world leader in the design and production of water desalination plants. The hundreds of installations to Metito's credit have earned it a reputation for professional excellence through a proven record of strong and reliable performance.



In the range of self-contained systems, Metito's "series 40" are extremely rugged, seawater reverse osmosis (R.O.) units, designed for high reliability, low maintenance and a wide degree of versatility. This range of R.O. units are indispensable for a variety of users including: hotels and resorts; seashore camps; seashore industries; coast guard stations; public coastal facilities (e.g. ports and airports); housing estates; merchant and military ships; off-shore drilling platforms; etc.



Metito's "series 40", are designed for a broad list of applications in the capacity range of 10 to 300 m<sup>3</sup> of pure water per day. Larger outputs are achieved by using multiple units in parallel. "Series 40", are skid mounted units having all of their components mounted on a single skid.

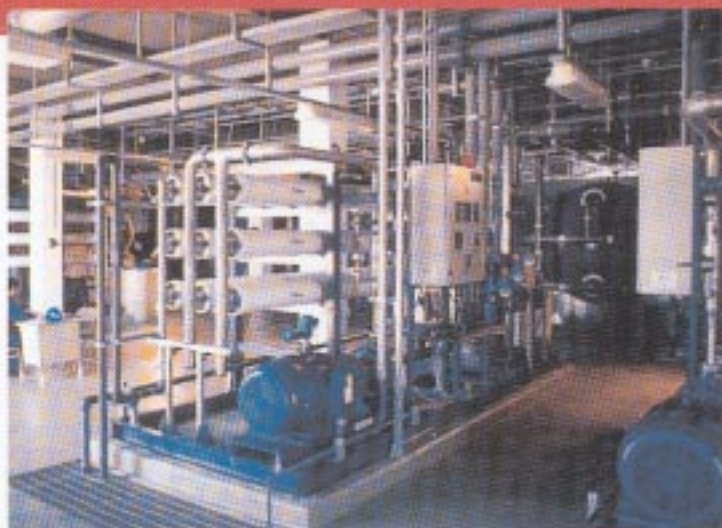
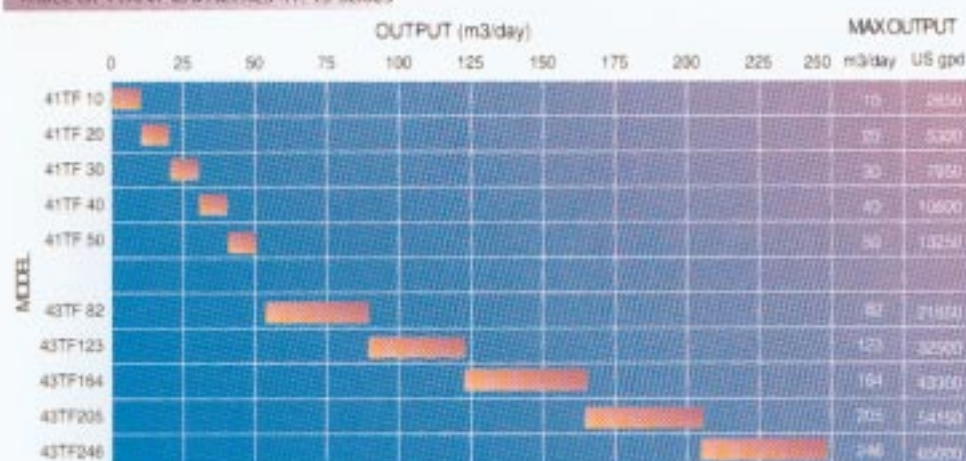
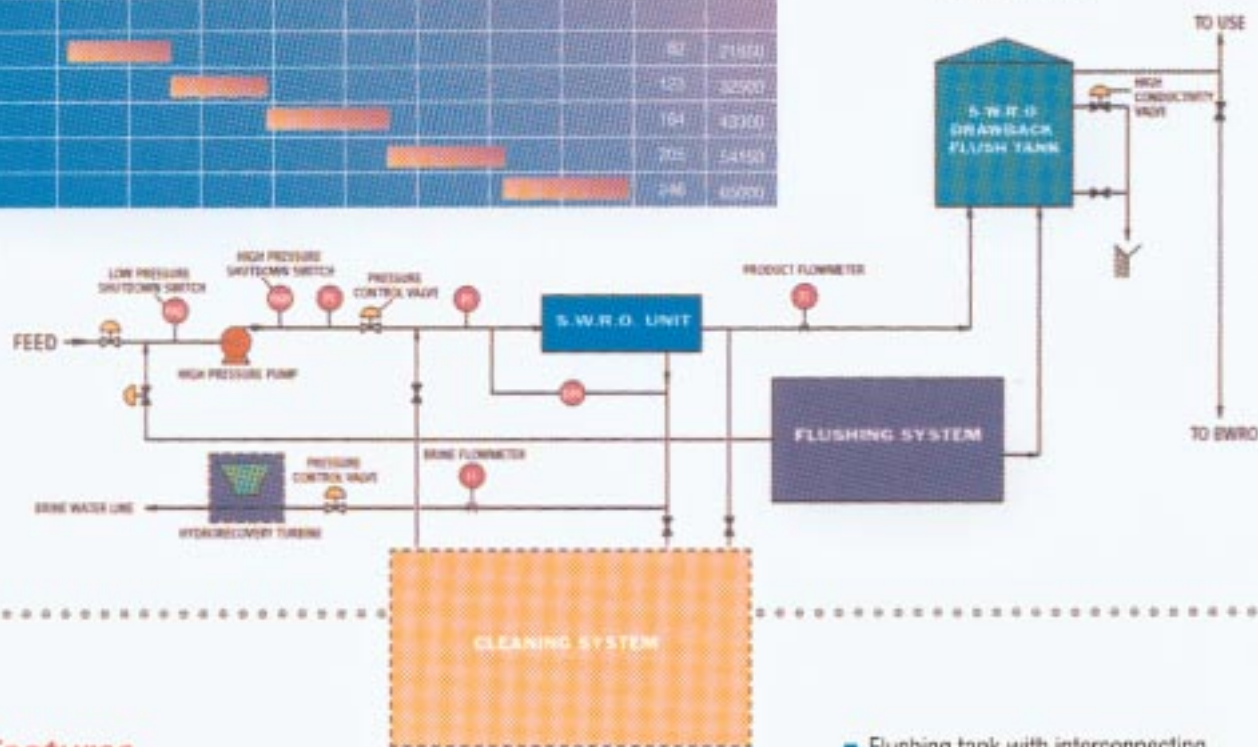


TABLE OF PLANT CAPACITIES 41/43 SERIES



GENERAL SCHEMATIC FOR SEAWATER REVERSE OSMOSIS



### Standard Features

- Epoxy coated welded steel skid
- M50 antiscalant metering system
- Thermoplastic prefilter with 5 micron polypropylene cartridge elements, vent valve, and inlet and outlet pressure gauges
- ORP "Oxidation Reduction Potential" monitor
- Low feed water pressure switch
- Stainless steel or aluminum bronze high pressure positive displacement or centrifugal pump with TEFC motor
- High pressure switch and feed control valve
- Pulsation dampners (used with positive displacement pumps) on suction and discharge of high pressure pump
- Reverse osmosis membranes in GRP pressure housings. The 41 and 43 series, use Thin Film Composite Spiral Wound elements and the 42 and 44 series, use Hollow Fiber Permeators
- Low pressure interconnecting piping in PVC
- High pressure interconnecting piping in stainless steel
- Reject control valve
- Product and reject flow indicators

- Flushing tank with interconnecting pipework and valves
- Control panel to NEMA 12, including programmable microprocessor, star-delta starter, integral disconnect switch, control circuit transformer, control switches, status and fault indication lights
- Standard power supply is 220-440 V, 3 phase, 50 or 60 Hz
- Operation and maintenance manual in English

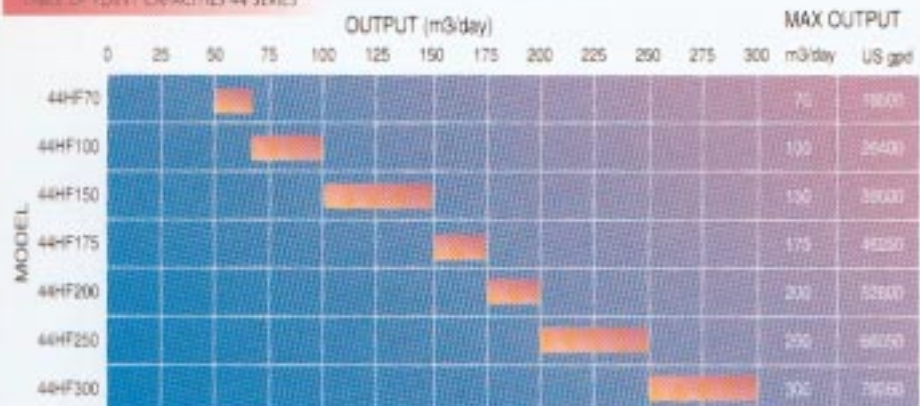
### Options and Accessories

- Clarifiers and media filters
- Chlorine/oxidant removal equipment

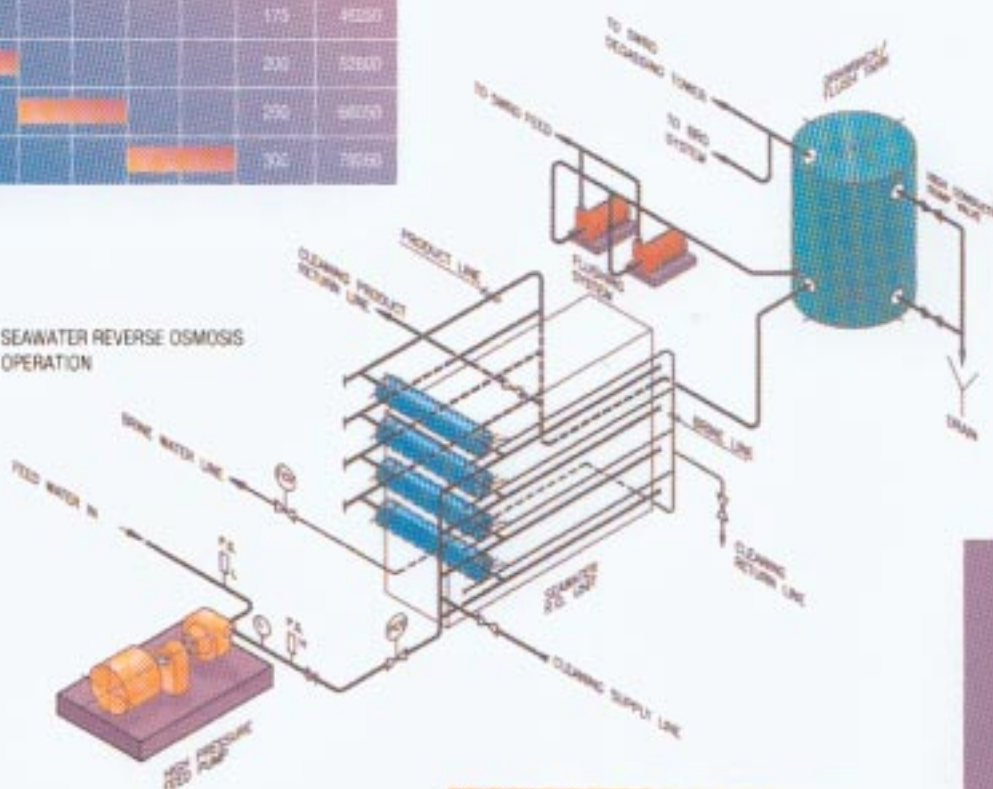
TABLE OF PLANT CAPACITIES 42 SERIES



TABLE OF PLANT CAPACITIES 44 SERIES



TYPICAL SEAWATER REVERSE OSMOSIS SYSTEM OPERATION



- Membrane cleaning station
- Silt Density Index (SDI) kit
- Portable TDS/Conductivity meter
- NEMA 4 or 7 control panel
- Auto isolating valve to close feedline at system shutdown
- Inline conductivity indicator
- High temperature alarm shutdown
- Post-disinfection systems
- Alternate power supply
- Glass-lined mild steel water storage tanks and water pressurization systems.
- Operating instructions in languages other than English

Dimensions mm (Inches)

Series	Length	Width	Height
41	4270 (168)	1050 (41)	2020 (79)
43	4270 (168)	2000 (78)	2550 (100)
42	2500 (98)	1050 (41)	2020 (79)
44	4000 (156)	2000 (78)	2800 (110)

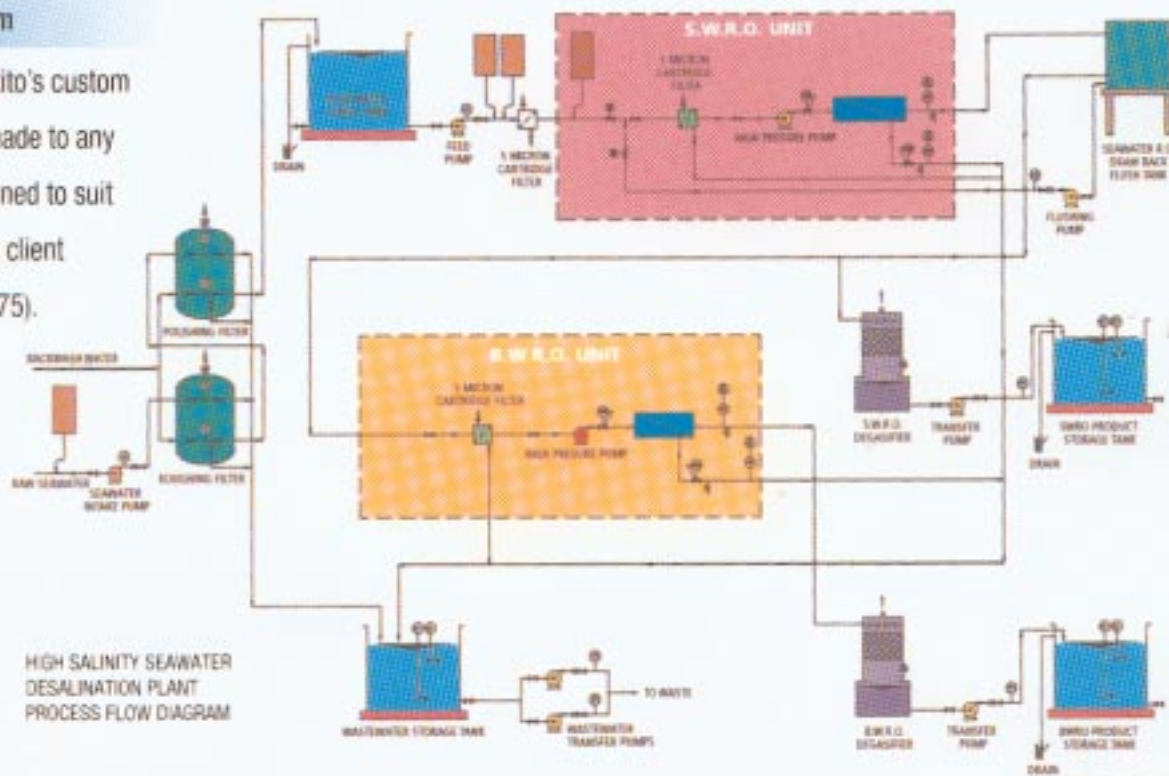
Application Data

Max Feed TDS (Mg./L.)	47,000
Design TDS (Mg./L.)	40,000
Product TDS (Mg./L.)	< 500
Max Recovery (%)	35
Design Recovery (%)	25
Max Temperature (Deg. C/F)	45 / 113
Min Temperature (Deg. C/F)	4 / 29
Design Temp. (Deg. C/F)	25 - 30 / 77 - 86
Membrane Type	Composite Polyamide
Membrane Configuration	Spiral or Hollow Fiber
Chlorine Tolerance	0
pH Range	3 - 10
Silt Density Index (SDI)	5 Max



### Custom Engineered RO System

In addition to "series 40", Metito's custom engineered systems can be made to any capacity, small or large, designed to suit the specific requirements of a client (ask for publication # RO-78075).



### Containerized RO System

The Metito CB and CS series, are containerized reverse osmosis systems that are ideal for remote and mobile applications. Ask for brochure.



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## METITO WORLDWIDE LOCATIONS

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Lebanon ▮ Tehran, Iran ▮ Sharjah, United Arab Emirates ▮ Abu Dhabi, United Arab  
Emirates ▮ Cairo, Egypt ▮ Baghdad, Iraq ▮ Tripoli, Libya ▮ Tunis, Tunisia ▮  
Mumbai, India ▮ Kuala Lumpur, Malaysia ▮ Amman, Jordan ▮ Tokyo, Japan ▮  
Seoul, S. Korea

