



# The Millenium™ RO

# Medical Device

## *Reverse Osmosis System* *1970 ml/min*

### Standard Features

- Specially designed for quiet operation.
- Advanced performance monitoring includes percent rejection and a digital display of product water total dissolved solids (TDS) as mg/L. For added safety, an audible alarm with adjustable set points is incorporated into the TDS monitor. The monitoring and instrumentation meets the standards recommended by the Association for the Advancement of Medical Instrumentation (AAMI).
- Panel mounted pressure gauges continuously display critical pump and product water pressures.
- Space-efficient design built for easy portability.
- Chemically compatible with 1% Minncare® Cold Sterilant disinfectant solution.
- Stainless steel RO pump and SS pressure vessels are used for maximum strength, reliability, and longevity.
- Thin film membrane for high quality and long life.
- Incoming water solenoid allows for system cleaning/sanitizing without disconnecting the water supply.
- Incoming water low pressure switch provides pump protection during sudden incoming pressure loss.
- Low Feed Pressure LED illuminates, indicating low feed pressure during normal operation.
- Product water recirculation returns the excess product water into the feed stream, which reduces stress on the RO membranes, increases permeate quality, conserves water, inhibits bacterial growth, and lowers operating costs.
- In-line GFCI (Ground Fault Circuit Interrupter) in a detachable power cord.
- Color-coordinated quick disconnect fittings for easy visual line connections.



- FDA registered manufacturer meets stringent medical device requirements.
- Listed as certified by CSA to Canadian and U.S. medical electrical standards and demonstrates compliance with CAN/CSA C22.2 No. 601.1-M90 (Safety of Medical Electrical Equipment, Part I; General Requirements for Safety) and UL STD 2601-1 (Safety of Medical Electrical Equipment, Part I; General Requirements for Safety).

### Optional Features

Mar Cor Purification offers a complete line of components and accessories, including:

- Docking Stations
- Pretreatment Carts
- Water Softeners
- Hardness & Total Chlorine Test Kits
- Carbon Tanks
- AAMI Water Analysis
- Sediment Filters
- High & Low pH Cleaners
- Disinfectant Tanks
- Stainless Steel Quick Disconnects

## Millenium Specifications

<b>Model</b>	M-750
<b>Nominal Product Flow Rate</b>	1970 ml/min
<b>at 77°F (25°C)</b>	31.2 gallons/hr (118 L/hr)
<b>Machine Recovery Rate</b>	38% (maximum)
<b>Dry Weight</b>	55 lbs. (25 kg)
<b>Power Required</b>	115/230 V, 60/50Hz 8/5 amps
<b>Dimensions Vertical</b>	Wide - 8" (20 cm)
<b>(of Assembled Unit)</b>	Depth - 15" (38 cm)
	Height - 25.5" (65 cm)

*Note: Initial product flow rate based upon membrane manufacturers' specifications of pretreated feed water, 200 psi (14 bars) applied pressure, 77°F (25°C) incoming water temperature, 1,000 ppm (mg/L) NaCl, 10% recovery and 1 psi (0.07 bars) product pressure. Membrane flux may vary ± 10%. For M-750, 200 psi (14 bars) applied pressure, 2,000 ppm (mg/L) NaCl, and 15% recovery.*

## Operational Parameters

<b>pH</b>	Operating: 5.5-10.5	Cleaning: 2-11
<b>pH with Chloramines</b>	Operating: 5.5-8.5	Cleaning: 2-11
<b>Temperature</b>	35-90°F (1.7-32°C)	
	<i>Water production decreases approximately 1.5% per 1°F (3% per 1°C) incoming water temperature drop.</i>	
<b>Inlet Pressure (Dynamic)</b>	Minimum: 30 psi (2 bars)	Maximum: 100 psi (7 bars)
<b>Inlet Water Flow</b>	Minimum: 2 gpm (7.6 L/m)	
<b>Total Hardness</b>	100 ppm (mg/L) (pH dependent)	
<b>Silt Density Index (SDI)</b>	<5	

*Note: Detailed analysis of the feed water will dictate the components, if any, needed in pre- or post-treatment of the Millenium RO unit. This will help assure a constant supply of water, meeting AAMI Dialysis Water Quality Standards.*



*Optional Millenium Pretreatment Cart shown with a carbon and softener tank. Pretreatment carts are available that will accommodate up to three 8" (20 cm) diameter tanks.*



*Optional Millenium Docking Station  
Baxter Meridian Shown*



*COBE C3 Shown*

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

Mar Cor Purification  
4450 Township Line Road  
Skipack, PA 19474-1429  
U.S.A.

Tel: (484) 991-0220  
Toll Free: (800) 346-0365  
Fax: (484) 991-0230

Mar Cor Purification  
14550 28th Avenue North  
Plymouth, MN 55447  
U.S.A.

Tel: (484) 991-0220  
Toll Free: (800) 633-3080  
Fax: (763) 210-3868

Mar Cor Purification  
3250 Harvester Road - Unit 6  
Burlington, ON L7N 3W9  
Canada

Tel: (905) 639-7025  
Toll Free: (800) 268-5035  
Fax: (905) 639-0425

Minntech B.V.  
Sourethweg 11  
6422 PC Heerlen  
The Netherlands

Tel: (+31) 45 5471 471  
Fax: (+31) 45 5429 695

Minntech Asia/Pacific Pte. Ltd.  
438 Alecandra Road  
#03-01 Alexandra Point  
Singapore 119958

Tel: (+65) 6227 9698  
Fax: (+65) 6225 6848