

## BioPure LSX

### High Efficiency RO-EDI USP Purified Water System with Automatic Heat Sanitization

Mar Cor Purification offers the next generation USP high purity water system, the BioPure LSX. The base system is a compact centralized single pass hot water sanitizable RO-EDI system designed to produce USP purified water grade.

The BioPure LSX system has been designed to minimize energy consumption, while the automated heat sanitization process allows for greater bacterial control. This reduces the need for chemicals and leads to increased peace of mind and less down time. The BioPure LSX has ethernet and USB connections for remote monitoring and troubleshooting.



### Standard Features & Benefits

- Single pass RO-EDI design
- Single skid, space saving design
- Automatic Hot Water sanitization programs
- All pharmaceutical grade 316L stainless steel tubing and <25Ra wetted surfaces.
- All welds are visually inspected
- Tri-clamp connections aid in sanitary design
- High efficiency motors with variable frequency drive
- Built in electric heater
- Sanitization Break Tank (100 US gallons)
- Fast installation and start-up
- Modulating valves allow user to dial in required flowrates within production range
- Self-adjusting reject flows allow for water savings in high recovery mode
- Differential pressure monitoring across filters and RO membranes

### Electrical / Instrumentation

- Allen-Bradley CompactLogix PLC
- NEMA 4/12 Main Control Panel
- Large 25.4 cm (10") Allen-Bradley HMI colour touch screen for easy operation
- USB ports for data logging & optional printer hook up
- Ethernet compatible for remote monitoring and troubleshooting
- Control panel powers up and interlocks pre-treatment via quick connects

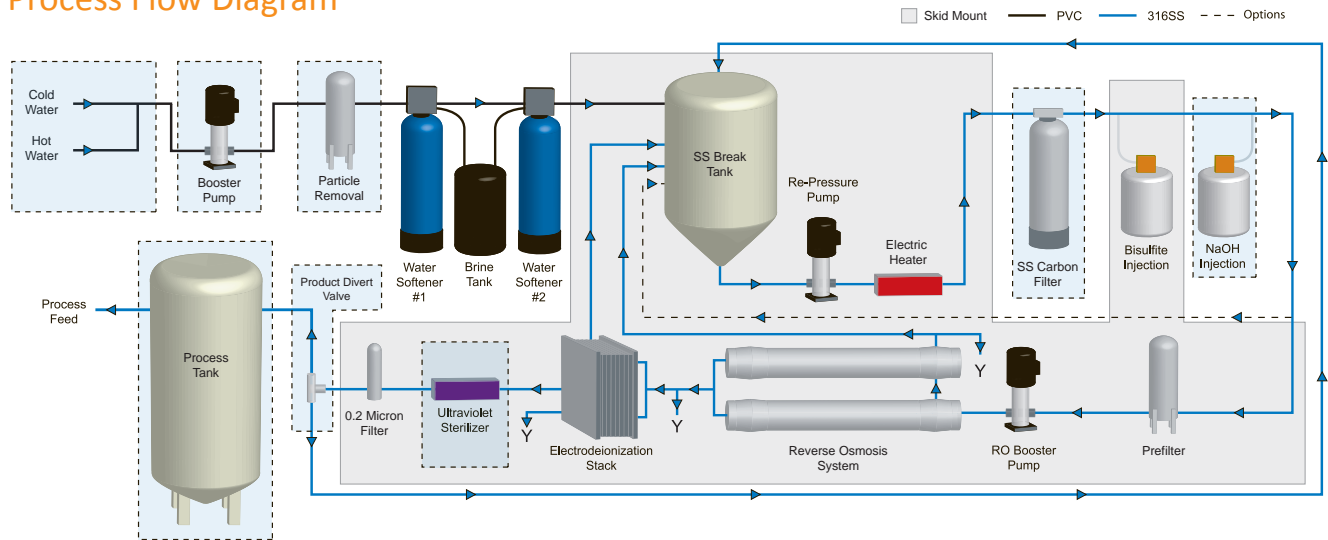
### Applications

- USP Purified Water
- Water for Injection (WFI) Water
- Highly Purified Grade Water for Rinsing
- Feed to Multi-Effect Still
- Cosmetics Process Water
- Medical Device Manufacturing

# Technical Data

Product Specifications					
<b>BioPure LSX USP Purified Water System</b>					
Part Number	LSX6.5	LSX15	LSX20	LSX30	LSX40
Product Flow Rate at 77°F (25°C)	2.5 to 6.5 US gpm 9.5 to 24.6 lpm	7.0 to 15.0 US gpm 26.5 to 56.7 lpm	14.0 to 20.0 US gpm 53.0 to 75.7 lpm	16.0 to 30.0 US gpm 60.6 to 113.6 lpm	26.0 to 40.0 US gpm 98.4 to 115.4 lpm
Dry Weight	1,565 kg (3,450 lbs)	1,905 kg (4,200 lbs)	2,268 kg (5,000 lbs)	2,912 kg (6,420 lbs)	3,084 kg (6,800 lbs)
Dimensions - Inches (mm)	122" L x 66" W x 80" H (3,099 x 1,676 x 2,032)			122" L x 87" W x 80" H (3,099 x 2,210 x 2,032)	
Power	460,575VAC / 3PH / 60HZ. Power selected at time of order.				
<b>Purified Hot Water Sanitization/Chemical Cleaning Break Tank</b>					
Tank Volume	378 litres (100 US gal)				
Material	304SS Stainless Steel & Insulated Jacket with 304SS Cladding				
Tank Rating	Atmospheric				
<b>Recovery, Nominal Rejection and Product Flowrate</b>					
Recovery	65-95%				
Element	Sanitary RO Membranes, 8"X40" (LSX6.5 4"X40"), Pharmaceutical EDI, Hot Water Sanitizable				
Nominal Rejection	Up to 99.9% of All Ionic Material				
Materials	All Critical Wetted Materials Are 316L Stainless Steel And Inert Plastics				
<b>Connections</b>					
Feed Water	1" 150 lbs Flange	1 1/2" 150 lbs Flange	1 1/2" 150 lbs Flange	2" 150 lbs Flange	2 1/2" 150 lbs Flange
Product Water	3/4" Sanitary Tri-Clamp	1" Sanitary Tri-Clamp	1 1/2" Sanitary Tri-Clamp	1 1/2" Sanitary Tri-Clamp	2" Sanitary Tri-Clamp
Drain Water	2" 150 lbs Flange	3" 150 lbs Flange	3" 150 lbs Flange	4" 150 lbs Flange	4" 150 lbs Flange
Cooling Water	1/2" Female NPT	1/2" Female NPT	1/2" Female NPT	1/2" Female NPT	1/2" Female NPT
Membrane permeate flow may vary +/- 10%. Performance is based on potable, pre-treated, 75°F (25°C) water. Membrane quantity will vary based on specific flow rate selected.					

## Process Flow Diagram



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