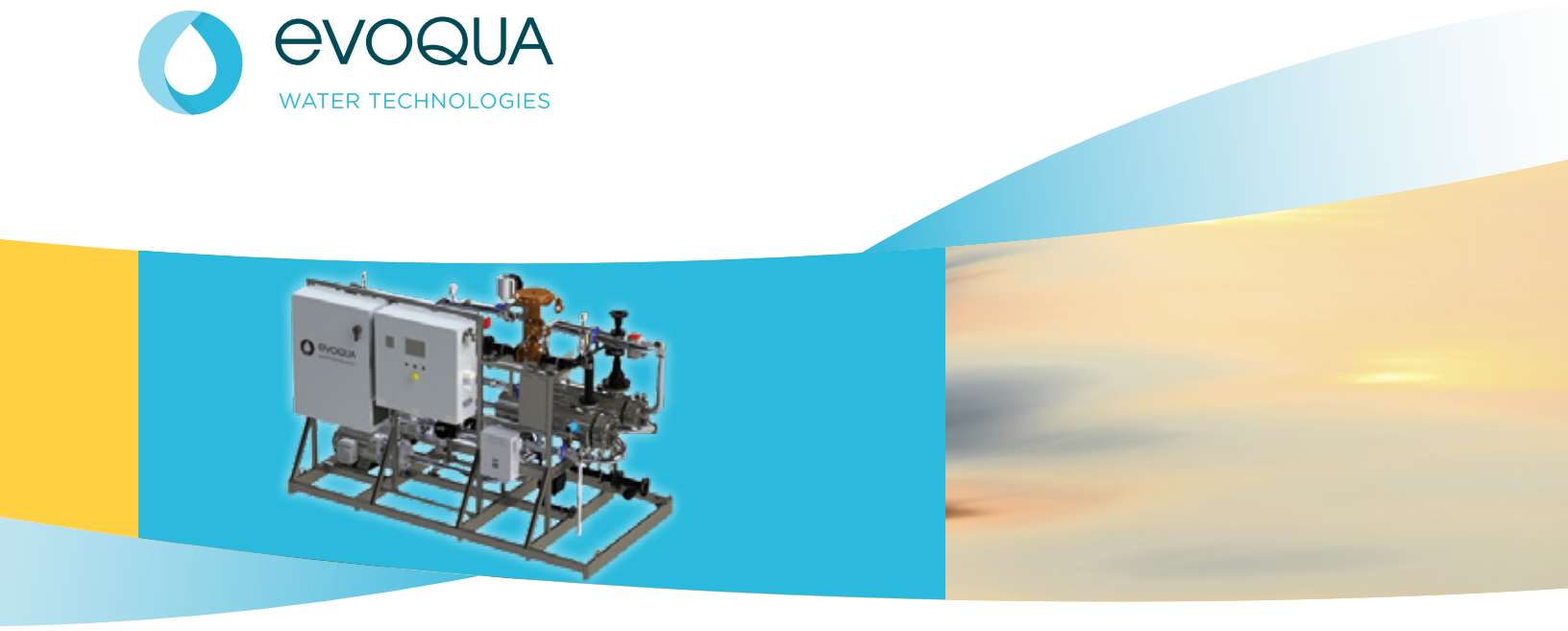

SDRX SYSTEM

The SDRx sanitizable system is built on a standardized platform for the storage and distribution of compendial water. Designed for minimization of microbial growth, the PURITAS SDRx System employs the use of sanitary stainless steel tubing and components.

The Hot Water Sanitizable (HWS) storage and distribution systems maximizes water quality by maintaining five process controls: (1) distribution flow rate, (2) loop pressure, (3) loop temperature, (4) microbial management in tank, piping and loop, and (5) a method to regularly sanitize the storage tank, distribution components and distribution loops.

The SDRx System is designed to compliment standard VRx generation systems or any custom offering. It has configurable options to match unique applications and process preferences. This proven product line is engineered and designed to produce reliable, high quality water distribution at an economical cost and highly competitive lead times.

SDRx System Benefits

- Efficient in both water and power consumption
- Utilizes pre-engineered SS storage tanks or existing storage tanks on site
- Allen-Bradley PLC/HMI for ease of use
- Wet FAT performed on all systems for easy installation and fast start-up
- Unsurpassed industry service and maintenance teams
- Comprehensive GAMP compliant validation documentation package and protocols, including detailed engineering/design documents and certs
- Designed for ease of operation, sampling and operator access/maintenance to all components

SDRx System Features

- Standardized pharmaceutical system with three flow rates (0 – 140 gpm)
- USP Purified Water, Highly Purified Water or Water-For-Injection applications
- Maximum microbial management
- Energy efficient with cost-saving features
- Selectable process water components*
- Four selectable operational modes for dual pump systems: (1) alternating, (2) one pump online, (3) one pump online with periodic flush through second pump, and (4) parallel operation with each pump providing 50% of the flow

*(Equipment options available on the next page.)

The SDRx System features a simple design with intricate stainless steel tubing to ensure the highest water quality.

PROCESS COMPONENTS

Process Water Equipment	
Distribution Pump	Stainless steel sanitary centrifical VFD controlled pump
Steam Heat Exchanger	Stainless steel shell and double tube heat exchanger for hot water sanitization
Controls Panel	IP65 rated controls enclosure
Power Panel	IP54 rated fan cooled enclosure
Process Piping	Stainless steel tube sanitary, 25Ra interior finish

Optional Process Water Components	
USP/WFI Storage Tank with Spray Balls	Water entry point for the PURITAS™ SDRx system is an insulated, sanitary stainless steel tank
Cooling Exchanger	Stainless steel shell and double tube heat exchanger for water tempering
UV Unit lamp (minimum 30 mj/cm2)	Stainless steel chamber with 254 nm
PLC/HMI	Allen-Bradley with 7" touch screen

GENERAL SPECIFICATIONS

Description	Model		
	1	2	3
Distribution Size	1.5"	2"	3"
Maximum Pount-of-Use gpm (m3/hr)	32 gpm (7.3 m^3/hr)	59 gpm (13.4 m^3/hr)	140 gpm (31.8 m^3/hr)
Skid Outlets Pressure	80 psig (5.51 bar)		
Distribution Loop Back Pressure	30 – 50 psig (2.07 – 3.44 bar)		
Inlet Feed Water Temperature	35 °F – 176 °F (1.67 °C – 80 °C)		
Frame Construction	304 stainless steel — box tube and channel		
Electrical and Power Panels	304 stainless steel		

PROCESS COMPONENTS SPECIFICATIONS

Loop specifications:	1.5": Up to 940 equivalent feet*	2": Up to 4,450 equivalent feet*	3": Up to 11,300 equivalent feet*
Pump specifications:	Sanitary, 316L or equivalent, 25 Ra wetted surface finish, capable of 100 psi boost pressure, inverter duty ready motor.		
UV specifications:	316L stainless steel; 15 Ra wetted surface finish; 254nm wavelength; validated lamps; 304 stainless steel, UL Type 3R control cabinet		
Tank specifications:	316L stainless steel; 25 Ra wetted surface finish; ASME rated, full vacuum to 50 psi; insulated with 304 stainless steel sheath; removable legs; custom spray ball(s) with coverage testing; vortex breaker.		

*Loop equivalent length based on smallest tank available, 30 psi back pressure, and maximum point-of-use flows. See the product specifications for details.

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