

Water Innovations Regenerable Ion Exchange (WIRIX) systems recycle industrial rinses or deionize potable water to produce 1-uS DI water or selectively removes metals from metal finishing wastewater with 75% greater recovery than Reverse osmosis and 95% lower operating cost than portable exchange DI.

Counter-current packed-bed resin regeneration produces high quality DI water at a 50% lower cost than co-current ion exchange, with optional optimized regeneration control (ORC).

Scalable from 10 to 25-gpm based on vessel, pipe & pump size and amount of media & resin.

Alternating duplex vessels provide 24/7 operation controlled by PLC based on uS, psi & gpm sensors.

System feed & DI water tank level sensors regulate feed & DI water pumps based on adjustable set points.

Constant system & DI water supply flow by multi-stage pumps regulated by PowerFlex 525 variable frequency drives.

Cerapure media vessels remove TSS & oxidizers with 5u filters.

Alternating duplex DI cation & anion or metal-scavenging resin vessels switch between service & regeneration

Media backwash triggered by psi, DI regeneration by totalized TDS or outlet uS & pH, and metal-scavenging by totalized flow.

Automated with CompactLogix & PanelView 7+ controlling GF PPA valves by Signet sensors, for minimal operator involvement.

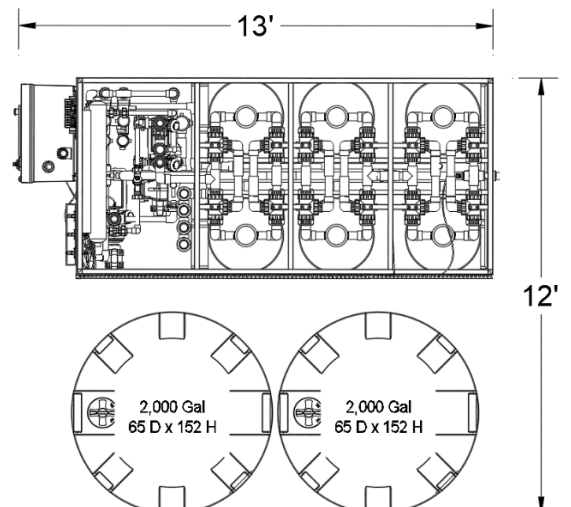
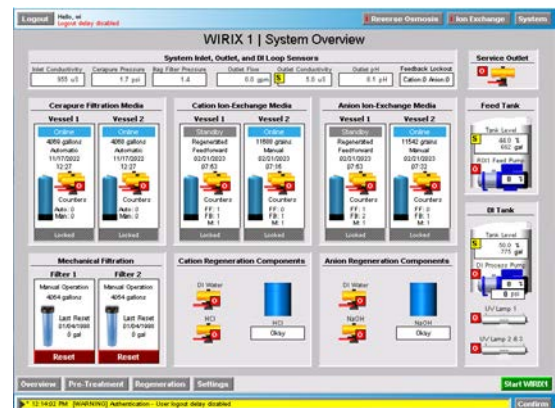
Optimized Regeneration Control (ORC) reduces chemical use by 25% & waste volume by 40% with uS sensor-controlled valves on chemical inlets & waste outlets.

Value-Engineered (VE) substitutes manual for actuated valves to alternate vessels before HMI/PLC-controlled regeneration.

Factory tested & certified for plug & play operation when supplied with 480VAC-3Φ, 5scfm & 60-psi city water.

Available turnkey by WI w/ start-up & operator training or by customer after factory wet test with ethernet remote support.

Includes WI-provided remote assistance, ongoing components and technical support up to on-site service.



WIRIX Systems Standard & Optional Features

WIRIX-WR - Water Recycling

- Feed Tank – Standard HDLPE flat-bottom dome-top, optional feed pump VFD.
- Feed Pump – Service & regeneration rated flow & pressure, optional VFD.
- Cerapure – Standard duplex vessels automatic or optional manual backwash.
- 5u bag Filter – Standard duplex 0-160psi gauge or optional 4-20mA psi sensors.
- Ion Exchange – Standard counter-current, optional WI-ORC or WI-VE regeneration.
- Instruments – Standard inlet/outlet uS, outlet flow, pH & psi.
- DI Water Tank – HDLPE flat-bottom dome-top with 254 & 185nm UV sterilizer.
- DI Water Pump – Service & regeneration flow/pressure, optional VFD.
- Sizes – 10, 15, 20, & 25-gpm service flow including regeneration 24/7.

WIRIX-DI - Deionizer

- Feed Tank – Standard HDLPE flat-bottom dome-top, optional pressurized water supply.
- Feed Pump – Service & regeneration flow & pressure, optional VFD.
- Cerapure – Standard duplex vessels automatic backwash, optional manual.
- 5u bag Filter – Standard duplex 0-160psi, optional 4-20mA psi sensors.
- Cation & Anion Exchange – Standard counter-current, optional WI-ORC or WI-VE regeneration.
- Instruments – Standard inlet/outlet uS, flow & outlet pH, optional multi-point psi data-log.
- DI Water Tank – Standard HDLPE flat-bottom dome-top with 254 & 185nm UV sterilizer.
- DI Water Pump – Service & regeneration flow & pressure, optional VFD control.
- Sizes – 10, 15, 20, & 25-gpm service flow including regeneration 24/7

WIRIX-MS - Metal Scavenger

- Feed Tank – Standard HDLPE flat-bottom dome-top, optional WI-CT-2-pH.
- Feed Pump – Service & regeneration flow & pressure, optional VFD control.
- Cerapure – Standard duplex vessels automatic backwash, optional manual.
- 5u bag Filter – Standard duplex 0-160psi, optional 4-20mA sensors.
- Lead & Lag Cation – Standard co-current, optional WI-ORC or WI-VE regeneration.
- Instruments – Standard Inlet pH, flow & outlet pH, optional multi-point psi data-log.
- Discharge Tank – Standard HDLPE flat-bottom dome-top, optional WI-CT-2-pH.
- Discharge Pump – Service & regeneration rated flow & pressure, optional VFD.
- Sizes – 10 or 20-gpm service flow including regeneration 24/7.