

RALEX® HPWU MPURE™ SYSTEMS

MPURE™ SYSTEMS PRODUCE HIGH PURITY WATER USING MPURE™ ELECTRODEIONIZATION MODULES. THE SYSTEMS ARE MANUFACTURED IN MEGA PRODUCTION PLANT IN ACCORDANCE TO ISO NORMS 9001, 14001 AND 45001.

A range of pre-engineered systems is available to provide simple integration of the EDI modules into overall water treatment systems. The equipment is designed to meet the requirements of the power, chemical and microelectronic industries.

DESCRIPTION

The RALEX® HPWU range of pre-engineered systems with MPure™ modules cover flow rates from 0,8 m³/h (22 gpm) to more than 100 m³/h (440 gpm) per unit. The rugged skid mounted systems are factory assembled and tested to minimize installation and start-up costs. Systems use premium components and are delivered complete with power supply, instrumentation and controls. Various options, including remote monitoring and control,

are available to allow for easy operation and integration with pretreatment and post treatment equipment.

STRUCTURE

1. MPure™36 modules
2. Switchboard with DC MPure™ Rectifiers (one DC rectifier for each module)
3. Electrically actuated product divert valves
4. Concentrate outlet
5. Product outlet
6. CIP outlet
7. Electrode solution outlet
8. Feed water inlet
9. CIP inlet
10. PLC with touch screen
11. AISI 304 skid incl. adjustable legs
12. Off spec outlet

FEATURES

Simple and cost-effective solution

Small footprint due to the ability to interconnect and arrange modules on top of each other

Welded stainless steel AISI 304 skid

Polypropylene as a standard piping material

Flow and Pressure transmitters

PLC with Ethernet interface

No isolation transformer required

CIP connections and auto divert valves included

Comprehensive documentation

OPERATING PARAMETERS

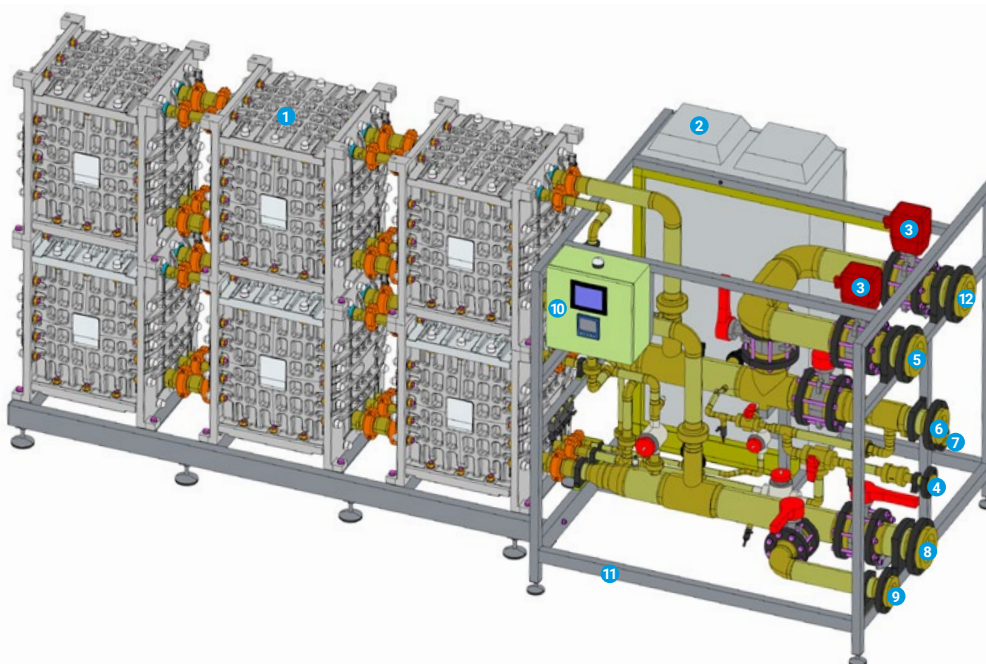
Recovery up to 97.5 %

Inlet power:
3 phase/400 VAC/50 Hz

Feed water temperature:
5 to 40 °C

Feed pressure: 3 to 7 bar

Pressure drop: 2 to 3 bar



RALEX® HPWU 6xMPure36

RALEX® HPWU MPURE™ SYSTEMS

THE MPURE™ SYSTEMS USE RO PERMEATE TO PRODUCE A PRODUCT WATER QUALITY WITH HIGH RESISTIVITY (16–18 MΩ·CM) AND ACHIEVE A SILICA REMOVAL OF MORE THAN 96 %. THE UNITS OPERATE IN ONE-PASS MODE WITHOUT THE NEED FOR RECIRCULATION OR SALT INJECTION.

EQUIPMENT SPECIFICATIONS

RALEX® HPWU type	1×MPure™36	2×MPure™36	3×MPure™36	4×MPure™36	5×MPure™36	6×MPure™36	7×MPure™36	8×MPure™36	9×MPure™36	
No. of modules	1	2	3	4	5	6	7	8	9	
Nominal flow rate (m³/h)	10	20	30	40	50	60	70	80	90	
Flow rates (m³/h)	5–15	10–30	15–45	20–60	25–75	30–90	35–105	40–120	45–135	
Hydraulical connection (mm)	Feed water inlet	DN100	DN100	DN100	DN125	DN125	DN125	DN150	DN150	DN150
	Product outlet	DN100	DN100	DN100	DN125	DN125	DN125	DN150	DN150	DN150
	Concentrate outlet	DN32	DN32	DN32	DN32	DN32	DN32	DN32	DN32	DN32
	Electrode solution outlet	DN20	DN20	DN20	DN20	DN20	DN20	DN20	DN20	DN20
	CIP inlet/outlet	DN80	DN80	DN80	DN100	DN100	DN100	DN125	DN125	DN125
Dimensions (mm)	Lenght	2,440	3,190	4,070	3,330	4,210	4,210	4,760	4,760	4,760
	Depth	1,300	1,300	1,300	1,470	1,470	1,470	1,500	1,500	1,500
	Height	1,655	1,655	1,655	1,810	1,810	1,810	2,620	2,620	2,620
Operating Weight (kg)	700	1,120	1,500	1,865	2,270	2,640	3,190	3,560	3,930	
Connected Power (kVA)	5,26	10,3	15,5	20,5	25,5	30,5	35,8	41	46	

EQUIPMENT SPECIFICATIONS

RALEX® HPWU type	1×MPure™6	1×MPure™12	
No. of modules	1	1	
Nominal product flow rate (m³/h)	1.67	3.33	
Product flow rates (m³/h)	0.83–2.5	1.67–5.0	
Hydraulical connection (mm)	Feed water inlet	Female thread G3"	Female thread G3"
	Product outlet	Female thread G3"	Female thread G3"
	Concentrate outlet	Female thread G1 3/4"	Female thread G1 3/4"
	Electrode solution outlet	Female thread G 1"	Female thread G 1"
	CIP inlet	–	–
Dimensions (mm)	Lenght	1,490	1,490
	Depth	950	950
	Height	1,817	1,817
Operating Weight (kg)	450	490	
Connected Power (kVA)	2,9	3,16	