

RAPIDE STRATA™

Short Cycle Regeneration Ion Exchange Deionization

Rapide Strata two-bed or three-bed units produce high purity water for a range of industrial applications. The unique design offers savings of up to 40% on operational and wastewater costs compared to conventional deionization systems.

Flow rates from 8 gpm to 250 gpm.

- Versions available according to American and European standards

Features & Benefits

- 3 models available, Rapide Strata, Rapide Strata+ and Rapide Strata+ Extended Regeneration in varying sizes
- Standard regeneration in 35-45 minutes: minimizes down time, enhances bacterial control, improves chemical usage efficiencies
- Control system PLC, Touch Screen HMI, Veolia Vision™ Ready: facilitate monitoring and operation
- Duplex operation mode for continuous water production: increased production capacity
- Continuous conductivity monitor with auto service shut-off and alarm: ensures water quality
- Continuous, intermittent or zero recirculation of water when tank reaches high point: operational flexibility
- Skid-mounted, standardized systems: short lead times, quick installation and start-up
- Variable frequency drive (VFD) on the pump on larger models (23/23+ to 60/60+)

Applications

- Pharmaceutical
- Beverage
- High and medium pressure boiler feed
- Surface finishing
- General industry

Rapide Strata+ Model

- Integrated polishing device (Hipol™)
- Eliminates need for separate post deionization step
- Produces water exceeding Ph Eur and USP conductivity requirements

Extended Regeneration Option on Strata+ models

- Capable of producing water with <20 ppb of reactive silica; suitable for high and medium pressure boiler-feed
- Produces water of <0.1 µS/cm; polishing RO water

Related Services

Local aftermarket service and support teams offer preventive and corrective maintenance programs to ensure the long-term, efficient operation of installed equipment.



RAPIDE STRATA™ Short cycle regeneration deionizer

Equipment Performance

Model		Rapide Strata							Rapide Strata+						
		4	10	18	23	32	45	60	4+	10+	18+	23+	32+	45+	60+
Maximum Gross Flow*	gpm	18	45	80	100	140	200	265	18	45	80	100	140	200	265
Minimum Flow	gpm	12	29	62	53	71	89	133	12	29	62	53	71	89	133
Regeneration Time**	minutes	35-55	35-55	35	35-55	35-55	35-55	35-55	35-80	35-80	35-80	35-80	35-80	35-80	35-80
Maximum Waste Flow to Drain during Regeneration	gpm	17	42	75	97	135	190	251	17	42	75	97	135	190	251
Wastewater Volume per Regeneration***	gallons	212	450	846	1189	1850	2510	3329	212	450	846	1189	1850	2510	3329
Chemical Usage per Regeneration****															
HCl (32%)	gallons	2	4	8	11	16	21	27	2	4	8	11	16	21	27
NaOH (32%)	gallons	2	4	7	11	15	17	21	2	4	7	11	15	17	21
Bulked wastewater	pH	6-9	6-9	6-9	6-9	6-9	6-9	6-9	6-9	6-9	6-9	6-9	6-9	6-9	6-9
Output per Regeneration (100 mg/l Total Anion load as CaCO ₃ Inc CO ₂ & SiO ₂)	gallons	5495	13737	23776	37777	53099	63401	77138	4439	11096	19021	30380	42796	51249	63345
Pump motor power	HP	3	5	8	10	15	15	20	3	5	8	10	15	15	20

* The maximum available flow-rate depends on the TDS of the feed water and the number of regenerations per day.

** Standard regeneration for Rapide Strata+ takes 35 minutes for treated water with a conductivity of < 1µS/cm.

For a treated water with a conductivity of < 0,1 µS/cm and SiO₂ < 20 ppb, regeneration time is 80 minutes.

***Wastewater volume depends on treated water quality.

**** Chemical consumption is calculated for treated water with a conductivity of < 2µS/cm.

Equipment Dimensions

Model		4/4+	10/10+	18/18+	23	32	45	60	23+	32+	45+	60+
Height	in	82	84	88	120	120	126	126	120	120	126	126
length	in	60	79	82	119	199	142	142	138	138	178	178
Width	in	36	44	52	75	75	83	83	75	75	83	83
Recommended Headroom	in	40	40	40	40	40	40	40	40	40	40	40
Approx. Service Weight	lbs	1430/1540	3410/3564	4290/4510	6600	8360	13310	15928	7084	8886	13750	16390
Feed Inlet (PVC Socket Union Flange ANSI)*		1 1/2"	2"	3"	3"	3"	4"	6"	3"	3"	4"	6"
Service Outlet (PVC Socket Union Flange ANSI)*	-	1 1/4"	1 1/2"	2"	3"	3"	4"	6"	3"	3"	4"	6"
Regeneration Water Inlet (PVC Socket Union Flange ANSI)*	-	1 1/2"	2"	3"	3"	3"	4"	6"	3"	3"	4"	6"
Drain (PVC Socket Union)	-	1"	1 1/4"	1 1/2"	3"	3"	4"	4"	3"	3"	4"	4"

* Socket unions: for Rapide Strata models 4/4+ to 18/18+. Flanges: for Rapid Strata models 23/23+ to 60/60+.

Typical Treated Water Quality

	TDS (mg/l)	Conductivity (µS/cm)
Rapide Strata	<1	max. 5; average <2
Rapide Strata+	<0.2	1-0.1

Material Specifications

Resin Vessels	Glass Reinforced Plastic
Pipework	PVC
Pump	316 stainless steel multistage centrifugal
Skid	Epoxy coated carbon steel
Control Valves	Air operated diaphragm valves or butterfly valves
Control Cabinet	Epoxy coated steel - NEMA 12

Feed Water Requirements

Potable water free from organic contamination, chlorine and suspended solids.

Pressure

Unpressurised via local break tank, or max. 14.5 psi

Temperature

min. 41°F max. 86°F (to 104°F max on request)

TDS max. 500 mg/l

Conductivity max. 700 µS/cm

Electrical Supply Options

460V/3PH/60Hz standard or adapted to customers requirements on request.

Air Supply

80 psi, Instrument Quality, 0,35 cfm intermittent.

For higher flow rates, consult your local Veolia Water Technologies company contact, details below.

Visit our website: www.veoliawatertechnologies.com

In keeping with the progressive nature of the company, we reserve the right to amend details without notice.

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