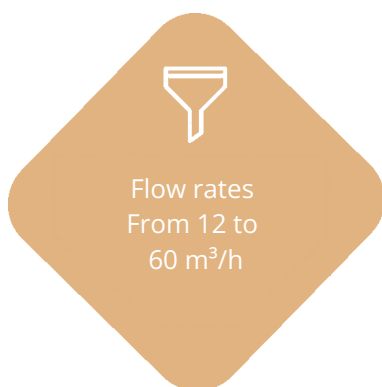


# RAPIDE STRATA™ (HF)

Short Cycle Regeneration Ion Exchange Deionisation

**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 deionisation systems.**

• Versions available according to American and European standards



## ✓ FEATURES & BENEFITS

- 2 models available, Rapide Strata, Rapide Strata+ and in varying sizes
- Standard regeneration in 35-80 minutes: minimizes down time, enhances bacterial control, improves chemical usage efficiencies
- Control system PLC, Touch Screen HMI, Veolia HUBGRADE™ 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, standardised systems: short lead times, quick installation and start-up
- Variable frequency drive (VFD)

## 💧 APPLICATIONS

- Industrial process water for all industry, pharmaceutical, beverage etc.
- High and medium pressure boiled feed
- Surface finishing

## + OPTIONS

- Automatic isolating valves on diluted chemical feed lines
- Pressure gauges in addition to pressure transmitters
- Multipurpose water pump non return valve
- Feed water manual isolating valve
- Resin trap strainer on deionized water outlet
- 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

## ASSOCIATED SERVICES

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





### System Operating Parameters

Model	Unit	24 UK	32 UK	45 UK	60 UK
Max Feed Flowrate	m <sup>3</sup> /h	23	32	45	60
Min Feed Flowrate	m <sup>3</sup> /h	12	16	20	30
Regeneration Time <sup>(1)</sup>	min.	35 - 55	35 - 55	35 - 55	35 - 55
Maximum Waste Flow to Drain during Regeneration	m <sup>3</sup> /h	22.0	30.5	43.0	57.0
Wastewater Volume per Regeneration <sup>(2)</sup>	m <sup>3</sup>	4.5	7.0	9.5	12.6
Bulked wastewater pH	-	6 - 9	6 - 9	6 - 9	6 - 9
Chemical Usage per Regeneration - HCl (32%) <sup>(3)</sup>	L	41	57	78	100
Chemical Usage per Regeneration - NaOH (32%) <sup>(3)</sup>	L	38.2	54.0	64.3	78.2
Output per Regeneration	m <sup>3</sup>	143	201	240	292
Pump Motor Size	kW	7.5	7.5	11.0	15.0

Model	Unit	24+ UK	32+ UK	45+ UK	60+ UK
Max Feed Flowrate	m <sup>3</sup> /h	23	32	45	60
Min Feed Flowrate	m <sup>3</sup> /h	12	16	20	30
Regeneration Time <sup>(1)</sup>	min.	35 - 55	35 - 55	35 - 55	35 - 55
Maximum Waste Flow to Drain during Regeneration	m <sup>3</sup> /h	22.0	30.5	43.0	57.0
Wastewater Volume per Regeneration <sup>(2)</sup>	m <sup>3</sup>	4.5	7.0	9.5	12.6
Bulked wastewater pH	-	6 - 9	6 - 9	6 - 9	6 - 9
Chemical Usage per Regeneration - HCl (32%) <sup>(3)</sup>	L	41	57	78	100
Chemical Usage per Regeneration - NaOH (32%) <sup>(3)</sup>	L	38.2	54.0	64.3	78.2
Output per Regeneration	m <sup>3</sup>	115	162	194	236
Pump Motor Size	kW	7.5	7.5	11.0	15.0

<sup>(1)</sup> 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 SiO<sub>2</sub> <20 ppb, regeneration time is 80 minutes.

<sup>(2)</sup> Wastewater volume depends on treated water quality.

<sup>(3)</sup> Chemical consumption is calculated for treated water with a conductivity of < 2µS/cm.

### System Dimensions

Model	Unit	24 UK	32 UK	45 UK	60 UK
Total Installed Length	m	3.0	3.0	3.6	3.6
Total Installed Width	m	1.9	1.9	2.1	2.1
Total Installed Height	m	3.04	3.04	3.19	3.19
Recommended Headroom	m	1	1	1	1
Operating Weight	kg	3000	3800	6050	7240

Model	Unit	24+ UK	32+ UK	45+ UK	60+ UK
Total Installed Length	m	3.5	3.5	4.5	4.5
Total Installed Width	m	1.9	1.9	2.1	2.1
Total Installed Height	m	3.04	3.04	3.19	3.19
Recommended Headroom	m	1	1	1	1
Operating Weight	kg	3220	4030	6250	7450





### Pipes Connections

Model	Unit	24 UK	32 UK	45 UK	60 UK
Feed	DN	80	100	100	125
Outlet	DN	65	80	100	125
Drain <sup>(4)</sup>	DN	80	80	100	100

Model	Unit	24+ UK	32+ UK	45+ UK	60+ UK
Feed	DN	80	100	100	125
Outlet	DN	65	80	100	125
Drain <sup>(4)</sup>	DN	80	80	100	100

<sup>(4)</sup>Socket unions: for Rapide Strata models 4/4+ to 18/18+. Flanges: for Rapid Strata models 23/23+ to 60/60+.

### Feed water Requirements

Parameter	Unit	Value
Maximum supply pressure	barg	1.2
Minimum water temperature	°C	5.0
Maximum water temperature	°C	30 (40 on request)
Maximum Inlet TDS	mg/l	500
Max inlet Conductivity	µS/cm	700
Max inlet Free Chlorine Cl <sub>2</sub>	mg/l	0.2
Max inlet Iron Fe <sup>3+</sup>	mg/l	0.3
Max inlet Manganese Mn <sup>2+</sup>	mg/l	0.2

### Environmental Conditions

Parameter	Unit	Value
Minimum ambient temperature	°C	10
Maximum ambient temperature	°C	40

### Materials of Construction

Pressure Vessels	Glass Reinforced Plastic
Pipework	uPVC
Skid	Epoxy coated carbon steel
Control Valves	Air operated diaphragm valves or butterfly valves
Control Cabinet	Epoxy coated steel - IP54

### Power Requirements

Parameter	Unit	Value
Voltage	V	380
Frequency	Hz	50
Phases	-	3

### Typical Treated Water Specifications and Performances

Parameter	Unit	Value
Compressed Air Pressure	barg	5.5 - 6.0
Maximum Conductivity	µS/cm	< 5, < 1 RS+
Silica as SiO <sub>2</sub>	ppb	< 200, < 20 RS+