

# RAPIDE STRATA™ (SF)

Ion Exchange Deionisation for Process Water

**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.**

Flow rates  
From 2.5 to  
18 m<sup>3</sup>/h



## ✓ FEATURES & BENEFITS

- 2 models available, Rapide Strata, Rapide Strata+ 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 shutoff 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

## 💧 APPLICATIONS

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

## ASSOCIATED SERVICES

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





### System Operating Parameters

Model	Unit	4 UK	10 UK	18 UK
Max Feed Flowrate	m <sup>3</sup> /h	4	10	18
Min Feed Flowrate	m <sup>3</sup> /h	2	5	9
Regeneration Time <sup>(1)</sup>	min.	35	35	35
Maximum Waste Flow to Drain during Regeneration	m <sup>3</sup> /h	3.2	7.1	13.0
Wastewater Volume per Regeneration	m <sup>3</sup>	0.7	1.5	2.7
Bulked wastewater pH	-	6 - 9	6 - 9	6 - 9
Chemical Usage per Regeneration - HCl (32%)	L	5.0	13.0	20.0
Chemical Usage per Regeneration - NaOH (32%)	L	6.0	14.0	26.0
Pump Motor Size	kW	1.50	3.00	5.50

Model	Unit	4+ UK	10+ UK	18+ UK
Max Feed Flowrate	m <sup>3</sup> /h	4	10	18
Min Feed Flowrate	m <sup>3</sup> /h	2	5	9
Regeneration Time <sup>(1)</sup>	min.	45	45	45
Maximum Waste Flow to Drain during Regeneration	m <sup>3</sup> /h	3.2	7.1	13.0
Wastewater Volume per Regeneration	m <sup>3</sup>	0.7	1.5	2.7
Bulked wastewater pH	-	6 - 9	6 - 9	6 - 9
Chemical Usage per Regeneration - HCl (32%)	L	5.0	13.0	20.0
Chemical Usage per Regeneration - NaOH (32%)	L	6.0	14.0	26.0
Pump Motor Size	kW	1.50	3.00	5.50

<sup>(1)</sup> Standard regeneration for Rapide Strata+ takes 35 minutes for treated water with a conductivity of < 1uS/cm. For a treated water with a conductivity of <0.1uS/cm and SiO<sub>2</sub> <20ppb, regeneration time is 80 minutes. Chemical consumption is calculated for treated water with a conductivity of <2uS/cm.

### System Dimensions

Model	Unit	4 UK	10 UK	18 UK
Total Installed Length	m	0.90	1.10	1.30
Total Installed Width	m	1.50	1.90	2.10
Total Installed Height	m	2.10	2.20	2.30
Recommended Headroom	m	1	1	1
Operating Weight	kg	650	1550	1950

Model	Unit	4+ UK	10+ UK	18+ UK
Total Installed Length	m	0.90	1.10	1.30
Total Installed Width	m	1.50	1.90	2.10
Total Installed Height	m	2.10	2.20	2.30
Recommended Headroom	m	1	1	1
Operating Weight	kg	680	1580	2000





### Pipes Connections

Model	Unit	4 UK	10 UK	18 UK
Feed	DN	40	50	80
Outlet	DN	40	50	80
Drain	DN	25	32	40

Model	Unit	4+ UK	10+ UK	18+ UK
Feed	DN	40	50	80
Outlet	DN	40	50	80
Drain	DN	25	32	40

### Feed water Requirements

Parameter	Unit	Value
Maximum supply pressure	barg	1.2
Minimum water temperature	°C	5.0
Maximum water temperature	°C	30 (35 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	Composite Plastic
Pipework	PVC-U
Skid	Epoxy coated mild steel
Control Valves	Air operated diaphragm 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
Maximum Conductivity	µS/cm	< 5 , < 1 RS+
Silica as SiO <sub>2</sub>	ppb	< 200 , < 20 RS+