

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 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)



- 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
- \bullet Produces water of <0.1 $\mu\text{S/cm};$ 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

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Model	Unit	23 UK	32 UK	45 UK	60 UK
Max Feed Flowrate	m³/h	23	32	45	60
Min Feed Flowrate	m³/h	12	16	20	30
Regeneration Time ⁽¹⁾	min.	35 - 55	35 - 55	35 - 55	35 - 55
Maximum Waste Flow to Drain during Regeneration	m³/h	22.0	30.5	43.0	57.0
Wastewater Volume per Regeneration ⁽²⁾	m³	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%) ⁽³⁾	L	41.0	57.0	78.0	100.0
Chemical Usage per Regeneration - NaOH (32%) ⁽³⁾	L	38.0	54.0	64.0	78.0
Pump Motor Size	kW	7.5	7.5	11.0	15.0
Model	Unit	23+ UK	32+ UK	45+ UK	60+ UK
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 $^{^{(1)}}$ Standard regeneration for Rapide Strata+ takes 35 minutes for treated water with a conductivity of < 1 μ S/cm. For a treated water with a conductivity of < 0,1 μ S/cm and SiO2 <20 ppb, regeneration time is 80 minutes.

System Dimensions

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Model	Unit	23 UK	32 UK	45 UK	60 UK
Total Installed Length	m	3.50	3.50	4.50	4.50
Total Installed Width	m	2.00	2.00	2.00	2.00
Total Installed Height	m	2.89	2.95	3.10	3.20
Recommended Headroom	m	1.00	1.00	1.00	1.00
Operating Weight	kg	3000	3800	6050	7240
Model	Unit	23+ UK	32+ UK	45+ UK	60+ UK
Total Installed Length	m	3.50	3.50	4.50	4.50
Total Installed Width	m	2.00	2.00	2.00	2.00
Total Installed Height	m	2.89	2.95	3.20	3.20
Recommended Headroom	m	1.00	1.00	1.00	1.00
Operating Weight	kg	3220	4030	6250	7450



⁽²⁾ Wastewater volume depends on treated water quality.

 $^{^{(3)}}$ Chemical consumption is calculated for treated water with a conductivity of < 2 μ S/cm.

Pipes Connections

Model	Unit	23 UK	32 UK	45 UK	60 UK
Feed	DN	80	100	100	125
Outlet	DN	65	80	100	100
Drain ⁽⁴⁾	DN	80	80	100	100
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Model	Unit	23+ UK	32+ UK	45+ UK	60+ UK
Model Feed	Unit DN	23+ UK 80	32+ UK 100	45+ UK	60+ UK 125

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 ₂	mg/l	0.2
Max inlet Iron Fe³+	mg/l	0.3
Max inlet Manganese Mn ²⁺	mg/l	0.2

Environmental Conditions

Parameter	Unit	Value
Minimum ambient temperature	°C	5
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 and 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 SiO₂	ppb	< 200, < 20 RS+