

Terion® S



Standard Deionized Water production single skid unit

The Terion® S standard single-skid unit combines single pass reverse osmosis and continuous electrodeionization to produce high grade deionized water which meets the highest global lab and industrial standards. Plug & play unit suitable for transportation into a container. 7 models available. All versions available according to European standards.



Flow rates
from 110 to
4000 L/h



Pharma



Cosmetics



Power



General
Industry



Laboratory



Electronics



Hydrogen



✓ FEATURES & BENEFITS

- Designed to produce demineralized water- up to 18 MΩ-cm .
- Salt rejection rate by the high pressure membranes greater than 99.5%.
- Hubgrade™ ready Control panel HMI /PLC centralises all operations and data for remote monitoring and control.
- FAT including wet tests.
- Skid mounted standardized Plug & Play systems suitable for transport in a container, allow for short lead times, quick installation and start-up.
- New RO40 touch screen control board, user friendly platform
- VFD for HP pump control in all models

HYDREX® CHEMICALS

Hydrex® 4000 water treatment chemicals from Veolia Water Technologies should be used for optimized plant operation (anti-scaling and CIP)

💧 APPLICATIONS

- Boiler feed water treatment
- Analytical water grade 2 production
- Industrial process water production
- Water for sterilisation
- Ultrapure water production

+ OPTIONS

- Concentrate water pH probe
- CO₂ membrane degasser – sweep mode
- CO₂ membrane degasser – vacuum mode
- Witnessed FAT

ASSOCIATED SERVICES

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





System Operating Parameters

Model	Unit	110	250	500	1000	2000	3000	4000
Permeate Nominal Flowrate	m ³ /h	0.11	0.25	0.5	1.00	2.00	3.00	4.00
Nominal Feed Flowrate	m ³ /h	0.15	0.35	0.70	1.40	2.81	4.40	5.61
Typical Design Flux	l/h/m ²	28						
Recovery	%	RO 75% - CEDI 95%						
Installed Power ⁽¹⁾	kW	1.75	2.50	3.10	3.30	5.20	7.70	9.80

⁽¹⁾ Installed power without optionals. For total power including options, review schedules or contact SOLYS.

System Dimensions

Model	Unit	110	250	500	1000	2000	3000	4000
Total Installed Length	m	0.80	0.80	0.80	0.80	0.80	1.00	1.00
Total Installed Width	m	1.05	1.05	1.05	1.30	1.30	1.35	1.35
Total Installed Height	m	1.48	1.48	1.48	2.34	2.34	2.78	2.78
Empty Weight	kg	200	220	250	300	350	550	600
Operating Weight	kg	225	245	290	350	400	680	750
Configuration	-	1:0:0x1	2:0:0x1	2:0:0x1	1:1:0x2	2:2:1x2	1:1:0x2	1:1:0x2

Pipes Connections

Model	Unit	110	250	500	1000	2000	3000	4000
Feed	-	G ¾"	G ¾"	G ¾"	Rp 1¼"	Rp 1¼"	Rp 1½"	Rp 1½"
Permeate diversion	-	G ¾"	G ¾"	G ¾"	Rp ¾"	Rp ¾"	Rp 1"	Rp 1"
Concentrate	-	G ½"	G ½"	G ½"	Rp ½"	Rp ½"	Rp ¾"	Rp ¾"
EDI Product	-	G ½"	G ½"	G ½"	Rp 1"	Rp 1"	Rp 1¼"	Rp 1¼"
EDI Product Divert	-	G ½"	G ½"	G ½"	Rp 1"	Rp 1"	Rp 1¼"	Rp 1¼"
EDI Concentrate	-	G ½"	G ½"	G ½"	Rp ½"	Rp ½"	Rp ½"	Rp ½"

Feed Water requirements

Parameter	Unit	Value
Minimum water temperature	°C	5
Maximum water temperature ⁽²⁾	°C	30
Minimum supply pressure	barg	1.5
Maximum supply pressure	barg	6
Max Silt Density Index (SDI)	-	<3
Maximum Inlet Turbidity	NTU	1
Maximum Inlet TDS	mg/l	750
Max inlet Total Hardness	mg/l CaCO ₃	10
Max inlet CO ₂ ⁽³⁾	mg/l	< 4
Max inlet Silica	mg/l	10
Max inlet TOC	mg/l	1
Max inlet Free Chlorine Cl ₂	mg/l	0

⁽²⁾ Different temperature range upon request

⁽³⁾ Without degasser

Typical Treated Water Quality

Parameter	Unit	Value
Average Conductivity	µS/cm	0.1
Silica as SiO ₂	ppb	< 30
Sodium + Potassium (Na+K)	ppb	< 10
Sodium (Na+)	ppb	< 10

Designed and Manufactured by Solys Veolia
www.veoliawatertechnologies.com

Environmental conditions

Parameter	Unit	Value
Minimum ambient temperature	°C	5
Maximum ambient temperature ⁽⁴⁾	°C	40
Maximum humidity	%	90

⁽⁴⁾ 30°C in case of CO₂ degasser option

Materials of Construction

Skid	Aluminium
Control Cabinet	Epoxy-coated carbon steel
Low pressure Pipework	POM, PA, PE, PP-H
High pressure Pipework	SS316L

Power Requirements

Parameter	Unit	Value
Voltage ⁽⁵⁾	V	380-420
Frequency	Hz	50/60
Phases	-	3

Parameter	Unit	Value
TOC	ppb	< 200
Compressed Air Pressure	barg	5.5
Compressed Air Flowrate	Nm ³ /h	2-40



*Product manufactured by Solys whose quality system has been certified ISO 9001 by Bureau Veritas Certification.