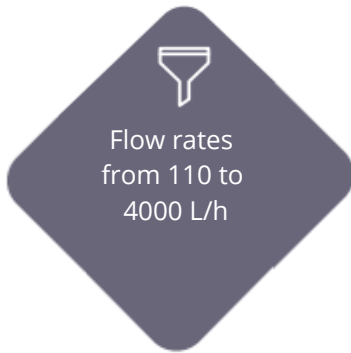


# TERION™ S

Standard Deionized Water

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.



## ✓ FEATURES & BENEFITS

- Designed to produce demineralized water- up to 18 MΩ-cm .
- Salt rejection rate by the high pressure membranes greater than 99.5%.
- Nearly continuous production process, no need to stop production for regeneration.Filter to protect RO from possible solid matter coming from pretreated raw water.
- Ready for manual CIP .
- Proven generation of CEDI to enhance performance.
- AQUAVISTA™ 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.

\* Available from December 2020.

### HYDREX™ CHEMICALS

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

## 💧 APPLICATIONS

- Industrial applications
- Power applications
- Boiler feed
- Turbine injection
- Microelectronics
- Hospitals
- Laboratory

## ✚ OPTIONS

- Concentrate water pH probe
- CO<sub>2</sub> membrane degasser – sweep mode
- CO<sub>2</sub> 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 <sup>3</sup> /h	0.11	0.25	0.5	1.00	2.00	3.00	4.00
Nominal Feed Flowrate	m <sup>3</sup> /h	0.15	0.35	0.70	1.40	2.81	4.21	5.61
Typical Design Flux	l/h/m <sup>2</sup>	28						
Recovery	%	RO 75% - CEDI 95%						
Installed Power <sup>(1)</sup>	kW	1.75	2.50	3.10	3.30	5.20	7.70	9.80

<sup>(1)</sup> 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

### 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	-	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"
CEDI Product	-	G ½"	G ½"	G ½"	Rp 1"	Rp 1"	Rp 1¼"	Rp 1¼"
CEDI Product Divert	-	G ½"	G ½"	G ½"	Rp 1"	Rp 1"	Rp 1¼"	Rp 1¼"
CEDI 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 <sup>(2)</sup>	°C	25
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 CO <sub>2</sub> <sup>(3)</sup>	mg/l	< 4
Max inlet Silica	mg/l	10
Max inlet TOC	mg/l	1
Iron and heavy metals, Oil, Suspended solids and colloids	-	Free
Max inlet Total Chlorine	mg/l	0.1

<sup>(2)</sup> Different temperature range upon request

<sup>(3)</sup> Without degasser

### Typical Treated Water Quality

Parameter	Unit	Value
Average Conductivity	µS/cm	0.1
TOC	ppb	< 1000
Product Pressure	barg	

### Environmental conditions

Parameter	Unit	Value
Minimum ambient temperature	°C	5
Maximum ambient temperature <sup>(4)</sup>	°C	35
Maximum humidity	%	90

Indoor design, non corrosive atmosphere

<sup>(4)</sup> 30°C in case of CO<sub>2</sub> degasser option

### Materials of Construction

Skid	Aluminium
Low pressure Pipework	POM, PA, PE, PP-H
High pressure Pipework	SS316L
Pressure Vessels	SS - FRP

### Power Requirements

Parameter	Unit	Value
Voltage <sup>(5)</sup>	V	400
Frequency	Hz	50
Phases	-	3

<sup>(5)</sup> 60 Hz upon request

### Utilites

Parameter	Unit	Value
Compressed Air Pressure	barg	5.5
Compressed Air Flowrate <sup>(6)</sup>	Nm <sup>3</sup> /h	30 - 700

<sup>(6)</sup> for CO<sub>2</sub> degasser option