



Wave Cyber (Shanghai) Co., Ltd.
Reverse Osmosis & Nanofiltration
Membrane Elements
Product Manual Rev.17

Wave Cyber (Shanghai) Co., Ltd.

Add : 899, Songying Road, Qingpu Industrial Zone,
Shanghai, China
Tel : +86-21-69758588

Guangdong Ospura Co.,Ltd.

Add: No.26,27,Guangshun Road,
Integrated Free Trade Zone, Shantou City, China
Tel: +86-754-89691661





Innovation Leads the Future





Shanghai production base

About Us

Since the founding of the company in 2001, Wave Cyber (Shanghai) Co., Ltd. has implemented the most advanced technologies and techniques in the world to make state-of-art products. We have established three major production bases in China (Shanghai, Shantou, Huzhou), and one in Mentor, Ohio in the United States. Our main products include membrane sheets and elements for reverse osmosis and nanofiltration applications, membrane pressure vessels, and composite pressure tanks.

Guangdong Ospura Co., Ltd. (Former Shantou Ospura Co., Ltd.) was found in 2011 as a wholly owned subsidiary of Wave Cyber (Shanghai) Co., Ltd. It is a high-tech enterprise with its original technology, patents, independent R&D and manufacturing strength of high performance membrane products. Its main products include series of membrane products such as membrane sheets and elements for reverse osmosis, nanofiltration applications. After more than 20 years of development, Wave Cyber has become a full-stack global supplier of high-performance separation membrane products.

Our main products have been certified with the ISO9001 quality management system and are also certified by international authorities including NSF, ASME, CE and KTW. The performance and major technical specifications of our products have both reached world class level.

In addition to the domestic market, our products are also available in overseas markets including Europe, USA and the Middle East, etc. As the long-term supplier of globally well-known enterprises such as Clack, Suez, BWT, Culligan and Miura, we have formed an extensive sales and service network in major global regions.

Wave Cyber is uniquely positioned to serve the global market. Guided by innovative high-tech applications and customer demand, we provide convenient, effective and sustainable one-stop products made with new polymer materials. Our products serve various applications in residential, commercial / industrial and municipal markets.

Four production bases home and abroad

Shanghai:

Established in 2001 to produce composite pressure vessels and membrane pressure vessels for the global market.

Shantou:

Established in 2011 and realized scale production of reverse osmosis membrane products in 2013 and nanofiltration membrane products in 2017; Production capacity was expanded in 2021 by putting another set of new plants into use.

Ohio, USA:

Established in 2014 to produce and sell specific composite tank models for North American market to expand our business in North America.

Huzhou:

Located in Nanxun, Zhejiang Province. This production base covers a total area of around 9.5 hectares with over 80,000 square meters of plant and office. With a total investment of 1.15 billion RMB, it is estimated to be completed (currently under construction) within two years to become our production base of membrane element and membrane housing products.



Shantou production base-Zone 1



US production base

About Us

A complete industry chain is formed with our series of products, which can be used together in downstream applications. Through strategies with diversified products, our position in the upstream of the membrane industry chain is consolidated. Our high-performance separation membrane products can be used in:

- Material concentration and separation (such as lithium extraction, bioscience, food, hydrogen energy, etc.);
- Water treatment, including industrial applications (semiconductor, reuse of reclaimed water, zero discharge, etc.);
- Municipal applications (seawater/brackish water desalination, drinking water, reuse, etc.);
- Upgrading of residential consumption (water softeners, water purifiers, whole-house water purification systems, etc.).

Our products are widely used. They are considered as new, strategic materials for emerging industries facing the new frontiers of science, technology, national economy and people's livelihood.

As our company is at the upstream of membrane separation industry chain, we supply core components to various membrane separation applications downstream, making us the core value link in membrane industry chain. As a novel separation technology, membrane separation technology has advantages such as higher separation performance, higher stability, lower cost and longer working life compared to traditional physical and chemical separation methods. The technology could be widely used in civil, commercial and industrial applications such as production of drinking water, sewage treatment, sea water desalination, production of purified water/high purity water and concentration and separation with expansive market prospect.



Huzhou production base



Shantou production base-Zone 2

Our History

2001
Founding of Wave Cyber Shanghai.



2003
Started production of MPV and Eurotrol became our distributor in Europe.



2005
Obtained ASME certification and became Clack's supplier.



2011
Guangdong Ospura Co., Ltd. (former Shantou Ospura Co., Ltd.) became the wholly owned subsidiary of Wave Cyber (Shanghai) Co., Ltd.



2014
A semi-automatic rolling machine for residential membranes was imported from Korea.



2016
One domestic semi-automatic rolling machine for industrial membranes was added to the production line.



2019
Two Foresight automatic rolling lines were introduced, one of each for residential and industrial membranes. In the same year, we won the bid with our nano-filtration membranes for the "Thirteenth Five Year Plan" 10000 m³/d national demonstration water project.



2021
Wave Cyber was listed on the SSE Star Market in 2021. We will continue to act as a market leader in the industry by adhering to the policy of "Innovation leads the future". (Stock code at SSE Star Market: 688718)



2002
Started production of composite pressure tanks.



2004
Obtained PED and ISO9000 certification and became supplier of GE in the U.S.A.



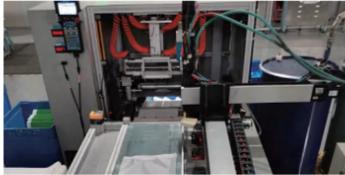
2008
Became Culligan's supplier.



2012
The first automatic membrane casting line imported from the U.S. was put into use with annual capacity of 4.5 million square meters. A domestic semi-automatic industrial rolling machine was also put into use to manufacture reverse osmosis membrane elements.



2015
Three domestic semi-automatic rolling machine for residential membranes were added to the production line.



2017
The second casting line was imported from the U.S. with annual capacity of 6.75M square meters, which increased our total capacity to over 11M square meters. An automatic rolling line for the second half process of producing residential membranes was imported from Korea.



2018
We won the contract for 3601 pieces of seawater membranes and 1213 pieces of brackish water membranes for an oil finery in Middle East.



2020
We are expanding our influence in the industry gradually, with our continuous efforts in the fields of seawater desalination, municipal projects, industrial zero discharge, and lithium extraction.



Honors and Qualification



2021 Wave Cyber was listed on the Science and Technology Innovation Board of Shanghai Stock Exchange. (Stock code at SSE Star Market: 688718)

2020 We are expanding our influence in the industry gradually, with our continuous efforts in the fields of seawater desalination, municipal projects, industrial zero discharge, and lithium extraction.

2019 Wave Cyber supplied membranes for large-scale reclaimed water projects for chemical companies, power plants and municipal applications and also became a supplier of core components of membrane separation technology and equipment for projects such as reuse of reclaimed water in power plants and sewage treatment plants.

2018 Wave Cyber received the "Product Star" award at the 2nd China Starlight Awards of water industry. In the same year, Wave Cyber was also awarded the title of "Quality Supplier" by Tus Qingyuan, a leading enterprise in the field of lithium extraction.

2017 Wave Cyber was awarded "Top Ten Suppliers of Parts and Materials" by Jiangsu Association of Manufacturing Industry of Water Purification Equipment.

2015 Wave Cyber was awarded "User Satisfaction Brand for Components" for China's water purification industry by HC.com.



NSF certificate- Wave Cyber Composite Pressure Tank



NSF certificate- Wave Cyber Membrane Pressure Vessel



ASME certificate



NB certificate



ACS certificate



ISO certificate



Kiwa certificates



NSF certificate- Osapura



Test report- RoHS

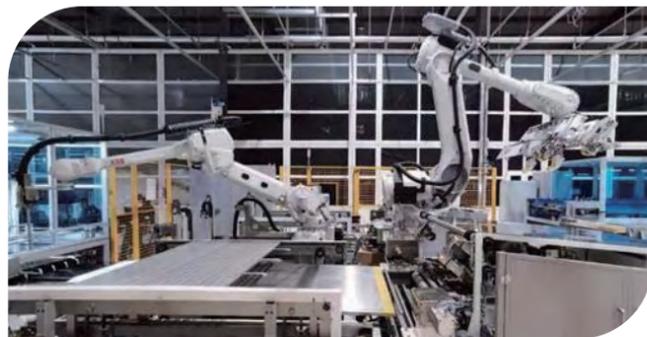


Test report- REACH

Advantages of Ospura



Integrated fully automatic casting membrane production line



Fully automatic rolling production line



Casting production line

Ospura introduced two fully automatic multi-functional RO membrane casting line from USA, integrating the most advanced membrane production process in the world.

Most advanced design and fabrication of casting head

Makes RO and nanofiltration membrane products more precise and reliable.

■ **Multi-functional production line**

The production line could be used to make RO membranes (TFC, thin-film composite), nanofiltration membranes (NF) and ultra filtration (UF) flat sheet membranes.

■ **Integrated production line**

It adopts a new process of continuous coating for ultrafiltration, reverse osmosis and nanofiltration, which greatly improve the stability of product quality and increase production efficiency.

■ **Advanced real-time online monitoring system**

Infrared scanning sensor technology is used for real-time monitoring thickness of liquid film, and LFL (Low Flammability Limit) monitoring technology is used to measure the content of flammable components in the air real time to ensure safe production.

■ **Recycling of water as a resource**

Water is utilized to the maximum content, and a positive contribution has been made to "energy saving and emission reduction".

Fully automatic rolling production line

We are equipped with the world's most advanced automatic rolling equipment for industrial membranes, which perfectly combines advanced rolling techniques and automation equipment with cutting edge technology.

■ **Fully automatic production process, including inspection of membrane sheet, folding membrane sheet, inserting spacer, applying glue, rolling, etc.**

■ **High grade configuration**

Advanced equipment is utilized in the factory, including the first automatic CCD camera detection system in the industry, the world's most advanced Graco glue system from the U.S., FANUC six-axis industrial robots from Japan, Siemens servo from Germany, PLC and electrical control systems and advanced product tracing system.

■ **Intelligence**

The production line is equipped with one-key model change function, production record tracing system, process control system, order distribution management system, fault warning and elimination indicationsystem, material detection and foolproof system, etc.

■ **High efficiency**

Each equipment can produce one 8040 membrane every 11 minutes, and one 4040 membrane every 5 minutes.

Four major applications of Ospura membranes

01

Commercial and residential

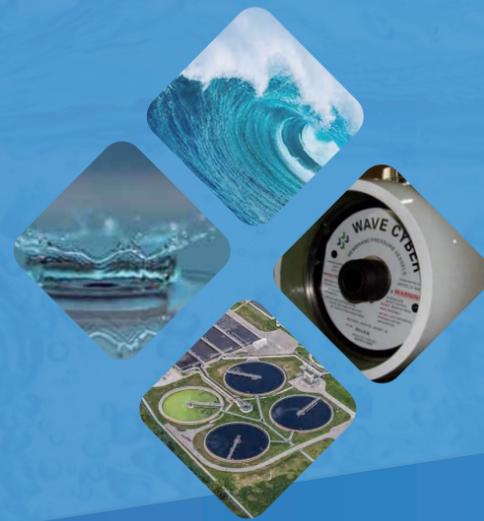
RO machine, direct drinking machine, water softener, whole house water purification system, etc.



02

Municipal

Seawater/brackish water desalination, drinking water, sewage treatment, etc.



03

Water treatment Industrial

Semiconductor, reuse of reclaimed water, zero discharge, etc.



04

Material concentration and separation

Lithium extraction, bioscience, food, hydrogen energy, etc.



- Material concentration and separation: Our large-scale application of lithium extraction has been successfully implemented on a large scale. Domestic nanofiltration membranes have broken international monopolies, reduced lithium extraction costs, and assisted the national strategic planning of the new energy industry to achieve the ambitious goals of carbon peak and carbon neutrality.
- Upgrading of municipal drinking water: Membrane technology has established new standards, new applications, and new magnitude in this field; Application of our nanofiltration membrane in the first national demonstration project of water plant sets a benchmark for the industry with a brilliant future.
- We are expanding our influence in the industry gradually with our continuous efforts in the fields of seawater desalination, municipal projects, industrial zero discharge, and lithium extraction.

Membrane elements



Ospura reverse osmosis (RO) and nanofiltration (NF) membrane elements are some of the finest products in the industry. The state of the art coating line, coupled with advanced membrane technology, yields product of the highest quality and most stable performance. Ospura elements are uniquely engineered to have a high level of salt rejection with minimum compromise in water flux.

For different water sources, we have developed "SW", "BW", "ULP", "FR", "NF" and other series of products; For different requirements of water yield, we also have "8040", "4040", "4021" and other models of membrane elements.

Brackish water, ultra/
extremely low pressure
Reverse osmosis
membrane element series



Fouling resistant
Reverse osmosis
membrane element series



Seawater desalination
Reverse osmosis
membrane element series



Nanofiltration
membrane element series



Main Applications of Membrane Elements

Fields	Series	Model	Applications
Industrial	8" Elements for Sea Water	SW-8040-HR	Sea water desalination/ High-salt wastewater
		SW-8040-HF	
	4" Elements for Sea Water	SW-4040	
	8" Low Pressure Elements for Brackish Water	BW-8040-400	Brackish water- High desalination rate
		BW-8040-400-HR	
	4" Low Pressure Elements for Brackish Water	BW-4040	
		BW-4040-HR	
	8" Ultra Low Pressure Elements for Brackish Water	ULP-8040-400	Brackish water- Low energy consumption
		ULP-8040-400-HR	
		ULP-8040-440	
		ULP-8040-440-HR	
	4" Ultra Low Pressure Elements for Brackish Water	ULP-4040-HF	
		ULP-4040	
		ULP-4040-HR	
8" Extremely Low Pressure Elements for Brackish Water	XULP-8040-400	Brackish water- Extremely low energy consumption	
	XULP-8040-440		
4" Extremely Low Pressure Elements for Brackish Water	XULP-4040		
8" Fouling Resistant Elements	FR-8040-400	Reclaimed water/ Highly polluted water source	
	FR-8040-400(34)		
4" Fouling Resistant Elements	FR-4040		
Commercial	4" Low Pressure Elements for Brackish Water	BW-4021	Brackish water- High desalination rate
	4" Ultra Low Pressure Elements for Brackish Water	ULP-4021	Brackish water- Low energy consumption
	4" Extremely Low Pressure Elements for Brackish Water	XULP-4021	Brackish water- Extremely low energy consumption
	2.5" Elements for Sea Water	SW-2540/2521	Sea water desalination/ High-salt wastewater
	2.5" Low Pressure Elements for Brackish Water	BW-2540/2521	Brackish water- High desalination rate
	2.5" Ultra Low Pressure Elements for Brackish Water	ULP-2540/2521	Brackish water- Low energy consumption
2.5" Extremely Low Pressure Elements for Brackish Water	XULP-2540/2521	Brackish water- Extremely low energy consumption	

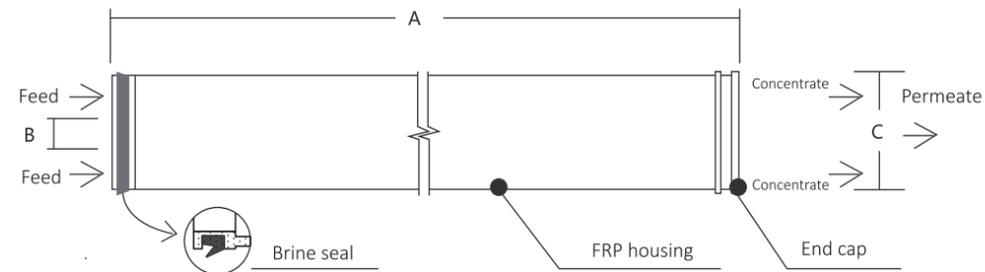
Specifications of Industrial Membrane Elements

Series	Model	Permeate flow		Active membrane area		Stabilized salt rejection	Minimum salt rejection	Feed spacer thickness		Recovery rate	Test solution	Test pressure
		GPD	m ³ /d	ft ²	(m ²)	%	%	mil	mm	%	/	psi
SW	SW-8040-HR	6200	23	400	37	99.8	99.7	28	0.7	8	32800ppm NaCl	800
	SW-8040-HF	8200	31	400	37	99.7	99.6	28	0.7	8	32800ppm NaCl	800
	SW-4040	1700	6	90	8.4	99.8	99.6	28	0.7	8	32800ppm NaCl	800
BW	BW-8040-400	11100	42	400	37	99.6	99.4	28	0.7	15	2000ppm NaCl	225
	BW-8040-400-HR	10500	40	400	37	99.7	99.5	28	0.7	15	2000ppm NaCl	225
	BW-4040	2400	9	90	8.4	99.6	99.4	28	0.7	15	2000ppm NaCl	225
	BW-4040-HR	2200	8	90	8.4	99.7	99.5	28	0.7	15	2000ppm NaCl	225
ULP	ULP-8040-400	11100	42	400	37	99.2	99.0	28	0.7	15	2000ppm NaCl	150
	ULP-8040-400-HR	10800	41	400	37	99.4	99.2	28	0.7	15	2000ppm NaCl	150
	ULP-8040-440	12300	47	440	41	99.2	99.0	28	0.7	15	2000ppm NaCl	150
	ULP-8040-440-HR	11800	45	440	41	99.4	99.2	28	0.7	15	2000ppm NaCl	150
	ULP-4040-HF	2900	11	90	8.4	99.0	98.6	28	0.7	15	2000ppm NaCl	150
	ULP-4040	2500	9	90	8.4	99.2	99.0	28	0.7	15	2000ppm NaCl	150
	ULP-4040-HR	2100	8	90	8.4	99.4	99.2	28	0.7	15	2000ppm NaCl	150
XULP	XULP-8040-400	10600	40	400	37	99.2	99.0	28	0.7	15	500ppm NaCl	100
	XULP-8040-440	11600	44	440	41	99.2	99.0	28	0.7	15	500ppm NaCl	100
	XULP-4040	2400	9	90	8.4	99.2	99.0	28	0.7	15	500ppm NaCl	100
FR	FR-8040-400(34)	10500	40	400	37	99.6	99.5	34	0.85	15	2000ppm NaCl	225
	FR-4040	2400	9	90	8.4	99.6	99.5	28	0.7	15	2000ppm NaCl	225
NF	NF-8040-400	11800	45	400	37	98	97	28	0.7	15	2000ppm MgSO ₄	70
		13800	52			40-60				15	500ppm NaCl	70
	NF-8040-400(34)	11800	45	400	37	98	97	34	0.85	15	2000ppm MgSO ₄	70
		13800	52			40-60				15	500ppm NaCl	70
	NF-4040	2800	11	90	8.4	98	97	28	0.7	15	2000ppm MgSO ₄	70
		3300	12			40-60				15	500ppm NaCl	70
	NF-8040-400-HR	8400	32	400	37	99	98	28	0.7	15	2000ppm MgSO ₄	110
	NF-8040-400-HR(34)	8400	32	400	37	99	98	34	0.85	15	2000ppm MgSO ₄	110
	NF-4040-HR	2100	8	90	8.4	99	98	28	0.7	15	2000ppm MgSO ₄	110
	NF-8040-400-HF	7900	30	400	37	95	93	28	0.7	15	2000ppm MgSO ₄	45
		9500	36			15-20				15	500ppm NaCl	45
	NF-8040-400-HF(34)	7900	30	400	37	95	93	34	0.85	15	2000ppm MgSO ₄	45
9500		36	15-20			15	500ppm NaCl			45		
NF-4040-HF	2100	8	90	8.4	95	93	28	0.7	15	2000ppm MgSO ₄	45	
	2500	9			15-20				15	500ppm NaCl	45	

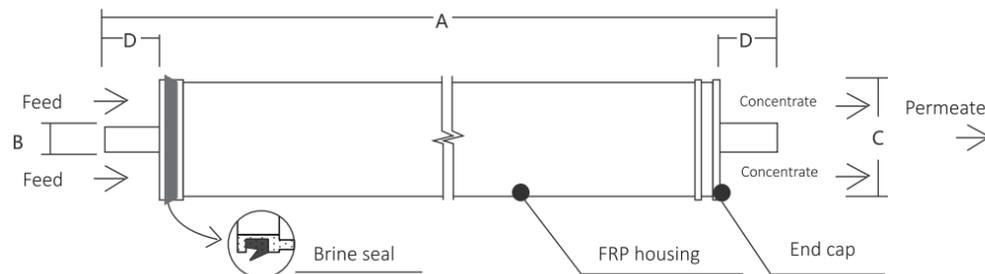
Note: 1. All performance data are collected at 25 C (77°F) and pH 7.5. 2. Performance flows for single element may vary ±15%.



8040



4040



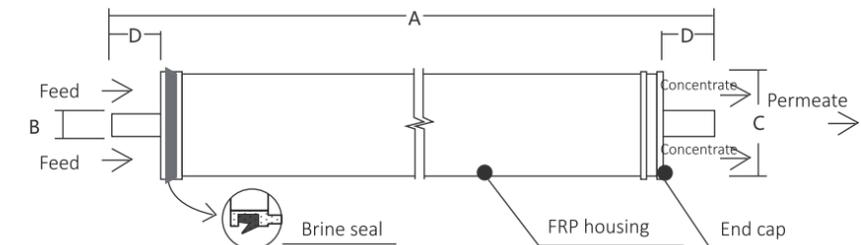
Dimensions

Size	Dimensions: in.(mm)			
	A	B	C	D
8040	40.0 (1016)	1.125 (29)	7.9 (201)	/
4040	40.0 (1016)	0.75 (19)	3.9 (99)	1.05 (26.7)

Specifications of Commercial Membrane Elements

Model	Permeate flow	Active membrane area	Stabilized salt rejection	Minimum salt rejection	Feed spacer thickness	Recovery rate	Test solution	Test pressure
	gpd(m ³ /d)	ft ² (m ²)	%	%	mil (mm)	%	/	psi
BW-4021	900(3.4)	36(3.3)	99.5	99.4	28(0.7)	15	2000ppmNaCl	225
ULP-4021	1050(4.0)	36(3.3)	99.2	99.0	28(0.7)	15	2000ppmNaCl	150
XULP-4021	1050(4.0)	36(3.3)	99.2	99.0	28(0.7)	15	500ppmNaCl	100
SW-2540	700(2.6)	27(2.5)	99.4	/	28(0.7)	8	32800ppmNaCl	800
SW-2521	300(1.1)	11(1.0)	99.4	/	28(0.7)	8	32800ppmNaCl	800
BW-2540	850(3.2)	27(2.5)	99.5	/	28(0.7)	15	2000ppmNaCl	225
BW-2521	318(1.2)	11(1)	99.5	/	28(0.7)	15	2000ppmNaCl	225
ULP-2540	758(2.9)	27(2.5)	99.2	/	28(0.7)	15	2000ppmNaCl	150
ULP-2521	318(1.2)	11(1)	99.2	/	28(0.7)	15	2000ppmNaCl	150
XULP-2540	758(2.9)	27(2.5)	99.2	/	28(0.7)	15	500ppmNaCl	100
XULP-2521	365(1.4)	11(1)	99.2	/	28(0.7)	15	500ppmNaCl	100

Note: 1. All performance data are collected at 25 °C (77°F) and pH 7.5. 2. Performance flows for single element may vary ±15%.



Dimensions

Size	Dimensions: in.(mm)			
	A	B	C	D
4021	21.0(533)	0.75(19)	3.9 (99)	1.05 (26.7)
2540	40.0 (1016)	0.75 (19)	2.4 (61)	1.05 (26.7)
2521	21.0 (533)	0.75 (19)	2.4 (61)	1.05 (26.7)

Operating condition and important notes

Series	PH range, Continuous operation	PH range, Short-term cleaning	Maximum operating pressure	Maximum operating temperature	Maximum pressure drop (Single element)	Chlorine tolerance	Maximum feed SDI
SW	2-11	1.2-12	1200psi	45°C(113°F)	15psi(1.0bar)	<0.1ppm	5
BW	2-11	1.2-12	600psi				
ULP	2-11	2-12	600psi				
XULP	2-11	2-12	600psi				
FR	2-11	1.2-12	600psi				
NF	3-10	2-11	600psi				

Industrial and Commercial Membrane Elements

- It is critical to follow approved start-up procedure to prevent membrane damage due to overfeeding or hydraulic shock. Before initiating system, loading of the RO elements, instrument calibration, membrane pretreatment and other system checks should be conducted.
- Minimize any pressure shock or cross-flow fluctuation on the spiral elements at all times. During start-up, a gradual, incremental change from a standstill to operating state is recommended.
- Maximum pressure drop across an entire pressure vessel (housing) is 50 psi (3.4 bar).
- No static pressure should ever be built up on permeate side.
- Keep elements moist at all times after initial wetting.
- If operating limits and guidelines are not followed, the Limited Warranty will be void.
- In case of prolonged system shutdowns, it is recommended that membrane elements be immersed in a preservative solution to prevent bacteria growth.
- Permeate collected from first hour of operation should be discarded.
- It is customer’s responsibility to make sure that the chemicals and lubricants do not have detrimental effects on RO elements.

Warranty of Reverse Osmosis Membrane Elements

Reverse Osmosis Element Three-Year Prorated Limited Warranty

- Ospura warrants that its new RO elements are free from defects in materials and workmanship. Ospura’s obligation extends a period not to exceed 12 months from date of receipt by Buyer, Ospura’s obligation under this limited warranty is limited to the repair or, at Ospura’s discretion, replacement of any element which appears to be defective under this provision of the limited warranty.
- Ospura warrants the performance of its elements for three years from whichever of the following events occurs first: a. First use in system; b. Six (6) months following date of shipment.
- During the first three years of operation of the element(s), Ospura warrants that minimum permeate flow, when operated under standard conditions published by Ospura, shall be at least 70% of the specified initial flow. Ospura further warrants that maximum salt passage, when an element is operated under standard test conditions published by Ospura and pressure required to give the initial flow, will not exceed 1.45x the specified maximum value. Upon confirmation of performance loss, Ospura will credit 1/36 of the original purchase price of the element for each unused month of the warranty period toward the purchase of a replacement element at the current price.

Conditions of Prorated Performance Limited Warranty :

- Feed water: turbidity< 1.0NTU; SDI15< 5; Temperature< 45 °C ; Salt lake lithium extraction system in Qinghai, China
- Feed water to RO elements shall not contain any chemicals/reagents harmful to membrane integrity;
- At all times, prior to installation and first use, RO elements shall be kept in sealed, original package. Storage temperature for dry membrane shall be < 45 °C , wet membrane 0-35 °C ;
- PH range under normal operation conditions is 2-11(NF is 3-10), while chemical cleaning,pH should be kept in the range of 1.2-12(ULP&XULP is 2-12,NF is 2-11);
- Feed water shall not contain any strong oxidants such as chlorine, potassium permanganate or ozone;
- The maximum operation pressure is stipulated in technical manual;
- Under no circumstances shall the back pressure exceed 5psi. The element(s) shall be operationally protected against hydraulic transients (water hammer).
- Elements should be cleaned when one or more of the below mentioned parameters are applicable:
 - The normalized permeate flow drops 10%;
 - The normalized salt passage increases 5-10%;
 - The normalized pressure drop (feed pressure minus concentrate pressure) increases 10- 15%;
- Buyer shall ensure that frequent, adequate system and subsystem normalized performance data are routinely recorded in a systematic format and reviewed. Such information to be available to Ospura on a regular basis in the event a claim is made against Ospura pursuant to this performance warranty.

References



Lithium extraction system
in Qinghai, China



Model	Series	Qty
NF-8040-400-HR	Nanofiltration	300 pcs



Lithium extraction system
in Qinghai, China



Model	Series	Qty
BW-8040-400	Brackish water	432 pcs

References



Boiler feed water system of a power plant
of Huaneng Group in China

Model	Series	Qty
FR-8040-400(34)	Fouling resistant	172 pcs

Boiler feed water system of a natural gas
thermal power plant in Shantou, China

Model	Series	Qty
FR-8040-400(34)	Fouling resistant	840 pcs
ULP-8040-440	Ultra low pressure	504 pcs



Sea water desalination system of a power plant
of Ewindpower Group in China

Model	Series	Qty
SW-8040-400	Seawater	350 pcs

References



Boiler feed water system of a power plant of Huaneng Group in China

Model	Series	Qty
FR-8040-400(34)	Fouling resistant	168 pcs

Boiler feed water system of a power plant of State Power Investment Corporation in China

Model	Series	Qty
FR-8040-400(34)	Fouling resistant	60 pcs



Zero discharge system of electroplating sewage in a metal ecological park in China

Model	Series	Qty
FR-8040-400(34)	Low fouling	100 pcs
SW-8040-400	Seawater	75 pcs



References



National high quality drinking water demonstration project of a tap water plant in Shanghai, China

Model	Series	Qty
NF-8040-400	Nanofiltration	552 pcs

A municipal sewage treatment plant in China Asia's largest and one of the world's largest sewage treatment plants

Model	Series	Qty
FR-8040-400 (34)	Fouling resistant	144 pcs



A tap water plant in Xi'an, China

Model	Series	Qty
ULP-8040-440	Ultra low pressure	360 pcs



References



Ningxia Coal of China Energy
Sewage treatment system of a coal mine
in China

Model	Series	Qty
FR-8040-400(34)	Fouling resistant	244 pcs

Shaanxi Yanchang Petroleum Group
Water treatment system of a coal chemical plant
in China

Model	Series	Qty
FR-8040-400(34)	Fouling resistant	198 pcs



Yuntianhua Group, Inner Mongolia
Zero discharge system of a coal chemical plant
in China

Model	Series	Qty
FR-8040-400(34)	Fouling resistant	126 pcs
SW-8040-400	Seawater	98 pcs

References



Production water system for preparation of
new material in a plant in Ningbo, China

Model	Series	Qty
FR-8040-400	Fouling resistant	192 pcs

A landfill in Wuhan, China
Landfill leachate treatment system

Model	Series	Qty
FRP-8040-400(34)	RO Fouling resistant	90 pcs
FRP-8040-400(34)	RO Fouling resistant	72 pcs
FRP-8040-400(34)	Concentrate RO Fouling resistant	90 pcs



A landfill in Chaozhou, China
Landfill leachate treatment system

Model	Series	Qty
FR-8040-400(34)	Fouling resistant	48 pcs

References



A petrochemical plant in the Middle East

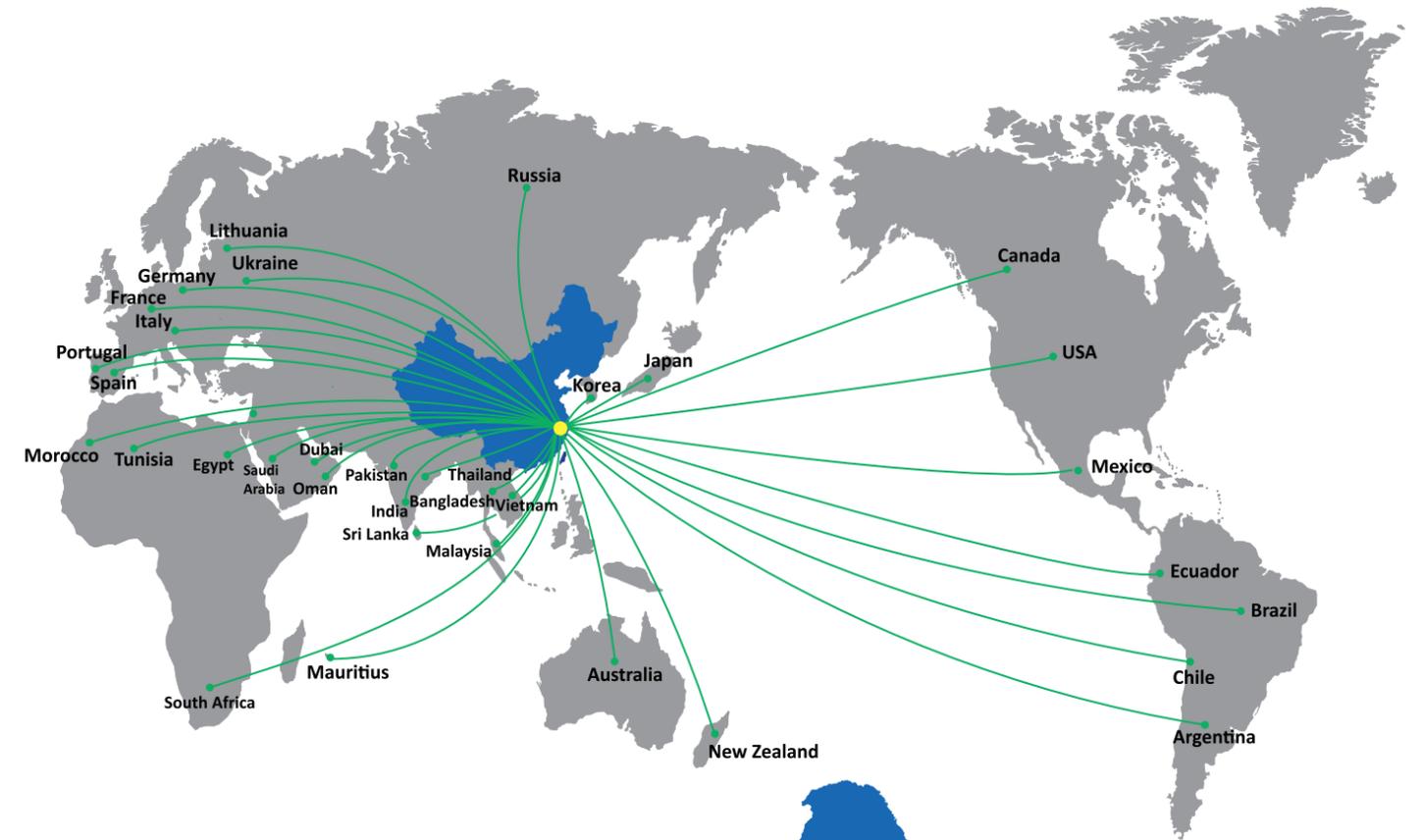
Model	Series	Qty
SW-8040-HF	Seawater	3600 pcs
BW-8040-400	Brackish water	2400 pcs

A petrochemical plant in the Middle East

Model	Series	Qty
SW-8040-HF	Seawater	3601 pcs
BW-8040-400	Brackish water	1213 pcs



International sales network



Domestic sales network