

# Shandong Claire Environmental Technology Co., Ltd

Professional manufacturing of fiberglass pressure vessels

Shandong • Liaocheng

#### COMPANY PROFILE

Shandong Klaier Environmental Technology Co., Ltd. is located in Liaocheng, Shandong, from Jiangbei Shuicheng in 2018 Established in March, it is an emerging and technologically advanced fiberglass pressure vessel with complete quality control for membrane water treat—mentProfessional manufacturer of containers and derivative products.

We have a technical team with over ten years of professional exper-ience, using the most advanced computer control technology in China. We produce multi axis winding, curing system, high-precision opening and surface treatment processes, with excellent craftsmanship andOur professional team's rigorous attitude towards product quality excell—ence has led to our products being exported both domestically and internationallyReceived unanimous praise from a large number of cust—omers. Our company's main business is the industrialization of new materials and equipment in the water industryR&D, production, and ser—vice, with the leading product being the separation membrane shell. The product is applied to water pollution control technology in the field of resources and environment, with over ten national projects The patent has been certified under the integrated management system of GB/T19001, GB/T24001, and GB/T28001.

#### **DEVELOPMENT HISTORY**





### K80E Series Module Housing

K80E low pressure





K80E high pressure





# Description:

Low voltage: K80E series membrane housing 300PSI/450PSI (1 core - 7 core)

High voltage: K80E series membrane shell 600PSI/800PSI/1000PSI/1200PSI/1500PSI/

1800PSI/2000PSI (1 core - 7 core)

The product has passed the EU CE certification and can withstand over 100000 atigue tests and 6 times the explosionHydrostatic testing.

The product is used in complex media environments and has been used in China since 2018Large and medium-sized projects both domestically and internationally.



# K80E Series Module Housing

# Technology:

Shandong Claire Environmental Technology Co., Ltd. has its own research and development team, adoptingThe most advanced computer-controlled mu -Iti axis winding machine in China · Curing system · The first in Chinaln -dependently developed high-precision automatic drilling equipment and advanced equipment for surface treatmentGood FRP performance testing me -thods to produce high-quality (Kreer standard) fiberglassSeries produ -cts such as membrane shells.

name	8-inch end opening low-pressure membrane housing	8-inch end opening high-pressure membrane housing		
model	K80S300/450	K80\$600/800/1000/1200/1500/1800/2000		
Design pressure	300/450PSI	600/800/1000/1200/1500/1800/2000PSI		
fatigue test	100000 times	100000 times		
burst pressure	6X	6X		
Membrane components can be installed	1-7	1-7		
Medium range	PH 3-11	PH 3-11		
Temperature resistance range	-10°C-66°C (14°F-150°F)	-10°C-66°C (14°F-150°F)		
Raw/concentrated water outlet Size specifications	1.5 " /2 " /2.5 " /3 "	1.5 " /2 " /2.5 " /3 "		
Clean water outlet Size specifications	1 "	1 ″		













EU CE certification ISO9001 Credit rating approval

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# Professional manufacturer of fiberglass pressure vessels



Shandong Claire Environmental Technology Co., Ltd

www.sdklehj.com

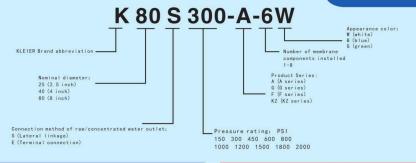


#### **PRODUCT**

Claier Environmental Technology Co., Ltd. Water Treatment Fiberglass Pressure Vessels and Derived Products Adopting the most advanced computer controlled multi axis winding and curing system in China, high-precision opening, and Surface treatment technology, product application in water pollution control technology in the field of resources and environment, Has over ten national patents and has passed GB/T19001, GB/T24001, and GB/T28001Integrated management system certification.

The leading product is the separation membrane shell, and the product pressure specifications include: 300PSI, 450PSI, 600PSI, 800PSI, 1000PSI, 1200PSI, 1500PSI, 1800PSI, 2000PSI, etc.

#### Product specifications



# Higher level of fiberglass pressure vessel manufacturing









ISO9001 Credit rating approval







High and new Hygiene permit hnology enterprises approval documen

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Mobile: 17706350266 TEL: 0635-3343158 Http://:www.sdklehj.com





### K80S Series Module Housing

K80S low pressure





K80S high pressure





# Description:

Low voltage: K80S series membrane housing 300PSI/450PSI (1 core - 7 core)

High voltage: K80S series membrane shell 600PSI/800PSI/1000PSI/1200PSI/1500PSI/

1800PSI/2000PSI (1 core - 7 core)

The product has passed the EU CE certification and can withstand over 100000 fatigue tests and 6 times the explosionHydrostatic testing.

The product is used in complex media environments and has been used in China since 2018Large and medium-sized projects both domestically and internationally.



# K80S Series Module Housing

# Technology:

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name	8-inch side opening low-pressure membrane housing	8-inch side opening high-pressure membrane housing		
model	K80\$300/450	K80\$600/800/1000/1200/1500/1800/2000		
Design pressure	300/450PSI	600/800/1000/1200/1500/1800/2000PSI		
fatigue test	100000 times	100000 times		
burst pressure	6X	6X		
Membrane components can be installed	1-7	1-7		
Medium range	PH 3-11	PH 3-11		
Temperature resistance range	-10°C-66°C (14°F-150°F)	-10°C-66°C (14°F-150°F)		
Raw/concentrated water outlet Size specifications	1.5 " /2 " /2.5 " /3 "	1.5 " /2 " /2.5 " /3 "		
Clean water outlet Size specifications	1 "	1 ″		















### K40E Series Module Housing

K40E low pressure





K40E high pressure





# Description:

Low voltage: K40E series membrane housing 300PSI/450PSI (1 core - 4 core)
High voltage: K40E series membrane shell 600PSI/800PSI/1000PSI/1200PSI

The product has passed the EU CE certification and can withstand over 100000 fatigue tests and 6 times the explosionHydrostatic testing

The product is used in complex media environments and has been used in China since 2018Large and medium-sized projects both domestically and internationally.



# K40E Series Module Housing

# Technology:

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name	4-inch side opening low-pressure membrane housing	4-inch side opening high-pressure membrane housing		
model	K40E 300/450	K40E 600/800/1000/1200		
Design pressure	300/450PSI	600/800/1000/1200PSI		
fatigue test	100000 times	100000 times		
burst pressure	6X	6X		
Membrane components can be installed	1-4	1-4		
Medium range	PH 3-11	PH 3-11		
Temperature resistance range	-10°C-66°C (14°F-150°F)	-10°C-66°C (14°F-150°F)		
Raw/concentrated water outlet Size specifications	3/4 "	3/4 "		
Clean water outlet Size specifications	1/2 ″	1/2 "		



















# K40S Series Module Housing

# Technology:

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name	4-inch side opening low-pressure membrane housing	4-inch side opening high-pressure membrane housing		
model	K40S 300/450	K40S 600/800/1000/1200		
Design pressure	300/450PSI	600/800/1000/1200PSI		
fatigue test	100000 times	100000 times		
burst pressure	6X	6X		
Membrane components can be installed	1-4	1-4		
Medium range	PH 3-11	PH 3-11		
Temperature resistance range	-10°C-66°C (14°F-150°F)	-10°C-66°C (14°F-150°F)		
Raw/concentrated water outlet Size specifications	1 "	1 ″		
Clean water outlet Size specifications	3/4 "	1/4 ″		





















# Description:

8-inch and 10-inch ST/DTRO landfill leachate membrane housings: 75Bar/90Bar/120Bar/150Bar/200Bar.

Product length: 945/1000/1145/1150/1200/1250mm,

Customizable according to customer needs.

Appearance colors: primary color, white, etc., can be customized according to customer needs.

The product (Kreil standard) has passed the EU CE certification and can withstand over 100000 fatigue tests and 6 timesBlasting water pressure test. The product is used in complex media envir -onments and has been used domestically and internationally sin ce 2018Large and medium-sized projects.



# ST/DTRO series products

# Technology:

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# Technical Parameter:

specifications	75Bar	90Bar	120Bar	150Bar	200Bar	
L	945mm	1000mm	1150mm	1200mm	1250mm	

Colors and sizes can be customized according to customer needs















ISO9001 Credit rating approval





# Description:

There are suspended solids, colloids, organic matter, and micr -oorganisms in the raw water of the water treatment systemAnd sa -lt crystallization, these substances can cause pollution to the reverse osmosis membrane components. Therefore, in theBefore the reverse osmosis system, the pre-treatment system will remove the -se pollutants, reducing the impact on the membrane components Reduce pollution and extend the operating time of the system. However, due to the inability of the preprocessing system to com-pleteFully treat these pollutants, therefore, the membrane components will also generate pollution after operating for a period of timeDyeing leads to a decrease in system performance, which requires cleaning of membrane components.

The Kreer KZ80S series membrane cleaning specialized container is designed specifically for membrane component cleaningThe bigg -est feature of this product is the rapid disassembly and assembly of the end cover to cope with the membraneFrequent loading and unloading of membrane components during component cleaning process, improving efficiency, reducing time, andLabor costs, in addition, the product has excellent corrosion resistance and can withstand variousCleaning agents for corrosive substances.



# KZ80E Series Membrane Housing

# Technology:

Shandong Claire Environmental Technology Co., Ltd. has its own research and development team, adoptingThe most advanced computer-controlled mulli axis winding machine in China · Curing system · The first in Chinaln - dependently developed high-precision automatic drilling equipment and advanced equipment for surface treatmentGood FRP performance testing melected to produce high-quality (Kreer standard) fiberglassSeries products such as membrane shells.

name	8 " washed fiberglass membrane shell		
model	KZ80E 300		
Design pressure	300PS1		
Applicable medium range	PH 3-11		
Temperature resistance range	-10°C-66°C (14°F-150°F)		













National Pate Certification





# Description:

There are suspended solids, colloids, organic matter, and microorganisms in the raw water of the water treatment system And salt crystallization, these substances can cause pollution to the reverse osmosis membrane components. Therefore, in the Before the reverse osmosis system, the pre-treatment system w-ill remove these pollutants, reducing the impact on the memb-rane componentsReduce pollution and extend the operating time of the system. However, due to the inability of the preprocess-ing system to completeFully treat these pollutants, therefore, the membrane components will also generate pollution after ope-rating for a period of timeDyeing leads to a decrease in syst-em performance, which requires cleaning of membrane components

The Kreer KZ40S series membrane cleaning specialized container is designed specifically for membrane component cleaning. The biggest feature of this product is the rapid disassembely and assembly of the end cover to cope with the membraneFrequent loading and unloading of membrane components during component cleaning process, improving efficiency, reducing time, and Labor costs, in addition, the product has excellent corrosion resistance and can withstand variousCleaning agents for corrosive substances.



# KZ40E Series Membrane Housing

# Technology:

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name	4 " washed fiberglass membrane shell		
model	KZ40E 300		
Design pressure	300PSI		
Applicable medium range	PH 3-11		
Temperature resistance range	-10°C-66°C (14°F-150°F)		













National Pate Certification



Horizontal fiberglass high flow filter series

Vertical fiberglass high flow filter series









# Description:

The horizontal fiberglass high flow filter series is divided into: end connected and side connected, and the filter element is divided intoFor Pall Pall and Parker Parker models; The vertical fiberglass high flow filter series is divided into: foldable filter element, filter bag, PPMelt blown filter element, etc.

The product has passed 1.5 times the water pressure test and can withsta -nd over 100000 fatigue test explosionsBreaking water pressure test.

The product has corrosion resistance, high pressure resistance, no leak -age, convenient disassembly and assembly, and a suitable lifespanLong wait for a series of advantages and disadvantages.



Horizontal fiberglass high flow filter series Vertical fiberglass high flow filter series

# Technology:

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Filter element type	External pressure filter element	Internal pressure filter element	
Module length	20 inches/40 inches/60 inche		
Membrane element diameter	6 inch	es	
Connection method of inlet/outlet	Side in end out   Side In /Side Out		
Inlet/outlet size	2 " /3 " /4 " Trench		
Module Housing Design Pressure	100PSI/150PSI		
Temperature resistance range	-10°C-49°C		
Working medium	water, PH3-11		













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K25E Straight





K25E Low pressure/high pressure





# Description:

There are three specifications for loading membrane components: 14 inches, 21 inches, and 40 inches in length.

Low voltage K25E series membrane housing 300PSI.

High voltage K25E series membrane housing 1000PSI.

The product has passed the EU CE certification and can withstand over 100000 fatigue tests and 6 times the burst water pressureTe-sting. The product is used in complex media environments and has been used in large and medium-sized projects both domestically and internationally since 2018.



# K25E Series Module Housing

# Technology:

Shandong Claire Environmental Technology Co., Ltd. has its own research and development team, adoptingThe most advanced computer-controlled mu -Iti axis winding machine in China · Curing system · The first in Chinaln -dependently developed high-precision automatic drilling equipment and advanced equipment for surface treatmentGood FRP performance testing me -thods to produce high-quality (Kreer standard) fiberglassSeries produ -cts such as membrane shells.

name	2.5 inch end open low pressure membrane housing	2.5 inch end open high pressure membrane housing
model	W25E 300	W25E 1000
Design pressure	300PS1	1000PSI
fatigue test	100000次	100000次
burst pressure	6X	6X
Membrane components can be installed	2514, 2521, 2540	2514, 2521, 2540
Medium range	PH 3-11	PH 3-11
Temperature resistance range	-10°C-66°C (14°F-150°F)	-10°C-66°C (14°F-150°F)
Raw/concentrated water outlet Size specifications	1 ″	1 *
Clean water outlet Size specifications	3/4 "	1/4 ″













EU CE certification ISO9001 Credit rating approval High and new technology enterprises approval document

























EU CE certification ISO9001 Credit rating approval High and new technology enterprises approval document

National Patent Certification



8040S quick release reverse osmosis membrane shell VS dedicated membrane shell for washing





4040 quick installation fiberglass membrane housing





# 8 "end, side connected membrane housing



#### **Product Selection:**

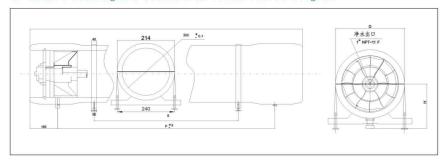
- Connection type: 8040 end connection, 8040 side connection (honeycomb), 8040 side connection (flat plate)
- 2. Pressure type: 150, 300, 450, 600, 800, 1000PSI
- 3. Length type: 1 to 7 cores
- 4. Appearance color: The marked configuration is white, which can be customized according to customer needs

### technical requirement:

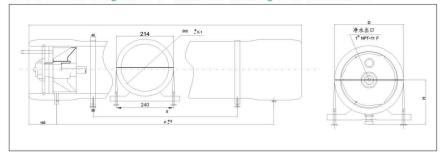
- The manufacturing method of the membrane shell follows the JC692-1998 standard;
- 2. The design pressure of the membrane shell is 150, 300, 450, 600, 800, and 1000PSI, Allowable working temperature range -7 °C -49 °C
- 3. The membrane shell penetration test is conducted using a water pressure test method, with a test pressure of 1.5 times the design pressure



#### 8 "Module Housing End Connection Installation Diagram



#### Installation diagram of 8 "membrane housing side connection



# Main installation dimensions

Working pressure	Number of sections	L (mm)	S (mm)	P (mm)	Working pressure	Number of sections	L (mm)	S (mm)	P (mm)
	1	1459	700	1139		1	1524	700	1142
	2	2475	1454	2155	1000PS1	2	2540	1454	2158
300PSI	3	3491	2064	3171		3	3556	2064	3174
	4	4510	1646*2	4190		4	4574	1646*2	4192
	5	5526	2000*2	5206		5	5588	2000*2	5208
	6	6542	2357*2	6222		6	6606	2357*2	6226
	7	7558	3084*2	7238		7	7622	3084*2	7242

Note: The main dimensions of the 8 "end connected membrane housing do not have P



4 "end, side connected membrane housing



#### **Product Selection:**

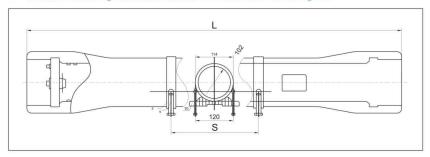
- 1. Connection type: 4040 end connection 4040 side connection
- 2. Pressure type: 150, 300, 450, 600, 800, 1000PSI
- 3. Length type: 1 to 5 cores
- Appearance color: The marked configuration is white, which can be customized according to customer needs

#### technical requirement:

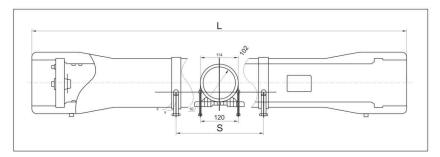
- 1. The manufacturing method of the membrane shell follows the JC692-1998 standard:
- 2. The design pressure of the membrane shell is 150, 300, 450, 600, 800, and 1000PSI, Allowable working temperature range -7 °C -49 °C
- 3. The membrane shell penetration test is conducted using a water pressure test method, with a test pressure of 1.5 times the design pressure



#### 4 "Module Housing End Connection Installation Diagram



#### Installation diagram of 4 "membrane housing side connection



# Main installation dimensions

工作压力					工作压力	节 数			
300PSI 1 2 3	1	1118/1235	700	1016	1000PSI	1	1177/1277	700	1016
	2	2135/2251	1350	2032		2	2193/2293	1350	2032
	3	3152/3268	1960	3050		3	3210/3368	1960	3050
	4	4168/4284	1580*2	4066		4	4226/4326	1580*2	4066

Note: The main dimensions of the 4 "end connected membrane housing do not have P

### Qualification certification







EU CE certification

ISO9001

Credit rating approval







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National Patent Certification



Enterprise Purpose: Integrity, Innovation, Pragmatism, and Efficiency **Business philosophy: Excellent quality Customer First** First class service

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