



**Shandong Bona Biological Technology Group Co., Ltd.**

Professional Membrane Manufacturer and Solution Provider

Shandong Bona Biological Technology Group Co., Ltd.  
Jinan • China

## Shandong Bona Biological Technology Group Co., Ltd.

Established in 2012, is a high-tech group enterprise focusing on membrane products manufacture and application.

One of the top professional and reliable manufacturers and integrated solution provider in the membrane application industry for filtration, purification, separation and concentration of the fluids in various industries.

Has two membrane production factories and an advanced R&D center, with more than 20 experienced engineers and 30+ Pilot Unit, can offer service for trial, design, manufacture of membrane equipment and provide excellent installation, commissioning and after-sales service.

Has successfully developed and applied more than 16 patents of membrane application technologies and processes. Covers more than 90% market of lab pilot Membrane Machine for colleges and institutes, and 70+ percent of Top100 Bio-Pharm Companies in china, and become one of the top equipment and solution provider for pilotscale experiment and industry production. Has provided over 1200+ completed systems and equipment for colleges, universities, research institutes and enterprises in and out of china with group domestic and international trading companies.

Can provide customers with integrate and innovate systems and process applications, in areas such as food & beverage, bio-pharm, fermentation, environmental, deep processing of agricultural products, plant extraction, petroleum and petrochemical industry, water treatment, chemical industry and etc.

Looking forward to establish good and long business relationship with you on mutual benefits!



Shandong bona group headquarter office building





### The R&D center

Located in Jinan High-tech Industrial Park, Shandong province, China.  
20 experienced engineers (including 2 personnel with doctorate degrees).  
30+ Pilot Unit for experiments, provide believable experimental data for for pilotscale experiment and industry production.



### Membrane production Plants

Two factories, Located in the Industrial Park of Zichuan Development Zone, Zibo City, Shandong Province, China.  
Passed the **ISO 9001** International Quality Management System Certificate  
Annual output of **100,000** Pcs ceramic membrane and 500+Unit Equipment.



### Products & Services

Manufacture membrane element / module, lab experiment Unit, pilotscale experiment and industry production membrane equipment systems.  
Provide integrated solution of trial, design, manufacture of membrane equipment system and excellent installation, commissioning and after-sales service.

## Certificates



ISO 9001:2015 International Quality Management System Certificates

CE Certificate: Certificate Number: M.2016.201.Y1044, Product Name: Ceramic Filter

## Patents



ZL201920356879.1  
Double housing series membrane  
filtration equipment  
  
ZL201820411532.8  
Temperature control membrane  
separation experimental machine



ZL201820412990.3  
Two-stage separation experimental  
machine  
  
ZL201920357866.6  
Multifunctional experimental  
membrane filter



ZL201920356899.9  
Hollow fiber membrane filtration  
equipment  
  
ZL201920359269.7  
Three-stage membrane filtration  
equipment

Patents of membrane application technologies and processes for filtration, purification, separation and concentration of the fluids in various industries.

## Patents



ZL201920356730.3  
Ceramic membrane filtration  
experiment equipment

ZL201920357658.6  
Double ultrafiltration filtration  
equipment



ZL201920357879.3  
Triple plate membrane filtration  
equipment

ZL201920356872.X  
Efficient six-stage membrane  
filtration equipment



ZL201920356714.4  
Temperature control regulating  
membrane experimental filtration  
equipment

More patents under transaction

Patents of membrane application technologies and processes for filtration, purification, separation and concentration of the fluids in various industries.

## CUSTOMER & CASES





As the most professional membrane products manufacturer and solution provider in food-beverage, bio-pharm industries. By the first half of 2019, Bona has provided more than 1200+ machine and completed filtration systems to customers in and out of China, and all of the machine and systems are all working well.

- ◇ Covers more than 90% market of China lab pilot Membrane Machine for colleges and institutes.
- ◇ Covers more than 70 percent of top 100 Bio-Pharm Companies in China.
- ◇ Has established good cooperative relations with many National and Provincial Grade scientific research institutions..
- ◇ Cooperate with world's biggest Sodium hyaluronate manufacturer.
- ◇ Cooperate with world's 3rd biggest China biggest Milk product manufacturer.
- ◇ Cooperate with China 2nd biggest Milk product manufacturer.
- ◇ Cooperate with world's 3rd biggest Yeast product manufacturer.
- ◇ Cooperate with China biggest Oil and Foodstuffs Corporation.
- ◇ Cooperate with China biggest Wine manufacturer.
- ◇ Cooperate with China 2nd biggest Wine manufacturer.
- ◇ Cooperate with China biggest healthy wine manufacturer.

And so on...



Yili Group, China

**World 3rd biggest**, Aisas /China top1 dairy company, Listed Company

Cooperate time: 2017

Production Line



Mengniu Group, China

**World top10 biggest**, China 2nd biggest dairy company, Listed Company

Cooperate time:2018

Equipment: Industrail Membrane System



China Oil and Foodstuffs Corporation, China

**China biggest** Oil and Foodstuffs Corporation, Listed Company

Cooperate time:2018

Equipment: Industrail Membrane System



Angel Yeast Co., Ltd., CN

**China 1st, world's 3rd** biggest Yeast product manufacturer, Listed Company

Cooperate time:2017

Equipment: Production Line



Kweichow Moutai Group, China

**China Top1 wine Brand, China's 'national liquor' , Listed Company**

Cooperate time: 2018

Equipment: Industrail Membrane System



Wuliangye Group, China

**China Top2 wine Brand, Listed Company**

Cooperate time:2018

Equipment: Industrail Membrane System



Jing Brand Co., Ltd. China

**China Top1 health wine company, Listed Company**

Cooperate time:2017

Equipment: Industrail Membrane System



Beijing Red Star Co., Ltd. China

**China famous white wine company, Listed Company**

Cooperate time:2017

Equipment: Industrail Membrane System



Bloomage Biotech, CN

**World Biggest** Sodium Hyaluronate Manufacturer, Listed Company

Cooperate time:2016

Equipment: Production Line



CR JIANGZHONG, CN

A subcompany of China Resources Group, Listed Company

Cooperate time:2017

Equipment: Industrail Membrane System



Beijing Kawin Technology Share-Holding Co., Ltd.

Bio-pharm Company Top 100 Brand No:

Cooperate time:2018

Equipment: Industrail Membrane System



Jiangmen Hengjian Pharmaceutical Co.,Ltd., CN

Bio-pharm Company Top 100 Brand No:

Cooperate time:2018

Equipment: Industrail Membrane System



Hunan Warrant Chiral Pharmaceutical Co., Ltd., CN

Bio-pharm Company Top 100 Brand No:

Cooperate time:2017

Equipment: Industrail Membrane System





齐鲁制药

Qilu Pharmaceutical, CN

Bio-pharm Company **Top 100 Brand No: 5**

China Large-scale comprehensive modern pharmaceutical company

Cooperate time: 2016      Equipment: Industrail Membrane System



CP Pharmaceutical Group, CN

Bio-pharm Company Top 100 Brand No: 7

Cooperate time: 2017

Equipment: Industrail Membrane System



Lunan Pharmaceutical Group, CN

Bio-pharm Company Top 100 Brand No: 13

Cooperate time: 2016

Equipment: Industrail Membrane System



Furen Medicine Group, CN

Bio-pharm Company Top 100 Brand No: 16, Listed company

Cooperate time: 2016

Equipment: Industrail Membrane System



Shenzhen Salubris Pharmaceuticals Co., Ltd., CN

Bio-pharm Company Top 100 Brand No: 19, Listed company

Cooperate time: 2017

Equipment: Industrail Membrane System



United Laboratories International Holdings Limited, CN

Bio-pharm Company Top 100 Brand No: 25

Cooperate time:2015

Equipment: Industrail Membrane System



Livzon Pharmaceutical Group Inc. , CN

Bio-pharm Company Top 100 Brand No: 30, Listed company

Cooperate time:2017

Equipment: Industrail Membrane System

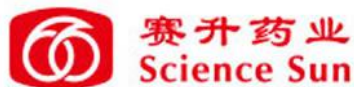


Yichang HEC Changjiang Pharmaceutical Co., Ltd , CN

Bio-pharm Company Top 100 Brand No: 32, Listed company

Cooperate time:2017

Equipment: Industrail Membrane System



Science Sun Pharmaceutical, CN

Bio-pharm Company Top 100 Brand No: 76, Listed company

Cooperate time:2016

Equipment: Industrail Membrane System



Zhejiang Chengyi Pharmaceutical Co., Ltd, CN

Bio-pharm Company Top 100 Brand No: 99, Listed company

Cooperate time:2014

Equipment: Industrail Membrane System



Hubei Jumpcan Pharmaceutical Co.,Ltd., CN

Chinese herbal medicine Top 100 Brand No: 9, Listed company

Cooperate time:2017

Equipment: Industrail Membrane System



Zhejiang Yongning Pharmaceutical Co., Ltd., CN

Chinese herbal medicine Top 100 Brand No: 52

Cooperate time:2017

Equipment: Industrail Membrane System



Shenzhen Haibin Pharmaceutical Co., Ltd., CN

Bio-pharm Company

Cooperate time:2017

Equipment: Industrail Membrane System



Fuhuagen, CN

Bio-pharm Company

Cooperate time:2017

Equipment: Industrail Membrane System



GUORUN ZHIYAO, CN

Bio-pharm Company

Cooperate time:2017

Equipment: Industrail Membrane System



Sichuan Meidakang Pharmaceutical Co., Ltd., CN

Chinese herbal medicine company

Cooperate time:2017

Equipment: Industrail Membrane System



Hubei Hongyuan Pharmaceutical technology Co.,Ltd., CN

Listed company

Cooperate time:2017

Equipment: Industrail Membrane System



HNFLAG, CN

Bio-pharm Company

Cooperate time:2017

Equipment: Industrail Membrane System



Jiangsu Vcare PharmaTech Co., Ltd., CN

Bio-pharm Company

Cooperate time:2017

Equipment: Industrail Membrane System



Jiujiang Gaoke Pharmaceutical technology Co.,Ltd., CN

Bio-pharm Company

Cooperate time:2017

Equipment: Industrail Membrane System





Qingdao Runda Biotechnology Co., Ltd., CN

Bio-pharm Company

Cooperate time:2017

Equipment: Industrail Membrane System



Asymchem Co., Ltd., CN

Bio-pharm Company

Cooperate time:2017

Equipment: Industrail Membrane System



Haibin , CN

Bio-pharm Company

Cooperate time:2017

Equipment: Industrail Membrane System



Fuhuagen, CN

Bio-pharm Company

Cooperate time:2017

Equipment: Industrail Membrane System



Story, CN

Bio-pharm Company

Cooperate time:2017

Equipment: Industrail Membrane System



Daguan medicine Co., Ltd., CN

Bio-pharm Company

Cooperate time:2017

Equipment: Industrail Membrane System



Readline Co., Ltd., CN

Bio-pharm Company

Cooperate time:2017

Equipment: Industrail Membrane System



Matbio, CN

Bio-pharm Company

Cooperate time:2017

Equipment: Industrail Membrane System



Xinfu pharmaceutical, CN

Bio-pharm Company

Cooperate time:2017

Equipment: Industrail Membrane System



Saituoson, CN

Bio-pharm Company

Cooperate time:2017

Equipment: Industrail Membrane System



Zhejiang Hongyuan Pharmaceutical Co., Ltd., CN

Bio-pharm Company

Cooperate time:2017

Equipment: Industrail Membrane System



Sanchuang biotechnology Co.,Ltd., CN

Bio-pharm Company

Cooperate time:2018

Equipment: Industrail Membrane System



Shandong Awa Biopharm Co.,Ltd., CN

Bio-pharm Company

Cooperate time:2017

Equipment: Industrail Membrane System



Huiyu Pharmaceutical ., CN

Bio-pharm Company

Cooperate time:2018

Equipment: Industrail Membrane System



Wuhan Taisheng Biological Technology Co.,Ltd., CN

Bio-pharm Company

Cooperate time:2019

Equipment: Industrail Membrane System



The University of Georgia, US

2020U.S.News University Ranking: No 46

Cooperate time: 2018

Equipment: BNNF402-2-M



Tsinghua University (shenzhen), CN

QS World University Rankings 2020: No 15

Cooperate time: 2016

Equipment: BONA-GM-1818H



Fudan University, CN

QS World University Rankings 2020: No 40

Cooperate time: 2017

Equipment: BONA-DMJ60-6





Zhejiang University, CN

QS World University Rankings 2020: No 54

Cooperate time: 2019

Equipment: BONA-GM-1819W



Shanghai Jiao Tong University, CN

QS World University Rankings 2020: No 60

Cooperate time: 2018

Equipment: BONA-DMJ60-6



Wuhan University, CN

QS World University Rankings 2020: No 257

Cooperate time: 2017

Equipment: BONA-DMJ60-4



Harbin Institute of Technology, CN

QS World University Rankings 2020: No 277

Cooperate time: 2019

Equipment: BNNF402-2-M



Nan Kai University, CN

QS World University Rankings 2020: No 368

Cooperate time: 2018

Equipment: BONA-DMJ60-3

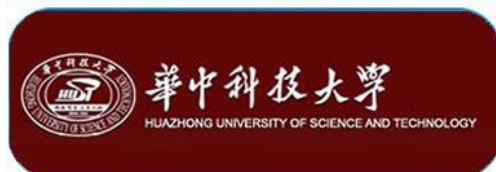


University of Macau, CN

QS World University Rankings 2020: No 387

Cooperate time: 2019

Equipment: BONA-GM-1819W



Huazhong University of Science and Technology, CN

QS World University Rankings 2020: No 400

Cooperate time: 2018

Equipment: BNCM 12-4-M



Beijing Institute of Technology, CN

QS World University Rankings 2020: No 436

Cooperate time: 2017

Equipment: BONA-GM-1818H



Xiamen University, CN

QS World University Rankings 2020: No 451

Cooperate time: 2016

Equipment: BONA-GM-22



Nan Kai University, CN

QS World University Rankings 2020: No 468

Cooperate time: 2015

Equipment: BONA-GM-1818H, BONA-GM-1819W



South China University of Technology, CN

QS World University Rankings 2020: No 480

Cooperate time: 2018

Equipment: BONA-DMJ60-6

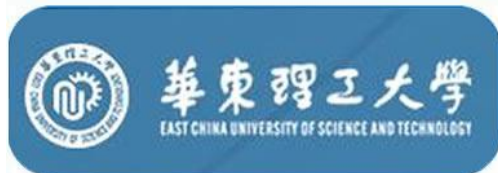


Jilin University, CN

QS World University Rankings 2020: No 484

Cooperate time: 2018

Equipment: BONA-GM-18-7, BNFXS



East China University of Science and Technology, CN

QS World University Rankings 2020: No 552

Cooperate time: 2017

Equipment: BONA-GM-1819W



Central South University, CN

QS World University Rankings 2020: No 705

Cooperate time: 2017

Equipment: BONA-GM-1818HA



Lan Zhou University, CN

QS World University Rankings 2020: No 762

Cooperate time: 2017

Equipment: BONA-GM-1818HA, BONA-GM-ZK06



Huazhong Agricultural University, CN

China University Rankings 2020: No 36

Cooperate time: 2017

Equipment: BONA-GM-1819W



Nanchang University, CN

China University Rankings 2020: No49

Cooperate time: 2018

Equipment: BONA-GM-M22



Southwest Jiaotong University, CN

China University Rankings 2020: No 52

Cooperate time: 2017

Equipment: BONA-GM-1818H

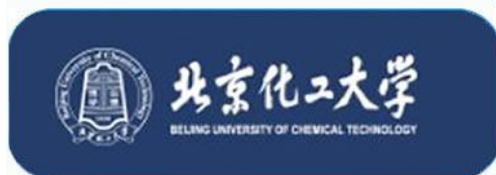


Southwest University China, CN

China University Rankings 2020: No 54

Cooperate time: 2018

Equipment: BONA-TYLG-19



Beijing University of Chemical Technology, CN

China University Rankings 2020: No 60

Cooperate time: 2016

Equipment: BONA-DMJ60-2



Fuzhou University, CN

China University Rankings 2020: No 68

Cooperate time: 2018

Equipment: BONA-GM-1817

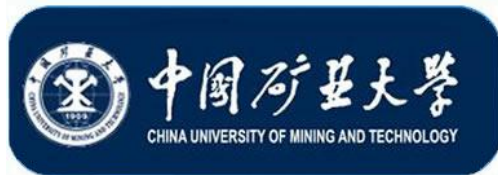


Taiyuan University of Technology, CN

China University Rankings 2020: No 78

Cooperate time: 2017

Equipment: BONA-DMJ60-4



China University of Mining & Technology, CN

China University Rankings 2020: No 80

Cooperate time: 2018

Equipment: BONA-GM-1818EH



Jiangnan University, CN

China University Rankings 2020: No 82

Cooperate time: 2017

Equipment: BNCM3-7-M



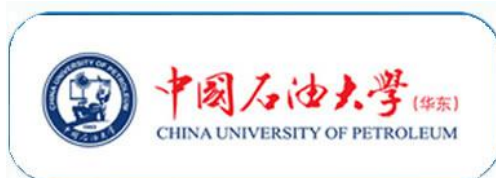
Zhejiang University of Technology, CN

China University Rankings 2020: No 84

Cooperate time: 2018

Equipment: TYLG-19N,BONA-GM-57MX





China University of Petroleum (Huadong), CN

China University Rankings 2020: No 85

Cooperate time: 2017

Equipment: BONA-GM-ZK06



Jiangsu University, CN

China University Rankings 2020: No 90

Cooperate time: 2016

Equipment: BONA-TYLG-19



Shanxi University, CN

China University Rankings 2020: No 94

Cooperate time: 2016

Equipment: BNVM3-7-M



Qilu University of Technology, CN

China University Rankings 2020: No 96

Cooperate time: 2015

Equipment: BONA-DMJ60-6, BONA-GM-57MX



Jiangxi Normal University, CN

China University Rankings 2020: No 116

Cooperate time: 2018

Equipment: BONA-GM-M18



Northeast Forestry University, CN

China University Rankings 2020: No 116

Cooperate time: 2017

Equipment: BONA-GM-19



Tianjin Polytechnic University, CN

China University Rankings 2020: No 122

Cooperate time: 2017

Equipment: BONA-GM-M18



Northeast Agricultural University, CN

China University Rankings 2020: No 123

Cooperate time: 2017

Equipment: BONA-TYLG-19N



Nanjing Forestry University, CN

China University Rankings 2020: No 125

Cooperate time: 2016

Equipment: BONA-HSDH-1



Shandong Agricultural University, CN

China University Rankings 2020: No 126

Cooperate time: 2016

Equipment: BONA-GM-1818H



Qingdao University, CN

China University Rankings 2020: No 167

Cooperate time: 2015

Equipment: BONA-GM-1819



天津中医药大学  
Tianjin University of Traditional Chinese Medicine

Tianjin University of Traditional Chinese Medicine, CN

China University Rankings 2020: No 180

Cooperate time: 2017

Equipment: BONA-GM-1819W



天津科技大学  
Tianjin University of Science & Technology

Tianjin University of Science & Technology, CN

China University Rankings 2020: No 190

Cooperate time: 2017

Equipment: BONA-TYLG-19



黑龙江中医药大学  
HEILONGJIANG UNIVERSITY OF CHINESE MEDICINE

Heilongjiang University of Chinese Medicine, CN

China University Rankings 2020: No 190

Cooperate time: 2018

Equipment: BONA-GM-1818H



河南工业大学  
Henan University of Technology

Henan University of Technology, CN

China University Rankings 2020: No 194

Cooperate time: 2016

Equipment: BONA-GM-20



大连工业大学  
Dalian Polytechnic University

Dalian Polytechnic University, CN

China University Rankings 2020: No 196

Cooperate time: 2015

Equipment: BONA-TYLG-19, BONA-TYLG-18



吉林农业大学  
JILIN AGRICULTURAL UNIVERSITY

Jilin Agricultural University, CN

China University Rankings 2020: No 216

Cooperate time: 2017

Equipment: BONA-GM-1818



广东海洋大学  
GUANGDONG OCEAN UNIVERSITY

Guangdong Ocean University, CN

China University Rankings 2020: No 234

Cooperate time: 2018

Equipment: BONA-GM-19



浙江海洋大学  
ZHEJIANG OCEAN UNIVERSITY

Zhejiang Ocean University, CN

China University Rankings 2020: No 270

Cooperate time: 2017

Equipment: BNPW-20, TYLG-19E



广东药科大学  
GUANGDONG PHARMACEUTICAL UNIVERSITY

Guangdong Pharmaceutical University, CN

China University Rankings 2020: No 283

Cooperate time: 2018

Equipment: BONA-GM-18H

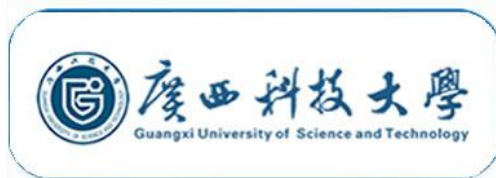


Zhongyuan University of Technology, CN

China University Rankings 2020: No 333

Cooperate time: 2016

Equipment: BONA-GM-22-18-7



Guangxi University of Science and Technology, CN

China University Rankings 2020: No 357

Cooperate time: 2018

Equipment: BONA-GM-1818EA



Beijing University of Agriculture, CN

China University Rankings 2020: No 364

Cooperate time: 2017

Equipment: BONA-GM-19



Beijing Institute of Petro-Chemical Technology, CN

China University Rankings 2020: No 379

Cooperate time: 2018

Equipment: BONA-GM-1819W



Jining Medical University, CN

China University Rankings 2020: No 490

Cooperate time: 2016

Equipment: BONA-GM-1818H





China Pharmaceutical University, CN

China University Rankings 2020: No 130

Cooperate time: 2017

Equipment: BONA-GM-19,BONA-BM-18



Northeast Normal University, CN

China University Rankings 2020: No 71

Cooperate time: 2016

Equipment: BONA-DMJ60-2



Beijing University of Chinese Medicine, CN

China University Rankings 2020: No 85

Cooperate time: 2018

Equipment: BONA-GM-18H

Remark:

Covers more than 90% market of lab pilot Membrane Machine for university and colleges in china. And sold well out of china.

Closing date of university and college cooperative partner: First half of 2019. More data will be updated later.

Equipment: Desktop pilot machines used for membrane demonstration and liquid testing in small volume. And pilotscale experiment machine.



Institute of Modern Physics, Chinese Academy of Sciences

Chinese Academy of Sciences

Cooperate time: 2018

Equipment: Industrail Membrane System



State Oceanic Administration, People's Republic of China

China State Oceanic Administration

Cooperate time: 2017

Equipment: Industrail Membrane System



Beijing Research Institute of Chemical Engineering and Metallurgy

CNNC

Cooperate time: 2018

Equipment: Industrail Membrane System



China Institute of Atomic Energy

CNNC

Cooperate time: 2018

Equipment: Industrail Membrane System



Qinghai Institute of Salt Lakes, Chinese Academy of Sciences

Chinese Academy of Sciences

Cooperate time: 2017

Equipment: Industrail Membrane System



Institute of Food Science and Technology CAAS, CN

Chinese Academy of Agricultural Sciences (CAAS)

Cooperate time: 2018

Equipment: Industrail Membrane System



Jiangxi Academy of Sciences, CN

Jiangxi Academy of Sciences

Cooperate time: 2017

Equipment: Industrail Membrane System



Guangdong Academy of Sciences, CN

Guangdong Academy of Sciences

Cooperate time: 2017

Equipment: Industrail Membrane System



Institute of Seawater Desalination and Multipurpose Utilization, CN

State Oceanic Administration, SOA (MNR 2018) (Tianjin), PRC

Cooperate time: 2018

Equipment: Industrail Membrane System



Hunan Academy of Agricultural Sciences, CN

Hunan Academy of Agricultural Sciences

Cooperate time: 2017

Equipment: Industrail Membrane System



School of Karst Science, Guizhou Normal University, CN

State Engineering Technology Institute for Karst Desertification control,  
PRC

Cooperate time:2017



Jiangsu Industrial Technology Research Institute, CN

Jiangsu Industrial Technology Research Institute

Cooperate time:2016

Equipment: Industrail Membrane System



The Key Laboratory of Chemistry for Natural Products, CN

Guizhou Province and Chinese Academy of Sciences

Cooperate time:2018

Equipment: Industrail Membrane System



Institute of Resources Comprehensive Utilization, CN

Guangdong Academy of Sciences

Cooperate time:2017

Equipment: Industrail Membrane System

#### Remark:

Our company has established good cooperative relations with many National and Provincial Grade scientific research institutions. Due to some of the institutes are classified or not willing to disclose information , we only display part of the cooperative institutes.



Chemical Industry



Water Treatment





















# PRODUCTS

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## Membrane & Membrane System





### Ceramic Membrane

Membrane Material: Al<sub>2</sub>O<sub>3</sub>; ZrO<sub>2</sub>; TiO<sub>2</sub>

Pore Size: 30nm(200KD), 20nm(150KD), 12nm(100KD), 10nm(20KD), 5nm(8000D), 3nm(2000D), 50nm, 100nm, 200nm, 400nm, 600nm, 800nm, 1um, 1.2um, 1.5um, 2um



### Organic Membrane

Membrane material: PES, PVDF, SPES, SPSF, PA and ect.

Type: Ultrafiltration membrane, Nanofiltration membrane, Reverse osmosis membrane, Hollow fiber membrane

Membrane Element meet FDA、3-A、USDA hygiene standards



### Membrane Module

Filtration Mode	Cross flow filtration
Number of membranes/housing	1, 3, 7, 12, 19, 37, 61, 91, 138, 241
Material of body	SS304, SS316L
Material of seals	EPDM, Fluoro Rubber, Silicon
Length of membrane	250-1200mm
Outer diameter of membrane	12/25/30/40/52/60mm



## Ceramic Membrane



## Organic Membrane



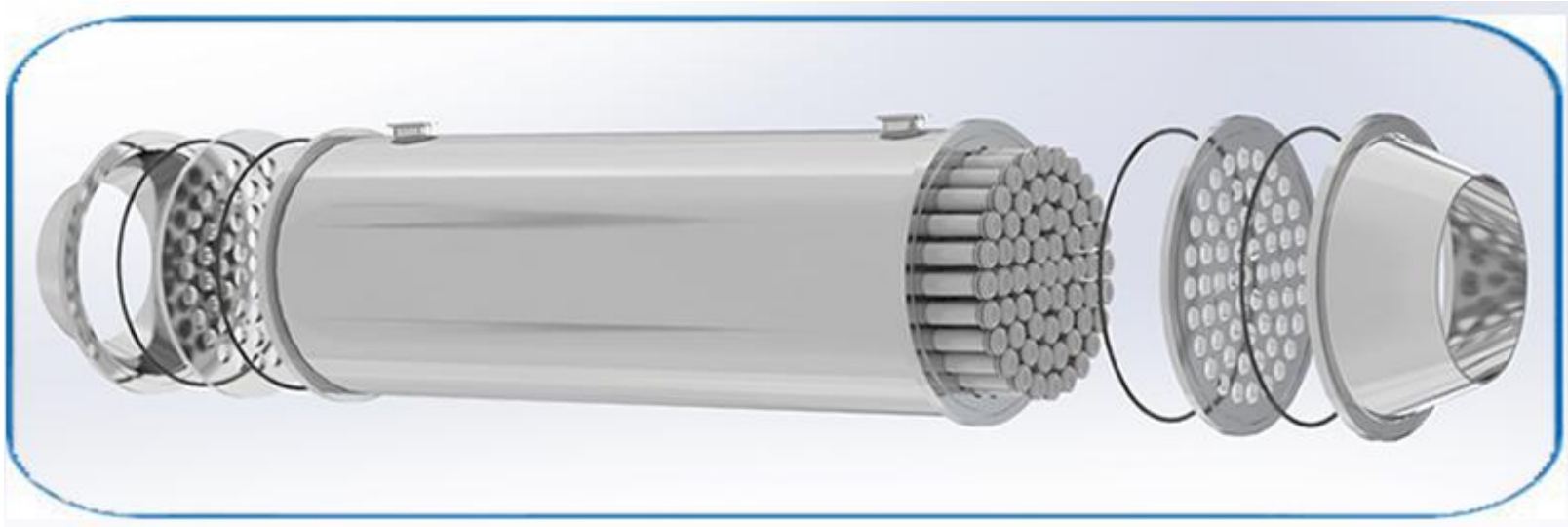
## Ceramic Flat Membrane



## Hollow Fiber Membrane



## Membrane Mouldle

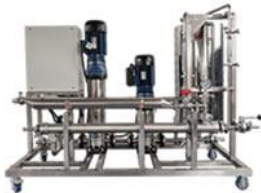






### Lab Experimental Equipment

Single or Multistages pilot machine equipped with membrane element of MF, UF, NF or RO for process validation, membrane demonstration and liquid testing in small volume.



### Pilot-scale Experiment Equipment

Pilot-scale equipment help customer to obtain key process parameters and schemes through experiments, providing references for scientific research and industrial applications, and also can be used as a small production equipment for small batch production.



### Industrial Equipment

Industry production membrane equipment system.  
Provide integrated solution and design for customer according to accurate process parameters and schemes.

## Lab Experimental Machine

**BONA**  
**GM-011**



Mini organic membrane filter

**BONA**  
**GM-18**



Organic membrane filter

**BONA**  
**GM-18H**



High Pressure Organic membrane filter

**BONA**  
**GM-19**



Reverse osmosis pilot filter

**BONA**  
**GM-20**



Hollow fiber membrane filter

**BONA**  
**GM-22**



Ceramic membrane filter

**BONA**  
**TYLG-17**



Low pressure flat membrane filter

**BONA**  
**TYLG-18**



Low pressure flat membrane filter

**BONA**  
**TYLG-19**



High pressure flat membrane filter

## Lab Experimental Machine

**BONA**  
**DMJ-60-2**



Two stage membrane separator

**BONA**  
**DMJ-60-3**



Three stage membrane separator

**BONA**  
**DMJ-60-4**



Four stage membrane separator

**BONA**  
**DMJ-60-6**



Six stage membrane separator

**BONA**  
**GM-22**



Ceramic membrane filter

**BONA**  
**GM-58**



Mini hollow fiber machine

**BONA**  
**DRM-18**



Ceramic membrane reactor

**BONA**  
**TYGC-18**



Pervaporation membrane pilot machine

**BONA**  
**GM-22-18-7**



Multifunction membrane machine

## Pilotscale Experiment Machine

**BONA**  
**BNCM3-7-M**



Ceramic membrane filter

**BONA**  
**DMJ-60-2**



Two stage membrane separator

**BONA**  
**GM-1819W**



Organic membrane machine

**BONA**  
**GM-1818EH**



High Pressure Explosion-proof  
Organic membrane machine

**BONA**  
**GM-1818H**



High Pressure Organic  
Membrane machine

**BONA**  
**GM-1819**



MF UF NF Membrane Filtration  
Machine

**BONA**  
**GM-1818E**



Explosion-proof Organic  
Membrane System

**BONA**  
**GM-M22**



Ceramic composite membrane  
Machine

**BONA**  
**GM-ZK06**



Hollow fiber membrane filtration  
Machine



## Industrial Equipment System



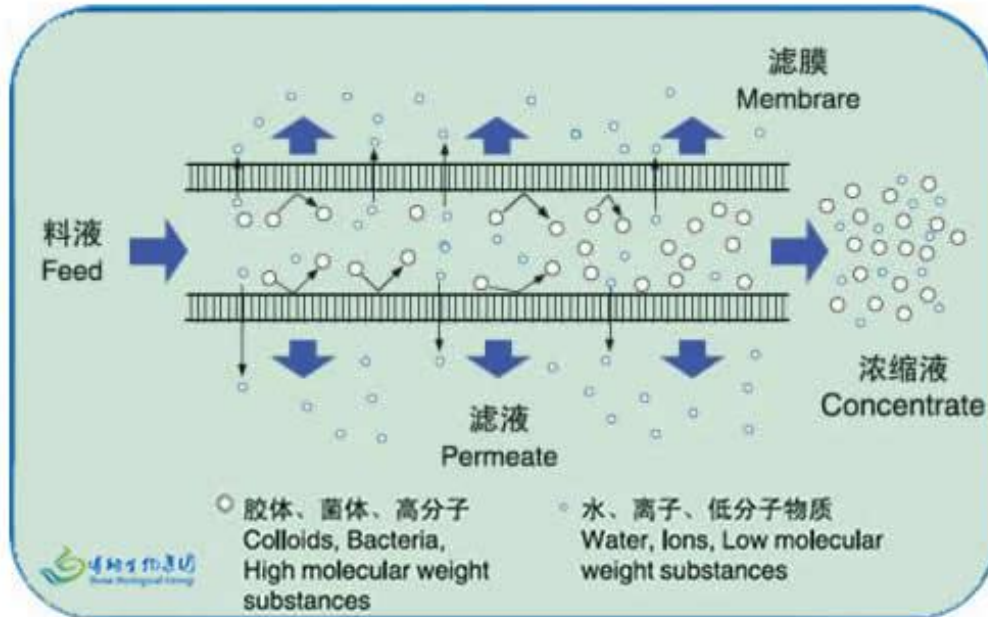


## Industrial Equipment System



# Membrane Technology and Applications





## Membrane Cross-flow filtration:

During filtration, any material smaller than the cross flow membrane pore passes through the membrane, while larger suspended particulates remain in the retentate stream. All particles whose size exceeds the pore radius of the membrane are retained. The majority of the feed flow travels tangentially across the surface of the filter, rather than into the filter. The filter cake (which can blind the filter) is substantially washed away during the filtration process, increasing the length of time that a filter unit can be operational. It

## Membrane Cross-flow Filtration Techonoly Advantages:

- The membrane surface is not easy to occur concentration polarization and membrane surface pollution, and the attenuation of membrane transmission rate is slow.
- There is no phase change in the separation process, and it is suitable for the separation and concentration of thermosensitive substances at room temperature.
- It is easy to operate and low energy consumption to use pressure as the driving force of membrane separation
- The equipment is easy to realize automation and low maintenance cost, and can provide up to 6.5MPa high pressure filtration.
- Easy to be cleaned and sanitized with back flush.

can be a continuous process, unlike batch-wise dead-end filtration.



## Food & beverage



- Separation and concentration of whey protein
- Concentration and Separation of milk dairy products
- Separation of milk protein
- Milk cold sterilization
- Concentration and Purification of tea drinks
- Deep Processing of Tea
- Clarification and Concentration of fruit and vegetable juice
- Clarification of wine
- Treatment of beer
- Clarification of vinegar, soya sauce
- Filtration of edible oil
- Preparation of natural pigments
- Deep Processing of Soybean, Soybean protein production
- Glucose syrup clarification, Glucose Refining
- Gelatin concentration
- Sugar Alcohol Extraction
- Non-Alcohol beer and no alcohol wine filtration
- Processing of Sweetener
- Processing of flavoring and seasoning
- Extraction and filtration of enzyme
- Natural Herb Extract  
and ect.

## Bio-Pharma



- Bio-product clarification
- Concentration of active principle
- Antibiotics fermentation broth clarification purification
- Purification of Organic acid fermented liquid
- Processing of biomass fermentation broth
- Bio pesticide zymotic fluid processing
- Amino acid fermentation broth clarification purification
- The processing of amino acid fermented liquid
- Enzyme concentration
- Separation and Purification of Amino Acids
- Chinese herbal medicine clarification
- Antibiotics Vitamin Purification
- Organic Acid Purification
- Plant Extraction
- Separation and Purification of Peptides
- Animal polypeptide filtration
- Plant peptide filtration
- The processing of Pharmaceutical excipients
- The processing of Isoamylase
- Desalination and concentration of chemical API
- The processing of natural pigments
- The processing of Silica Sol and ect.



## Water Treatment



- Oil field injection water
- Landfill leachate
- Textile and printing industry waste water
- Titanium dioxide waste water
- Desalination/seawater treatment
- Paper industry waste water
- Palm oil waste water
- Oily waste water
- Fermentation/chemical industry waste water
- Degreasing liquid treatment and ect.

## Other Industry



- Liquid clarification
- Desalination and concentration of nano materials
- Hemodialysis Membrane Technolog
- Polysilicon cutting fluid recovery and ect



**Membrane and moudle:**

Online support  
Video technical support  
Spare parts

**Lab & Pilot Machine:**

Online support  
Video technical support  
Spare parts

**Industrail Membrane System:**

Online support  
Video technical support  
Spare parts  
Field installation, commissioning  
Field maintenance & repair service

# 合作共赢

Win - Win Cooperation

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*Professional Membrane Products Manufacturer and Solution Provider*