SANAT

GHESHA

Ghesha Sanat Isatis

SANAT GHESHA

Pioneer of innovative technologies in water industries

The largest manufacturer of reverse osmosis membrane filters in Iran

Ghesha Sanat Isatis Co.

Welcome to Ghesha Sanat Isatis Co., the largest and leading manufacturer of reverse osmosis (RO) membranes and specialized membranes in Iran. We specialize in research, development, manufacturing, and sale of high-quality membranes to address the ever-growing needs of various industries. The company manufactures its products under the license and quality supervision of leading international brands. Our commitment to quality and innovation has enabled us to establish our company as a reliable provider of filtration equipment.
The company has developed a diverse range of products to meet the needs of various applications. Our product range includes RO membrane filters,nanofiltration membranes(NF), ultrafiltration membranes (UF), and specialized membranes. These membranes are used in a wide spectrum of applications, such as water purification, food and beverage production, pharmaceutical manufacturing, and many other uses.

Hamid Reza Sharafat

Chairman of the Board

Amir Sharafat

CEO

Message:

- At our advanced manufacturing unit, we employ cutting-edge technologies and production processes to ensure the highest quality and product compatibility. Our team of experts is continually engaged in research and development efforts to develop new membranes which are more efficient and environmentally friendly.
- We feel proud of providing excellent services and support to our customers. Our team is always available to assist our customers with any questions or technical concerns they may have. Additionally, we offer customized solutions to meet the specific needs of our customers.
- In addition to our commitment to quality and innovation, we also prioritize sustainability. We are dedicated to minimizing our environmental footprint to the greatest extent possible through the use of environmentally-friendly materials and processes.

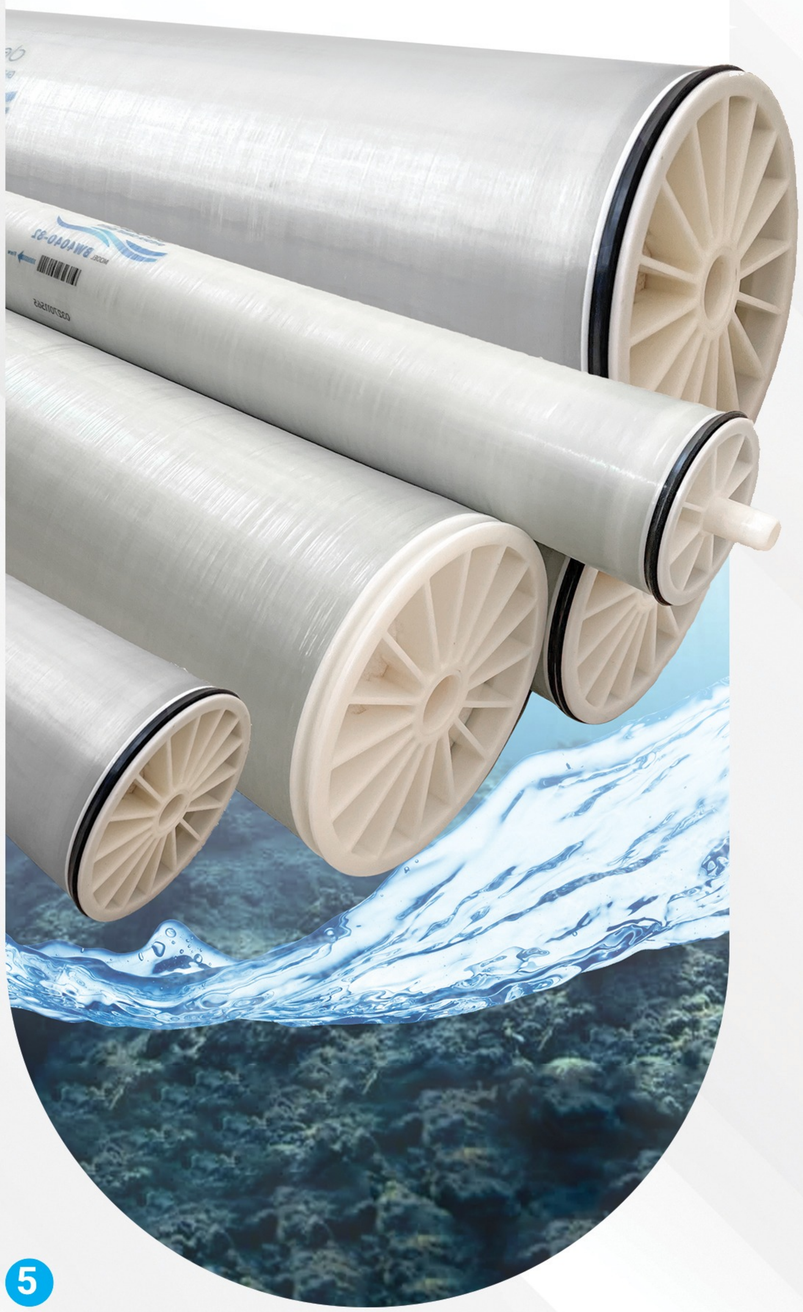
• At Ghesha Sanat Isatis Co., we have recognized the pivotal importance of access to clean and safe water for individuals and communities worldwide, especially in our country. The fact that over 2 billion people lack access to this essential resource globally, including parts of our own nation, highlights the significance of our active role in shaping a more sustainable future.

• As a company which is a manufacturer of high-quality reverse osmosis membrane filters, we are honored to operate in collaboration with and under the supervision of experienced international experts. Our commitment to innovation and excellence ensures that our products adhere to the highest quality standards, guaranteeing reliability and functionality.

• We are strongly committed to environmental responsibility and sustainable development. We understand that the production and use of water filters can impact the environment and we take this responsibility seriously. We are committed to taking actions to minimize our environmental footprint, including investing in efficient energy technologies, reducing waste and promoting recycling and reuse.

Ghesha Sanat Isatis Co.

As we strive to achieve our goals and work towards our vision of providing clean and safe water for urban, industrial, and agricultural applications, we remain steadfast in our commitment to the sustainable development objectives of the United Nations. These goals provide a framework for creating a more just and peaceful world, and we believe that our work contributes to the attainment of these crucial objectives. We would like to express our appreciations for your continuous support and participation in efforts to make a change in the world, as the stakeholders of the company who influence on our behavior and processes. together, we can create brighter and more sustainable future.



The largest and modernized manufacturer of reverse osmosis membrane in Iran

As the largest and modernized manufacturer of reverse osmosis membrane filters in Iran, our company is dedicated to offer its products with full supervision and compliance with international standards.

Specialized production to meet customer needs

Our desalination products have applications in various industries, including chemical, petrochemical, municipal power generation, food and beverage, oil and gas, RO and seawater desalination and treatment. Ghesha Sanat Isatis Co. offers unique RO polymer membranes with distinct performance specifications and configurations, to provide the best performance for a specific application.

Swift Delivery

Ghesha Sanat Isatis Co. delivers all orders in accordance with a specific schedule, starting from the contract signing date and the initial payment within one business week if the items are in stock. If the products are to be manufactured yet, delivery to the customer's location will be made within 60 to 75 business days.

Distinctive Advantages

Product Warranty

We guarantee that the products manufactured by our company are free from defects in terms of materials, mechanism, and functionality. Provided that the buyer uses and maintains the membrane elements correctly, in accordance in terms of documentation provided by our company, if there are any quality issues in the materials or product functionality, the responsibility for the products will lie with our company. For a period of 36 months from the date of sale (delivery to the transport location) and 24 months from the date of installation and commissioning, if any product is found to be defective, Ghesha Sanat Isatis Co. will undertake free repair or replacement. The company provides the customers with an official warranty certificate along with its products, in accordance with the specified terms.

Product Performance Certification

Possessing product test equipment, the company subjects all its products to performance testing. Customers receive a Certificate of Performance for all products upon delivery of their Customized Order.

Reverse Osmosis (RO) Membrane Filters

Reverse Osmosis (RO) Membrane Filters are a type of water purification technology that utilizes a semi-permeable membrane to remove dissolved solid substances, such as salts, from water. This process involves applying pressure to the solution to overcome the natural osmotic pressure and force water molecules through the membrane, leaving behind dissolved solids. RO membranes are commonly used in desalination of brackish water as well as in industrial water treatment systems. They are preferred over traditional desalination methods like thermal distillation because they are more energy-efficient and cost-effective. RO membrane filters have a high removal rate for dissolved salts, making them highly effective in removing solid substances, bacteria, and viruses from water, rendering it safe for consumption. They are also used in the treatment of industrial wastewater and effluents from industries such as oil and gas, petrochemicals, and power plants. In general, RO membrane filters are an excellent choice for sustainable and environmentally- friendly water purification solutions, which provide high-quality water with minimal environmental impact.

Operational Specifications

- Continuous Operation Range: 2-11 pH
- Short-Term Cleaning Range: 1-13 pH
- Maximum Operating Temperature: 45°C (113F°)
- Maximum amount of SDI15 inlet water: 5.00 (depends on the membrane model)
- Maximum Operating Pressure: 41 Bar (600 psi)
- Maximum Pressure Drop across the Element: 1.0 Bar (15psi)
- Free Chlorine Tolerance: <0.1 ppm

Model	Membrane Area ft² (m²)	Max. Salt Rejection	Min. Salt Rejection	Flux, gpd (m³/d)	A Inch (mm)	B Inch (mm)	C Inch (mm)
GBW 8040-400	400(37)	99.5%	99.0%	10,500(40)	40(1,016)	7.9(201)	1.125 (29)
GBW 4040	85(7.9)	99.7%	99.5%	2,600(9.8)	400(1,016)	3.9(99)	0.75(19)
GBW8040-400FR	400(37)	99.5%	99.0%	10,500(40)	40(1,016)	7.9(201)	1.125 (29)
GBW8040-400FR/34	400(37)	99.5%	99.0%	10,500(40)	40(1,016)	7.9(201)	1.125 (29)
GBW4040-85FR	85(7.9)	99.5%	99.0%	2,050(7.8)	40(1.016)	3.9(99)	0.75(19)
GBW8040-400XFR	400(37)	99.6%	99.4%	10,500(40)	40(1,016)	7.9(201)	1.125 (29)
GBW8040-400XFR/34	400(37)	99.6%	99.4%	10,500(40)	40(1,016)	7.9(201)	1.125 (29)
GBW4040-78XFR	78(7.2	99.6%	99.4%	2,050(7.8)	37.9(963)	3.9(99)	0.75(19)
GBW8040-400LE	400(37)	99.3%	99.0%	11,500(44)	40(1,016)	7.9(201)	1.125 (29)

Model	Membrane Area ft² (m²)	Max. Salt Rejection	Min. Salt Rejection	Flux, gpd (m³/d)	A Inch (mm)	B Inch (mm)	C Inch (mm)
GBW8040-440HRLE	440(41)	99.3%	99.0%	12,650(48)	40(1,016)	7.9(201)	1.125 (29)
GBW4040-78LE	78(7.2)	99.3%	99.0%	2,250(7.8)	37.9(963)	3.9(99)	0.75(19)
GBW8040-400XLE	400(37)	99.0%	98.0%	11,500(44)	40(1,016)	7.9(201)	1.125 (29)
GBW8040-440XLE	440(41)	99.0%	98.0%	12,650(48)	40(1,016)	7.9(201)	1.125 (29)
GBW4040-78XLE	78(7.2)	99.0%	98.0%	2,250(7.8)	37.9(963)	3.9(99)	0.75(19)
GBW8040-400FRLE	400(37)	99.3%	99.0%	11,500(44)	40(1,016)	7.9(201)	1.125 (29)
GBW8040-400FRLE /34	400(37)	99.3%	99.0%	11,500(44)	40(1,016)	3.9(99)	0.75(19)
GBW8040-400HRFR	400(37)	99.7%	99.4%	11,500(44)	40(1,016)	7.9(201)	1.125 (29)
GBW4040-78HRFR	78(7.2)	99.7%	99.4%	2,250(7.8)	37.9(963)	3.9(99)	0.75(19)

Model	Membrane Area ft² (m²)	Max. Salt Rejection	Min. Salt Rejection	Flux, gpd (m³/d)	A Inch (mm)	B Inch (mm)	C Inch (mm)
GSW8040-400HRLE	400(37)	99.80%	99.70%	9,000(34)	40(1,016)	7.9(201)	1.125 (29)
GSW8040-400HR	400(37)	99.80%	99.70%	6,000(23)	40(1,016)	7.9(201)	1.125 (29)
GSW8040-400XHR	400(37)	99.80%	99.70%	6,000(23)	40(1,016)	7.9(201)	1.125 (29)
GSW8040-440HRLE	440(41)	99.80%	99.70%	8,200(31)	40(1,016)	7.9(201)	1.125 (29)
GSW8040-440HR	440(41)	99.80%	99.70%	6,600(25)	40(1,016)	7.9(201)	1.125 (29)
GSW8040-365HRLE/34	365(34)	99.80%	99.70%	6,700(25)	40(1,016)	7.9(201)	1.125 (29)
GSW4040	80(7.4)	99.80%	99.70%	1,950(7.4)	40(1,016)	3.9(99)	0.75(19)

Reverse Osmosis (RO) Sea Water filters

Reverse Osmosis (RO) Sea Water Series membranes are a filtration technology designed for desalination and purification of seawater and other high salinity water sources. A thin and dense protective layer with resistance to high pressure is a key feature that enhances membrane performance and lifespan. This layer acts as a barrier to prevent the penetration of contaminant particles that could potentially harm the membrane, making it ideal to be used in harsh and corrosive environments.

This membrane can tolerate a wide range of pH values, simplifying its cleaning with basic and acidic solutions. This leads to high cleaning efficiency, which is crucial for maintaining membrane performance and extending its useful life. With long operation under lower pressure, the membrane will have better functionality and efficiency. This reduces frequent need to replacement, resulting in minimized operational costs.

Operational Specifications

- Continuous Operation Range: 2-11 pH
- Short-Term Cleaning Range: 1-13 pH
- Maximum Operating Temperature: 45°C (113F°)
- Maximum amount of SDI 15 inlet water: 5.00 (depends on the membrane model)
- Maximum Operating Pressure: 83 Bar (1200 psi)
- Maximum Pressure Drop across the Element: 1.0 Bar (15psi)
- Free Chlorine Tolerance: <0.1 ppm

Industries and Applications

• Industrial Water Treatment

We offer customized solutions tailored to the specific needs of industrial plants, resulting in improved safety and hygiene, reduced maintenance and repair costs, minimized chemical treatment, and decreased wastewater disposal costs. Ultimately, these solutions enhance the sustainability of the system and the quality of the output product. We are focused on providing a wide range of desalination systems, from small scale systems to large industrial systems.

• Power Generation Plants

Our company's primary focus is on providing water treatment solutions for the power and energy industry, with the goal of optimizing power plants through capital cost reduction and increased efficiency. This is achieved through various water treatment methods, including pretreatment filtration, reverse osmosis, ion exchange, and electrodionication systems.

• Petrochemical and Chemical Industries

In petrochemical wastewater treatment, the process begins with pre-treatment using sand and activated carbon filters. Subsequently, the wastewater is purified using reverse osmosis (RO) equipment. Our company's products are designed and manufactured, taking into consideration specific details of the RO process, such as feed flow rate, recovery rate, and the quality of the treated water.

Seawater Desalination

Seawater desalination is a valuable process for regions that lack access to fresh water resources or have contaminated or polluted existing sources. Our company's products are designed to control high levels of Total Dissolved Solids (TDS) in seawater.

Mining Industries

The waste generated from mining activities is a significant environmental concern. It can lead to soil and water pollution and cause long-term harm to ecosystems and wild-life. Membrane systems, such as those provided by Ghesha Sanat Isatis Co., can offer an effective solution to address this issue through water purification used in mining operations.

Food and Beverage Industries

The purity of water is essential in producing safe and high-quality beverages . Every company may have its specific requirements and standards. To ensure that we can meet the water needs of our customers, conducting a comprehensive analysis of the water source and determining suitable purification processes are crucial.

desalt

We create clean water

Sustaining Life with Every Drop

Head office: 4th floor, Malek Commercial Building, Parvin Etesamy Alley, Jomhoury Blvd.

Postal Code: 8918784965

Contact Phone: +983538310051

Fax: +982179491756 Domestic 2004

Factory: No. 83, Orkideh St., Harofteh Industrial District, Mehriz, Yazd

Contact number: +983533253223

Mobile number: +989120543353

www.gheshasanat.com info@gheshasanat.com | Postal Code: 8981187716