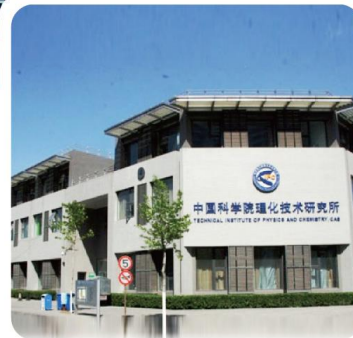




山东章鼓 股票代码: 002598



“MVR EVAPORATION AND Concentration CRYSTALLIZATION DEVICES



Shandong Zhangqiu Blower Co., Ltd

Shandong Zhangqiu Blower Co., Ltd. (hereinafter referred to as Shandong ZhangGu) is a national leading blower manufacturer, vice chairman of China General Machinery Blower Association, and a national high-tech enterprise with 50 years of technology and experience in blower design, production, manufacturing.

Technical Institute of Physics and Chemistry CAS

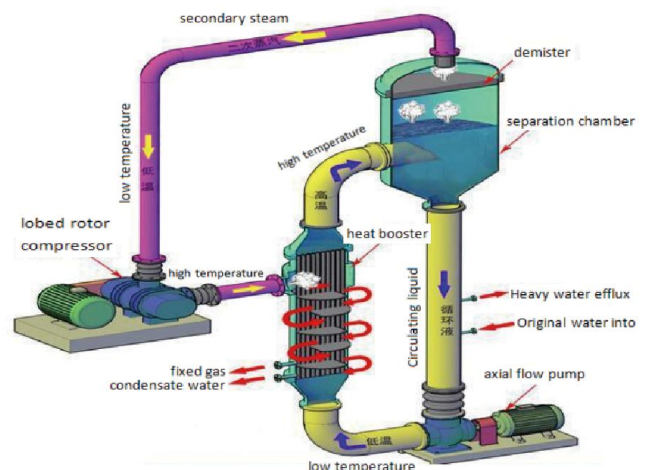
The Technical Institute of Physics and Chemistry CAS is a research institution with thermophysics, chemistry and engineering technology as the discipline background and mainly focusing on technological innovation and development. The key research areas are optical functional materials and devices, new technologies for low temperature engineering, new green chemical synthesis technologies, and new technologies for energy saving and environmental protection.



SHANDONG ZHANGQIU BLOWER CO., LTD

THE PRINCIPLE OF MVR

Mechanical Vapor Recompression(MVR) is a kind of energy saving and environmental protection technology that presses the secondary steam produced by the evaporator through the steam compressor, so as to reduce the demand for external energy. The steam compressor, can convert electrical energy into thermal energy, raise the temperature and enthalpy of the steam and return it to the evaporator as a heat source to continue to heat the evaporated original-liquid.



The system has three distinct features:

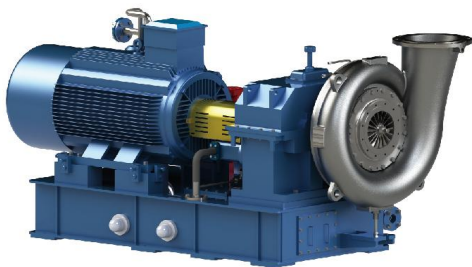
- The system completely uses the latent heat of the secondary steam generated by itself to achieve the purpose of energy saving.
- The secondary steam produced by the system itself is all converted into condensate discharge system after heat exchange, with no steam discharge, so as to achieve the purpose of environmental protection.
- Except for the system startup, essentially no fresh steam supplement is required during operation, thus reducing the dependence on fresh steam.



THE CORE MACHINE OF MVR

The core machine of MVR system, single-stage high-speed centrifugal steam compressor and Roots steam compressor are developed by our company based on the introduction of the world's advanced technology, and combined with the characteristics of MVR system and years of manufacturing experience. The product design is based on our years of thermodynamic calculation experience and research results in gas dynamics, using special impeller, high-temperature-resistant structure design, special and reliable sealing structure, anti-corrosion means corresponding to different material liquid conditions, to ensure the stable and reliable operation of steam compressor.

CBV Series of Single-stage High-speed Centrifugal Steam Compressor



Main Characteristics of Products:

1. The impeller has good mechanical properties, corrosion resistance and stable operation;
2. Flow adjustment range is wide, and can be applicable to various working conditions;
3. The compressor is compact and has a small footprint;
4. The equipment has low vibration, high reliability, and low overall noise;

V Series Lobed Rotor Compressor



Main Characteristics of Products:

1. The compressor adopts frequency conversion control mode to save electricity, and the impeller adopts new line, good sealing, energy saving and environmental protection;
2. Strict calculation and high precision production and processing ensure the clearance of the two impeller in the shell during high temperature operation, as well as the reliability and stability of the overall operation of the compressor.

PRODUCT PRESENTATION OF MVR

1.Environmental protection, energy saving products.

The energy consumption of MVR system is mainly electricity, which eliminates the dependence on boilers, thus reducing the pollution and emission of carbon dioxide, sulfur dioxide, dust solid waste residue, nitrogen and oxide. So the MVR system is the most energy-saving and environmentally friendly technology in the field of evaporation.



2.Products Suitable for the evaporation and crystallization of heat-sensitive materials.

MVR evaporation technology can achieve low-temperature evaporation at about 40°C, minimizing the damage degree of some high-temperature heat-sensitive materials easy to denature and ensuring the quality of products.

3.Module MVR

Shandong Zhang Gu relies on its own excellent technical team, from the process system, structural design, automatic control and other aspects of the development of modular MVR evaporator which is divided into concentrated and crystalline, has the advantages of integration, miniaturization, free installation, convenient maintenance, low operating cost and so on.



project	Main material	Maximum temperature rise	Installed power	Dimensions (length * width * height)
The evaporation capacity is 0.5t / h	TA2/2205/316L/304	20°C	80days	8.0m*2.5m*5.2m
The evaporation capacity is 1t / h	TA2/2205/316L/304	22°C	85days	9.0m*3.0m*5.5m
The evaporation capacity is 2t / h	TA2/2205/316L/304	17°C	90days	12.0m*3.0m*8.5m



Shandong Zhangqiu Blower Co., Ltd

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For more details, please open
WeChat and scan the QR code



The official website of
Shandong Zhanggu

Quality Service Commitment

- The company's system and products in the warranty period of three guarantees, according to different circumstances of the implementation of repair, replacement, package return;
- Implement lifetime service for the systems and products beyond the warranty period;
- For all customers cooperating with our company, we offer free training and guidance for installation and commissioning services.