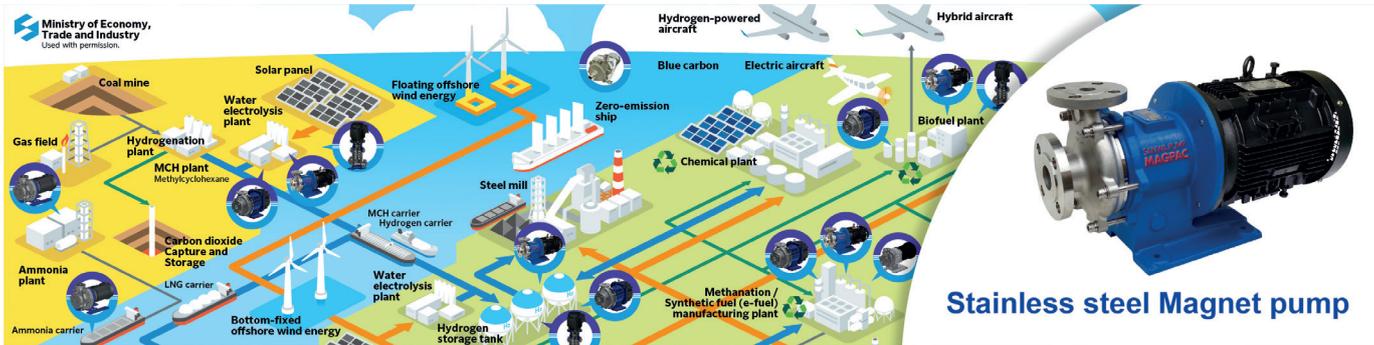


# Striving for a net-zero society through innovative magnetic pump technology

As a top niche manufacturer of stainless steel magnetic pumps, Sanwa Hydrotech aims to establish a leading position in this specialized global market to achieve a net zero society.



**Stainless steel Magnet pump**

Founded in 1934 as a pioneer in stainless steel casting, Sanwa Hydrotech has grown to become a top niche manufacturer of stainless steel magnetic pumps in Japan. Under a strategic vision to create new niche markets and become the leading manufacturer in these, we have expanded into a wide variety of industries, including the semiconductor, liquid crystal, energy, and food industries, rather than limiting ourselves only to the conventional petrochemical sector.

for LPG transport trucks, cooling systems for data centers, pumps for semiconductor applications, and aseptic-compliant magnetic pumps for the food industry. In the spirit of always challenging ourselves in new ways, Sanwa Hydrotech is now focusing on two main objectives as we approach our 100th anniversary: to enhance global recognition of Sanwa Pump and to build strong partnerships. In pursuit of these goals, we will participate in AICHEMA 2024 in

Germany – the world’s largest chemical machinery and equipment exhibition – for the second time. Led by a project team consisting of young professionals, we will promote Sanwa Pump globally and work to deepen relationships with international distributors and forge new business partnerships.

Net zero is an emerging focus of our global operations. At Sanwa Hydrotech, we believe that our magnetic pumps will be crucial in novel industries that will emerge during the global transition to net zero. Our magnetic pumps use few consumables, are highly efficient, and work without additional equipment, making them well-suited for net zero ini-



The inspiration to develop magnetic pumps came from a shift in our environmental conscience. We saw a growing demand in the petrochemical industry for pumps with superior corrosion resistance and durability, and that could fully prevent leakage of harmful and toxic liquids, both for the sake of the natural environment and human safety. As a result of our continuous efforts in pioneering leak-free magnetic drive pumps, our global sales had approached 200,000 units by 2022, making us the top manufacturer of metal magnetic pumps, including the development of loading pumps

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tiatives. They have already been implemented in processes such as chemical recycling of plastic bottles, materials manufacturing for lithium-ion batteries essential for smartphones, and fuel stations for hydrogen-powered vehicles. They also have a proven track record of adoption in the latest technologies such as methanation aiming to economically reduce CO<sub>2</sub> emissions using existing infrastructure, green hydrogen production equipment, and CO<sub>2</sub> separation and recovery systems. The latest net zero technologies are still in the process of evolving, and what is required of pumps in such systems changes constantly. Therefore, we believe that by actively exploring potential needs and making proposals, we will be able to contribute to achieving a net zero. Currently, we are working on the development of magnetic pumps for liquefied ammonia gas, which must meet strict requirements: no ammonia leakage, as it is a flammable liquid harmful to the human body, and the ability to withstand high pressure and low temperatures. While these criteria are quite demand-



“We believe the potential of magnetic pumps will expand globally in the future.”

Kiyotaka Horiuchi, President, Sanwa Hydrotech Corporation

ing, if achieved, these pumps will expand the potential of ammonia as a new energy source.

Following in the footsteps of our founder, who had a true pioneering ethos of “constantly developing new technologies, new materials, and new products”, Sanwa Hydrotech aims to grow its business to become an industry leader through the development of “NET ZERO” markets and with our products that combine superior technical know-how with added value. As well as meeting customer needs, we aim to become the top manufacturer in this highly specialized market by building excellent relationships with partners and tapping into potential needs to become an indispensable company across a wide range of industries – especially those related to net zero.



[www.sanwapump.co.jp](http://www.sanwapump.co.jp)