

## Reference

May 2021



## Güntner Introduced its Adiabatic HydroPad Gas Cooler Solution to the Japanese Refrigeration Market

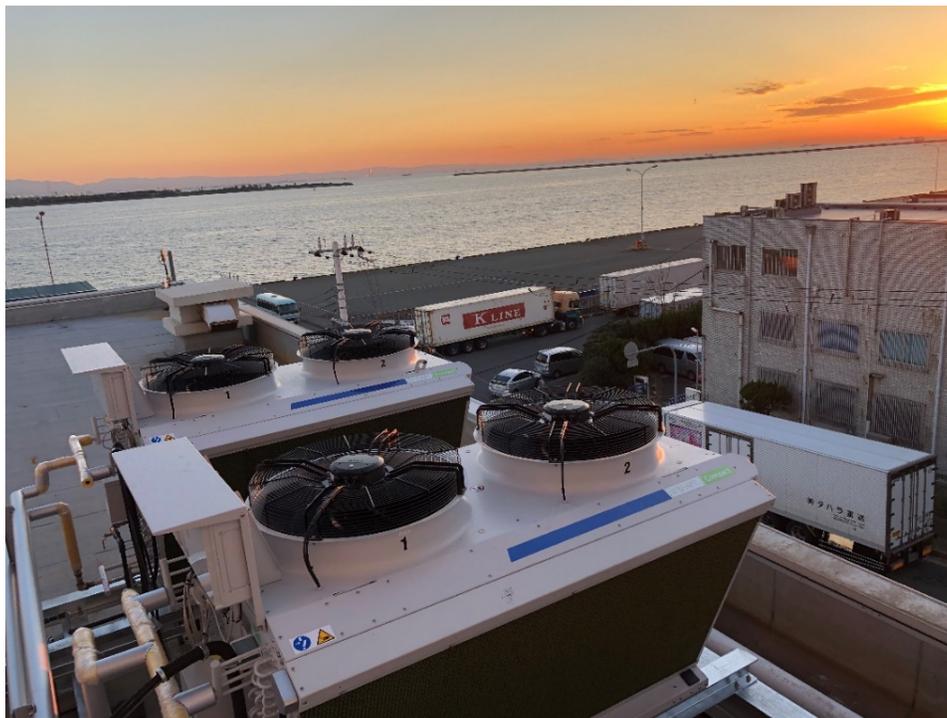
Years ago, when Panasonic debuted its new 80 HP transcritical CO<sub>2</sub> rack in an international trade show, a senior executive of the company explained that they had identified the need for CO<sub>2</sub> systems in the Japanese industrial refrigeration market, “in Japan’s cold storage sector, there are still many R22 refrigeration systems, which must be replaced with systems that use new alternative refrigerants to comply with global regulations.”

Benirei Logistics, a Japanese cold storage warehouse operator and logistics company, made the decision to retrofit its cold storage warehouse in Osaka South Seaport with modern CO<sub>2</sub> systems from Panasonic, including ten 80HP CO<sub>2</sub> rack units, four 40HP CO<sub>2</sub> racks, two 20HP and two 15HP CO<sub>2</sub> condensing units. After running for almost 40 years, the old refrigeration systems of Benirei Logistics’ cold storage warehouse were going to step down from the stage of history in October 2020.

### Panasonic 80HP CO<sub>2</sub> Rack Landed in Japanese Market

The upgraded refrigeration systems will not only benefit Benirei Logistics, but also mean a lot to Panasonic: the new product, 80HP CO<sub>2</sub> rack (the largest capacity Panasonic has developed so far), has successfully landed in the Japanese refrigeration market.

To ensure the high quality of 80HP CO<sub>2</sub> rack, key components such as compressors and controller are procured from the world’s premier suppliers.



When coming to the selection of gas coolers for CO<sub>2</sub> racks in the Osaka South Seaport warehouse, Panasonic settled on Güntner’s V shape EC fan gas cooler equipped with adiabatic HydroPad.



### Safeguard from Güntner Gas Cooler with the HydroPad Solution

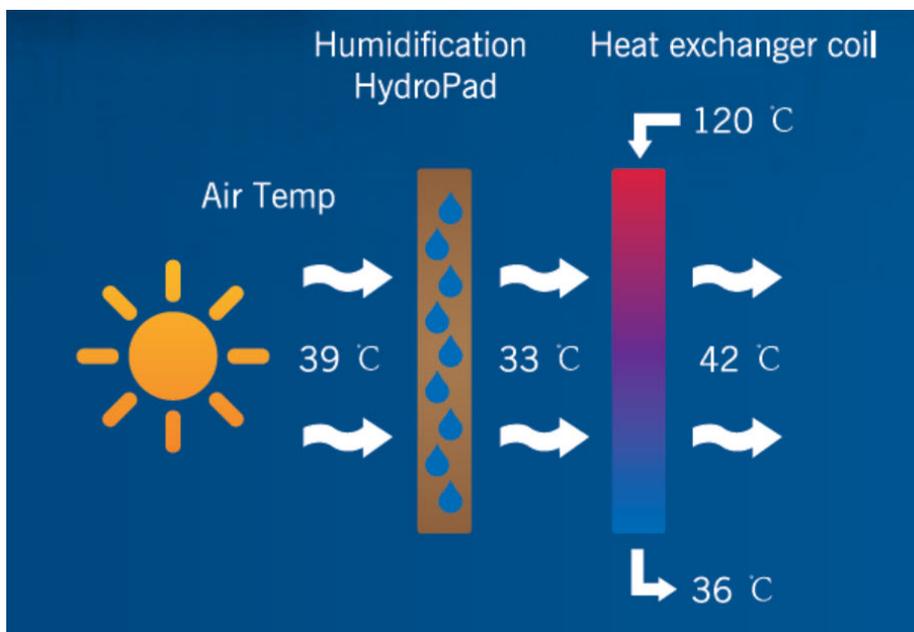
“We chose Güntner because of their quality products, trustworthy service and extensive track record of delivering CO<sub>2</sub> coolers globally,” said Mr. Shimada, sales manager of Panasonic.

Güntner provided a total of 14 units of V Shape EC fan CO<sub>2</sub> gas coolers equipped with HydroPad to ensure reliable operation of 80HP CO<sub>2</sub> racks installed in the Osaka port project.

This was the first time Güntner brought this state-of-art solution to the Japanese market. Its remarkable performance in saving energy and shrinking up installation footprint has already been well proved and acknowledged in other markets.

### HydroPad Pre-cooling Saves Energy and Reduces Footprint

“We are confident that our gas cooler systems will add more value to the whole CO<sub>2</sub> system of Panasonic, especially in terms of energy efficiency. The adiabatic HydroPad, which is mounted on both sides of our V-shape gas cooler, pre-cools the inlet air of gas cooler, and thus saves more energy by lowering the condensing temperature,” said Tomohiro Satake, sales manager of Güntner Japan.



*Note: An example of how HydroPad pre-cooling system works with a Güntner CO<sub>2</sub> gas cooler. Not Panasonic project temperatures.*

“During hot seasons, this adiabatic HydroPad solution can bring immense energy saving potential. Meanwhile, when installation space is at a premium, such a solution is also the first choice, as it requires less installation footprint.”

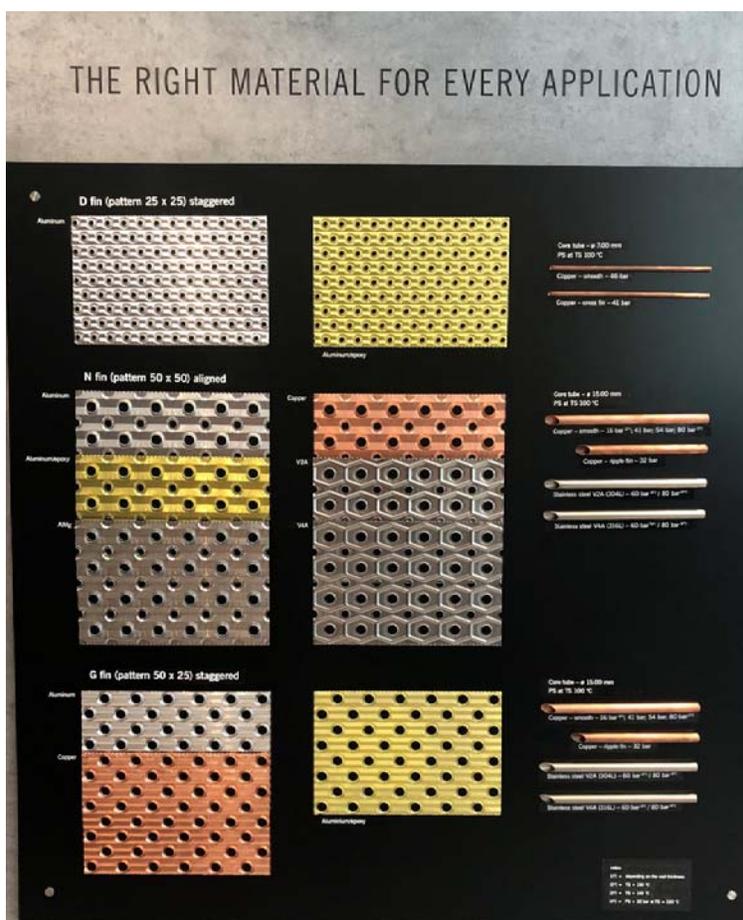
### KTL Coating: Highly Anti-corrosive Coated Coil

In addition to energy efficiency, anti-corrosion is another feature of the gas cooler solution that Satake and his colleagues are proud of.



Benirei Logistics' Osaka South Seaport cold storage warehouse is located in the Port of Osaka, which is known as "Water Capital". The coastal atmospheric environment (high humidity and high salt) plays havoc with outdoor equipment.

Shortly after meeting with Panasonic's team, Patrik Raich, technical manager of Güntner Japan, realized that he needed to design a gas cooler with outstanding anti-corrosion performance.



"Finally, all our gas coolers for the project were configured with KTL coated coil," said Patrik, "Güntner's heat exchanger expert team knows which material is the best choice for a specific application."

### Reference

- [1] <https://r744.com/panasonic-ships-first-80hp-tc-r744-racks-in-japan/>
- [2] <https://r744.com/panasonic-debuts-80-hp-transcritical-co2-rack-at-china-ref-2019/>

### About Güntner

Based in Fürstfeldbruck near Munich, Germany, Güntner GmbH & Co. KG is a world leader in the manufacture of refrigeration and air conditioning equipment components. With approx. 3,600 employees worldwide and production sites in Germany, Hungary, Romania, Indonesia, Mexico, Brazil and Russia, the company shows a strong presence for their partners in all markets. Decades of experience in the industry and the consistent integration of the latest technologies and research findings ensure the high-quality standard of Güntner solutions. The international areas of application comprise energy & process cooling projects, industrial and commercial applications in the field of food production and storage as well as HVAC applications for buildings and specific applications such as server room cooling.

In Asia, with offices located in Singapore (head office), China, Indonesia, Thailand, Vietnam and Japan and production site in Indonesia, the company shows a strong presence for their partners.