



METRO Cash and Carry Japan

METRO Japan cuts 60% energy costs with AHT chest freezers

Metro Cash and Carry Japan, a division of German Retailer Metro AG, recently replaced 200 HFC display cases at three of their locations with environmentally friendly propane plug-in units. AHT supplied the stores in Kawaguchi, Chiba and Tamasakai with the horizontal freezers ATHEN XL.

The stores were previously equipped with low-temperature display cabinets with glass lids connected to a remote system running on R404a (HFC blend). METRO's policy is to use refrigerants with low GWP. The ATHEN XL cabinets run on R290 (propane) with a GWP of 0.02*, whereas the old refrigerant had a GWP of 4728*.

With the adoption of AHT cabinets, electricity costs could be reduced by close to 60%.

The global warming potential (GWP) is a measure of the relative contribution to the greenhouse effect – warming effect of the Earth's atmosphere. The lower the number, the smaller the impact on the greenhouse effect.

Propane (R290) is one of the environmentally friendliest and greenest refrigerants on the market and available on all AHT products.

Year of Installation

2020

Installed systems

- _ ATHEN XL
- _ Active Monitoring System

Project requirements

Replacing 200 display cases using HFC refrigerants at three locations with AHT cabinets using R290 propane without stopping store operations.

METRO Japan was proud of receiving awards for implementing and promoting natural refrigerants in the Japanese retail sector.



“In addition to energy and maintenance cost reduction, one of the main reasons behind the success of this large-scale-retrofit project was the fact that all cabinets were installed without stopping store operations“, said Mr. Kenji Funamori, Construction and Fitting Manager at METRO.

The entire trouble-free installation was carried out in night shifts in order to maintain continuous operation of the stores.

The installation of electric cables was completed prior to bringing in the cabinets. An advantage of going with the plug-in systems, Mr. Funamori added, was there was no gas piping or drainage work required.

Future layout flexibility of the cabinets is possible. Differently to remote systems in which a failure can cause a complete system shut down, the distributed approach of plug-in cabinet solutions allows the single modules to be serviced by an AHT technician or COOLPOINT partner without interrupting the operation of the other cabinets.

AHT has been successfully supplying METRO AG in 17 countries since 2007 with energy efficient and green refrigerant products. METRO Cash and Carry Japan project was jointly delivered by the AHT teams located in Asia and in the headquarters in Rottenmann, Austria.

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