

Epta announces positive results from the installation of its refrigeration system

Commercial refrigeration manufacturer says its installation of its XTE system in Hungary hypermarket has yielded an average measured savings of 15% up to ambient temperatures of 42 degrees C

MILAN, Italy, 3 December 2024: Epta said it is celebrating the positive results achieved at the Auchan Korzó hypermarket, in Maglód, Hungary, in the months following the installation of its XTE (Extra Transcritical Efficiency) refrigeration system, in collaboration with Energy Recovery Inc. Making the announcement through a Press Release, Epta said the XTE, which is patented with IT granted application IT202200020811, is set to revolutionise the cold chain in the large-scale retail sector.

According to Epta, the store features a customised transcritical CO2 system, consisting of two modular ECO2Large units for large spaces, one of which is integrated with the XTE system, thus featuring enhanced refrigeration capacity, and reaching a total of 285 kW.



Stefano Trabucchi, Epta System Engineering Group Manager, said: “The data collected and analysed over a significant range of operating conditions, accounting for various seasonal outdoor temperatures, showed performance beyond expectations, with an average measured savings of 15% with the XTE system in operation, up to ambient temperatures of 42 degrees C. This achievement is the result of continuous Research and Development efforts aimed at making the technology increasingly cutting-edge, beginning with the optimisation and standardisation of the refrigeration circuit.”

According to Epta, the installation in Maglód represents one of the first applied studies of XTE, carried out as part of the European project, ENOUGH, of which Epta is one of the supporters participating to the demonstration of new technologies. Funded by the European Union's Horizon 2020 programme and coordinated by SINTEF Ocean in Norway, the plan aims to decarbonise technologies for large-scale distribution and make the cold chain climate-neutral and more efficient, Epta said.

Specifically, the Hungarian site demonstrates the feasibility and field performance of XTE, with an assessment of the system in operation, Epta said, adding that the integration of the Energy Recovery's PX G1300 pressure exchanger, suitable for use with CO2, proves to be effective, even at an operational level, for recovering expansion work and reducing the energy consumption of the system.