

## Significant performances improvement with Epta's XTE: an applied study in the Auchan Korzó hypermarket in Maglód

Independent global player and leader specialised in commercial refrigeration – celebrates the **positive results** achieved by the **Auchan Korzó hypermarket in Maglód**, Hungary, in the months following the completion of the **XTE (Extra Transcritical Efficiency) installation** in collaboration with **Energy Recovery Inc.**. The **innovative refrigeration system**, that is **patented** with IT granted application IT202200020811, is set to **revolutionise the Cold Chain** in the large-scale retail sector.



In detail, the store features a **customised transcritical CO<sub>2</sub> system**, consisting of two **modular ECO2Large units for large spaces**, one of which is integrated with XTE. The system, featuring **enhanced refrigeration capacity**, reaches a **total of 285 kW**.

*"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°C**" states **Stefano Trabucchi**, Epta System Engineering Group Manager, who continues "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."*

### DEMO 19: THE AUCHAN IN MAGLÓD IS ENOUGH

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** program 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** (grant n. 101036588 under H2020 program).

Specifically, the **Hungarian site demonstrates the feasibility and field performance of XTE**, with an **assessment** of the system in operation. The integration of the Energy Recovery's **PX G1300 pressure exchanger, suitable for use with CO<sub>2</sub>**, proves to be effective, even at an operational level, for **recovering expansion work and reducing the energy consumption of the system**.

### EPTA: A TURNKEY PROJECT WITH NUMBERS THAT COUNT

This **turnkey project** confirms Epta as a **Fully Integrated Provider**, capable of completing **every phase** related to the store's **restyling**: from **designing the best refrigeration system** and **configuring the layout of the counters**, to their **installation and commissioning**, as well as **providing after-sales services**.

An **integrated approach** that not only translates into **superior quality and efficiency** but also in numbers that count: **10,000 m<sup>2</sup> of sales area**, **131 remote counters**, connected via ducts and with the refrigeration units through **5 km of copper piping**, and **24 temperature-controlled spaces** for **storing fresh and frozen foods**, upgraded by Epta through **retrofit interventions with 35 new evaporators**.

#### EPTA IS EXCELLENCE IN EVERY DEPARTMENT

The **creative team at EptaConcept** was able to design a **harmonious and elegant layout** and create **synergies** between the **Eurocryor display cases** and the **Costan solutions**, thanks to the **complementarity of the Group's brands**, with the aim of **increasing attractiveness and profitability** in the various departments:

- **Pre-packaged fresh products:** with the **positive vertical GranVista Next** and the **semi-vertical GranValdaj** and **GranSibari** from the **GranFit** line under the **Costan** brand, ensuring **perfect preservation of goods** and **excellent energy performance**;
- **High-value fresh products:** such as cheeses, both fresh and aged and cakes, thanks to the **Twin SV** display case from the **Ambienti** family by **Eurocryor**, known for its **dual temperature** and complete **transparency**;
- **Frozen products:** with the **negative vertical GranBering units** from the **GranFit** series, in combination with the **Tortuga Ultra** cabinets under the **Costan** brand, for **excellent visual impact** and **immediate access to the products**.

Epta confirms its **technological leadership** also through a **comprehensive package of after-sales services** included in the **EptaService LifeCycle Program**, offering **advanced diagnostics**, **remote monitoring functions** and **predictive maintenance algorithms**, designed to support technicians in troubleshooting processes and **extend the lifespan** of the installed system.

*Source: Lbdi Communication*

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