



# METZGER MEATS EXPANDS WITH PRECISION CONTROL

H. WILKINSON 2024

---

## LEVERAGING DIGITAL SOLUTIONS FOR ENHANCED EFFICIENCY & SAFETY

---

Under the leadership of Gerhard Metzger, a German-trained butcher with over 30 years of experience, Metzger Meats has grown into a renowned premium meats producer, serving wholesale and retail clients across Ontario. With a processing facility and retail store located in Hensall, Metzger's provides high-quality fresh and frozen products to grocery stores throughout the region. As its customer base expanded, the company embarked on a significant expansion of its processing facility to meet rising demand while maintaining its commitment to quality.

To achieve this, the processors recognized the critical importance of precision temperature control and traceability. These elements are essential for preserving their products' freshness, texture, and nutritional value while preventing spoilage and financial loss. Beyond maintaining product quality, precision control plays a key role in optimizing system performance and improving operational efficiency. Consistent conditions help reduce energy

consumption, minimize equipment wear, and prevent costly downtime, all of which contribute to long-term cost savings.

Initially, they considered installing an ammonia-based refrigeration system. Still, ammonia's inherent complexities and risks, including its flammability and toxicity, prompted further investigation. Ammonia systems require intricate engineering, specialized components, and extensive infrastructure, making them costly and challenging to manage.

After exploring alternatives, Metzger Meats discovered Oxford Energy Solutions' (OES) low-pressure digital platform, which utilizes ultra-low GWP HFO refrigerants that are non-toxic and non-flammable. Offering a safer, cost-effective, and streamlined solution, the proven technology of the Oxford LPP™ presented an integrated, modern refrigeration management system that checked all the boxes.



---

## **FUTURE-FORWARD REFRIGERATION: EMBRACE INNOVATION, NOT YESTERDAY'S SOLUTIONS**

---

By partnering with OES, Metzger Meats upgraded to state-of-the-art digital refrigeration solutions. They embraced advanced technology to manage their growing operations more efficiently. Implementing digital solutions allowed them to achieve complete system management and traceability throughout their product flow. The new system initialized enhanced connectivity, electronic controls, and real-time data monitoring, providing full transparency of equipment performance at every stage of the process.



At its core, the digital platform integrates parallel compression systems with standalone units like blast coolers and drying rooms into an entirely intuitive, interactive interface, creating one seamless

system with no gaps in visibility. It provides comprehensive data on compressors, the condenser, liquid quality, and evaporator performance, all working together smoothly—because every detail matters for true efficiency. With IoT and cloud-based management, Metzger Meats continuously monitors and can adjust its equipment in real-time. Interactive screens display key performance indicators, including detailed graphs and historical logs, making tracking product quality and system efficiency easier for staff. Built-in energy profiles demonstrate the significant reduction in energy consumption achieved through the low-pressure benefits of the system. With this level of integration, the LPP™ delivers the lowest energy consumption and maintenance costs, making it the most profitable solution available.

This streamlined approach ensures the plant maintains compliance with food safety standards while operating at peak efficiency, setting a new benchmark for performance, safety, and precision in food processing. Metzger Meats has positioned itself for sustained growth by embracing cutting-edge refrigeration technology. The fully digitalized plant, monitoring everything from airflow to temperature, already delivers energy savings, reduced maintenance, and improved overall performance. This forward-thinking strategy enables Metzger's to uphold the quality and safety that its customers trust, solidifying their leadership in the industry. 🍁