Case Study
Optimal Health Performance Ltd

Delivery Partner

LIVERPOOL JOHN MOORES UNIVERSITY

Background

Optimal Health Performance Ltd sells a range of cutting-edge, high-quality, certified, and effective wellness and recovery equipment to the UK and International markets and customers.

Product types include Hyperbaric Chambers, Red Light Therapy, Cryotherapy, Ice Baths, and Electromagnetic Chairs, which impact and improve personal wellness and recovery.

Optimal Health Performance equipment stands out in the marketplace, underpinned by rigorous testing, support, and precision-engineered technology that ensures the best possible results. The company's commitment to quality and customer satisfaction is a priority, offering not just top-tier products but also expert guidance and comprehensive service every step of the way.

Challlenge

Following an introduction to the Horizons team at Liverpool John Moores University (LJMU), a consultative support process via a combination of digital diagnostics and readiness level assessment resulted in a range of support opportunities centring on product manufacturing, assembly, simulation, optimisation, optimisation and execution system, including a variety of knowledge base industrial challenge projects spanning across business, electrical, and mechanical specialties.

Solution

Newly introduced digital processes within the company can facilitate the implementation of advanced and intelligent bench technology, enhancing the integration of biometric user data. This technology can assess chamber residence time, providing a tailored experience that supports the launch of an upgraded cryotherapy chamber product, which does not currently exist in the market.

Following this project, Optimal Health Performance is enthusiastic about exploring further opportunities to employ Liverpool John Moores University (LJMU) graduates, working closely with the Sport Science Department to underpin and test the product technologies.

Case Study
Optimal Health Performance Ltd

Delivery Partner

LIVERPOOL JOHN MOORES UNIVERSITY

Impact

This newly upgraded manufacturing process is expected to boost productivity by 30%. This improvement will stem from reduced product assembly times, achieved through better utilisation of assembly staff resources and clear build instructions, ultimately enhancing product quality at the end of the line.

Additionally, the detailed digitisation of various Wellness products has enabled the quantification of warehouse stock fill times and costs. As a result, the business can respond to sales orders more promptly, thereby increasing its competitiveness in the market.

A collaborative innovation Knowledge Transfer Project has been established to explore the future design of the next generation of mild hyperbaric chambers. This initiative will leverage expertise from Sports Science, along with valuable insights from key users of the technology.

Moreover, extra innovation resources have been allocated to refine and develop the initial simulation and manufacturing execution system for cryotherapy chamber assembly.

Finally, project briefs for Mechanical Engineering, Electrical and Electronic Engineering, and Internet of Things industrial challenges have been made available for final-year engineering students to select from, beginning in the new academic year.

Our partnership with Horizons has been a real eye-opener and has given us the means to introduce a new digital process, which significantly improved the productivity of the Cryotherapy Chamber manufacturing assembly line, helping to quantify the time to fill and cost warehouse stock, enabling the business to respond to sales orders in a timely fashion, improving market competitiveness and customer service levels.

Marc Heath, Director of Optimal Health Performance Ltd