



TRICEL
GENERATIONS OF INNOVATION

CASE STUDY

50 CUSTOM ONE-PIECE GRP WATER TANKS FOR J.PAO AND CO. LTD

Project Information

Client: J. Pao and Co. Ltd

Industry: Food Production, Agriculture

Contractor: Tricel Water

Project: To manufacture and install 50 custom one-piece GRP water tanks for J. Pao and Co. Ltd's new food production facility.

TANK DIMENSIONS: 2000 x 1200 x 1100mm

Challenge: The project faced a tight timeline, restricted access, strict hygiene requirements, and unique maintenance demands.

Timeline: Project Completion: Q3, 2025

Current Project Status: Tanks in Final Installation Phase & Sign Off

Solutions

Tricel Water manufactured and installed 50 custom-built GRP one-piece water tanks (dimensions: 2000 x 1200 x 1100mm). Each tank was hygienic, corrosion-resistant, WRAS-approved, and designed with dual manways for safe and easy access.

Support provided:

Tricel's sales, technical, and engineering teams worked in close collaboration, providing full design consultation to address site-specific access, hygiene, and maintenance needs, while maintaining ongoing communication with the client throughout the specification and delivery phases.

Results

All 50 tanks were successfully delivered and installed, received highly positive client feedback, and are now fully integrated as a central component of the new facility's operations.

Engineering Around Constraints: Meeting the Demands of a Modern Food Facility

Bringing a new food production facility online is no small feat, especially when every component must meet the highest standards of hygiene, efficiency, and reliability. For J. Pao and Co. Ltd, the water storage system was not just a utility, it was a critical infrastructure element that would directly impact daily operations, compliance, and long-term maintenance. From the outset, the project demanded a solution that was not only technically sound but also tailored to the unique constraints of the site. As the build progressed toward its summer 2025 completion, several key challenges emerged that would shape the design and delivery of the water tanks.

- **Tight Timeline:** The tanks needed to be delivered and installed in line with the facility's construction schedule.
- **Restricted Access:** Internal access points were limited, requiring precise design and delivery coordination.
- **Strict Hygiene Standards:** As a food-grade environment, the tanks had to meet WRAS compliance and be easy to clean and inspect.
- **Custom Maintenance Needs:** Long-term operability and minimal downtime were essential.

Setting the Standard:

A Precise Brief for a Demanding Environment



The project brief from J. Pao and Co. Ltd was both clear and uncompromising, reflecting the precision required for a food-grade facility. The company required 50 one-piece GRP cold water storage tanks, each manufactured to exact custom dimensions of 2000 x 1200 x 1100mm. These tanks needed to be fully WRAS-approved to ensure compliance with stringent hygiene regulations and constructed from corrosion-resistant materials suitable for long-term use in this demanding environment.

Additionally, the design had to accommodate tight internal access points while also supporting hygienic operation and ease of maintenance, ensuring the tanks would perform reliably with minimal disruption throughout their service life.

In summary the requirements included:

- 50 One-Piece GRP Cold Water Tanks
- Custom Tank Dimensions: 2000 x 1200 x 1100mm
- WRAS-Approved & Corrosion-Resistant Solution
- Designed for Tight Access, Hygienic Use, and Ease of Maintenance

BUILT ON TRUST: THE CASE FOR CHOOSING TRICEL

J Pao and Co. Ltd chose Tricel Water as their water storage partner based on a combination of proven expertise, technical capability, and a collaborative approach to design. With over 30 years of reliable supply and service, Tricel brought a strong track record of delivering high-quality, durable solutions across a range of industries.

Their ability to custom-manufacture tanks to exact specifications was a key factor, ensuring that each unit would meet the unique spatial and operational demands of the new facility. Equally important was Tricel's use of WRAS-approved GRP materials, which provided the hygienic assurance required for food-grade environments.

Throughout the project, Tricel demonstrated a flexible and responsive design process, working closely with J. Pao and Co. Ltd's team to adapt and refine the tank configurations based on real-time feedback from the site, an approach that proved essential to the project's success.

J Pao and Co. Ltd had previously partnered with Tricel Water (formerly Dewey Waters Ltd.) and chose to return for this project based on a consistently positive experience.

- Proven Track Record: Over 30 years of reliable supply and service
- Custom Manufacturing Capability: Ability to tailor tank design to exact specifications
- Hygienic Assurance: Use of WRAS-approved GRP materials suitable for food environments
- Collaborative Design Process: Flexibility to adapt designs based on real-time site feedback

TAILORED TO PREFORM A BESPOKE WATER STORAGE SOLUTION



Meeting the demands of a high-specification food production facility required more than just off-the-shelf products, it called for a tailored engineering solution that could deliver on performance, hygiene, and practicality. From the outset, Tricel Water approached the project with a commitment to precision and partnership, ensuring that every tank would not only meet regulatory standards but also integrate seamlessly into the facility's infrastructure. With a deep understanding of the food industry's operational challenges, Tricel engineered a solution that balanced robust construction with thoughtful design features to support long-term efficiency and compliance, delivering a fully bespoke solution:

- 50 custom-built one-piece GRP tanks, each with dual manways for safe access and hygiene control
- WRAS-approved materials ensuring compliance with food industry standards
- Corrosion-resistant construction for long-term durability
- Precision design to accommodate tight internal access and layout constraints



Seamless Collaboration, Precision Delivery

The successful execution of this project was driven by close collaboration between Tricel Water and J. Pao and Co. Ltd. Tricel's dedicated project team—including Stewart (Sales), Karl Lacey (Technical Sales Director), and Edward Hunter-Varadi (Engineering) worked hand-in-hand with J. Pao's site engineers and contractors from the earliest stages of planning through to final installation. The Tricel Water team delivered:

- Comprehensive design consultations were carried out to address the specific spatial, hygiene, and maintenance requirements of the site.
- Continuous communication was maintained throughout the specification and delivery phases to ensure alignment and responsiveness.
- Deliveries were strategically phased to match the construction schedule and support seamless on-site integration.

This partnership began with a comprehensive design consultation, where Tricel's experts assessed the facility's spatial limitations, hygiene requirements, and long-term maintenance needs. These insights were translated into a tailored tank design that met both regulatory standards and the practical demands of daily operation.

Throughout the specification and manufacturing process, Tricel maintained clear and consistent communication with the client. Regular updates, responsiveness to evolving site conditions, and a willingness to adapt designs based on real-time feedback ensured the project stayed on track.

To align with the construction schedule, Tricel coordinated phased deliveries from its UK manufacturing site, allowing for smooth integration of the tanks as different areas of the facility became ready.

A standout innovation was the inclusion of dual manways in each tank – a feature developed specifically to meet J. Pao's hygiene and maintenance requirements. This design allows for safer, more efficient internal access, simplifying routine inspections and cleaning while minimizing operational downtime – an essential consideration in a food-grade environment.



"Tricel's one-piece tanks are seamless and completely leak-proof. They are corrosion-resistant, strong, and built to last.

Quick to install, they save time and fit into tight spaces. Fully certified, they guarantee safe and reliable water storage.

From Vision to Results:

A Seamless Execution



The outcome of the project was a clear success. All 50 custom-designed GRP water tanks were delivered and installed precisely on schedule, aligning seamlessly with the construction timeline of J. Pao's new facility. Once in place, the tanks were fully integrated into the plant's operations, where they now play a vital role in supporting daily production and hygiene standards.

Client feedback has been overwhelmingly positive, with particular praise for the thoughtful design, reliable delivery, and overall performance of the tanks. The collaboration between Tricel and J. Pao not only met expectations but also laid the foundation for a strengthened long-term partnership.

Client Feedback

"We were impressed by Tricel's ability to design tanks around our exact layout. The tanks are a central part of our new plant, and we're very happy with the results."

— Andrew, J. Pao and Co. Ltd



Contact us today to discuss your project needs.

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