

Case Study

Rittal New Zealand / Integrated Automation Ltd



Rittal Hygienic Design Enclosures Set the Standard for One of New Zealand's Leading Automation Solutions Providers, IAL, in Food Production Automation Systems

Introduction

Meeting hygiene standards in food production facilities requires robust and compliant equipment that can withstand rigorous cleaning processes and protect critical automation systems. Integrated Automation Limited (IAL), one of New Zealand's leading automation solutions providers sought a reliable enclosure solution for their accumulation conveyor system in the food and beverage industry.

Rittal's Hygienic Design (HD) series enclosures provided the perfect solution, offering durability, compliance, and visual appeal. This project marked IAL's first use of the HD series, which has since become the standard for their automation solutions across the food and beverage industry.



Problem

Food production facilities pose unique challenges for automation systems, where hygiene and durability are paramount. IAL faced several key issues:

- **Hygiene Standards:** Enclosures needed to meet strict food production regulations, ensuring they were easy to clean, resistant to bacterial growth, and safe for environments involving direct food contact.
- **Cleaning Processes:** Regular use of hot water and aggressive chemicals during cleaning posed risks of corrosion and water ingress, which could compromise enclosure integrity.
- **Temperature Changes:** Fluctuations in room temperatures created risks of condensation inside enclosures, threatening the performance of sensitive automation components.
- **System Reliability:** Protecting critical equipment from environmental damage was essential to prevent downtime and costly repairs.

IAL required enclosures that could tackle these challenges while maintaining a professional appearance and seamlessly integrating with their automation systems.

ENCLOSURES

POWER DISTRIBUTION

CLIMATE CONTROL

IT INFRASTRUCTURE

SOFTWARE & SERVICES



Solution

Rittal's Hygienic Design enclosures provided a comprehensive and reliable solution tailored to the needs of food production facilities.

Key Features of the Rittal Hygienic Design Enclosures Include:

1. **Stainless Steel Construction:**

High-grade stainless steel with a smooth finish offers resistance to corrosion and damage from cleaning agents while enhancing the system's professional appearance.

2. **Sloped Roof Design:**

The 30° sloped roof prevents water pooling during cleaning, reducing bacterial growth risks and ensuring compliance with hygiene regulations.

3. **Blue Door Seals:**

FDA-compliant, food-safe silicone gaskets create a secure seal that prevents contaminants. The distinctive blue colour simplifies hygiene inspections.

4. **Quick-Release Fasteners:**

Hexagon fasteners ensure easy access for maintenance without compromising the hygienic seal.

5. **Customisation and Modularity:**

Modular enclosures allowed IAL to customise the setup for their automation components, ensuring seamless integration with the accumulation conveyor system.

The HD enclosures offered both functionality and visual appeal, creating a durable and hygienic environment for automation equipment.

"This was our first Rittal Hygienic Design series cabinet, which then became a standard for IAL and its customers. The HD series has a superior design, high-quality stainless-steel construction, hygienic blue seals and gaskets add to the quality. We build world-class automation systems that add value to our customers profitability and business growth. Protecting the automation components in the control cabinet is essential to prevent downtime" commented Donovan Ryan, Managing Director of IAL.



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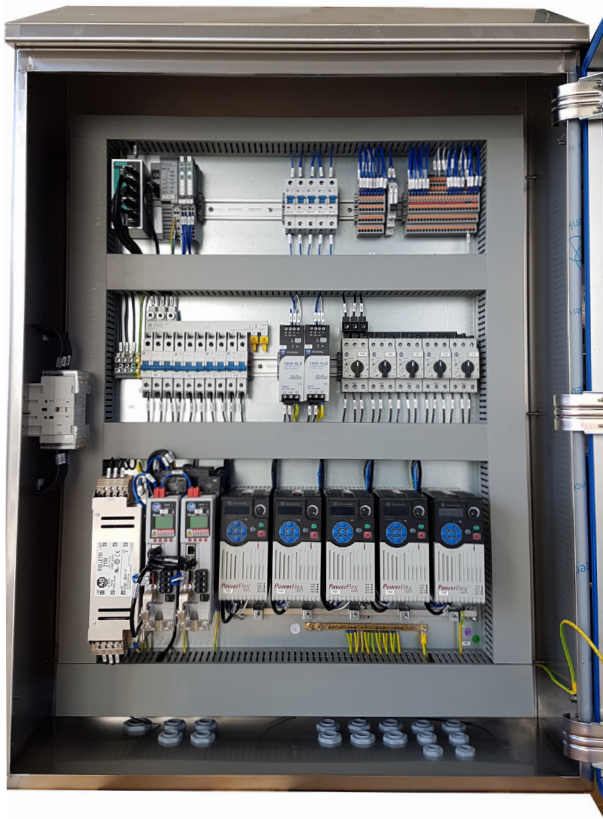
Donovan Ryan,
Managing Director of IAL

Outcome

The implementation of Rittal's Hygienic Design enclosures provided IAL with a durable and compliant solution, addressing all challenges effectively.

Key Benefits:

- **Extended Equipment Life Cycle:** Robust construction safeguarded automation systems against cleaning agents, water ingress, and temperature fluctuations, enhancing reliability and longevity.
- **Hygiene Compliance:** The stainless-steel finish, sloped roof, and blue seals ensured regulatory compliance and minimised contamination risks.
- **Ease of Maintenance:** Quick-release fasteners and a modular design simplified maintenance while upholding hygiene integrity.
- **Enhanced Aesthetic Appeal:** The clean and professional design complemented the automation system, impressing both IAL and its customers.



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Donovan Ryan,
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The success of this project established Rittal's HD enclosures as a standard for IAL and its customers, setting a new benchmark for hygiene-focused automation solutions in the food production industry. By delivering tailored solutions, Rittal continues to provide long-term value and operational excellence in hygiene-critical environments.