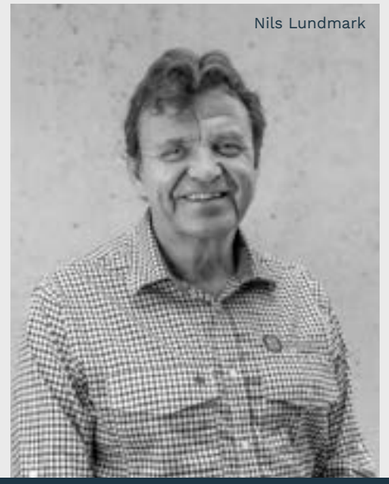
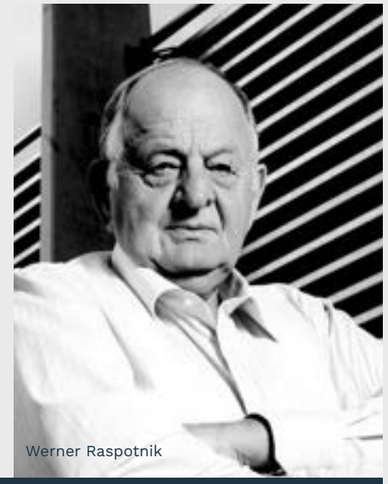
Scantec®
REFRIGERATION

CAPABILITY STATEMENT


Stefan Jensen


Nils Lundmark


Werner Raspotnik

Maintaining Innovation

We are refrigeration experts supporting a wide variety of industries including cold storage, food processing, beverage production, and the manufacturing and resource industries.

Scantec Refrigeration Technologies is an Australian specialist industrial refrigeration company, with the proven capability to deliver industry-leading solutions both nationally and internationally.

Founded by Werner Raspotnik, Stefan Jensen and Nils Lundmark over 30 years ago, Scantec provides the full package, managing everything from the design, and installation of the system through to servicing and preventative maintenance.

Backed by more than 200 years of combined industrial refrigeration experience, our team is now lead by Stefan and Nils, with a shared vision to exceed expectations on every project.

We’re constantly pushing for better outcomes through innovation and smarter technology.

Together we deliver projects with an unwavering commitment to quality, innovation, sustainability and efficiency.

30 YEARS | Scantec® REFRIGERATION

WHAT WE DO

Our strengths lie in advanced refrigeration technologies, system design, construction, installation, and comprehensive service, maintenance and spare parts for all types of refrigeration, freezing and environment control systems.

Technologies

Scantec specialises in all aspects of industrial and commercial refrigeration. Our focus has always been on improving and developing existing technology to be able to deliver more complete and efficient solutions. This focus has given us a formidable reputation within the industry. We are industry leaders in environmentally friendly refrigeration technology, predominantly employing environmentally benign natural refrigerants such as NH_3 and CO_2.

Construction

We are the trusted experts in the construction of large-scale refrigeration and control systems. We utilise our own experienced construction team enabling us to deliver quality results every time. Our advanced construction capability enables us to install or upgrade systems around your operating facilities, minimising expensive downtime. We have constructed thousands of systems to date, several hundred embedding our in-house designedcomputerised control and monitoring (SCADA) systems.

Design

We design advanced temperature regulated environments on an industrial scale. Every project has a unique set of requirements; we design and develop reliable and optimal solutions for each and every one. Good system design is not just about being functional and energy efficient, it can contribute to the profitability of your business. In large-scale facilities, where the energy consumption of the refrigeration plant is considerable, our efficient systems can positively affect your profitability.

Servicing

Have your system fully supported by the best back-up team in the business. We don't just service and support our own systems, our expertise is relied upon to service and maintain all types of industrial and commercial refrigeration and air conditioning systems. We offer a comprehensive 24/7 breakdown service. With a large range of spare parts on hand, our service fleet is able to respond quickly to minimise downtime and potential losses.

SCANTEC INNOVATION

Smarter Refrigeration.
Lower Energy Costs.
Sustainable Performance.

Scantec Refrigeration specialises in natural refrigerant solutions that deliver lower environmental impact and lower operating costs. By replacing synthetic refrigerants with ammonia (NH_3), we help businesses improve efficiency and future-proof their operations.

Proven Energy Savings

Our refrigeration systems consistently deliver exceptional energy performance.

- Reduced energy consumption from **100 to 60 kWH/m³/year** through a R22 to NH_3 conversion
- Achieving **15 kWh/m³/year** in a 65,000m³ distribution centre
- Achieving **<10 kWh/m³/year** in a 115,000m³ distribution centre

Future Ready Technology

Scantec's low-charge ammonia systems are designed to maximise efficiency, reduce environmental impact, improve safety, and support long-term operational performance.

Complete Project Delivery

From design to construction through to servicing and maintenance, our experienced team delivers refrigeration solutions that are reliable, efficient, and built to perform.

Our Technologies

Scantec's technologies are centred around engineered refrigeration systems that prioritise thermodynamic efficiency, reduced refrigerant inventory, and proven operational performance.

We specialise in low charge, direct expansion ammonia systems, designed to minimise refrigerant inventory while maintaining high heat transfer efficiency and stable control across varying load profiles. System performance is validated through measured power and operational data, allowing benchmarking of real energy consumption against design intent rather than relying on theoretical modelling.

Our ScanPAC is a containerised plant room that integrate compressors, vessels, electrical, and controls into a compact, pre-engineered solution that simplifies site installation, reduces construction interfaces, improves compliance outcomes, and enables plant relocatability where required.

Proprietary developments such as LOGAS defrost is used to optimise system efficiency and defrost energy utilisation. All systems are delivered through fully integrated in house capabilities, including mechanical design, electrical engineering, PLC and SCADA control, and construction, ensuring consistency from concept through to commissioning and long term operation.

LoGas™
SMARTER COOLING

Greener Faster

We identify smarter solutions that will help your organisation become more sustainable through leading technology. Refrigeration and cooling are major investments and running costs are an expensive ongoing cost centre. Our efficient technologies can deliver up to 75% reduction in energy consumption, which is better for both your bottom line and the environment. Scantec can help future-proof your business, allowing it to become Greener Faster™.

By investing now, you can meet sustainability targets sooner. Contact us today, whatever the task, and we will deliver an uncompromising commitment to quality, technological innovation and finding new and better ways of utilising existing technologies and systems.

DESIGN INNOVATION

Computerised Control and Monitoring Systems

Scantec designs and develops all computerised control and monitoring systems in-house through our specialist Electrical Engineering team.

We combine refrigeration and mechanical engineering expertise with advanced PLC and SCADA technologies to deliver smart, efficient control solutions that reduce energy consumption, improve reliability, and optimise plant performance.

With hundreds of systems operating successfully across Australia, China, Malaysia, Fiji, Vietnam, Solomon Islands and Papua New Guinea, our controls are proven in the field across a wide range of refrigeration and air conditioning applications. Each system is shaped by decades of practical experience, ensuring robust performance and fit-for-purpose design.

Our engineering knowledge is continually built upon through real-world application, creating a consistent and reliable control approach across all Scantec installations.

Through secure remote SCADA access, we also provide ongoing monitoring and analysis of plant performance. This enables early detection of issues, improved decision-making, and proactive maintenance to help prevent downtime before it occurs.

The result is intelligent control systems that deliver long-term efficiency, reliability, and peace of mind.

REFRIGERATION SERVICING

Computerised Control and Monitoring Systems

Keeping your refrigeration and air conditioning systems operating reliably is critical to your business.

Scantec's dedicated service team provides responsive support, preventative maintenance, and expert technical assistance to minimise downtime and maximise performance.

Available 24/7

- Emergency breakdown support, 24 hours a day, 7 days a week
- Rapid response from experienced service technicians
- Electrical engineers and PLC programmers available

Fast & Efficient Service

- Fully equipped service vehicles
- Extensive spare parts inventory to reduce downtime

Expert Technical Support

- Industrial and commercial refrigeration systems
- Air conditioning systems
- Electrical, PLC, and control systems

Preventative Maintenance

- Scheduled maintenance programs
- Early identification of potential issues
- Improved reliability and plant performance
- Reduced risk of unexpected breakdowns

OUR CLIENTS

We partner with clients across a diverse range of industries, from construction and cold storage to food processing, beverage production and manufacturing.

Our experience across these sectors allows us to deliver tailored solutions that meet the unique demands of every project.

ALDI
Bidfood
Goodman
Woolworths
CCA COCA-COLA AMATIL
FORTESCUE FUTURE INDUSTRIES
Heineken
snapfresh
markwell cold storage
SunPork Group
Lite n' Easy
KILCOY
TEYS
MINUS 1 REFRIGERATED TRANSPORT
Martin Brower
coles
Lineage
Sanitarium The Health Food Company
Blenners TRANSPORT
PRIMARY CONNECT
REDVALLEY FARMS
PFD FOODSERVICES
HILTON FOODS
space frame DESIGN + CONSTRUCT SOLUTIONS
mcnab
DOUGLAS CONSTRUCTION & ENGINEERING
CASTLEMAINE PERKINS

WHAT THEY SAY ABOUT US

GOURMET GARDEN HERBS SPICES

"This new facility is a striking feature on the Sunshine Coast Hinterland... and provides the business with the platform for which Gourmet Garden can grow to a significant global brand.

This project has been an extremely demanding and complex one which has challenged all involved. I would like to thank you for your hard work, persistence and patience - particularly through the most frustrating stages.

Liz Muller

Gourmet Garden | Project Manager

"We received a letter from Woolworths congratulating us on the successful completion of the Woolworths Regional Distribution centre, Perth.

Such letters are very rare, and we can all be proud of such an outcome. Thank you for your efforts, co-operation and support.

MULTIPLEX

Rob Lodge

Multiplex | Director Multiplex Constructions (WA)

CASE STUDY

Fernhurst
Melbourne, VIC

Fernhurst needed a single, energy-efficient facility to consolidate three existing cold storage operations into one advanced refrigerated logistics warehouse in Truganina, Melbourne.

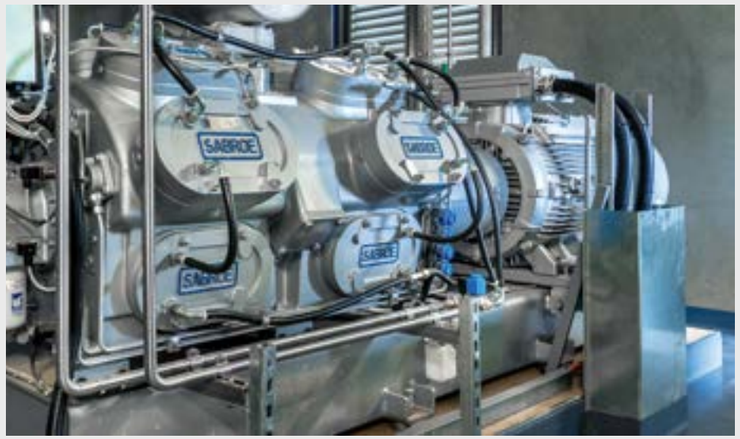
Scantec delivered a low-charge ammonia refrigeration solution designed to improve efficiency, support flexible operations, and provide a future-ready alternative to conventional HFC and CFC-based systems.

Summary

The Truganina facility features a centralised dual-stage, low-charge NH_3 refrigeration plant with batch blast freezing, developed to meet Fernhurst's varied storage and freezing requirements while keeping ammonia inventory low at 472kg.

The system saves around **$400,000** per year in energy costs, while doubling the refrigerated storage volume compared with the previous facilities it replaced. The plant includes innovative features such as a cold lake air distribution system and automatic ambient air defrost.

Recognised as a **winner** in the **2021 AIRAH Awards,** the project stands out as a high-efficiency, large-scale cold storage solution built around natural refrigerants.



Saving approximately **$400,000 per year** in energy costs

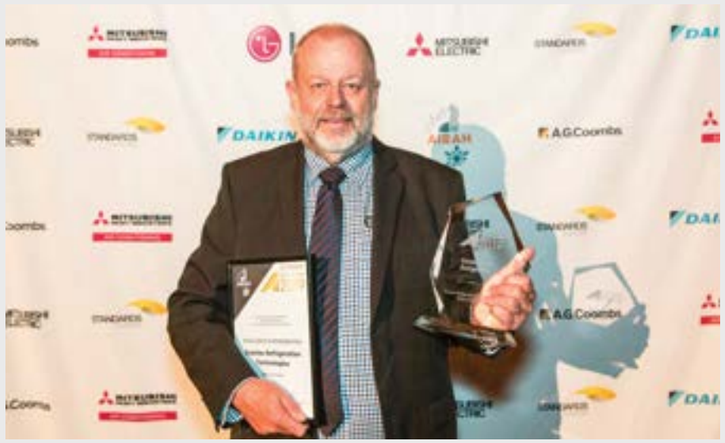
CASE STUDY

Bidfood
Mackay, QLD

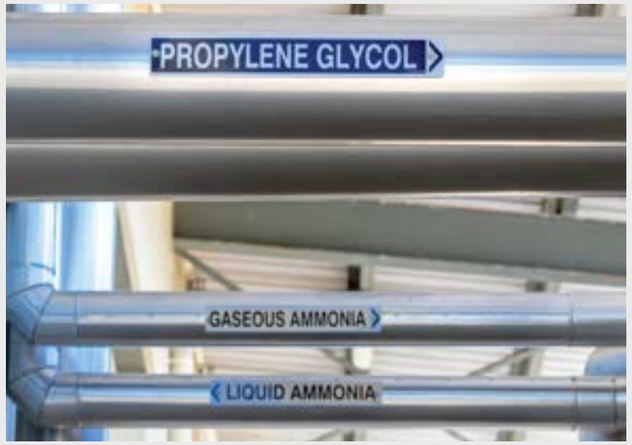
Bidfood Mackay needed an efficient, future-ready refrigeration solution for its distribution centre in a challenging warm, humid climate. Scantec delivered a ScanPAC packaged, centralised low-charge ammonia system to replace the site's HFC 404A plant, giving the customer a more sustainable and energy-efficient natural refrigerant solution.

Summary

The ScanPAC system was designed to reduce the ammonia charge while maintaining strong refrigeration performance for low- and medium-temperature applications. The installation was completed in August 2018 and delivered a recorded reduction in specific energy consumption from 206kWh/m³a to 88kWh/m³a during the initial monitored period, a 57 per cent improvement.



WINNER - 2019
Excellence in Refrigeration at National AIRAH Awards



CASE STUDY

Cold Store Retrofit
Melbourne, VIC

A large international cold storage company required a retrofit of an older refrigeration system at its Melbourne facility to improve efficiency, reduce refrigerant inventory, and modernise plant performance without compromising storage capability.

Scantec delivered a containerised ScanPAC plant room and converted the site from a pumped liquid recirculation ammonia system to a direct expansion ammonia solution.

Summary

The retrofit upgraded a 45,000m³ cold store with blast freezing by replacing the existing liquid recirculation NH3 plant, which had an approximate ammonia charge of 3,000kg, with a direct expansion NH_3 system using ceiling-suspended air coolers and an estimated refrigerant inventory of about 760kg.

Based on presented project results, average refrigeration power consumption reduced from 571kW to 213kW, a reduction of about 63 per cent, while the annual energy consumption was reduced by around 75%.

The result was a safer, lower-charge and significantly more energy-efficient refrigeration solution for an established cold storage operation.

Reduced annual energy consumption by **75%** and achieved approximately **63%** power consumption savings

CASE STUDY

High Rise Cold Store
Malaysia, South East Asia

A cold storage operator in Malaysia was expanding an inner-city warehouse with three 32 meter high freezer rooms and needed a refrigeration solution that could deliver stronger efficiency, lower ammonia inventory, and better suitability for a high-rise layout.

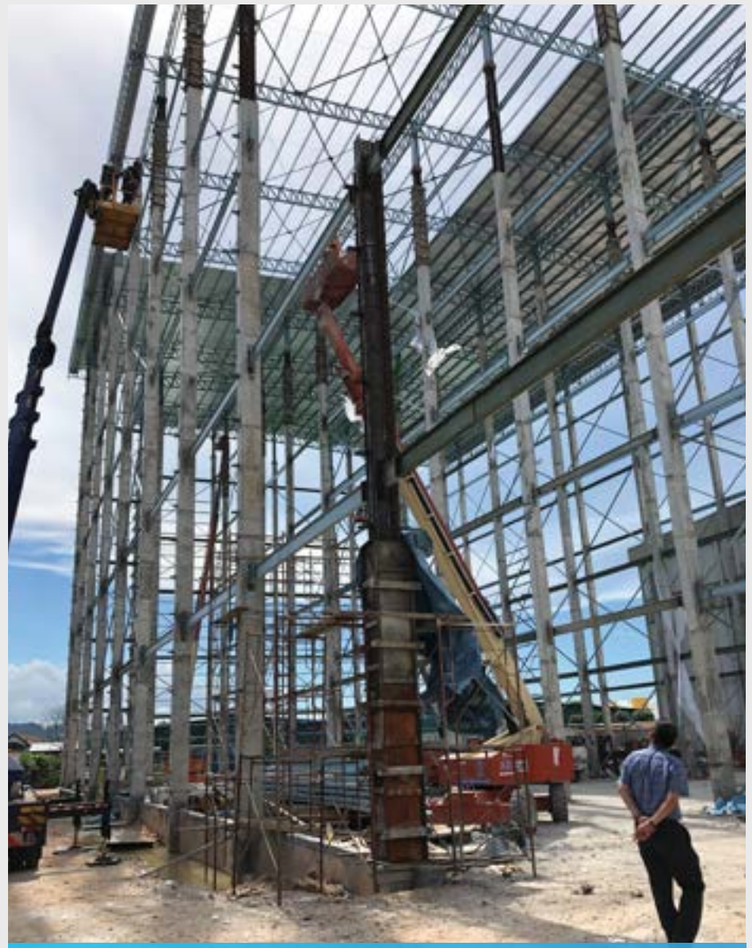
Scantec provided a low-charge ammonia system designed to support the new facility while addressing the performance limitations of the site's older liquid overfeed plant.

Summary

The new system was installed to serve a medium sized high-rise cold storage expansion with a refrigerated volume of approximately 112,000–113,000m³.

According to the published case study, the low-charge ammonia design achieved a specific energy consumption more than seven times lower than the facility's previous ammonia liquid-overfeed system, substantially outperforming expectations.

The project also helped minimise liquid content in the system for the high-rise building arrangement, improving overall practicality, efficiency and refrigerant management for a complex urban cold storage application.



Freezer rooms that are **32m high**

CASE STUDY

Quick Chill Tunnel (Meat Processing) Kingaroy, QLD

To support a new processing facility in Kingaroy, Queensland, Scantec delivered a dedicated quick chill tunnel refrigeration system designed for high throughput meat processing rather than conventional cold storage.

The project required rapid heat removal, tight temperature control, and a system configuration capable of supporting continuous production at very high volumes.

Summary

This ammonia refrigeration system services a quick chill tunnel for a new kill floor and is designed to cool up to 750 pig carcasses per hour, making it the largest quick chill tunnel for pigs in the southern hemisphere.*

The tunnel delivers cooling in less than two hours, operates across five temperature zones to help minimise chilling weight loss and bacteria growth potential, and uses approximately 2.9MW of tunnel cooling capacity at -35°C.

With features including stainless steel refrigerant pipework, sequential automatic hot gas defrost, and a secondary propylene glycol loop for medium temperature services, the project demonstrates Scantec's capability in advanced food processing applications as well as cold storage.

Designed to cool up to **750 carcasses per hour**

*at time of construction


30
YEARS
Scantec®
REFRIGERATION

CONTACT

Scantec Refrigeration Technologies

Refrigerant Trading Authority: AU00063
QBCC Act Licence: 77103
ABN: 76 073 109 065

Phone: +61 7 3890 9400
Email: sales@scantec.com.au

Locations

Head Office:	225 Queensport Rd North, Murarrie QLD 4172
Brisbane:	11 Davey Street, Moorooka QLD 4107
Melbourne:	3/9 Woolboard Road, Port Melbourne VIC 3207