



SPECIALIST

refrigeration consultancy

design verification

energy efficiency

risk assessment

refrigeration system design

News & Reports

Overview	Experience	Plant Services
Plant Safety	Environmental	Awards
Projects		

Commercial Refrigeration Development	Safety Audit Check List	Ammonia Piping Stress Analysis
--------------------------------------	-------------------------	--------------------------------



Ray Clark

email:ray@iseco.com.au

THE TEAM

Robert de Jong

email:robertdj@iseco.com.au

Craig Willis

email:craig@iseco.com.au

Jonathan Fryer

email:jonathan@iseco.com.au

Overview

ISECO Consulting Services is recognised as Australia's leading specialist consultancy in industrial refrigeration.

The success of the consultancy business has been underpinned by solid engineering base with a practical approach to problem solving and the application of the highest professional standards to obtain the best results for its clients.

Capabilities

Established in 1990, ISECO's founder Ray Clarke has 40 years experience in the refrigeration industry. Ray has held a number of senior posts with large refrigeration companies both in Australia and overseas in North America and Europe. Ray is past national president of AIRAH.

His team of professional engineers has the combined experience to undertake and manage anything from the simplest of tasks to complex plant design and evaluation.

Our Approach

We offer a total project approach working closely with end users. We can provide support for multi-disciplinary project teams of Architects, Structural Engineers and others. We also offer design and drafting services for contractors and manufacturers.

Experience

Over the last 16 years the company has been engaged in over 500 projects across a broad spectrum of industries, mainly in food production and storage.

- ☐ Meat & abattoirs
- ☐ Poultry processing
- ☐ Cheese & dairy
- ☐ Fish processing
- ☐ Fruit & vegetables
- ☐ Distribution centres
- ☐ Commercial and supermarkets
- ☐ Cold storage
- ☐ Beverages
- ☐ Process cooling
- ☐ Chemical
- ☐ Mining
- ☐ Road and rail link cross docks



Our Project Services

- ☐ Production Evaluation & Analysis
- ☐ Refrigeration Plant Development
- ☐ Detailed System Design
- ☐ Preparation of Tender Documents
- ☐ Tender & Quotation Analysis
- ☐ Project Budgets
- ☐ Project Management
- ☐ Claims Verification & Approval
- ☐ Project Documentation
- ☐ Cool Room Panel & Doors
- ☐ Industrial air conditioning design
- ☐ Ventilation and wash down systems
- ☐ Chilled water and glycol reticulation
- ☐ Design verification and sign off
- ☐ QA Documentation



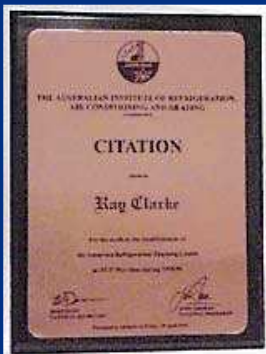
Awards

"The technical effort and perpetual assistance/directions given by ISECO has ...turned around this to an excellent results with a satisfied client"

WALTER Construction Group Limited

"On behalf of our mutual client I am very pleased to be able to commend you on your performance during the planning, delivery and commissioning of the Stapylton Qld Refrigerated Warehouse Project"

APP Project Management



**Winner of the
2003 Excellence in
Refrigeration Award**

ISECO Consulting Services offers independent consulting and project management to refrigeration users in the food, production and processing industries.

Melbourne Office

**723 Burwood Road, Hawthorn East, Vic. 3123
Tel +61 3 9882 7340, Fax +61 3 9882 7339**

Hobart Office

**8 Norwood Avenue, Taroona, Tasmania 7053
Tel +61 3 6227 9756, Fax +61 3 6227 9751**

www.iseco.com.au

iseco@vicnet.com.au

Our Plant Services

- Arbitration – Technical & Contractual
- Design Verification
- Energy Efficiency
- Maintenance Planning
- Pipe Stress Analysis
- Plant Trouble Shooting
- Pressure Vessel Design
- Risk Assessments
- Safety Audits
- Standards Interpretation
- Used Plant Evaluation
- Safe work procedures
- Training and supervision
- Standards compliance
- Emergency procedures
- Plant and equipment drawings
- Maintenance manuals
- Pressure vessel register
- Relief valve selection
- Relief valve register
- Plant and equipment valuations
- Standards Compliance Audits



Risk engineering plant safety

Plant safety and compliance

- Code compliance
- Detectors
- Respirators and chemical suits
- Ventilation
- Pressure vessels
- Relief valves

Training and authorities

- Ammonia emergency training
- Co-ordination with authorities
- Environmental monitoring – spills
- Safety data sheets
- Injury response

Risk management structure typical profile

- Emergency procedures manual
 - Fire
 - Ammonia leak
 - Hazardous chemicals etc
- Control organisation
 - response team
 - structure and responsibility
- Check list
 - Emergency numbers
 - Services and personnel
- Response resources
 - Sprinklers, and hose reels
 - Detection and alarm systems
- Evacuation
 - Procedures
 - Responsibilities
 - Escape routes
 - Alarm response



Environmental Engineering



- Energy
 - Plant design for minimum energy usage
 - Commissioning monitoring to attain design conditions
 - Plant duty optimisation for design conditions for minimum energy
- Refrigerant Selection
 - Selected to consider environmental interests
 - Occupancy considerations
 - Energy usage
 - Containment
 - Detection
- Water
 - Usage
 - Disposal
 - Treatment
 - Carry Over
- Oil and Chemicals
 - Selection
 - Disposal
 - Spillage
 - Treatment
 - Clean up
- Secondary Coolants
 - Selection
 - Pump Energy
 - Health and Safety
 - Corrosion
 - Spillage
 - Treatment
 - Clean up
- Sub Floor Design
 - Ventilation
 - Thermal Effect
 - Monitoring
 - Energy Control
 - Pollution



Commercial Refrigeration Development

ISECO can offer Custom Engineered Solutions that Match Your Needs.

- *Compressor & Plant Controls*
- *Supermarket Installations*
- *Packaged Plant Rooms*
- *Chilled & Frozen Product Storage*
- *Specialized Requirements*
- *Documentation*
- *System testing*
- *Compliance review*

For further information contact ISECO



Energy Audits Services

What is an Energy Audit?

An Energy Audit is a stock take of energy consumed on your premises.

When do you undertake an Energy Audit?

- When your bills have escalated.
- When there is a suspicion of energy inefficiencies.
- As part of an Energy Management plan

What will we do during an Energy Audit?

- Identify the purpose of the Energy Audit.
- Define the three levels of Energy Audits.
- Investigate energy usage
- Establish an inventory of equipment.
- Explain the benefits.

What are the outcomes of an Energy Audit?

- Locate energy inefficiencies
- Improved efficiency
- Achieve cost savings
- Provide the users an Energy management plan