

**Advancing Food Safety & Quality
Through Hygienic Design**

EHEDG Basic Course - Hygienic Design Principles

Thursday 28th October 2021



**Waipuna Highbrook
Conference Suites**

Organizer: EHEDG New Zealand <https://www.ehedg.org/>

Date: 28th October – 2021 8:45am – 5:00pm

Training Venue: Waipuna Highbrook Conference Suites, Ground Floor, Quest Building, 60 Highbrook Drive, East Tamaki, Auckland 2013

Course Overview:

Hygienic Design of food manufacturing facilities, equipment and services is an essential, but often under-appreciated, pre-requisite requirement of HACCP-based food safety management programmes. Consequently, many food hygiene issues have hygienic design failings as a root cause, leading to high remedial and investigative costs, productivity losses and in serious cases product recalls. With proper knowledge and training these losses are entirely preventable.

The objective of this one-day course is to provide general knowledge and understanding of hygienic design principles for food manufacturing facilities and equipment and their importance to food safety outcomes for the food industry. The course is aiming to:

- provide an introduction to the benefits and importance of Hygienic Design;
- provide understanding on core Hygienic Design criteria for equipment and facilities, including detailed engineering concepts as appropriate;
- communicate the Key Learning Points from relevant EHEDG guidelines and EHEDG teaching aids and providing links to detailed Guidelines for specific applications;
- create awareness of the EHEDG Organisation and how it supports practical implementation of hygienic design principles;

The theoretical fundamentals of the different subjects are given in a short and concise way, relating these to practice by means of examples by video, pictures or samples.

Target Groups and their Acquired Competencies

- **Food Manufacturing Industry Personnel, including:**
 - Management responsible for decisions regarding risk assessment, plant and process modification, project management and cost appropriation; and
 - Operations supervisors responsible for line efficiencies and staff; and
 - Quality Assurance staff responsible for delivering safe food and shelf-life outcomes; and
 - Engineering staff responsible for installing, operating and maintaining food machinery or food processes; and
 - Sanitarians responsible for maintaining hygienic status of process equipment.
- **Equipment Engineering Supply Companies**
 - Design and installation personnel responsible for supplying processing equipment, fit for purpose, and capable of being cleaned and maintained to a hygienic level appropriate to the industry standards required.
- **Auditors, Inspectors, Testers, Service Supply Companies and Consultants**
 - At completion of the course to understand the hygienic design principles required to verify or test the conformance of hygienic equipment and associated systems and documentation to recognised standards.

This course will provide participants with a general awareness and understanding of hygienic design principles to be considered in their processes and facilities, and to enable hygienic risk assessments to be undertaken for new and existing processes. With the benefit of further support from EHEDG Guidelines and Training, attendees can progress to leadership of such activities.

Course Detail

The Basic Course is a full one-day programme addressing the following core hygienic design elements:

- Legislation overview
- Hazards in hygienic engineering
- Hygienic Design criteria
- Materials of Construction
- Building and process layout
- Cleaning and Disinfection

Information on EHEDG structure, mission, further training options and membership will be provided.

Hard copy training materials will be provided as part of the course, along with a certificate of attendance. A light lunch and refreshments will be included.

Course Registration

Numbers: This course requires a minimum of 20 people to proceed but is limited to the first 40 applicants. *Registrations must be received by October 7th.*

Course Fees: NZ\$700 + GST

Discounts: Discounts apply for multiple registrations from the same company, students and for EHEDG members. Visit the registration site for details.

Registration: Details at www.nzifst.org.nz.

If accommodation is required, the training venue is in the same complex as the Quest Apartments - <https://www.questapartments.co.nz/properties/north-island/auckland/quest-highbrook>

Trainers

The course content will be delivered in by; Shane Mason – Engineering Manager, Pentair New Zealand; and David Lowry, Managing Director of Lowry Food Consulting and Chairperson of EHEDG New Zealand. Shane and David are authorised EHEDG Trainers.

Shane Mason



Shane Mason is a very experienced professional mechanical engineer, currently working as Engineering / R&D Manager for Pentair Flow Technologies Pacific Pty. Ltd based in Hamilton, a position which he has held since 1992. His career began at MIRINZ designing, building and testing prototype mechanical de-boning equipment for lamb carcasses. He then moved to NDA Engineering in Hamilton as an R&D Engineer / Technical Sales Manager developing farm milk holding tanks and ancillary equipment. He solely developed new techniques for Hydro-forming of stainless steel vessel domed ends for both road tankers and large fabricated liquid storage silos.

In his role with Pentair he has had sole responsibility for the re-development and ongoing support of all products in the current Pentair Hygienic Valve portfolio and including a HOVAP Hygienic pump range. The projects involved: plastic and electronic component design, PLC BUS protocol variants, integration of other OEM pneumatic valves and electronic proximity switches, tooling design and elastomeric seal design.

A key element of this work has been application of hygienic design principles and he has undertaken both 3-A and EHEDG certification requirements for the products and markets. Shane has successfully completed a Certified EHEDG Advanced Training Course.

David Lowry



David has 40 years' experience in the NZ and global food industry with a primary focus on microbiological quality and safety of food manufacturing operations. David has worked closely with food professionals and regulators across all industry sectors, with special focus on red meat, seafood, poultry, produce, dairy, RTE foods and bottled water operations. He has strong expertise in pathogen and shelf-life troubleshooting, and particularly the importance of hygienic design and effective hygiene programs in food quality and safety.

His professional career started at MIRINZ undertaking fundamental and process-related microbiological research for the meat industry and other aligned protein sector industries, mainly addressing key pathogens, spoilage profiling and predictive modelling and direct technical support to process operations. He then moved to ECOLAB focusing on cleaning and sanitation program development with multiple leadership roles in the Australian and New Zealand operations as well as 6 years spread across Ecolab's global business based in the US and Asia Pacific. David now has his own consultancy company – Lowry Food Consulting Ltd. - <https://www.foodinc.co.nz/>

His extensive experience in microbiological troubleshooting and incident prevention, and the desire to drive hygienic design improvements and efficiencies in the food industry led to his mission to establish a regional section of EHEDG as a primary resource for the NZ Food Industry where he is currently the chairperson of EHEDG New Zealand. Dave has successfully completed a Certified EHEDG Advanced Training Course. He is a Fellow of NZIFST and is a regular presenter and Food Industry Conferences and other training events.

For further information contact: info@ehedg.co.nz