

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

EHEDG Advanced Course on Hygienic Design

1st October to 3rd October 2019



**Food Innovation Network – Food Bowl
Auckland**

info@ehedg.co.nz

www.ehedg.co.nz

Organizer: EHEDG New Zealand <https://ehedg.co.nz>

Date: 1 – 3 October 2019

Training Venue: The FOOD BOWL, 22 Verissimo Drive, Mangere, Auckland
<https://foodinnovationnetwork.co.nz/locations/foodbowl>

Course Overview:

The objective of this course is to provide knowledge and insight into the hygienic design of equipment and hygienic engineering aspects especially for the food, but also for the cosmetics, pharmaceutical, biotechnology and chemical industries. The course is aiming to:

- create awareness of the EHEDG Organisation
- explain the benefits and importance of Hygienic Design
- provide understanding on the key Hygienic Design criteria for equipment and facilities, including detailed engineering concepts
- communicate the Key Learning Points (KLPs) from all relevant EHEDG guidelines and EHEDG teaching aids such as training modules, case studies and videos
- The course is given from a very practical viewpoint. The theoretical fundamentals of the different subjects are given in a short and concise way, continuously relating these to practice by means of examples on video, pictures or samples. Small groups are preferred in order to make the course interactive.

Target Groups and their Acquired Competencies

- **Designers from Technical Engineering, Process Development and Quality Assurance**
 - After completion of the EHEDG Advanced Course on Hygienic Design, the qualified participant should be able to discharge successfully the role of sole responsible expert in hygienic design for design, construction or operational teams involved with food machinery or food processing.
- **Management, Marketing and Sales Staff from Design & Mechanical Engineering Companies and Food Manufacturers**
 - Sales and marketing professionals need to have sufficient knowledge of hygienic design to assure that sale and development of existing or new products comply with the above requirements. After completion of the EHEDG Advanced Course on Hygienic Design, the qualified participant should be in a position to discharge successfully the role of executive manager or marketing or sales professional in an organisation involved in designing, installing, maintaining or operating and cleaning food machinery or food processes and systems in such a way that hygienic safety is established and maintained.
- **Operators, Maintenance Engineers, Installers and Sanitarians**
 - After completion of the EHEDG Advanced Course on Hygienic Design, the qualified participant should be competent to operate, maintain, install and clean food machinery or processes in such a way that its hygienic safety is established and maintained, provided the general training is complete.
- **Auditors, Inspectors, Testers, Consultants and Certifiers**
 - After completion of the EHEDG Advanced Course on Hygienic Design, the qualified participant should be competent to verify or test the conformance of hygienic equipment and associated systems and documentation to recognised standards, including [EHEDG Document 8](#).

Course Detail & Timetable

Day 1: Tuesday 1st October	
Timetable	Topic
9:00 – 9:15	Registration and introduction of delegates
9:15 – 9:30	EHEDG Introduction
9:30 – 10:15	Legal Requirements
10:15 – 10:30	COFFEE BREAK
10:30 – 11:45	Hazards Controlled Through Hygienic Processing
11:45 – 12:30	Materials of Construction & Surface Treatment of Stainless Steel
12:30 – 13:15	LUNCH
13:15 – 14:30	Hygienic Design Criteria
14:30 – 15:00	Welding Stainless Steel Tube Systems
15:00 – 16:00	Working Coffee Break and Case Studies Part 1
16:00 – 17:15	Dry Materials Handling - General
Day 2: Wednesday 2nd October	
9:00 – 10:15	Static Seals & Pipe Couplings
10:15 – 10:30	COFFEE BREAK
10:30 – 11:30	Valves
11:30 – 12:30	Pumps and Homogenizers
12:30 – 13:15	LUNCH
13:15 – 14:15	Cleaning & Disinfection
14:15 – 15:00	Verification and Certification
15:00 – 15:15	COFFEE BREAK
16:00 – 17:15	Case Study Part 2
Day 3: Thursday 3rd October	
9:00 – 10:15	Food Factory Design and Process Layout
10:15 – 10:30	COFFEE BREAK
10:30 – 11:45	Equipment Installation & Maintenance, Lubricants
11:30 – 12:30	Sensors, Packaging Machines, Aseptic Processes
12:30 – 13:30	Working LUNCH and Case Study Preparation of Final Presentations
13:30 – 15:00	Case Study Presentations on Equipment
15:00 – 15:15	COFFEE BREAK
15:15 – 16:15	Hygienic Design – Final exam Questionnaire

Course Qualification

A certificate for successful completion of the final exam – “EHEDG Advanced Course on Hygienic Design” will be delivered to participants. Participants will be offered the opportunity to have their name published in the Training Section of the EHEDG website.

EHEDG Certified Trainer

The course will be delivered by Andy Timperley, Chairman of the EHEDG Working Group for Certification. See a profile for Andy below.

Course Registration

Numbers: The course is limited to the first 24 persons who apply

Course Fees: NZ\$2400 + GST

Discount: EHEDG Company or Institute members – 10% discount

Registration: Details at www.nzifst.org.nz

Links: <http://ehedg.co.nz> ; <https://www.ehedg.org/training-education/>

Location: The Food Bowl is in the Auckland airport precinct. Numerous hotel options are nearby.

Andy Timperley Profile



Andy Timperley is an Hygienic Design Engineer, working as a Consultant to the Food Industry. He has over thirty five years' experience in engineering related disciplines since joining a Fluid Power Research Association in 1980 and subsequently Campden BRI in 1988. Since leaving Campden BRI in 2006 his main activities include;

- Providing consultancy on equipment selection and system design issues.
- Conducting hygienic design audits of food factories and troubleshooting.
- Conducting third party inspections of equipment and issuing Certification documentation in conjunction with the EHEDG Certification Scheme.
- Conducting third party verification (TPV) inspections of equipment on behalf of 3-A Sanitary Standards Inc. to support the application of 3-A and P3-A symbols.
- Conducting basic and advanced hygienic design training courses in conjunction with EHEDG and for specific Companies
- Providing material for guideline documents on hygienic design of equipment and food factories.
- Producing Hygienic Design Guidelines and Test Methods in conjunction with the EHEDG.

Andy also provides hygienic design consultancy to the European Standards Organisation (CEN) as the named UK Hygiene Expert responsible for hygienic design issues relating to plenary and machine specific 'C' Standards which are then published in the UK by the British Standards Institute. In February 2004, Andy became the first European based Certified Conformance Evaluator (CCE) for 3-A Sanitary Standards Inc. In June 2006 Andy was elected Chairman of the EHEDG Test Methods Sub-group and continues to be the Chairman of the re-named EHEDG Working Group Certification. In January 2009, Andy qualified as a CCE for the P3-A group of Standards for pharmaceutical equipment. Andy was appointed as an EHEDG authorised trainer in July 2009 and continues to provide EHEDG Basic and Advanced Courses on Hygienic Engineering.

Andy has his own company – Timperley Consulting: www.timperleyconsulting.co.uk

Food Innovation Network <https://foodinnovationnetwork.co.nz/>

The New Zealand Food Innovation Network (NZFIN) is an accessible, national network of science and technology resources created to support the growth and development of New Zealand food & beverage business of all sizes. NZFIN also provides facilities and the expertise needed to develop new products and process from idea to commercial success.



The FOODBOWL is an open access facility operated by NZ Food Innovation Auckland. The FOODBOWL was designed as a facility where companies can do research and development trials, pilot scale and commercial runs of new products for domestic and export markets.