

High Level International  
Advanced Course

# Hygienic Engineering and Contamination Control

- for the food and pharmaceutical industry as well  
as equipment manufacturers



## Place

DTU Hygienic Design Centre,  
National Food Institute  
Technical University of Denmark

DK-2800 Lyngby

## Time

23-26 November 2015

## Aim

The course gives knowledge about and insight into the hygienic design of equipment and processes for the pharmaceutical and food industry, and suppliers will be better able to use this knowledge to satisfy the needs of consumers and regulators.

Investing in hygienic design can – when optimally used – lead to diminished down time, lower maintenance and cleaning costs, and less environmental impact with efficient cleaning, optimal product safety and constant product quality as a result. The course trainers will show participants how to fulfil current legislation and standards and also how to anticipate future changes.



## Participants

The course is originally targeted at the food industry with service procedures. Drawing on knowledge of the industries involved, we believe that there is valuable science-based information for pharmaceutical, cosmetic and related industries as well as their suppliers. The course is targeted at mechanical engineers, managers and supervisors in the food and pharmaceutical industry, constructors, draughtsmen, project managers and sales engineers, who are active in using, building or servicing equipment for industries that rely on hygienic or aseptic processing. The course is also excellent for technical and quality assurance staff in these industries.

## Previous training and working experience

Participants should have a minimum of two years of relevant practical experience. Participants with equivalent training or experience may be able to participate after consulting the course trainers.

# The course

## Course duration

The course duration is four days, starting at 8.30 and ending at 17.30 - full see program on pages 5-8. Four lunches and three dinners are included.

## Form and content

The course is given from a very practical point of view. The theoretical fundamentals of the different subjects are given in a short and concise way with the course trainers continuously relating these to practice through examples on video, pictures or physical samples. The design guidelines are justified in terms of the basic properties of microbes and original experimental evidence.

Through team case studies, carried out in the Hygienic Design Center and pilot plant, you will get hands-on opportunities to test your new knowledge. The course gives you tools to solve hygienic problems within your own organisation. The course is very interactive because training takes place in small groups. For more information on content, please contact Associate Professor Gun Wirtanen at [guwi@food.dtu.dk](mailto:guwi@food.dtu.dk). There will be an exam (aids allowed). Participants will receive an EHEDG certificate after attending the full course.

# Costs and cancellation

## Registration fee

The cost of the course is €2000, inclusive of course notes, coffee/tea, and four lunches and three dinners (ex. VAT). EHEDG members will receive a €200 discount. Note that individual membership can be used only for the person(s) being the member(s).

If more than three employees from the same company want to participate, please contact [lihol@food.dtu.dk](mailto:lihol@food.dtu.dk) (coordinator Lissi Holm at DTU Hygienic Design Center) for a special price.

## Cancellation

You can cancel your registration free of charge up until 23 October 2015.

If your registration is not canceled, the organisers will charge the full price. Alternatively the company can send a colleague.

## Contact

**For further information regarding the course:**  
Associate Professor Gun Wirtanen, [guwi@food.dtu.dk](mailto:guwi@food.dtu.dk)

**For questions regarding hotel accommodation  
and course place:**

Lissi Holm, [lihol@food.dtu.dk](mailto:lihol@food.dtu.dk)

10.00 – 10.30	Registration and coffee/tea
10.30 – 11.15	Introduction and participant presentation
11.15 – 12.00	Legal requirements
12.00 – 13.15	Lunch break
13.15 – 14.00	Scientific background to EHEDG documents
14.00 – 14.45	Hygienic design of open process equipment
14.45 – 15.30	Hygienic design of closed process equipment
15.30 – 16.00	Coffee/tea break
16.00 – 16.45	Summary of the day and participant expectations
19.30 –	Dinner

08.15- 08.30	Registration and coffee/tea
08.30 – 09.15	Certification procedure including EHEDG test procedure for closed equipment
09.15 – 10.00	Food microbiology
10.00 – 10.30	Coffee/tea break
10.30 – 11.15	Surface and air microbiology
11.15 – 12.00	Equipment material - stainless steel and polymers
12.00 – 13.15	Lunch break
13.15 – 14.00	Welding stainless steel
14.00 – 15.30	Common demonstration on hygienic design
15.30 – 16.00	Coffee/tea break
16.00 – 17.30	Group work 1 - 3: Hygienic design of various process items, surface hygiene and EHEDG test procedure for closed equipment
19.30 –	Dinner

# Day 3

Wednesday 25/11

08.15- 08.30	Registration and coffee/tea
08.30 – 09.15	Static seals and couplings
09.15 – 10.00	Fluid dynamics
10.00 – 10.30	Coffee/tea break
10.30 – 11.15	Valves
11.15 – 12.00	Pumps (dynamic seals) and case study on pumps
12.00 – 13.15	Lunch break
13.15 – 14.00	Heat treatment (heat transfer)
14.00 – 15.30	Group work 2 - 3: Hygienic design of various process items, surface hygiene and EHEDG test procedure for closed equipment
15.30 – 16.00	Coffee/Tea Break
16.00 – 17.30	Group work 3 - 3: Hygienic design of various process items, surface hygiene and EHEDG test procedure for closed equipment
19.30 –	Dinner



08.15- 08.30	Registration and coffee/tea
08.30 – 09.15	Cleaning & Disinfection - Cleaning Procedures in Open and Closed Processes
09.15 – 10.00	Cleaning and disinfection - Cleaning agents & disinfectants
10.00 – 10.30	Coffee/tea break
10.30 – 11.15	Foodgrade lubricants
11.15 – 12.00	Exam (aids allowed)
12.00 – 13.15	Lunch break
13.15 – 14.00	Integration, installation and maintenance
14.00 – 14.45	Building and process layout
14.45 – 15.30	Concluding remarks, course certificates and course evaluation by participants
15.30 – 16.00	Coffee/tea break with sandwiches
16.00 – 16.45	Bus to Copenhagen and thereafter to the hotel for those who are staying until Friday

## Registration form

# Course on Hygienic Engineering and Contamination Control

23-26 November 2015

Register no later than 1 November

Name \_\_\_\_\_

Company \_\_\_\_\_

Address / P.O. Box \_\_\_\_\_

Zip code, city/town & country \_\_\_\_\_

Phone direct/GSM \_\_\_\_\_

E-mail \_\_\_\_\_

EHEDG Member:  Yes  No

Invoicing adress (if different from above given adress)  
\_\_\_\_\_  
\_\_\_\_\_

Scan the form and send it as an attachment to Lissi Holm by e-mail.  
Alternatively send the above information by e-mail.

Phone: +45 45 25 25 58

E-mail: [lihol@food.dtu.dk](mailto:lihol@food.dtu.dk)

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