

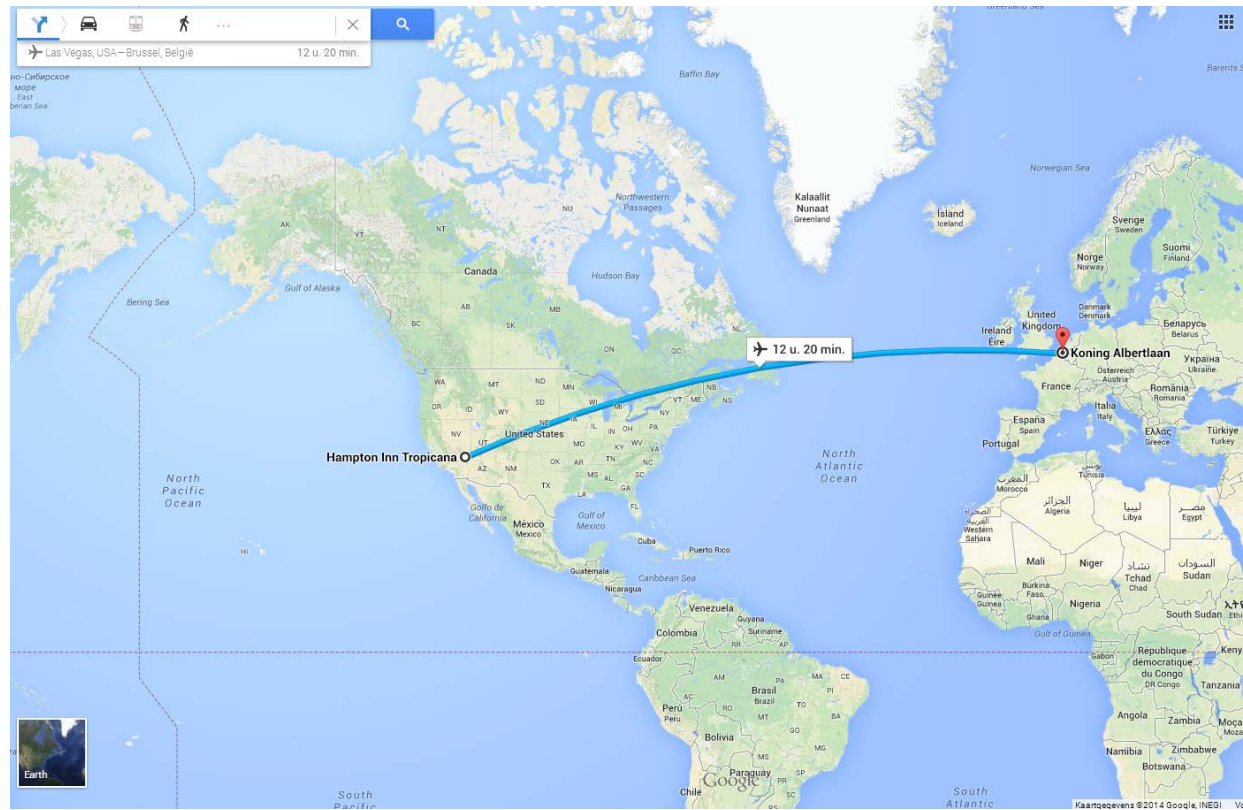


Ensuring safe food production by providing guidance as an authority on hygienic engineering and design for food manufactured in or imported into Europe



Belgium, land of beer and chocolates...

And also



## Sealed Air

**CRYOVAC®**

**Diversey**

We protect what's important - helping people live healthier, eat better and ship products safely around the world. We strive to be the global leaders in food safety & security, facility hygiene and product protection.

- Approximately 25,000 employees
- Net sales of ~ \$8 billion
- Operations in 62 countries with distribution reaching 175 countries
- 145 manufacturing facilities
- 56 Labs/Research Facilities
- More than 500 scientists and engineers
- More than 1000 equipment and application experts
- 4,600 patents
- More than 9000 trademarks

# Problem Statement

Although manufacturers and food companies comply with standards and regulations, yearly thousands of food-borne diseases happen as a result of not hygienically designed food processing equipment, process lines or plants.

The reason is that there are two major gaps:

- **Lack of practical guidelines**
- **Lack of education**

# What is EHEDG?

**EHEDG was founded 1989 as a non-profit consortium of:**

- **Equipment manufacturers**
- **Food industries**
- **Suppliers to the food industries**
- **Research institutes and universities**
- **Public health authorities**

**Since that time, the European Hygienic Engineering & Design Group is guiding the industry in hygienic design solutions by offering practical guidelines, test procedures, training and education.**

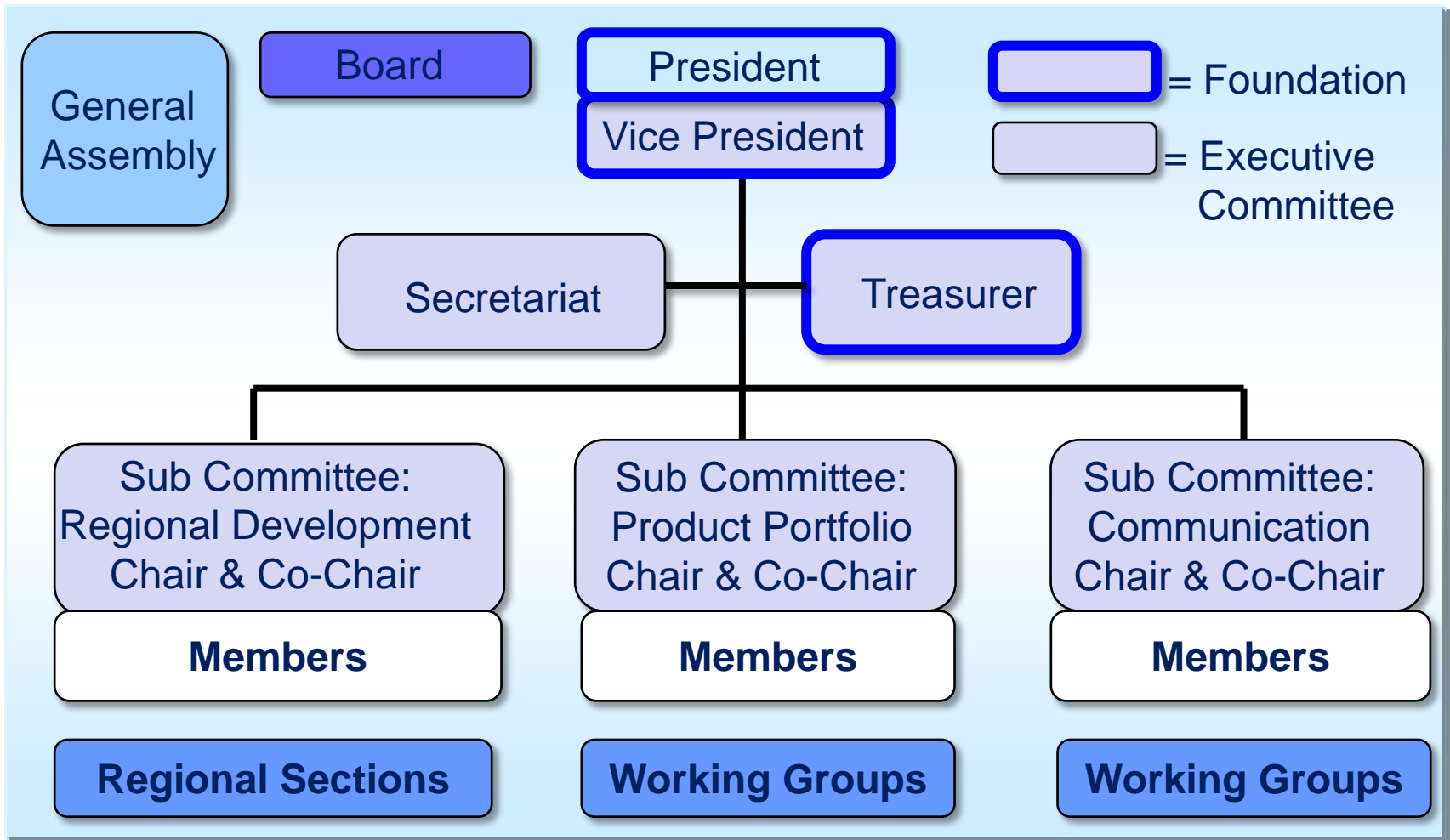
# EHEDG tasks and objectives

- Fill the existing gaps by practical guidelines and education
- Offer expertise and networking on a voluntary basis
- Discuss and further develop hygienic design issues
- Prepare scientific and technical guidelines on all aspects of state-of-the-art hygienic design requirements in accordance to EU legislation
- Develop test methods in order to identify and eliminate HACCPs of equipment used in food production

# EHEDG tasks and objectives

- Offer training courses, seminars and workshops on hygienic design
- Strengthen the participation in standardisation bodies like CEN, ISO, DIN, JIS, 3-A, NSF etc.
- Strengthen the cooperation with the EU (i.e. food contact material directive, traceability and other EU-Projects)
- Promote and disseminate hygienic design know-how by print media, congresses, seminars and workshops

# Structure of the EHEDG





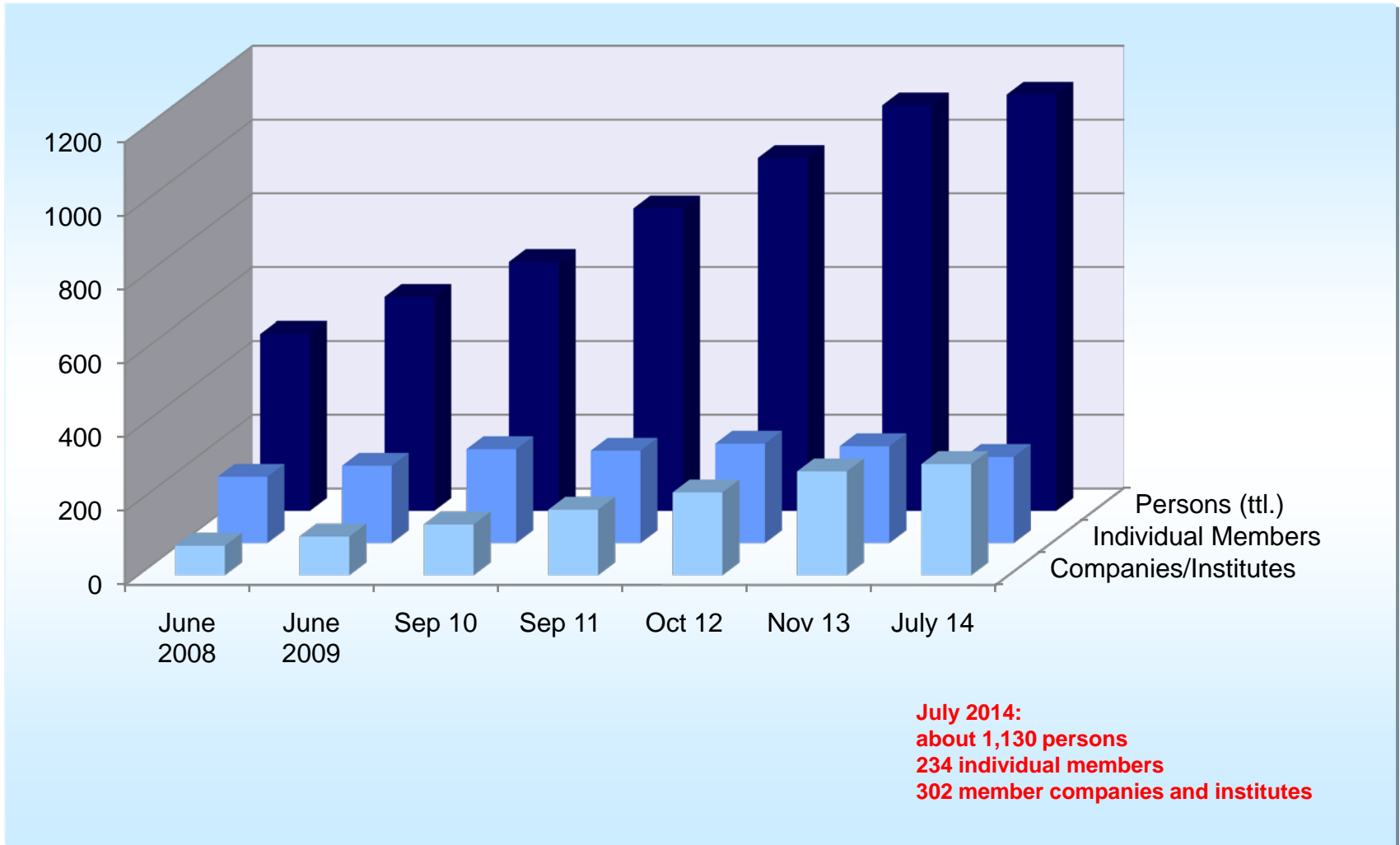
# EHEDG Strategy

**"EHEDG enables safe food production by providing guidance as an authority on hygienic engineering and design for food manufactured in or imported into Europe" (EHEDG ExCo, mission agreement 2012)**

# EHEDG Strategy Discussion

- The **Executive Committee** is appointed by the Board (every 3 years).
  - Members: President, Vice-President, Treasurer as well as the Leaders and Co-Leaders of each Sub-Committee.
  - Main tasks: to drive implementation of EHEDG work plans and approved work programmes, develop a strategy for EHEDG with annual budgets, fees and plans, secure approval by the Board. The Executive Committee regularly communicates important decisions, progress and accomplishments to the members.
- In addition, the following **Sub-Committees** are established to develop the future organisational structure of EHEDG in the following thematic clusters:
  - Product Portfolio (Guidelines/Subgroups, Training, Certification)
  - Regional Sections
  - Communications & Membership relations
  - Sub-committees consist of a leader, a co-leader and appointed members (experts in the field). The role of the Sub-Committees is to lead and develop the specific strategies and programs in relation to their own area of responsibility.

# EHEDG Membership Development



# EHEDG Working Groups

## Active:

- Air Handling\*
- Bakery Equipment
- Building Design\*\*
- Cleaning in Place
- Cleaning Validation
- Conveyor Systems\*\*
- Dry Materials Handling
- Fish Processing
- Food Refrigeration\* (finalization of draft 2005)
- Heat Treatment (Update of Doc. 1 and 6)\*
- Materials of Construction in Contact with Food (update of Doc. 32)\*
- Mechanical Seals\*

- Open Equipment\*
- Seals
- Tank Cleaning
- Test Methods
- Training & Education
- Valves\*
- Welding\*

## Projected:

- Membrane Filtration
- Hygienic Equipment (i.e. brushes)

\* = Update of existing documents

\*\* = Draft under final review

**Today: Over 400 voluntary experts actively involved into 19 Working Groups  
42 guidelines published - THANK YOU !**

**for further information see [www.ehedg.org](http://www.ehedg.org)**

# EHEDG Working Group Tasks

The EHEDG Working Groups meet to develop guidelines and revise existing documents (based on reference documents, research work and development of own test methods).

The Working Groups highlight selected topics and describe typical problem statements, hygiene risks as well as causes of faults and defects.

- EHEDG guidelines define likely weak points and describe problem solving; they are picture-illustrated and practically oriented
  - ➔ **Keep things simple and easy to understand!**
- Where appropriate, guidelines are added by special considerations (i.e. trouble shooting, traceability and maintenance tasks)
- EHEDG documents are harmonized with 3-A standards

Further, the EHEDG Working Groups provide guideline translation by experts who are native speaking experts and they publish technical articles

**For activities and expertise required, see [www.ehedg.org](http://www.ehedg.org) > News > Working Group Activities**

# Regional Sections

**EHEDG is growing world wide and has members in 55 countries today**

## **Existing Regional Sections (24):**

Armenia, Belgium, Croatia, Czech Republic, Denmark, Germany, France, Italy, Japan, Lithuania, Macedonia, Mexico, Netherlands, Nordic (FI, S, NO), Poland, Russia, Serbia, Spain, Switzerland, Taiwan, Thailand, Turkey, Ukraine

## **Coming soon:**

Brazil, China, U.K., Uruguay



**A global network!**

**for further information see [www.ehedg.org](http://www.ehedg.org)**

# EHEDG Regional Sections - Tasks

## Disseminate know-how in hygienic design by

- Organization of seminars and workshops
- Organization of local training courses
- Organization of trade shows

## Guideline translation

## Publications and articles

## Activities to gain new members

Translate EHEDG website contents, publish local news on the web and in the Newsletter

Prepare and fulfil an annual business plan

# EHEDG Regional Sections – YOUR Network

## The „Big Thirty“:

Make use of the EHEDG to strengthen your relations with the important market players who are part of our network and also involve your subsidiaries abroad. Please recommend us and let us know of your contacts at site to get them connected to EHEDG

We enhance the reputation of our member companies and help them to become leaders in hygienic design and processing.

We provide networking on an international level, opportunities for the establishment of global contacts and are interlinking our Regional Sections.





# EHEDG Education and Training

- EHEDG provides international, high-level training & education and our training material is developed by recognized experts in the field
- Translation of the training material into many languages is in progress by the regions
- The 'International Advanced Course on Hygienic Design' is standardized and offered in many countries
- EHEDG courses in 2014:  
Germany, Italy, Japan, Mexico, Netherlands, USA, Spain, Taiwan, Turkey
- Attendees who have successfully passed an EHEDG training course exam are published on our website (if agreed).

European Hygienic Engineering & Design Group

### (Micro)biological contamination

#### Microorganisms

- yeasts and moulds, algae; bacteria; viruses (can not survive on surfaces)

Source: D. Hiltbragen, TU Dresden  
Saccharomyces cerevisiae

Source: D. Hiltbragen, TU Dresden  
red: E. coli; green: l. orange: Salmonella

http://spatmicro.med.sc.edu/viralhep-a5.jpg  
Hepatitis A Virus

European Hygienic Engineering & Design Group

### Contamination routes

#### Human error - Contamination source No.1

Forehead – 100-1000 / cm<sup>2</sup>

Nasal fluid – app. 10 million / gm

Hands – 10,000-100,000 cm<sup>2</sup>

Groin – 1-20 million / cm<sup>2</sup>

Scalp – approx. 1 million / cm<sup>2</sup>

Saliva – approx. 10 million / gm

Ampit – 1-10 million / cm<sup>2</sup>

Feet – 1 million / cm<sup>2</sup>

Faeces – greater than 100 million / gm

guide to GMP, Revision Annex 1, 2003)

European Hygienic Engineering & Design Group

### Water-filled corrosion pit in a stainless steel heating plate

No flow at the laminar boundary layer near the wall

Biofilm grows against flow and pressure gradient at the laminar boundary layer

European Hygienic Engineering & Design Group

# EHEDG Publications

42 guidelines (many available in different languages)

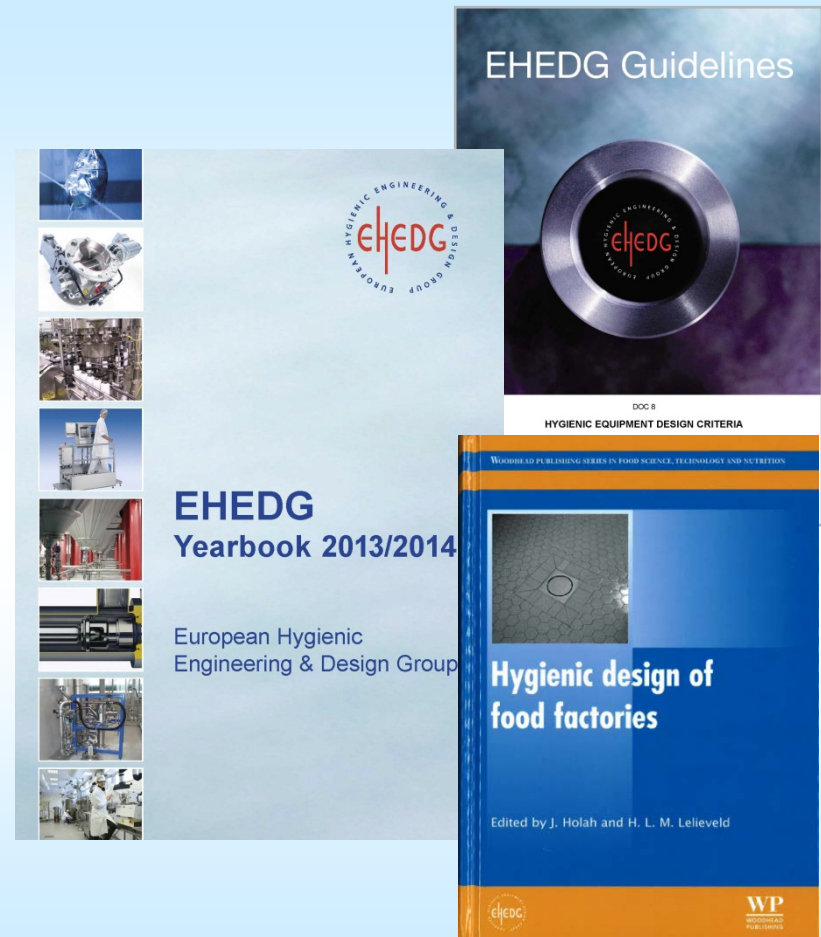
Extended guideline summaries available in *Trends in Food Science and Technology*

Yearbook – new issue 2015/2016 under preparation  
Handbooks:

- *Hygienic Design of Food Factories\**
- *Hygiene in Food Processing\**
- *Handbook of Hygiene Control in the Food Industry\**

**EHEDG members receive a 35 % discount on above Woodhead publications**

Articles in technical press and journals:  
*New Food, Food Engineering, Journal on Hygienic Engineering & Design and others*



# EHEDG Website

The website [www.ehedg.org](http://www.ehedg.org) is the major EHEDG information and communication platform

1989-2014  
EHEDG  
25 Years

Select your country ▼ Select your language ▼

Organisation  
 Armenia  
 Belgium  
 Czech Republic  
 Denmark  
 France  
 Germany  
 India  
 Italy  
 Japan  
 Lithuania  
 Macedonia  
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 Poland  
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HOME

WELCOME TO EHEDG  
THE EUROPEAN HYGIENIC ENGINEERING & DESIGN GROUP

Home Training & Education Guidelines Certification

Home  
More about EHEDG  
Regional Sections

**Welcome to EHEDG**

The **European Hygienic Engineering & Design Group (EHEDG)** is a consortium of equipment manufacturers, food industries, research institutes as well as public health authorities and was founded in 1989 to promote hygiene during the processing and packing of food products. The principal goal of EHEDG is the promotion of safe food by improving hygienic engineering aspects of food manufacture. EHEDG actively supports European legislation, which requires that handling, preparation and packaging of food is done hygienically using hygienic machinery and in hygienic premises (EC Directive 2006/42/EC for Machinery, EN 1672-2 and EN ISO 14159 Hygiene requirement).

The EHEDG mission is defined as:  
**"EHEDG enables safe food production by providing guidance as an authority on hygienic engineering and design for food manufactured in or imported into Europe"**. The mission statement of the EHEDG Statutes which were extensively revised in the past years and relaunched in January 2014.

For more information please download  
 - the [EHEDG Statutes](#)  
 - the [organisational chart](#)  
 - the [EHEDG brochure](#)  
 - the [EHEDG benefits](#).

Please have a look at the EHEDG Introduction movie (turn on the sound). Duration: 4:15 min.

EHEDG World Congress on Hygienic Engineering and Design 2014 – Italy

Latest News  
 EHEDG Working Group Valves  
 more...

EHEDG World Congress on Hygienic Engineering and Design 2014 - Italy  
 more...

# EHEDG Website

All Working Group information is available from the website back-end download section

The screenshot shows the EHEDG website interface. At the top right, there is a language selection dropdown set to 'English' and a 'Member Login' link circled in red. Below this is a navigation menu with tabs for Home, Training & Education, Guidelines, Certification, Subgroups, News & Events, and Membership. The main content area is titled 'WELCOME TO EHEDG THE EUROPEAN HYGIENIC ENGINEERING & DESIGN GROUP'. On the left, a sidebar contains a 'MEMBERAREA' link circled in red and a 'My Subgroups' link also circled in red. The main content area displays a file list with columns for Name, Date, and Size. The files listed are:

Name	Date	Size
HIHP_100917.pptx	16.11.2010 11:20:12	65.6 MB
HIHP_AWT_Modified_Slides_101118.ppt	18.11.2010 22:30:18	7.9 MB
Man_in_Truck.wmv	15.01.2010 15:46:44	2.5 MB
Joseph_s_very_motile_bacillus.wmv	15.01.2010 15:40:14	17.6 MB

At the bottom of the file list, there are input fields for 'Add folder:', 'New folder', 'Add file:', and 'Upload', along with a 'Durchsuchen' button.



# Webshop

Guidelines can be purchased by non-members and individual members (at a 50% discount) from the webshop which is interlinked from "Guidelines" on the EHEDG website

**VDMA Verlag** Ihr Warenkorb: Sie haben noch keine Produkte in Ihrem Warenkorb.

Home Suchen Über uns Hilfe / FAQ Ihr Konto | Merkzettel | Warenkorb | Kasse

Startseite » Katalog » EHEDG

Kategorien	EHEDG
<ul style="list-style-type: none"> <li>Bedingungen</li> <li>EHEDG               <ul style="list-style-type: none"> <li>armenisch</li> <li>deutsch</li> <li>englisch</li> <li>französisch</li> <li>italienisch</li> <li>mazedonisch</li> <li>niederländisch</li> <li>spanisch</li> <li>ukrainisch</li> <li>Download-Bündel</li> </ul> </li> <li>Entscheidungshilfen</li> <li>FEM</li> <li>Fiber Year</li> <li>Forschungshefte (FKM)</li> <li>Verträge</li> <li>World Robotics 2011</li> <li>nur als Print verfügbar...</li> </ul>	<p>View and select here all guidelines published by the European Hygienic Engineering and Design Group (EHEDG). This webshop is regularly updated and complemented by new and updated documents in various language versions. The search function can be used to look for keywords mentioned in the guideline titles and contents (full-text search).</p> <p>If interested to benefit from discounted or complimentary guideline downloads you are welcome to apply for an EHEDG Individual Membership or a Company/Institute Membership. For further information please see <a href="#">here!</a></p> <p>Download a <b>complimentary copy</b> of the EHEDG Glossary and EHEDG Doc. 8 - Hygienic Equipment Design Criteria.</p> <p><b>Survey of all language versions</b></p> <ol style="list-style-type: none"> <li>1 Microbiologically safe continuous pasteurization of liquid food. dutch   english   french   ukrainian</li> <li>2 A method for assessing the in-place cleanability of food processing equipment. armenian   dutch   english   french   german   italian   macedonian   spanish</li> <li>3 Microbiologically safe aseptic packing of food products. armenian   dutch   english   french   ukrainian</li> <li>4 A method for the assessment of in-line pasteurisation of food processing equipment. armenian   dutch   english   french   ukrainian</li> <li>5 A method for the assessment of in-line sterilisability of food processing equipment. armenian   dutch   english   french   german</li> <li>6 The microbiologically safe continuous flow thermal sterilisation of liquid foods. dutch   english   french   ukrainian</li> <li>7 A method for the assessment of bacteria-tightness of food processing equipment.</li> </ol>

**Sprachen**

**Mehr über...**  
 Impressum  
 AGB  
 Widerrufsrecht

**Zum Print-Shop**  
 zum Print-Shop  
 zum Gesamtverzeichnis Bücher

**Kundenlogin**

**Informationen**  
 >> Auslieferung  
 >> Rückfrage? Fehler entdeckt?  
 >> Sitemap  
 >> Zum Print-Shop  
 >> Zahlungsmethoden  
 >> SSL  
 >> Callback Service  
 >> Neues Kundenkonto anlegen  
 >> Umsatzsteuer-ID

EHEDG Company and Institute Members have free access to the guidelines by download from our website

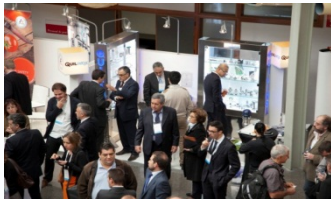
# EHEDG Events & Congresses

**EHEDG World Congress on Hygienic Engineering & Design,  
30 - 31 October 2014 in Parma/Italy in conjunction with Cibus Tec – Food Pack**

## Topics

The congress will be a 'summit' in hygienic design and will highlight the following topics:

- Hygienic design of equipment for the food, pharmaceutical and cosmetics industries
- Hygienic design of food factories and utilities
- New trends in cleaning & disinfection, surface treatments, validation, sustainability and others
- Materials in contact with the product



## Programme

- 2 days international congress
- Excellent sponsoring opportunities and exhibition area for companies
- Call for articles and poster's area
- One-to-One business meetings
- Official congress dinner
- Guided exhibition tour
- Hygienic Study Awards Ceremony

*Registration open at  
discounted rates for  
EHEDG members*

# www.ehedg-congress.org

Please visit the congress webpage for all programme details, sponsorship opportunities and registration

[Home](#)
[Programma](#)
[One-to-one Business Meetings](#)
[Congress Venue](#)
[Iscrizione](#)
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 Obiettivi del Congresso  
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 Attività parallele  
 Lingue ufficiali del Congresso

**EHEDG World Congress on Hygienic Engineering and Design 2014 - Italy**  
 L' "EHEDG World Congress on Hygienic Engineering and Design 2014" sarà il summit per le aziende e i professionisti interessati nella progettazione e costruzione igienica delle apparecchiature e degli stabilimenti per la produzione in sicurezza dei prodotti alimentari e affini.  
 L'evento è promosso dall' EHEDG, European Hygienic Engineering & Design Group, una delle organizzazioni leader in questo campo.  
**Il Congresso si terrà dal 30-31 Ottobre 2014 a Parma / Italia** in concomitanza con la fiera [Cibus Tec](#) e sarà co-organizzato da Fiere di Parma.

# EHEDG Individual Membership

- 50 % discount on the sales price of EHEDG guidelines
- Complimentary copies of selected guidelines (for working party members being co-authors)
- Discounts on other selected publications
- Discount on registration fees to conferences, seminars and training courses
- Free copy of EHEDG reports and the yearbook
- Networking with other members on issues of common interest
- All individual members receive general information about EHEDG and have the option to join a Regional Section and its activities.

Individual **Working Party Members** contribute to EHEDG by their know-how and are addressing themselves to the task of developing and writing up guidelines in a team of other experts.

**Corresponding Members** receive minutes of the working group meetings and updates on the progress of their work.

**Individual Membership fee: 100 Euros p.a.**

**Online Registration:**  
**[www.ehedg.org](http://www.ehedg.org) > Membership > Individual Membership**



# EHEDG Company Membership

Graduated membership fee depending on food-related turnover

- Whole series of EHEDG guidelines in all languages including updates (to be downloaded from the EHEDG website) available to all staff members
- Contribute to work of EHEDG Working Groups and co-decide on Working Group activities
- Use of the EHEDG Company Member Logo under agreed conditions
- One to four complimentary staff memberships
- Discounts on other selected publications, discounted registration fees to conferences, seminars and training courses
- Publication of company logo and link on the EHEDG Website and in other print media
- Discounted or complimentary EHEDG training toolbox



**Online Registration:**  
**[www.ehedg.org](http://www.ehedg.org) > Membership > Company Membership**

# EHEDG Institute Membership

- Available to institutes, universities, schools, research centres and governmental authorities
- Same benefits like company members including use of the “Institute Member” Logo at a reduced membership contribution of EUR 500 p.a.



**Online Registration:**  
**[www.ehedg.org](http://www.ehedg.org) > Membership > Institute Membership**

## EHEDG Benefits

- EHEDG creates a central, internationally recognized source of excellence on hygienic engineering
- We provide networking on an international level, opportunities for the establishment of global contacts and are interlinking our Regional Sections
- We are a platform for an exchange of state-of-the-art know-how and offer advancement in knowledge
- We provide influence in setting global standards and rules and have impact on regulatory bodies
- We are offering a legal basis by practically demonstrating how to follow existing requirements and standards
- Our guidelines are referenced by international organisations and provide practical know-how
- Our guidelines are created by gathering the expert know-how of our members who are equipment manufacturers of food and packaging machinery as well as food processing companies, research institutes and health authorities

## EHEDG Benefits

- We follow up new trends and help to share, disseminate and canalize hygienic design know-how
- We extend the EHEDG mission to “environmental issues” and are aiming to support food safety and sustainability
- We evaluate hygienic design in relation to shelf-life
- We provide international, high-level training & education and our training material is developed by recognized experts in the field
- We provide equipment certification by EHEDG-accredited test institutes
- Our certification methods are continuously further developed and complemented by new test methods
- We provide reference publications like the EHEDG Yearbook and press articles in scientific journals and trade magazines
- We enhance the reputation of our member companies and help them to become leaders in hygienic design and processing

**For questions or further information please contact:**



**EHEDG Secretariat, c/o VDMA  
Lyoner Strasse 18  
60528 Frankfurt am Main  
Deutschland**

**Susanne Flenner (Office Manager)  
Jana Huth  
Johanna Todsén**

**secretariat@ehedg.org**

**Phone: +49 69 6603 1217**

**[www.ehedg.org](http://www.ehedg.org)**