EHEDG Introduction
Content

• Why Hygienic Design
• Key Areas of Hygienic Design
• Who is EHEDG
• Organization and Activities
Why Hygienic Design?

Benefits of Hygienic Design (random order)

- Hazard control (allergens, microbiological, chemical, foreign matter)
- Improved product quality
- Life cycle cost reduction
- Quick change over execution
- Pest control
- Human safety
- Housekeeping
- Equipment reliability
- Dietary compliance (Halal, Kosher, organic)
- Regulatory Compliance
## 5 Key Areas in Hygienic Design

<table>
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<tr>
<th></th>
<th>HYGIENIC BUILDING DESIGN</th>
<th>HYGIENIC UTILITIES</th>
<th>HYGIENIC EQUIPMENT AND PROCESS DESIGN</th>
<th>CLEANING AND SANITATION (DISINFECTION)</th>
<th>PERSONNEL HYGIENE</th>
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<tr>
<td>1</td>
<td>Hygienic Floors, Walls, Ceilings, Drains</td>
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<tr>
<td>2</td>
<td>Zoning</td>
<td>Water, Steam</td>
<td>Materials of construction</td>
<td>Cleaning In Place (CIP) Design</td>
<td>Gowning, e.g. Hand/Shoe cleaning devices</td>
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<td>3</td>
<td>Food Defense, e.g. site security, fencing</td>
<td>Steam</td>
<td>Hygienic Welding</td>
<td>Dry cleaning, Cleaning out Place, Open Plant Cleaning</td>
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<td>4</td>
<td>HVAC, Cabling, ducts, cabinets</td>
<td>Air</td>
<td>Maintenance</td>
<td>Cleaning Procedures</td>
<td>Culture</td>
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<tr>
<td>5</td>
<td></td>
<td></td>
<td>Cleanability and Drainability</td>
<td>Cleaning Validation</td>
<td>Practices</td>
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Who 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 and governmental organisations

The mission: EHEDG enables safe food production by providing guidance as an authority on hygienic engineering and design.
Overall objectives

• To provide guidance on hygienic design and engineering to ensure food safety and quality
• To offer a platform for the food industry to discuss issues on hygienic design
• To develop guideline documents on hygienic design requirements and practices based on science and technology to ensure compliance to legislation
• To maintain a transparent and unambiguous hygienic equipment certification scheme
• To identify areas were hygienic design knowledge is insufficient and initiate and promote research and development in those areas
EHEDG Membership Benefits

- Company members are authorized to use the EHEDG Company Member logo under agreed conditions. Note that the logo may not be used in a way of mistakenly implying EHEDG certification.
- Companies initially avail of at least one up to four free main contact persons. Additional persons can be listed later on for active or corresponding Working Group membership and active involvement into the EHEDG regional activities.
- Publication of the company logo and name on the EHEDG website, conference programs, brochures, etc.
- Hyperlink from the EHEDG website to the company website.
- Whole series of the EHEDG Guidelines in all language versions including updates for free download by all staff members.
- Discount or waiver of registration fees for EHEDG sponsored events.
- Discount on EHEDG training course participation.
The Vision

**MARKET**

A globally recognized authority

All stakeholders in the production of safe food

- Producers & retailers
- Equipment & system suppliers
- Service suppliers & building designers
- Academia
- Legislators and enforcement agencies

**PRODUCTS**

A consensus based product portfolio

A comprehensive product portfolio

- Guidelines on process, services and buildings, striving for harmonization on a global scale
- Testing & Certification
- Training & Assessment

**STRUCTURE**

A well-balanced membership with global coverage

A fully transparent non-profit organization

- Funded by strongly committed members,
- Relying upon voluntary contribution and active involvement
- Attractive for large and small
Organisational Chart

General Assembly

President
Vice-President
Treasurer / Secretary

Secretariat

Advisory Board
(including President)

Sub Committee:
Regional Development
Chair & Co-Chair

Members

Regional Sections

Sub Committee:
Product Portfolio
Chair & Co-Chair

Members

Working Groups

Sub Committee:
Communication
Chair & Co-Chair

Members

Working Groups

= Foundation Board

= Executive Committee

Foundation Board:

Members

Working Groups
Foundation Board

First election by General Assembly in December 2014

Ludvig Josefsberg
President
ExCo Member since 2010

Piet Steenaard
Treasurer/Secretary
ExCo Member since 1992

Patrick Wouters
Vice-President
ExCo Member since 2010
Membership development

January 2017:
- Over 1,300 main contact persons world-wide
- 270 individual members
- 432 member companies and institutes with thousands of EHEDG resources behind

- EHEDG membership is continuing to grow
- EHEDG has a global reach
A global network

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

Existing Regional Sections (31):

- Argentina
- Armenia
- Austria
- Belgium
- Brazil
- China
- Croatia
- Czech Republic
- Denmark
- France
- Germany
- India
- Italy
- Japan
- Lithuania
- Macedonia
- Mexico
- Netherlands
- Nordic (FI, S, NO)
- Poland
- Romania
- Russia
- Serbia
- Spain
- Switzerland
- Taiwan
- Thailand
- Turkey
- Ukraine
- UK & Ireland
- Uruguay
A global network

Existing Regional Sections Europe (22)

- Armenia
- Austria
- Belgium
- Croatia
- Czech Republic
- Denmark
- France
- Germany
- Italy
- Lithuania
- Macedonia
- Netherlands
- Nordic (FI, NO, SE)
- Poland
- Romania
- Russia
- Serbia
- Spain
- Switzerland
- Turkey
- UK & Ireland
- Ukraine
A global network

Existing Regional Sections America (4) & Asia (5)

- Argentina
- Brazil
- Mexico
- Uruguay

- China
- India
- Japan
- Taiwan
- Thailand
Regional development

Objectives

• Increase the local awareness and recognition of EHEDG

• Raise the importance of and knowledge in safe food production

• Provide guidance and support to local stakeholder

• Enhance the cooperation between Regional Sections

• Provide support to continuous development of EHEDG International
Product Portfolio

3 Main Areas

1. Guidelines
2. Testing & Certification
3. Training & Education

Some facts

• 21 working groups
• 46 published guidelines
  (with 10 currently being updated)
• 400 volunteers participating
• > 400 equipment / components certified
Product Portfolio

Objectives

• Ensure high quality of guidelines, training materials, and certification services - **Transparent and unambiguous**

• Define, plan and schedule updates and developments of product portfolio activities, documents and procedures

• Initiate and assist with establishment and management of working groups to assure participation of all stakeholders

• Establish procedures and guidance to assure uniformity of presentation and coordination across all product portfolio documents and services
Focus areas of Guideline Working Groups

Continuous development and updating

- **General**
  - Glossary

- **General Principles, Materials, Surfaces**
  - Doc. 8, 9, 18, 23, 32, 34, 35, 39

- **Test Methods**
  - Doc. 2, 5, 7, 19

- **Factory Design incl. Design of Utility Systems**
  - Doc. 27, 28, 44, 47

- **Closed Equipment for Liquid Food**
  - Doc. 10, 14, 16, 17, 20, 25, 37, 42

- **Closed Equipment for Dry Particulate Materials**
  - Doc. 22, 31, 33, 36, 38, 40, 41

- **Open Equipment**
  - Doc. 13, 43

- **Packaging Machinery incl. Filling Machinery**
  - Doc. 3, 11, 21, 29

- **Heat Treatment**
  - Doc. 1, 6, 12, 24

- **Cleaning & Validation**
  - Doc. 45

**Training & Education**

All EHEDG Documents

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EHEDG Introduction
Continuous Process

- **Projected**
  - Foreign Bodies, Meat Processing, Hygienic Design of Food Bulk Tankers

- **Recently started**
  - Lubricants* (Doc. 23), Cleaning Validation (supplements to Doc. 45), Cleaning & Disinfection, Mechanical Seals* (Doc. 25), Sensors* (Doc. 37), Water Management* (Docs. 27+28)

- **Work in progress**
  - Bakery Equipment, Cleaning in Place, Dry Materials Handling*, Food Refrigeration, Hygienic Systems Integration* (Doc. 34), Materials in food contact* (Doc. 32), Tank Cleaning, Test methods, Valves* (Doc. 14+20), Packaging Machinery* (Doc. 3, 11, 21)

- **In a final stage**
  - Heat Treatment* (Doc. 1+6), Hygienic Design Principles* (Doc. 8), Welding* (Doc. 9+35), Elastomeric Seals (new Doc. 48), Fish Processing (new Doc. 49)

- **Recently published**
  - Conveyor Systems (Doc. 43), Cleaning Validation Principles (Doc. 45), Air Handling (Doc. 47),

* = Update of existing documents

**Today:** Over 400 voluntary experts actively involved in 21 Working Groups
43 guidelines published (3 withdrawn in 2016)
Focus areas of Training & Education

Continuous development and improvement of proprietary course modules on all guideline contents

Case Studies
Drawings, hands on equipment, hands on pilot plant

Hygienic Design Checklist

E-learning

Picture Database
(for training material and guidelines)
Focus areas of Testing & Certification

- Continuous development and improvement of Testing & Certification procedures
- Development of a test method for open equipment (started in 2016)
- Establishment of new test institutes world-wide
- Centralisation of EHEDG Certification
- Implementation of a 5 year’s renewal cycle for all certificates
Position of EHEDG in Food Safety Management

WHAT

- HACCP
- Pre-requisite Programs “Standards”
- EHEDG Guidelines “Good Practises”
- Factory Site / Standard Operating Procedures / Work Instructions

HOW

Opportunity to harmonize GFSI requirements with the EHEDG Certification Scheme
15 Pre-Requisite Programs

- Construction and layout of buildings and associated utilities
- Layout of premises, including workspace and employee facilities
- Supplies of air, water, energy and other utilities
- Supporting services, including water and sewage disposal
- Suitability of equipment and its accessibility for cleaning, maintenance and preventative maintenance
- Management of purchased materials
- Measures for the prevention of cross-contamination
- Cleaning and disinfection [sanitization]
- Pest Control
- Personnel Hygiene
- Rework
- Product Recall procedures
- Warehousing
- Product information and consumer awareness
- Food defense, biovigilance and bioterrorism

Covered by the EHEDG guidelines
Working Groups

Active:
- Air Handling (Update of Doc. 30)**
- Bakery Equipment
- Cleaning in Place
- Cleaning Validation *
- Cleaning & Disinfection
- Dry Materials Handling
- Fish Processing
- Food Refrigeration *
- Foreign Bodies
- Heat Treatment (Update of Doc. 1 and 6)*
- Hygienic Systems Integration*
- Hygienic Design Principles (Update of Doc. 8)*
- Materials of Construction in Contact with Food (update of Doc. 32)*
- Mechanical Seals*
- Seals
- Sensors*
- Tank Cleaning
- Test Methods
- Training & Education
- Valves*
- Water Management
- Welding**

Projected:
- Meat Processing

* = Update of existing documents
** = Draft under final review / subject to publication

Today: Over 400 voluntary experts actively involved in 21 Working Groups
46 guidelines published
Communication

Responsible for strategy regarding

1. Membership Relations
2. External Communication
3. Internal Communication Tools
4. EHEDG International Events
New Website

The website www.ehedg.org is the major EHEDG information and communication platform available in 24 languages.
You are welcome to join us!

Online Registration:
www.ehedg.org > Membership > Company Membership or
> Institute Membership

Thank You!
For questions or further information please contact us:

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Thank You!
Any Questions?