

Hygienic Engineering and Design: Foundational to a Successful Food Safety Program



Agenda

- Purpose and structure of EHEDG and its partnership with 3-A Standards Inc.
- Product offering and position of EHEDG in the food value chain
- Importance of hygienic engineering and design in food safety management
- Role of EHEDG capabilities in GFSI certification



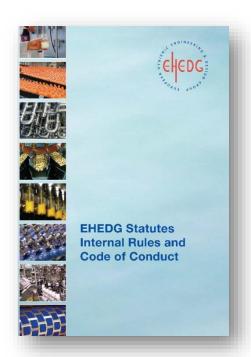
European Hygienic Engineering & Design Group Stichting EHEDG - a Dutch "Institution for General Benefit"

EHEDG was founded 1989 as a non-profit consortium of leading

European food industry stakeholders and consists of:

- Equipment & machinery manufacturers
- Food producers
- Suppliers to the food industry
- Research institutes and universities

Head office is located in Frankfurt, Germany





The Mission

EHEDG enables food production by providing guidance as an authority on hygienic engineering and design

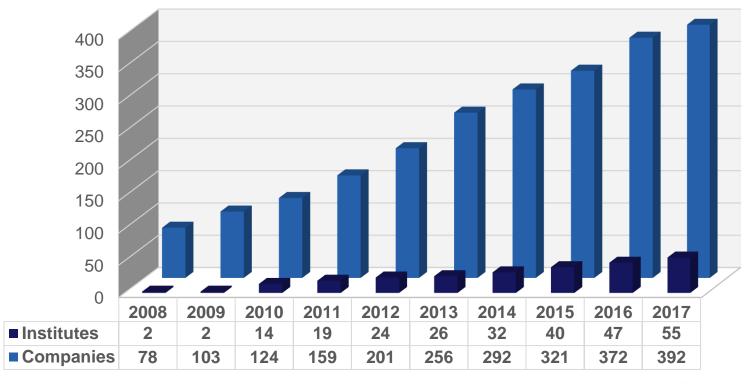
through development of consensus based

- design and engineering guidelines
- equipment certification schemes
- training and education programs





Membership Development







Global Network

- 80% equipment & machinery manufacturers and 20% food producers
- The "Big 50" global member companies
- Established in 31 geographical regions including 17 EU countries





Foundation Structure

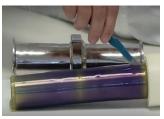
Specific strategies are established, communicated and executed by Sub-Committees



Regional Development through Regional Sections

Advisory Board

General Assembly



Product Portfoliothrough Working Groups

Foundation Board
President
Vice-President
Treasurer / Secretary



Communication through Task Forces

Sub-Com Regional Development

Sub-Com Product Portfolio

Sub-Com Communication



Lasting relationship with 3-A Sanitary Standards Inc.

3-A hygienic design standards go back to the 1920's

- EHEDG and 3-A have common objectives and similar missions
- Expert participation and co-authorship in committees and working groups
- Cross-referencing and harmonization of EHEDG and 3-A documents







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Our Vision



MARKET

A globally recognized European authority on hygienic design for all stakeholders in value chain

PRODUCTS

A consensus based product portfolio providing relevant value for member companies

STRUCTURE

A well-balanced membership with global coverage, attractive for big and small



EHEDG Objectives

- Provide guidance and training to ensure food safety, quality and compliance with legislation
- Offer and maintain a platform for stakeholders to collaborate on matters that can enhance food product safety
- Maintain a transparent and unambiguous hygienic equipment testing and certification scheme
- Sponsor research and development where knowledge gaps are identified
- Make EHEDG a key player in recognized food safety programs





To date

2017

The Core Product Portfolio

Guideline Development

Published: 43

Active working groups: 21

Equipment Certification

certificates: 512

Valid

Expected certificates: 30

Training & Education

Authorized trainers: 30

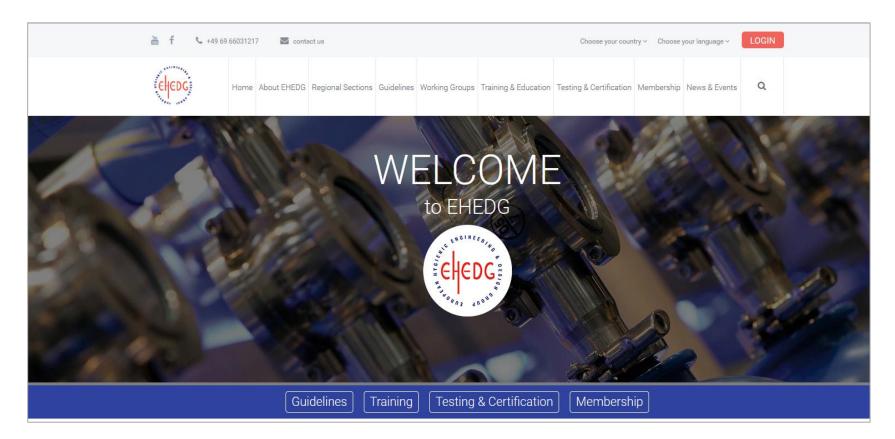
Advanced training courses: 25

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Global Information Channel

www.ehedg.org

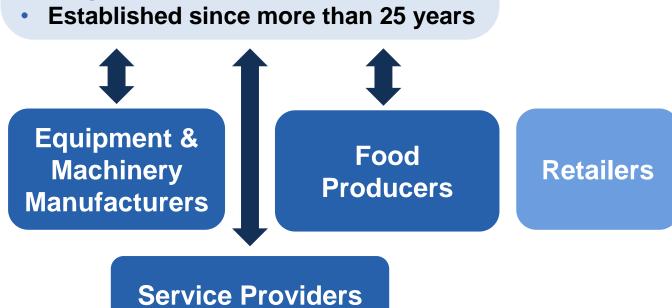




Central Position in the Value Chain

Core EHEDG values

- Stakeholders active participation
- Strong technical base
- Well-established product portfolio
- Large network of expertise



Raw Material Suppliers



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Purpose of Hygienic Design

Various types of production processes Open – Dry – Wet – Closed

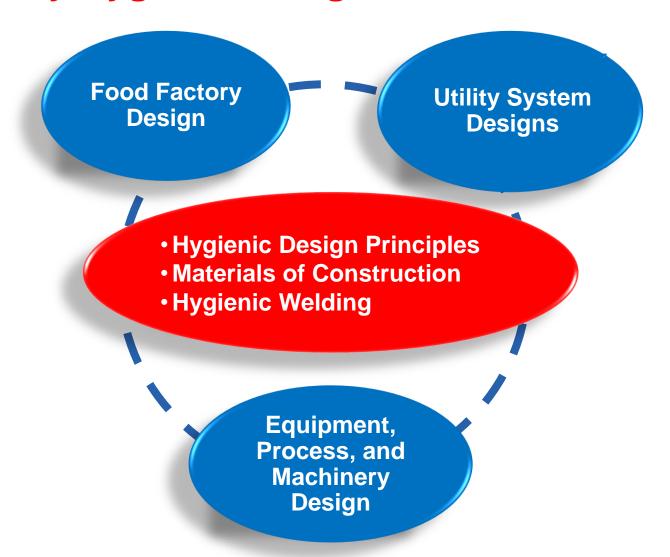


Deliberate application of design measures to minimise risk of contamination by **biological**, **chemical** and **physical** hazards.

Design requirements must be established on risk based decisions.



Key Hygienic Design Areas





Operational Aspects

Cleaning & Sanitization

- CIP-COP-OPC Design principles
- Procedures
- Validation



Maintenance

- Lubrication
- Preventative & Corrective
- Renovation requirements





Equipment Certification One Critical Tool

EHEDG offers a unique certification scheme based on



Inspection of technical drawings and equipment



Cleanability testing

- Established procedures
- Independent ISO certified test organisations
- Central ownership by EHEDG
- 5 year renewal policy
- Increasing recognition by food industry





Benefits of Hygienic Design

- Prevention of food safety hazards and product quality issues
- Equipment reliability maximising production time and reduced life cycle costs
- Process and occupational safety
- Sustainable operations
- Regulatory compliance





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Global Trends in Food Production

- Globalization of supply chains which drives end to end control requirements
- Food product innovation, local and global branding
- Risk management to ensure food safety and quality by design through the whole value chain
- Importance of Total Costs of Operation
- Sustainability requirements





Common GFSI and EHEDG objectives

- Reduce food product safety risks
- Manage cost and improving operational efficiency
- Develop competencies and capacity building in food safety management
- Provide a unique international stakeholder platform for collaboration, knowledge exchange and networking





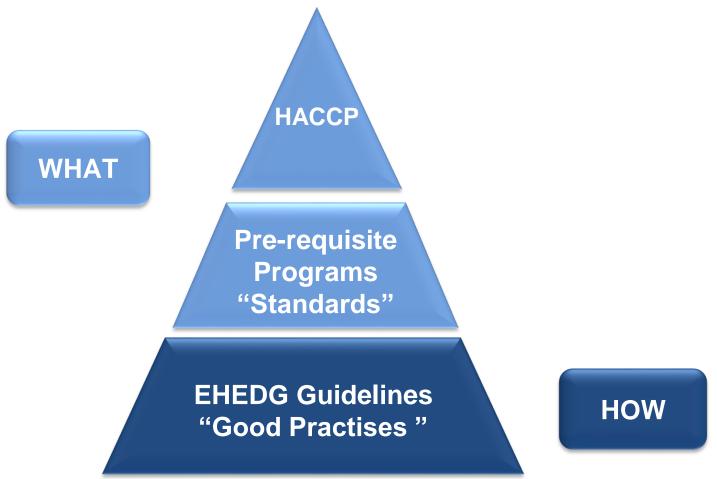
Capabilities relevant for GFSI recognized certification

- Strong product portfolio and expertise with global presence specialised on food industry
- Unique and reliable equipment certification program to ensure that equipment is cleanable by design
- Procedures to improve quality of pre-requisite programs which are fundamental to ensure right safety and quality of products every day





Position of EHEDG in Food Safety Management





What Next - Future Plans

Initiate alignment process

- Appoint Project Manager and form alignment team
- Define current status and opportunity areas
- Identify gaps in EHEDG content vs GFSI recognized schemes
- Adapt EHEDG portfolio to required standards





