

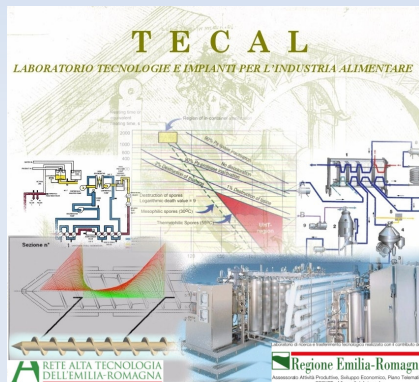
# Obblighi igienici e norme volontarie per le macchine alimentari

## CIBUS TEC – 17 Ottobre 2007

### EUROPEAN HYGIENIC ENGINEERING AND DESIGN GROUP Regional Sections

## Costituzione della Sezione Italiana

*Giampaolo Betta*



**TECAL** – Laboratorio Tecnologie e Impianti per l'Industria Alimentare  
Università degli Studi di Parma  
Dipartimento di Ingegneria Industriale  
via G. Usberti 181/A, 43100 Parma  
[giampaolo.betta@nemo.unipr.it](mailto:giampaolo.betta@nemo.unipr.it)





## REGULATORY CONTEXT (EU)

- **Reg.EC 852/2004**                    **general hygiene rules**
- **Dir. 98/37/EC**                    **EU Machinery Directive**
- **Dir. 2006/42/EC**                **Machinery (since Dec. 2009)**
- Reg.EC 853/2004                hygiene rules for food of animal origin
- Reg.EC 1935/2004               materials and articles intended to come into contact with food
- Reg.EC 178/2002                general principles and requirements of food law
- [vertical](#) regulations            each covering a restricted range of foodstuffs



## From Regulation to Guidelines

Regulations normally lay down general requirements

Example:

### CLEANABILITY

📖 “All articles, fittings and equipment with which food comes into contact are to be effectively cleaned and, where necessary, disinfected” (Reg.EC 852/2004).

📖 “The machinery must be so designed and constructed that these materials can be clean before each use. (...) All surfaces in contact with the foodstuffs must be easily cleaned and disinfected (...)” (Dir. 1998/37/EC)

📖 “The machinery must be designed and constructed in such a way that these materials can be cleaned before each use”. (Dir. 2006/42/EC).

📖 “All plants equipment and utensils shall be so designed and of such material and workmanship as to be adequately cleanable (...)” (21 CFR 110.40). (US Regulation)

**Can we assert that equipments are always and actually compliant to these requirements?**



## From Regulation to Guidelines

Regulations **don't** normally suggest how to design a correctly cleanable equipment

The important role of [Standards and Guidelines](#)

**EHEDG provides practical guidelines on several topics:**

continuous flow pasteurisation & sterilization of liquid foods	pumps, homogenisers and dampening devices
hygienic and aseptic packing	passivation of stainless steel
welding stainless steel	double-seat mixproof valves
closed equipment	processing of dry particulate materials
thermal treatment of particulate foods	food-grade lubricants
open processing	prevention and control of Legionella spp
valves	hygienic and aseptic mechanical seals
pipe couplings	treatment, storage and distribution of water
packing systems for solid foodstuffs	air handling
fluid bed and spray dryer plants	



## Aims

### What is?

- EHEDG is a Consortium of **Equipment Manufacturers, Food Industries, Research Institutes, Public Health Authorities** and was Founded in 1989.

### Aims (see also [www.ehedg.org](http://www.ehedg.org))

- To provide **guideline documents** on essential hygienic design standards and practices, based on science and technology, and to periodically review them. These provide **guidance** to equipment manufacturers and users **on compliance with national and international legislation**.
- To develop **test methods** that can be used by third parties for hygienic design assessment to aid compliance with relevant legislation.
- To increase **awareness** about food hygiene, help in **prevention** of food safety problems, thereby **sustaining the image** of the food industry among consumers.



## Organization

### Activities (see also [www.ehedg.org](http://www.ehedg.org))

- Production, update and publication of **guidelines**.
- Equipment **certification**.
- Organization of **conferences**, regional meetings and workshops.

### Organization

- Subgroups: Guideline development is carried out by the subgroups.
- Regional Sections.



## Regional Sections

## Working Regional Section

Benelux	Poland
France	Portugal
Germany	Spain
Hungary	UK
Nordic	<b>ITALIA</b>



## Regional Sections

### Aim

- Promote hygienic manufacturing of food through regional activities.

### Activities

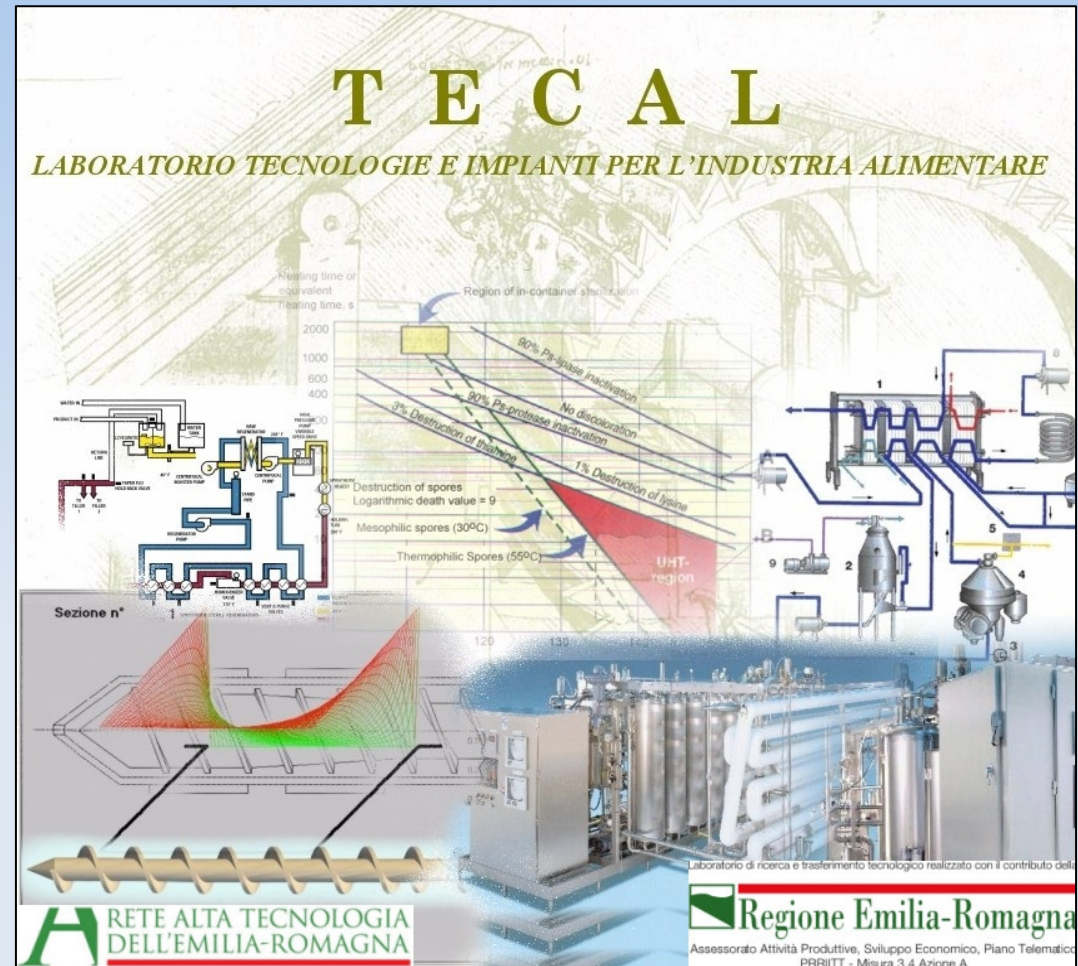
- **Translation** of guidelines into the local language.
- **Dissemination** of information to all concerned parties.
- To serve as a **platform for discussion** of hygienic engineering issues at national or regional level.
- To identify areas where knowledge of hygienic design is insufficient and to **encourage research** and development in such areas.





## Italian Section setting-up

- EHEDG Italian Section is an initiative of EHEDG and of the **Food Technology Unit** of Industrial Engineering Department of Parma University.
- The Italian Section setting-up has been encouraged by a research on *Hygienic design and Engineering of Aseptic Thermal Processing Equipments* performed by **TECAL Networked Laboratory for the Food Industry Technologies and Systems**, a laboratory funded by **Emilia-Romagna Region**





## Italian Section – Promoter Group

- According to EHEDG general principles, the **Promoter Group** of the Italian Section is actually composed of Equipment Manufacturers, Food Industries, Research Institutes, Public Health Authorities

RESEARCH INSTITUTIONS	EQUIPMENTS MANUFACTURERS	FOOD COMPANIES	HEALTH INSTITUTIONS
Food Technology (University of Parma)	CFT Rossi & Catelli	Barilla G. e R. Fratelli	Health Ministry
Industrial Mechanical Plants (University of Parma)	FMC Technologies Italia	Parmacotto	
Equipment Construction (University of Parma)	GEA - NIRO Soavi	Parmalat	
Mechanics Applied to Equipments (University of Parma)	GEA - Procomac	Sangemini	
Machinery (University of Parma)	PNR Italia		
Hygiene and Sanification (University of Parma)	Sidel		
Food Microbiology (University of Parma)			
SSICA (Stazione Sperimentale per l'Industria delle Conserve Alimentari)			



## Italian Section

# Upcoming activities of the Italian Section

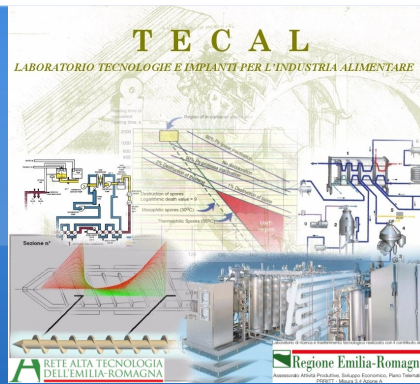
- Translation of guidelines, firstly:

**Doc.8** Hygienic equipment design criteria, 2004

**Doc.2** (Updated) - A method for assessing the in-place cleanability of food processing equipment, 2004

- To provide a website of the Italian Section

[www.ehedg.unipr.it](http://www.ehedg.unipr.it) (soon on line)



*Università degli Studi di Parma  
Fiere di Parma*

**“Obblighi igienici e norme tecniche per  
le macchine alimentari”**

**CIBUS TEC 17 Ottobre 2007**

**THANK YOU FOR YOUR ATTENTION**

For further information please contact

[giampaolo.betta@nemo.unipr.it](mailto:giampaolo.betta@nemo.unipr.it)