



June 4th - 6th / 2014

## advanced course on hygienic design

**ainia** centro tecnológico  
Parque Tecnológico de Valencia.  
C/ Benjamín Franklin, 5-11 46980 Paterna (Valencia)

*From Valencia:*

Pista de Ademuz, salida 9 (Mas Camarena - Parque Tecnológico)

*From Madrid, Alicante and airport:*

Circunvalación Valencia - dirección Barcelona  
salida 497 Valencia - Ademuz / salida 9 (Mas Camarena - Parque Tecnológico)

*From Barcelona:*

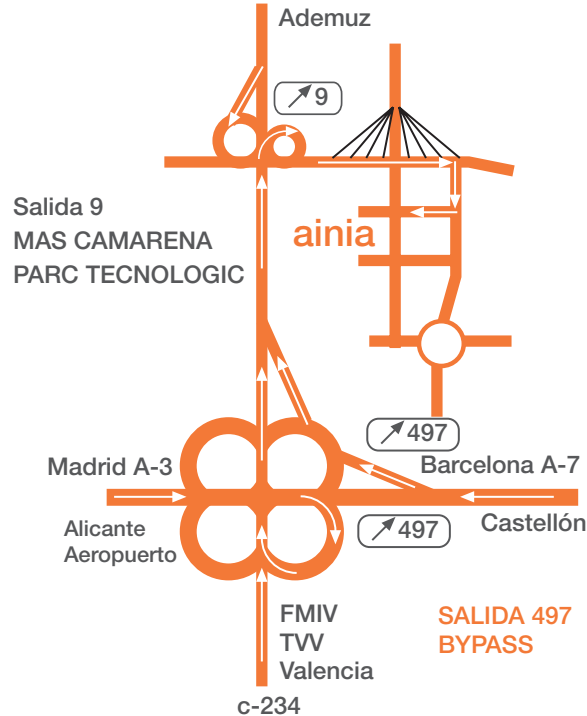
Circunvalación Valencia - oeste  
salida 497 Valencia - Ademuz / salida 9 (Mas Camarena - Parque Tecnológico)

*Hotels in the Parque Tecnológico:*

HUSA Mas Camarena \*\*\*\*  
[www.husa.es/es/nuestros-hoteles/hotel/v/u/husa-mas-camarena](http://www.husa.es/es/nuestros-hoteles/hotel/v/u/husa-mas-camarena)

Posadas de España Paterna \*\*\*  
[www.posadasdeespanapaterna.com](http://www.posadasdeespanapaterna.com)

[www.ainia.es](http://www.ainia.es)  
<http://formacion.ainia.es>



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## 1. introduction

Hygienic design of equipment and facilities is one of the main tools that food, pharma and cosmetics companies have in order to achieve their final aim of guaranteeing the innocuousness of the products they manufacture. Both these industries and food equipment manufacturers should be aware of the importance of considering hygienic aspects in the activities they carry out.

EHEDG (European Hygienic and Engineering design Group) provides practical guidance on the hygienic engineering aspects of manufacturing safe and wholesome food. Founded in 1989, it is a consortium of equipment manufacturers, food companies, research and educational institutes as well as public health authorities whose common aim is to promote hygiene during the processing and packaging of food products.

**ainia** is a member of EHEDG, authorised institute for equipment testing and certification and is representing the Spanish Regional Section of the organization.

## 2. aim

The course gives knowledge and insight into the hygienic design of equipment and processes for the food industry, better to satisfy the needs of purchasers and retailers. These include minimal down time, maintenance, cleaning costs, environmental impact and efficient cleaning, optimal product safety and constant product quality. The design should fulfil present legislation and standards, but can also anticipate future changes.

## 3. methodology

The course is given from a very practical viewpoint. The theoretical fundamentals of the different subjects are given in a short and concise way, continuously relating these to practice by means of examples. You will get the opportunity to apply the knowledge yourself via a case study in the pilot plant. The course gives you tools to solve hygienic problems within your own organisation. Because of the small groups the course is very interactive.

## 4. program

Module	Day 1	Topic
	<b>Start-End</b>	
1	10:00 - 10:30	Welcome; Introduction speakers panel; participants; program
2	10:30 - 11:30	Legal requirements
	11:30 - 12:00	Coffee break
3	12:00 - 13:00	Hazards in hygienic processing
	13:00 - 14:00	Hygienic design criteria
4	14:00 - 15:00	Lunch
5	15:00 - 15:30	Hygienic design criteria
	15:30 - 17:00	Cleaning and disinfection
	17:00 - 17:30	Coffee break
6	17:45 - 18:30	Case study

Module	Day 2	Topic
	<b>Start-End</b>	
7	09:00 - 9:45	Welding stainless steel
8	9:45 - 10:30	Static seals and couplings
	10:30 - 10:45	Coffee break
9	10:45 - 12:15	Material of construction
10	12:15 - 13:00	Valves
	13:00 - 14:00	Lunch
11	14:00 - 14:45	Pumps (dynamic seals)
12	14:45 - 15:45	Verification of HD. Test methods. Certification
	15:45 - 16:00	Coffee break
13	16:00 - 16:30	Hygienic design of sensors
14	16:30 - 17:00	Installation and maintenance. Lubricants
15	17:00 - 18:00	Case study

Module	Day 3	Topic
	<b>Start-End</b>	
16	09:00 - 10:30	Building and process lay out
	10:30 - 10:45	Coffee break
17	10:45 - 12:00	Case study. Equipment assessment at the pilot plant
18	12:00 - 13:30	Case study. Presentation of results and debate at the classroom
	13:30 - 14:00	Student course evaluation
	14:00 - 15:00	Lunch

## 5. why attend

The course will be relevant to:

- **Equipment manufacturers**, since they will get knowledge and practical information of direct application in their activities of design and construction of equipment.
- **Food, cosmetics and pharma industries**, since they will get sound information and criteria for a proper equipment selection when purchasing, and knowledge for a safer and more rational internal maintenance of equipment and facilities.

## 6. previous training and working experience

The participants should have a minimum of two years of relevant practical experience.

## 7. course data and location

The course will be held in the facilities of **ainia** in Paterna (Valencia-Spain) in June 4th - 6th, 2014. Lunches and two dinners are included.

The course will be in English and Spanish, with simultaneous translation

## 8. trainers

Trainers participating in the course are members of the Training and Education group of EHEDG.

Andrew Timperley. *Timperley Consulting.*

M<sup>a</sup> Irene Llorca. *ainia Centro tecnológico.*

Rafael Soro. *ainia Centro tecnológico.*

## 9. certificate

An attendance certificate will be provided at the end of the course.

## 10. costs

The costs of the course are Euro 1.650 including hand-outs, coffee, tea, lunches and two dinners. Both members of **ainia** and EHEDG will get a 10% discount on the course price.

Reduction of 10% for the second registration coming from the same company and 15% from the third registration on.

## 11. registration

The number of participants is strictly limited, therefore we recommend an early registration.

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