

*NCTI is the independent knowledge and advisory centre providing know-how and advice for everyone professionally involved in insulation. It is NCTI's task to disseminate and advise in industrial and HVAC insulation all on behalf of the (petro)chemical industry, process industry, HVAC, power plants, pharmacy- and food processing industry, ship building and offshore, horticulture, cold stores or combinations of these markets.*

## Program CINI Course

### A. INSULATION TECHNIQUE I

1. Introduction **Thermal Insulation systems in the industry** (*insulation materials & systems*)
2. The **CINI Manual** (*Standard for Insulation in Industries, fundamental of CINI Manual*)
3. Use of **digital manual** (*hands-on demonstration of the manual's digital possibilities*)
4. Case **Hot insulation** (*insulation case of a refinery*)

### B. INSULATION TECHNIQUE II

1. **Corrosion under insulation** (*introduction to corrosion, corrosion under insulation and procedures*)
2. **Quality (QA/QC)** (*quality assurance and life cycle quality chain*)
3. **Measurement specifications** (*details of measurement specifications, factors and examples*)
4. **Model specification** (*introduction to an example of a specification with clarification of choices*)

### C. INSULATION TECHNIQUE III

1. **Theory** (*background of energy savings*)
2. Case **Cold insulation** (*insulation case in a dairy factory, cyclic process*)
3. **HSE (Health, Safety and Environment)**

### D. INSULATION TECHNIQUE IV

1. **Insulation and energy** (*energy savings in the field, reduction of emissions, corporate social responsibility, infrared thermography*)
2. **Acoustics** (*introduction to acoustic specifications: design and installation*)
3. **'Insulation in the field'** (*good & bad practices of technical insulation*)
4. **Latest developments**

*Specialists who have joined the CINI Course and now want to get involved in new build or maintenance inspection could register for the course 'Inspector Insulation for Industries'. During one day attendants will be trained in the assessment of insulation work.*

### **Objective and brief content of the CINI Course**

In the course the background of the international CINI-organization will be explained, as well as the structure of the CINI Manual. Furthermore, conservation and measurement specifications will be covered. Practical techniques of insulation will be trained using several (field) examples.

After attending the course you will be able to use the CINI Manual and you will be able to select the application of several techniques, systems, insulation and finishing materials. You will also be able to use the digital version of the CINI Manual and to apply measurement specifications according to the CINI standards. Furthermore an example of a standard specification will be discussed. You will have a better understanding of corrosion under insulation en QA/QC of insulation systems.

A closer look at basic skills of thermal insulation in industries, and everything (in)directly related, will be addressed during the course. The basics of corrosion under insulation (CUI) and QA/QC will be reviewed thoroughly. The correct application of insulation materials according to issues like energy saving and reduction of emission will be reviewed into detail.

### **Target groups:**

In case you are employed in the (petro)chemical and process industry, power generation, HVAC, pharmacy and food processing industry, ship building and offshore, horticulture, cold stores or combinations of these markets or when you are employed for an engineering agency or as a consultant/auditor and willing to broaden your knowledge in technical insulation and/or working with the CINI Manual. The CINI-course provides the opportunity.

### **Duration of the course:**

2 consecutive days

### **Number of participants:**

The maximum number of participants is 15. Minimum number is 8 of different disciplines, e.g. asset owner, contractor, agencies and others

### **Location:**

The course will be held in Spijkenisse, near Rotterdam, the Netherlands. With enough participants of the same company, the course can be given on location (worldwide).

### **Costs:**

The costs per person is € 1.290,00. For large groups a quotation will be proposed. Hand-out is included, also coffee-tea and lunches, exclusive VAT.

### **General:**

The course will be given by teachers with a broad experience in the industry.

For (more) information, registration and rates, please contact:

# **NCTI**

**Netherlands Centre for Technical Insulation**