

**Duration:** 3 Days**Training Sessions:** 18-20 January 2017 (Rayong)  
2-4 October 2017 (Rayong)**Fees:** 18,500 Baht / Person\***Ref. Documents:** EN 14127/ ASTM E 797**Suitable for:**

Inspectors, QA/QC Engineers and Technicians  
from inspection and maintenance departments

**Objectives:**

At the end of the training course, you will be able:

- To select the appropriate instrument which fits to the material to be inspected
- To adjust the parameters of the instrument
- To perform thickness measurements

*This course includes practical workshops*

**Content:****ULTRASOUNDS PHYSICS**

- Types of waves
- Sound wave propagation
- The transformation of waves and conversion modes

**GENERALITIES ON THE THICKNESS MEASUREMENT**

- Principles
- Measurement techniques
- Possibilities and extent of the method
- Quality of the measurement
- Measures at hot temperature
- Standards

**EQUIPMENT**

- Ultrasonic devices and displays
- Transducer
- Calibration and reference blocks

**PREPARATION OF THE MEASUREMENT**

- Information required
- Materials and structures to be inspected
- Precautions
- Geometric considerations
- Preparation of surfaces to be inspected
- Influence of temperature
- Data entry

**PRACTICAL WORKSHOPS**

- Choice of the transducer ( $\Phi$  and frequency)
- Measurement standards
- Thin-walls
- Materials of various grades
- Small diameter pipes
- Examination report

\* Excluding VAT - Published prices and schedules are subject to change without advance notification

\* Registration fees are inclusive of lunch and coffee breaks