

Duration: 5 Days

Fees: 49,000 Baht / Person\*

Training Sessions: 14 – 18 May 2018 (Bangkok)

#### Suitable for:

- Engineers, Technicians, Supervisors, Inspectors who face problems related to the implementation of welding techniques or who wish to acquire a general knowledge of welding.

#### Objectives:

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

- To take into account the thermal aspect and the behaviour of materials during welding
- To understand and take into account the technology of the welding processes and their implementation
- To approach knowingly issues related to the design the preparation and the inspection of welded joints
- To understand the phenomena of stress and strain due to welding
- To ascertain the main specifications governing the implementation of welding

#### Content :

##### WELDING PROCESSES AND APPLICATIONS

- Generalities
- Classification

##### ELECTRIC ARC WELDING PROCESSES

- Arc welding with covered electrodes
- TIG, MIG-MAG, Plasma
- Flux-Cored Wire Metal Arc Welding
- Submerged Arc Welding

##### FILLET METAL STANDARDS

##### INTRODUCTION TO THE PHYSICAL

##### METALLURGY OF WELDING

- Basic principles of metallurgy
- The welded joint (macro-graphical analysis - Thermal Cycle - Thermal distribution and factors - Melting zone)
- Single and multiple pass welding
- Basic of weldability

##### RELATED TECHNIQUES AND EXTENSIVE KNOWLEDGE

- Gas welding
- Soldering and brazing
- Thermal cutting
- Surfacing and thermal spray
- Welding and laser cutting
- Electron beam welding
- Resistance welding

##### PREPARATION OF FUSION WELDED JOINTS

- Straight and chamfered edges
- Parameters defining the joint and its selection

##### WELD DEFECTS

- Classification
- Origins
- Solutions
- Consequences

##### INFORMATION ON THE COST PRICE WELDABILITY OF LOW AND HIGH ALLOY

##### CARBON STEEL

- Classification of the main categories
- Special features in terms of weldability

##### CORROSION IN WELDING

- Electrochemical corrosion
- Chemical corrosion
- Uniform corrosion
- Localized corrosion
- Protection methods

##### DESIGN AND CALCULATION ISSUES FOR WELDED CONSTRUCTIONS

- Elasticity
- In-service behaviour
- Design

##### INSPECTION OF WELDED JOINTS

- Consequences
- Choices
- Evolution (codes, specifications, contract documents, standards)
- Non-destructive testing
- Radiographic testing
- Ultrasonic testing
- Magnetic Particle testing
- Penetrant testing

##### HEALTH AND SAFETY

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

\* Registration fees are inclusive of lunch and coffee breaks