

CERTIFIED WELDING INSPECTOR (CWI) TRAINING COURSE & CERTIFICATION EXAM

PROGRAM Objectives:

The CWI Qualification Training Course is performed for the nominated candidates to prepare them to set for the CWI exam. Since this training program is offering important information in the field of welding and welding inspection, it is helpful for interested personnel who do not want to set for the official AWS certification exam.



Course Duration:

- The program will take exam two working weeks (10 working days) not including the.
- One day for exam
- The course is scheduled according to the request of the customers.

PROGRAM OUTLINES:

1. General Section of the CWI Program:

(5 days)

1. Welding Inspection and Certification.
2. Safe Practices.
3. Metal Joining and Cutting Processes.
4. Weld Joint Geometry and Welding Symbols.
5. Documents Governing Welding Inspection and Qualification.
6. Metal Properties and Destructive Testing.
7. Metric Practice for Welding Inspection.
8. Welding Metallurgy for the Welding Inspectors.
9. Weld and Base Metal Discontinuities.
10. Visual Inspection and Other NDE Methods and Symbols.



Subsidiary of **Gekash** Company for
Consultation and Inspection
www.weldecc.com



11. Discussions and solving samples of the CWI previous exams.

2. Visual Inspection Workshop: (2 days)

1. Introduction to the Workshop
2. Visual Inspection of Welding
3. Weld and Base Metal Discontinuities
4. Welding Codes and Specifications
5. Measurements of Welding and Measurement Tools (Welded Samples will be used in training)

3. Clinic for API-1104 Standard (Welding of Pipelines & Related Facilities): (3 days)

1. Introduction: How to Use API 1104
2. Section 1: General
3. Section 2: Referenced Publications
4. Section 3: Definition of Terms
5. Section 4: Specifications
6. Section 5: Qualification of Welding Procedures for Welds Containing Filler-Metal Additives
7. Section 6: Qualification of Welders
8. Section 7: Design and Preparation of a Joint for Production Welding
9. Section 8: Inspection and Testing of Production Welds
10. Section 9: Acceptance Standards for Nondestructive Testing
11. Section 10: Repair and Removal of Defects
12. Section 11: Procedures for Nondestructive Testing
13. Section 12: Mechanized Welding with Filler Metal Additions
14. Section 13: Automatic Welding without Filler-Metal Additions

Course Coordinator and Lecturer:

Dr. Hassan Shaaban, (B.S., M.S. and Ph.D. in Eng.), is a professor of Metallurgy who has performed extensive research work in the fields of metallurgy of metals and alloys including: material strength, high temperature properties of alloys, failure of materials and alloys, fracture mechanics, etc. He has been as a visiting scientist at various International Universities and research centers in USA, France and Italy.



Dr. Shaaban has been involved in submitting consultation and training to various industrial sectors in both Egypt and several Arab Countries for the past 25 years.

Dr. Shaaban has been in charge for the professional training programs in the fields of welding, failure analysis, quality, etc at both the American University in Cairo and the Academy of Science and technology. Presently, he is professor emeritus at the Egyptian Atomic Energy Authority. Finally, he has more than 70 published articles and research papers.

Dr. Shaaban is certified as AWS Cert. Welding Engineer and Level III ASNT Nondestructive Inspector.