Computerised Information Technology Limited

CIT/Digital Radiography Training

Part code: **DIGI-RAD**

Learning objectives: Prepare project engineers, operators, supervisors/auditors, inspectors, and system administration for:

- Digital Radiograph technology, its benefits, limitations & inspection variables
- Understand regulatory compliance and acceptance code
- Understand hardware, software, viewing systems, maintenance
- Understand the product, project requirement, inspection requirements, production control
- Understand Digital Radiography Image Quality, assessment, Analysis and Report generation, archival and data management
- Understand the Environment, Health & Safety compliances

Training benefits:

- Service provider and end customers can be assured that the Digital radiography Personals/engineers are fully trained and competent to use the digital radiography systems and reporting in accordance to the international and other applicable standards
- The organisation can be ensured that the staffs run the system at its full capacity.
- The systems are maintained and 100% efficient for the long term stability performance in accordance to EN 462-5, EN 14784-1, ASTM E2445-05 & ASTM 1647-98
- Technicians awareness of Digital radiography Benefits and application to save time, resources, increase the production without compromising the quality of work. It is also an opportunity for any NDT technician to adapt knowledge and prepare for future NDT challenges.

Pre-requisites:

- The course does not cover basic radiography inspection principles. It is designed for operators, supervisors, inspectors, system managers and auditors qualified and experienced with Level I; II or III in NDT conventional radiography conventional
- Candidate must be computer literate.

Course Content:

Technical and Hand-on training course and examination is prepared to fulfil ASME-V, article 2/ASNT-TC1-1CA EN473 / EN4179 / EN14096 / ISO9712/ guideline

Operator Training - Level I - 5 day course	**Supervisors Training – Level II** **3 Days course**	**System Administrators Training – Level III** **2 Days course**
- Digital CR Technology, Comparison vs. conventional - Regulatory Compliance - Advantages and limitations - CR system Components and Software - Electromagnetic radiation, materials, Ionisation - X-Ray Machines, Sources & accessories - System processing variables & Characteristics - Digital radiography Operating parameters & techniques - Imaging plates Handling & management - Pre-Digital radiography setups - CR system set-up, security log-in & Maintenance - Exposing set-ups - Image acquisition, processing, quality & measurements - Authorisation & Authentication - Archival, Archive disk operation, back-ups & data security - Health, safety & protection	- Standards required - Object under inspection - Technique setup - Dip plate management - Various defects - Radiograph Browsing - Advanced Radiograph Analysis [FAST TRACK] - Reporting Tools - System Calibration - System long term stability performance with CR Phantom **The candidate must have achieved Digital radiography Level I training.**	- System adaptation - Project definition and set-up - Archive Disk Management - Image quality, analysis - Radiation risk & Presentation - Projects Reports - Recommendations, preventative actions - Quality checks & Control, Quality Logbook - System Administration Document **The candidate must have achieved Digital radiography level II training and at least 30 days of experience using the Digital radiography technology and system**

Skills developed:

- Understanding of the global Digital Radiography Process and standards
- Knowledge of various Digital Radiography Systems, components, and sources
- Capability of handling the Imaging Plates and its maintenance
- Knowledge of defects types and probability of detection using image analysis and measurement tools
- Save & Retrieval the digital radiography Images
- Understanding the areas of responsibility and accountability when Digital Radiography is used to carry out NDT Radiography & Inspection
- Knowledge of quality perspectives and radiography methods

For any further information about this course and its content, please contact our team on

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