**Magnetic Particle Level II**

**Course Objectives:**

* Review of basic Principles; Flux Fields; Alternating & Direct pulsating currents.
* Factors affecting Depth of penetration.
* Effects of Discontinuities on Materials; Current calculation formulas.
* Current directional flow versus flux field; Discontinuities commonly detected.
* Selecting the Proper Method of Magnetization; Sequence of operations.
* Demagnetization Procedures & Need for demagnetization of parts.
* Equipment; Black light type; Light characteristics & Tests for black light intensity.
* Quality Control of Equipment and Processes; Malfunctioning of equipment.
* Bath concentration; Settling & Other bath-strength tests.
* Testing of many numbers of flawed specimens using magnetic particle tests.
* Interpreting results based on ASTM/ASME standards and specifications.
* Interpret the Company Procedure to perform acceptance/rejection.

**Course Outlines:**

* Hands-On Practical on weld specimens with Plate, Pipe, T, Nod and Nozzle configurations.
* Hands-On Practical on Flawed forged specimens.
* Reviews & Discussions.
* Mock Up Tests, Home Works, and Examinations.
* Test will be conducted in 3 methods:

1. General 2. Specific 3. Practical

* The candidate successfully completes the course if he gets a minimum score of 70% in each test (General, Specific and Practical) & a minimum of 80% for the average of 3 tests.

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**Who Should Attend?**

* Should be High School graduate of science branch (minimum recommended level of education).
* Should have a minimum experience of 70 hours in method and 130 hours in NDT.
* Certificates: Near Vision acuity (Jaeger Number 2 or Ortho-Rater 8), and Color Contrast Differentiation has to be submitted at the time of registration.

**Duration:** 5 Days

**For more information:**

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