

Genesis of IMM Certified Coating Fingerprint Trainer Program: From Foundation to Quality Controller Workshop



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What if we need to complete a coating project in the middle of offshore platform surrounded by a team comprising engineers to technicians and only one person to deliver the quality of coating? That was a striking challenge which frequently faced by professionals when need to train their team and leading to the launch of the 3-day hands-on training workshop on Coating Fingerprint Trainer Program by IMM from 7th - 9th November, 2018. The program comprising two different consecutive workshops namely IMM Coating Fingerprint Foundation Course and IMM Certified Coating Quality Controller Course.

Necessity for a polymeric "Coating Fingerprint Certificate" have been instigated from the paint and coating industries in order to improve quality assurance similar to "Mill Certificate" practiced in metal industry. Such initiative leads to selection of Fourier Transform Infra-Red (FTIR) method as an appropriate method to provide the fingerprinting requirement in addition to other routine physical as well as chemical tests practiced by the paint and coating manufacturers [1]. Combination of a half-day theory lectures on the FTIR method with addition to demonstration of FTIR equipment encompass this 1-day Coating Fingerprint foundation course. Such equipment demo facilitates participants to understand the procedure of the FTIR testing, distinguish the strengths and limitations of FTIR method, interpretation as well as analysis of FTIR results. This also provided a trainee in the classroom to get the first-hand experience of running the FTIR testing with the actual FTIR equipment by own self.

Genesis of IMM Certified Coating Fingerprint Quality Controller course was due to imminence of implementation the requirement for Coating Fingerprint Certificates (equivalent to the Mill Certificates for Metals) towards oil & gas and petrochemical industries for all the protective coatings and paints supplied to them. As such, to conduct FTIR tests and all related chemical as well as material tests to produce a Coating Fingerprint Certificate [2]. Five years' valid "IMM Certified Coating Fingerprint Quality Controller" certificate would be issued upon completion of this course. Professionals from various countries including Malaysia, Indonesia & Singapore were participated and sat for the examination during the workshop. However, trainer program involved with delivery theoretical part, demonstrating hands on of FTIR testing to the participants including analysis through software, invigilating exam as well as marking the exam papers.



Figure 1: Participants of the IMM Coating Fingerprint Foundation Course.



Figure 2: Hands-on training for Lab exercise during Coating Fingerprint Quality Controller Course.

Moreover, requirements to be "certified" trainer of 2-day Certified Coating Fingerprint Quality Controller Course (Coating Fingerprint Trainer Course), the pre-requisites for the 1st phase are:

- (1) IMM Certified Coating Fingerprint Quality Controller AND
- (2) Committee members of IMM Task Force on Coating Fingerprinting AND
- (3) To observe for both 1-day Coating Fingerprint Foundation Course and 2-day Certified Coating Fingerprint Quality Controller Course AND
- (4) To coach / lecture both 1-day Coating Fingerprint Foundation Course (one or partial of the full course) and 2-day Certified Coating Fingerprint Quality Controller Course (one or partial of the full course) with evaluation of the course developer.



Figure 3: Group photo taken after the completion of Fingerprint Quality Controller Training.

After the successfully completion of the Fingerprint Quality Controller examination, the workshop was concluded through a certificate giving ceremony for participation by Assoc. Prof. Dr. Melissa Chan Chin Han of IMM.

References

1. IMM, FTIR application for Coatings Fingerprinting Master Class. Materials Mind, 2016. Issue 13: p. 28.
2. IMM, IMM training & Certification Program Booklet, 2018: p.16-17.