



Institute of Materials, Malaysia

IMM Coating Fingerprint Certification Scheme

Certified Coating Fingerprint Quality Controller Level 2

Code: FP2

The oil & gas and petrochemical industries have implemented the requirements for Coating Fingerprint Certificate (equivalent to the Mill Certificate for Metals) for all the protective coatings and paints supplied to the industry operators. As such, IMM Certified Coating Fingerprint Quality Controllers (FPQC) will be engaged by paint manufacturers, 3rd-party laboratories, (sub-)contractors, auditors and owners to prepare or to review Coating Fingerprint Certificate for quality assurance and quality control (QA & QC) purpose. This certification scheme places special emphasis on generation of a good Reference spectrum for in-house paint manufacturers and 3rd-party laboratories, which is very crucial for subsequent estimation of degree of similarity for batch-to-batch paint consistency. Besides, on-site inspection using mobile or handheld equipment, review of Coating Fingerprint Certificate and cross-checking of raw FTIR spectrum will be highlighted.

Reference standards (reference used shall refer to the latest published document):

- IMM FP01, *Coating Fingerprinting Overall Procedures for Paints Using FTIR and Other Related Methods*
- IMM FP02, *Paint Raw Material Overall Procedures Using FTIR and Other Related Methods*
- IMM FP03, *Dried Coating Fingerprinting Overall Procedures Using FTIR and Other Related Methods*

Who should apply

This certification scheme is for those who will be involved in conducting quality assurance or quality control (QA/QC) on paints and coating systems, especially for analysts at testing laboratories (in-house and 3rd-party) as well as for internal and external auditors.

Objective

The objective of this certification scheme is to assess and certify IMM Certified Coating Fingerprint Quality Controllers Level 1 on upgraded knowledge and skills in quality control and quality assurance on paints and coating systems. In addition, the persons certified as IMM Coating Fingerprint Quality Controller Level 2 can continue to issue the Coating Fingerprint Certificate.

Exam topics

- IMM FTIR Analysis Standards, qualification and fingerprint certificates of raw materials, paints and dried coatings
- Sampling precautions in relation to FTIR fingerprinting for paints
- FTIR fingerprinting of raw materials for epoxy paint manufacturing
- Good practice for generation of Reference FTIR for Coating Fingerprint Certificate
- Good practice for sample storage, collection and analysis
- On-site inspection using mobile or handheld spectrophotometer
- Audit trail of a FTIR spectrum using FTIR software

Exam format

The exam/assessment paper consists of 50 – 70 multiple choice questions



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Exam duration

60 min or less

Candidate's criteria

Candidate shall possess valid IMM Certified Coating Fingerprint Quality Controller Level 1 certificate or equivalent with at least 6-month working experience on coating fingerprinting.

Pre-requisite training

Candidate is encouraged to attend the 1-day IMM Coating Fingerprint Quality Controller Level 2 training course as the training prepares and provides comprehensive guidance and practice to the candidate aligned to the topics covered in the examination.

IMM CPD points

The candidate is entitled for 28 IMM CPD points if he/she attended the 1-day training course recognized by IMM (*7 activity hours x 1 day x 4 weightage factor*).

Criteria for competency

Successful in the examination with a minimum pass mark of 70%

Certificate awarded

IMM Certified Coating Fingerprint Quality Controller Level 2

Candidate will also be authorized to use the Coating Fingerprint Quality Controller Rubber Stamp (Figure 1) in all documents and reports, including the Coating Fingerprint Certificate, in relation to coating fingerprint to any person, company or authority in Malaysia.



Figure 1

Validity period of certificate

5 years

Information on re-certification

6 months prior to expiry of certification (at the end of the 5th year of certification), candidate can apply for re-certification for another 5 years by

- providing proof to IMM that he/she has been employed in a related profession; and



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Information on re-certification (*cont'd.*)

- accumulating sufficient Continuing Professional Development (CPD) points*.

Prior to the expiry of the 5-year re-certification (at the end of the 10th year of certification), candidate can continue to be certified for a further 5-year period by

- providing proof to IMM that he/she has been employed in a related profession;
- accumulating sufficient CPD points*; and
- attending the relevant Refresher Course for certification (if any).

The candidate must re-sit the certification examination if he/she has been out of the profession for more than 18 months continuously during the 5-year certification or re-certification period.

**The minimum number of CPD Points to be accumulated over a 5-year period shall be 100 points with an annual requirement of at least 10 points.*