



## INSTITUTE OF MATERIAL, MALAYSIA

### IMM Coating Certification Scheme

## **Certified Protective Coating Technician (Blaster and/or Painter) Level 1 & Level 2**

Code: PCT

*HRDF claimable*

This certification scheme will assess the candidate on capabilities and competency in abrasive blasting and protective coating painting skills, mainly in the oil & gas and heavy engineering industries. The candidate will be assessed both in the theory and practical aspects of Blasting and/or Painting which will determine their competency in accordance to the terms and conditions of the IMM Coating Certification Scheme. The candidate has a choice to sit for only the Blaster or Painter examinations or both.

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

- ISO 8501-1: Preparation of Steel Substrates Before Application of Paints and Related Products - Visual Assessment of Surface Cleanliness - Part 1: Rust Grades and Preparation Grades of Uncoated Steel Substrates and of Steel Substrates After Overall Removal of Previous Coatings
- SSPC PA-1: Shop, Field, and Maintenance Coating of Metals

### **Who should apply**

This certification scheme is suitable for new workers as well as those with experience in painting and/or blasting who want to be certified.

### **Objectives**

To access the following knowledge and skills in:

- Specifying protective paint/coating system to a variety of substrates (Level 1 – Blaster; Level 1 – Painter; Level 2 – Multi-skill)
- The preparation of substrates prior to painting (Level 1 – Blaster; Level 2 – Multi-skill)
- The application of paint coatings (Level 1 – Painter; Level 2 – Multi-skill)
- The diagnosis and rectification of faults in paint coatings and communication in written form (Level 1 – Blaster; Level 1 – Painter; Level 2 – Multi-skill)

### **Examination topics**

- Understanding corrosion types, factors affecting corrosion and effects of corrosion (Level 1 – Blaster; Level 1 – Painter; Level 2 – Multi-skill)
- Standards and paint materials data sheets (Level 1 – Blaster; Level 1 – Painter; Level 2 – Multi-skill)
- Composition and important types of paints (Level 1 – Blaster; Level 1 – Painter; Level 2 – Multi-skill)
- Surface preparation and related techniques (Level 1 – Blaster; Level 2 – Multi-skill)
- Application of paints (Level 1 – Painter; Level 2 – Multi-skill)
- Paint faults and coating defects (Level 1 – Blaster; Level 1 – Painter; Level 2 – Multi-skill)
- Quality assurance checks (Level 1 – Blaster; Level 1 – Painter; Level 2 – Multi-skill)
- Health, safety and environment – hazards, safety features and preventive measures (Level 1 – Blaster; Level 1 – Painter; Level 2 – Multi-skill)
- About coating fingerprinting (Level 1 – Blaster; Level 1 – Painter; Level 2 – Multi-skill)

The examination/assessment shall be preceded by a 2-hour pre-assessment briefing for Level 2 – Multi-skill OR

The examination/assessment shall be preceded by a 1-hour pre-assessment briefing for Level 1 – Blaster

OR

The examination/assessment shall be preceded by a 1-hour pre-assessment briefing for Level 1 – Painter

### **Examination format**

The examination comprises both theory and practical assessments, as follows:

- Theory

#### **IMM PCT Level 2 (Multi-skill)**

Paper 1 - Surface preparation, 23 multiple choice questions

Paper 2 - Painting, 23 multiple choice questions

#### **IMM PCT Level 1 (Blaster or Painter)**

Paper 1 - Surface preparation, 23 multiple choice questions

OR

Paper 2 – Painting, 23 multiple choice questions

- Practical assessment

#### **IMM PCT Level 2 (Multi-skill)**

Part 1- Surface preparation

- » Identify the main parts of a setup blasting equipment.
- » Identify the safety features of blasting equipment and explain its function.
- » To carry out blasting on a test panel to SA 2½ standard.

Part 2 - Painting

- » Identify the main parts of airless spray equipment.
- » Identify and explain the safety features of an airless spray gun.
- » Show how to check that the one or two-pack paint is the correct one with reference to the paint technical datasheets.
- » Explain how the mixing of one or two-pack paint is to be carried out.
- » To carry out spraying of paint on a test panel.

#### **IMM PCT Level 1 (Blaster or Painter)**

**For Blaster only:** Part 1- Surface preparation

- » Identify the main parts of a setup blasting equipment.
- » Identify the safety features of blasting equipment and explain its function.
- » To carry out blasting on a test panel to SA 2½ standard.

OR

**For Painter only:** Part 2 – Painting

- » Identify the main parts of airless spray equipment.
- » Identify and explain the safety features of an airless spray gun.
- » Show how to check that the one or two-pack paint is the correct one with reference to the paint technical datasheets.
- » Explain how the mixing of one or two-pack paint is to be carried out.
- » To carry out spraying of paint on a test panel.

### **Examination duration**

Theory: 1 hour for both Parts 1 and 2 OR ½ hour for Part 1 or Part 2

Practical: 5 hours for both Parts 1 and 2 OR 2 ½ hours for Part 1 or Part 2

### **Examination fee**

As specified on the IMM website.

### **Candidate's criteria**

Candidate should have

- Minimum academic qualification – SPM, SKM or any other academic certificate OR equivalent\*\*  
OR

- 2 years of blasting and/or painting experience, must show in the resume or CV. Candidate with less than 2 years' experience must submit a testimonial letter from employer or client to demonstrate their eligibility **OR**
- IMM Certified B1B2 Assistant Blaster and/or Painter with a minimum of 1 year experience in blasting and/or painting, must show in the resume or CV **OR**
- IMM Certified Blaster (L1) who has acquired coating skills and wishes to sit for the Painter assessment must submit a record (a testimonial from employer or client) prior to the examination showing proof of his/her experience over a twelve (12)-month period. The same procedure applies to IMM Certified Painter (L1) who wishes to sit for the Blaster assessment.

#### **NOTES:**

Candidate, who does not meet any of the above listed criteria, must attend the full training course before the examination.

**\*\*Candidate fulfils the minimum academic qualification but without blasting and/or painting experience is considered as candidate without experience.**

#### **Pre-requisite training**

A candidate without experience is required to attend IMM approved/recognized training course which prepares and provides comprehensive guidance and practice aligned to the topics covered in the examination.

A candidate with experience is encouraged to attend IMM approved/recognized training course.

#### **Criteria for certification**

The candidate must be successful in each of the following:

- Minimum pass mark of 70% each of Part 1 and/or Part 2 in the theory examination.
- Minimum pass mark of 70% each of Part 1 and/or Part 2 in the practical assessment.

#### **Certificate awarded**

- **IMM Certified Protective Coating Technician Level 2 (Multi-skill)**  
[If the candidate is successful in all parts of the Blaster and Painter examination]
- **IMM Certified Protective Coating Technician Level 1 (Blaster) OR  
IMM Certified Protective Coating Technician Level 1 (Painter)**  
[If the candidate is successful in either Surface Preparation (Blaster) or Painter Assessment only]

#### **Validity period of certificate**

5 years

#### **Re-sit of examination**

A candidate who had failed in one or more of the examination parts can apply to re-sit for the failed component(s) of the examination within a year from the date of the first examination. The candidate shall have to pay the full examination fee for the re-sit and without the need to attend any pre-requisite training course.

#### **Information on re-certification**

6 months prior to the expiry of certification (at the end of the 5<sup>th</sup> year of certification), the 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
- attending the relevant Refresher Course for certification (if any).

Prior to the expiry of the 5-year re-certification (at the end of the 10<sup>th</sup> year of certification), the 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; 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.