



**FMM Institute** (475427-W)

No 1&3, Jalan Kencana Mas 1/1, Tebrau Business Park, 81100 Johor Bahru  
Tel No: 07-3577613 Fax: 07-3577617



## INTRODUCTION

The **FMM Certificate in Boilerman** Grade 2 (4 week) and Grade 1 (6 week) is a non residential part time course. Is specially developed to upgrade the Theoretical and Operational Skills of the current workforce in handling Steam Boilers in various sectors.

# Certificate In Boilerman- Grade 2

**Date: Commence on November 13 , 2021**

Venue: Remote Online Training via ZOOM Platform

## Course Content

### CERTIFICATE IN BOILERMAN \*\* GRADE 2 \*\*

- 1. Acts and Regulations Related to Boilers**  
Factory and Machinery Act,1967 (Act139)  
OSH Act, DOSH (JKKP) and various Certificates
- 2. Types of Boilers**  
Difference between Fire and Water-Tube Boilers  
Package Boilers, Cochran, Vertical Type
- 3. Boiler Operation –Practical**  
Start-up, Shut Down and Blow Down procedures  
Procedure of Supplying Steam to Plant/Machinery
- 4. Essential Fittings and Mountings**  
Various essential Fittings/Mountings  
Functions of each essential Fittings/Mountings
- 5. Preparation for Mandatory Inspection**  
Preparation and Assistance for Inspection
- 6. Various Types of Test Related to Boilers**  
Hydrastatic, Steam and Gauge Glass Testing
- 7. Boiler Maintenance**  
Regular Preventive Maintenance on Fire and Water sides, Fittings and Accessories
- 8. Boiler House/ Room Requirements**  
Change Shift procedure and Space Requirements  
House Keeping, Safety Equipment and Ventilation
- 9. Instrumentation And Control**  
Measurement Instruments and Calibration Controls
- 10. Oral Revision**  
Revision and Question & Answer Session

**Total hours = 32 hours (4 Days)**

### CERTIFICATE IN BOILERMAN \*\* GRADE1 \*\*

The Course Syllabus for the Certificate in Boilerman Grade 1 is the same as the above up till Module 9 and in addition as follows:

- 1. Water Treatment**  
Internal & External Treatment and various Test
- 2. Construction of Boilers**  
Methods of Joints i.e. Welded  
Welding of Shells and Drums, Tube Plate to Shell, Tubes to Tube Plate and Fuel Gas Path
- 3. Fuel and Combustion**  
Various types of Fuel, their Properties and Advantages and Disadvantages of each type.
- 4. Steam Turbine**
- 5. Boiler Accessories**  
Functions of the Various Boiler Accessories
- 6. Oral Revision**

**Total hours = 32 hours (4 Days)**

### WHO SHOULD ATTEND ▼

Steam Engine or Steam Boiler Attendant (directly handle boiler) and Apprentice or Journeyman Fitter in a Steam Plant or Engineering Workshop (Indirectly handling of boiler)

~ SBL SCHEME ~

## OBJECTIVES ▼

This programme will enable participants to

Upgrade the knowledge and skills of current personnels in handling and operating Steam Boilers and further upgrade the skills of Boilerman Grade 2 Certificate holders

Establish a level of legal knowledge pertaining to boilers in theory and practice, skills upgrading in order to manage and handle steam boilers towards better work performance;

Create opportunities for career advancement and development within an organisation.

Prepare participants for the Boilerman Grade 2 and Grade 1 Examination conducted by the Jabatan Keselamatan dan Kesihatan Pekerjaan (JKKP/DOSH).

## ENTRY REQUIREMENTS ▼

A candidate must have the following entry requirements to register for this course and sit for the **Boilerman Grade 2 Examination:**

- that he is a Malaysian Citizen
- that he is not less than 21 years of age
- that he has the suitable educational qualification (**at least passed LCE/SRP/PMR or completed Form 3**)
- that he has at least 2 years working experience as a Steam Engine or Steam Boiler Attendance (indirectly **handling a boiler**) or at least **3 years working experience** as an Apprentice or Journeyman Fitter in such a Steam Plant or an Engineering Workshop (**indirect handling of a Boiler**).

A candidate must have the following entry requirement to register for this course and sit for the **Boilerman Grade 1 Examination:**

- that he is a Boilerman Grade 2 Certificate holder
- that he has at least **18 months working experience in handling Steam Boilers of not less than 500 sq. ft heating surface while holding the Certificate in Boilerman Grade 2.**

## CERTIFICATION ▼

Participants are required to meet the 80% attendance course requirement to qualify to sit for the examinations. Participants who have attended the latest 80% of the programme will be awarded a Certificate of Attendance.

## MEDIUM OF INSTRUCTION

Bahasa Melayu and English

## EXAMINATION

This course will assist participants in preparing to sit for an oral examination for competency in Boilerman. However, candidates for the examination are subjected to minimum requirements.

## ADMINISTRATIVE DETAILS

Date: **Commence on 13, 14, 27 & 28 November 2021 (Sat & Sun)**

Time: **9.00am – 5.00pm**

Venue: **Remote online Training via ZOOM Platform**

### Fees

Grade 2: FMM Members: **RM1,908.00** per participant  
Others: **RM2,332.00** per participant

Grade 1: FMM Members: **RM2,332.00** per participant  
Others: **RM2,968.00** per participant

**\*\* (Course fee Includes training material & Certificate of Attendance )**

**For further information, kindly contact:  
FMM Institute, Johor Branch**

E-mail: [jessica@fmm.org.my](mailto:jessica@fmm.org.my) / [astri@fmm.org.my](mailto:astri@fmm.org.my)

## ~ REGISTRATION FORM ~

### ~ Certificate In Boilerman –Grade 2 ~ Commence on November 13, 2021

FMM Institute Johor Branch **Tel: 07-3577 613 Fax: 07-3577 618**  
**(Attn: Jessica)**

Dear Sir/ Madam,

Please register the following participant(s) for the above programme.

1. Name : \_\_\_\_\_  
IC No : \_\_\_\_\_ Grade \_\_\_\_\_
2. Name : \_\_\_\_\_  
IC No : \_\_\_\_\_ Grade: \_\_\_\_\_

(If space is insufficient, please attach a separate list.)

### Submitted by:

Name \_\_\_\_\_

Designation \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

FMM Membership No. \_\_\_\_\_ Tel No. \_\_\_\_\_ HP.No: \_\_\_\_\_

E-mail: \_\_\_\_\_ Date: \_\_\_\_\_

### Sponsorship (pls circle)

a) *Company sponsored*                      b) *Self-sponsor*

b) *Invoice Required*                      Yes \_\_\_ No \_\_\_

**Company  
Stamping**

### Registration Details

- ☐ Registration is on a first-come-first served basic **Closing date for registration will be on November 05, 2021**
- ☐ There will be no refund for cancellation within 7 days prior to the programme. 50% refund for cancellation between 8-13 days. Full refund for cancellation 14 days prior to the programme
- ☐ However, replacement can be accepted at no additional cost.
- ☐ Cancellation must be in writing.
- ☐ The FMM Institute reserves the right to cancel or reschedule the above programme and all efforts will be taken to inform participants of the changes.
- ☐ E-Payment Details Upon FMM Confirmation prior commencing :

**FMM INSTITUTE  
Maybank Banking Berhad  
Account No : 501280-05-6601 .**

### **Important :**

**» Please email or fax us the Remittance Information for verification purpose & RECEIPT .**