



FMM CERTIFICATE IN BOILERMAN (45TH BATCH)

I NOVEMBER 4, 5, 11 & 12, 2025 ⊕ 9.00AM – 5.00PM **A** FMM INSTITUTE, PERAK

The FMM Certificate in Boilerman course is specially developed to upgrade the theoretical operational skills of the current workforce handling Steam Boilers in various industries. The Certificate programme will provide the knowledge to upgrade the skills of Boilerman, Assistant Boilerman, Firemen, Apprentice and also to prepare them to sit for the Boilerman exam conducted by DOSH.

The course covers topics related to safe operation procedures, mountings & fittings, periodical inspection, maintenance of Steam Boilers and also understand the requirements by DOSH. Other factory personnel such as SHO, OSHC and Maintenance Supervisors/Technicians are also encouraged to attend this programme to obtain overall knowledge about Steam Boilers especially matters related to safety procedures to be implemented during maintenance, overhauling and inspections by DOSH.

...COURSE CONTENTS...

1. ACTS AND REGULATIONS

- Factory and Machinery Act, 1967 (Act 139)
 Abolished 1 June 2024
- Occupational Safety and Health Act, 1994 (Act 514) Version 2024
- Petroleum Act (Safety Measures), 1984 (Act 302)

2. TYPES OF STEAM BOILERS

- Fire and Water Tube Boilers
- Specifications of Boilers

3. BOILER OPERATION (THEORY)

- Piping Systems
- Start-Up Procedures / Shut-Down Procedures
- Trouble Shooting

4. ESSENTIAL FITTINGS AND MOUNTINGS

- Various Fittings and Mountings
- Functions of Each Fittings and Mountings

5. PREPARATION FOR PERIODICAL INSPECTION

- Preparation of Boiler for Inspection by DOSH / Licensed Person
- Time Based Inspection
- Risk Based Inspection
- Confine Space Procedures / LOTO

6. VARIOUS TEST RELATED TO STEAM BOILERS

Hydrostatic Test

- Steam Test
- Non-Destructive Testing
- Destructive Testing

7. BOILER HOUSE/ROOM REQUIREMENTS

- Log Sheet / Log Book
- Responsibilities of Boilerman
- Serious Misconduct
- Dangerous Occurrences

8. BOILER CONSTRUCTION

- Fabrication Process
- Plain Tube / Stay Tube / Stay Bar / Gusset Stay

9. BOILER WATER TREATMENT

- Purpose of Treatment
- Internal Treatment / External Treatment

10. BOILER MAINTENANCE

- Regular Preventive Maintenance on Fire and Water Sides
- Boiler Storage

11. BOILER ACCESSORIES

- Various Accessories
- Function of the Accessories

12. ORAL REVISION AND DISCUSSION.

Note: Pre-Test and Post-Test will be given during the course.

...OBJECTIVES...

- Upgrade the knowledge and skills of current personnel's handling and operating Steam Boilers and to further upgrade the skills of Boilerman.
- Establish a level of legal knowledge pertaining to Steam Boilers and the theoretical and practical skills in order to efficiently manage and handle steam boilers towards better work performance.
- Create opportunities for career advancement.
- Prepare participants to sit for the Boilerman (Grade 1 and 2) Oral Examinations conducted by Jabatan Keselamatan dan Kesihatan Pekerjaan (JKKP/DOSH)

...TRAINER...

MR G. MOHANA KRISHNAN holds a Master of Science (Mechanical Engineering) from Universiti Sains Malaysia, a Bachelor in Engineering (Naval Architecture and Shipbuilding), University of Newcastle, UK as well as a Diploma in Mechanical Engineering from Universiti Teknologi Malaysia. He has been a Technical Lecturer with the Department of Marine Engineering, Politeknik Ungku Omar, Perak from 1982 – 2002. Subsequently, he was the Head of Mechanical Engineering Department at Politeknik Sultan Azlan Shah, Behrang, Perak.

MR. MOHANA specialty is in areas such as Mathematics, Mechanics of Machine, Naval Architecture, Engineering Design, Strength of Materials and Steam Boilers and has experience supervising the operation of Steam Boilers at the Politeknik. In addition, he has also been the main facilitator of FMM Institute's Certificate in Boilerman Course for both Grade 1 and Grade 2 levels, since 1995.

...ENTRY REQUIREMENTS TO ATTEND ORAL EXAMINATION BY DOSH...

A candidate **must** have the following entry requirements to **register** for this course and **sit** for the **Examination by DOSH:**

Grade 2	\Rightarrow	⇒ мү Malaysian Citizen, 21 years old and above				
	\Rightarrow	Minimum 2 years' experience as an Assistant Boilerman or Fireman				
		OR				
		Minimum 3 years' experience as an Apprentice/Journeyman Fitter in a Steam Plant or				
		Engineering Workshop (indirect steam boiler handling)				
	⇒	SPM pass in Bahasa Malaysia – Compulsory				
	\Rightarrow	Medically fit, certified by an OHD (Occupational Health Doctor)				
Grade 1	\Rightarrow	🔧 At least 18 months' experience as a Grade 2 Boilerman				
	⇒	Experience handling boilers with a heating surface of 100 m² or more				
	⇒	Medically fit, certified by an OHD				

...CERTIFICATION...

- Participants are required to attend all scheduled classes of the course. There is a minimum requirement of 75%
 attendance before participants can be considered for the Certificate of Attendance issued by FMM Institute
 Perak.
- 2. The **Certificate of Competency** as a Boilerman Grade 2 or Grade 1 will be issued by **JKKP** only to those participants who **PASS** the **Boilerman Grade 2** or **Grade 1 Examination** respectively.

...EXAMINATION...

The **Examination** for the Certificate of Competency as a Boilerman Grade 2 and Grade 1 will be **conducted** by **Jabatan Keselamatan dan Kesihatan Pekerjaan** (JKKP / DOSH). Applicants have to apply through MyKKP. Upon complying to the entry requirements, they will be called for an oral examination.

...ADMINISTRATIVE DETAILS...

⇒ Day 2 ~ November 5, 2025

⇒ Day 3 ~ November 11, 2025

⇒ Day 4 ~ November 12, 2025

Duration 4 days (28 hours)
Time 9.00am - 5.00pm
Venue FMM Institute Perak

No 1, Lorong Raja DiHilir,

30350 Ipoh, Perak

Medium of Instruction **B.Malaysia**

Fees FMM Members RM1,944.00/pax

Non-Members RM2,592.00/pax Self-Sponsored RM1,944.00/pax

(Installment – RM972 x 2)

(Fees inclusive of Service Tax at 8%, Course Materials, Refreshment, Lunch and Certificate of Attendance. However, its excluding **DOSH Examination Fee.**)

DISCLAIMER

The FMM Institute Perak **reserves the right** to change the facilitator, date and to vary/cancel the programme should unavoidable circumstances arise. All efforts will be taken to inform participants of the changes.

REGISTRATION

- Upon Faxing / Mailing the completed Registration Form to FMM institute Perak, you are deemed to have read and accepted the terms and conditions. The course would also be deemed as confirmed unless informed otherwise.
- For HRD Corp Claimable, employer's HRD Corp grant Approval must be forwarded to FMM Institute Perak at least 3 days before the Training date.

PAYMENT

- For HRD Corp Claimable Scheme, an Attendance of 100% is a MUST, in any case, employers will be billed in full.
- Cheques must be made in favour of 'FMM Institute'.
- FMM Institute SST Registration No: W10-1901-32000105
- FMM Institute TIN No. C10626805080

CANCELLATION / DISCONTINUATION

Must be in Writing with Reasons • 7 days before the course commences - No payment charged • 3 - 6 days before the course commences - 50% payment charged • < 3 days before the course commences -Full payment charged • Participants who did not turn-up will be charged full payment • Replacements can be accepted at no additional cost. • For discontinuation, payment made will be forfeited.

Closing Date: OCTOBER 28, 2025

Fax: 05-5488221

~ Registration Form ~

FMM CERTIFICATE IN BOILERMAN

FMM Institute

No 1, Lorong Raja DiHilir, 30350 Ipoh, Perak

Dear Sir / Madam, please register the following participant(s) for the above programme.

1.	Name		NRIC	
	Designation		Age	
	Email		HP No	
	Qualification		Grade	1
	Experience	(Number of Years)	(please ✓)	2
2.	Name		NRIC	
	Designation		Age	
	Email		HP No	
	Qualification		Grade	1
	Experience	(Number of Years)	(please ✓)	2

(Please attach a separate list if space is insufficient)

We he	ereby confirmed that (<i>Please tick (✓) in approp</i> We will be claiming from HRD Corp and full from HRD Corp under any circumstances	•	in the event that no disbursement	:	
	We will NOT BE CLAIMING from HRD Corp being payment for participant(s) ma	for RM	for RM		
Submi	itted by:				
Nam	e:	Designation:	Designation:		
Com	pany:	Tel:	Fax:		
Addr	ress:	·	·		
Emai	il:		FMM Membership No		