



INDUSTRIAL SAFETY DIVISION

DEPARTMENT OF OCCUPATIONAL SAFETY AND HEALTH MALAYSIA

APPLICATION GUIDE FOR DESIGN VERIFICATION

OF LOCAL STEAM BOILER

2025

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1.0 INTRODUCTION

This application guide serves as a reference for the competent person submitting online application of local steam boiler design verification via MySKUD system. This aims to provide the competent person with clear and accurate guidance to help them meet all application requirements.

2.0 ENABLER

Occupational Safety and Health (Plant Requiring Certificate of Fitness) Regulations 2024 are provisioned under the Occupational Safety and Health Act 1994, Section 27B, whereby the Minister may specify any plant for which certification of fitness is required. These regulations come into operation on **June 1, 2024**.

This guide is issued pursuant Section 27C, Occupational Safety and Health Act 1994, whereby The Director General may grant an approval subject to such terms and conditions as the Director General may impose.

3.0 INTERPRETATION

Pursuant to Regulation 2, Occupational Safety and Health (Plant Requiring Certificate of Fitness) Regulations 2024;

- a) "steam boiler" means any closed vessel for any purposes which steam is generated under pressure greater than atmospheric pressure and includes any economiser used to heat water being fed to the vessel and any super heater used for heating steam and any pipes and fittings connected to the closed vessel;
- b) "heating surface" means, in respect of a steam boiler, the total surface of all plates and tubes exposed to heat on one side and in contact with water on the other, measured on the water or fireside, whichever is the greater, and excluding the heating surface of any economiser and superheater connected to it;

4.0 SCOPE OF APPLICATION

- 4.1 One design verification application is applicable to only one (1) type of steam boiler model.
- 4.2 Any steam boiler that is new, never been used and has never suffered from any deterioration.
- 4.3 The scope of the application only applies to steam boilers manufactured by local steam boiler manufacturers registered with the Department as Competent Person (Company).
- 4.4 The design verification application must be submitted to the Department before the construction of the steam boiler begins.

5.0 APPLICATION REQUIREMENTS

- 5.1 Every document submitted must be in either **Malay or English**. Any translations made must be done by the manufacturer or an official translation institute.
- 5.2 Only Competent Person (Company) Manufacturer for Steam Boiler registered with the Department are allowed to apply for local steam boiler design verification.
- 5.3 The design, materials, construction, performance quality, inspection and testing of the steam boiler shall comply with recognized standards according to the latest edition or amendment specified in Fourth Schedule, Occupational Safety and Health (Plant Requiring Certificate of Fitness) Regulations 2024 and verified by an authorized inspecting body as per **Annex 1**.
- 5.4 This steam boiler at the time of construction at the manufacturer's location shall be supervised by an authorized inspecting body listed in the First Schedule, Occupational Safety and Health (Plant Requiring Certificate of Fitness) Regulations 2024. A certificate from this authorized inspecting body shall be submitted to the officer who will carry out the inspection of this boiler.

5.5 Any steam boiler involving hot work such as cutting, welding or other work on the pressure part during the construction and installation of the steam boiler at the owner's location, this steam boiler at the time of construction and installation at the owner's location shall be supervised by the authorized inspecting body specified in the First Schedule, Occupational Safety and Health (Plant Requiring Certificate of Fitness) Regulations 2024. A certificate from this authorized inspecting body must be submitted to the Officer or Licensed Person who will carry out the steam boiler inspection.

5.6 Economiser or / and superheater

a) Application for economiser or / and superheater shall be applied together with the steam boiler in one application for design verification and information about the economiser or / and superheater must be included in the general arrangement drawing of the steam boiler (GA drawing): **New Design Verification Application.**

b) Addition of economiser or / and superheater to a steam boiler that already obtained a certificate of fitness (CF): **An application for alteration of the steam boiler must be applied.**

6.0 INSTRUCTION FOR FILLING OUT APPLICATION DETAILS

Required information for Design Verification of Local Steam Boiler Application Form:

DETAILS	NOTES
APPLICATION CATEGORY	
1) Verification Category	Select > Design Verification of Local Steam Boiler, and; Select > Design Verification of New Steam Boiler
APPLICANT INFORMATION	
2) Competent Person (Company) Number	Fill in the registered Competent Person (Company) number.
3) Applicant Name*	Fill in the applicant's information, for local steam boilers, can only be filled in by a Competent Person (Company).

DETAILS	NOTES
4) Applicant's Address*	The address of the party mentioned above.
5) Name of Contact Person*	Name of applicant company officer who can be contacted.
6) Telephone Number*	The phone number of the company officer mentioned above.
7) Email*	Email of the company officer mentioned above.
8) Technical Officer's Name*	The name of the technical officer who can be contacted.
9) Technical Person's Phone Number*	The telephone number of the technical officer mentioned above.
10) Technical Person's Email*	Email the technical officer mentioned above.
STEAM BOILER CONSTRUCTION INFORMATION	
11) Manufacturer Name*	<p>The name of the company that manufactured the steam boiler Example: ABC Sdn. Bhd. Note: Fill in the company name as stated in the approval letter as a Competent Person (Company) Manufacturer for Steam Boiler approved by the Department and is still within the validity period.</p>
12) Manufacturer's Address*	<p>Address of the company mentioned above. Note: Fill in the address as stated in the approval letter as a Competent Person (Company) Manufacturer for Steam Boiler approved by the Department.</p>
STEAM BOILER INFORMATION	
13) Boiler Category*	<p>Category 1 Water Tube Boiler, Heat Recovery Steam Generator, Coal Fired Boiler, Waste Heat Boiler, Fire Tube Boiler, High Pressure Boiler, Combi Boiler, Tubeless Boiler, Once Through Boiler</p>

DETAILS	NOTES
	Category 2 Electric Steam Boiler, Autoclave, Steam Tube Oven, Steam Tube Hot Plate
14) Model*	Fill in the steam boiler model information as per design drawing Enter (-) if not related
15) Year manufactured*	Fill in the year the steam boiler was manufactured
16) Capacity (m ³)	Fill in the steam boiler volume information Enter (-) if not related
17) Evaporation Capacity (tons per hour)*	Fill in the steam boiler capacity information Enter (-) if not related
18) Heating Power (kW)	Fill in the steam boiler heating power information Enter (-) if not relevant
19) Design Drawing Number*	Fill in the design drawing number and revision.
DESIGN AND TEST PRESSURE INFORMATION	
20) Design pressure (kPa)*	Fill in the design pressure information in units of kilopascals (kPa) as per design drawing.
21) Heating surface (m ²)*	Fill the total heating surface of the steam boiler only and excluding the heating surface of any economizer and superheater connected to it. Enter (-) if not relevant (autoclave and electric steam boiler)
22) Design temperature*	Fill in the design temperature information as per design drawing.
23) Recognized standard*	Fill in the recognized standard information (design code) according to the latest edition or amendment as per Fourth Schedule, Occupational Safety and Health (Plant Requiring Certificate of Fitness) Regulations 2024.
24) Authorized inspecting body*	Select the information of an authorized inspecting body recognized by the Department as listed in the First Schedule, Occupational Safety and Health (Plant Requiring Certificate of Fitness) Regulations 2024. Enter (-) if not related
OWNER INFORMATION	
25) Owner Name*	Fill in the owner's information, if there is no owner please enter the word "Stock"

DETAILS	NOTES
ESSENTIAL FITTINGS INFORMATION	
26) Essential Fittings*	Fill in the essential fittings information as per design drawings as specified in the Eighth Schedule, Occupational Safety and Health (Plant Requiring Certificate of Fitness) Regulations 2024 and recognized standards.

7.0 APPLICATION DOCUMENTS

Please upload the required documents for the design verification of the local steam boiler as follows:

DOCUMENTS	EXPLANATORY NOTES
1) Design appraisal certificate by an authorized inspecting body*	<p>Design appraisal certificate by an authorized inspecting body specified in the First Schedule, Occupational Safety and Health (Plant Requiring Certificate of Fitness) Regulations 2024.</p> <p>*Authorized inspecting body design appraisal certificate is not compulsory for autoclave.</p>
2) Design drawings verified by an authorized inspecting body*	<p>Design drawings include general arrangement drawings (GA) and detailed drawings of each pressured part verified by an authorized inspecting body. Design drawings should be complete with the following information:</p> <ol style="list-style-type: none"> a. Design data such as design pressure, design temperature, operating pressure, operating temperature, test pressure and type of pressure test, latest recognized standards, non-destructive testing (NDT), working media, heating surface, heating power, evaporative capacity and others. b. Main dimensions. c. Welding details. d. Orientation, dimensions and function for each 'nozzle'. e. Specifications of materials. f. Essential Fittings. <p>* Verification by an authorized inspecting body is not compulsory for autoclave design drawings.</p>

3) Design calculation*	The design calculations are based on the latest recognized standards as per Fourth Schedule, Occupational Safety and Health (Plant Requiring Certificate of Fitness) Regulations 2024 and verified by an authorized inspecting body. *Verification by an authorized inspecting body is not compulsory for autoclave design calculation.
4) Piping and Instrumentation Diagram (P&ID) *	For Autoclave and Electric Steam Boiler only.
5) Name plate *	For Autoclave and Electric Steam Boiler only.
6) Other Supporting Documents	Other supporting documents.

8.0 INFORMATION

- 8.1 Any incomplete application will be rejected.
- 8.2 The Department reserve the right to reject the application or withdraw the design verification approval at any time if found that:
 - a) Does not comply with or violates any terms and conditions set by the Director General under Section 27C.(3), Occupational Safety and Health Act 1994 as stated in the verification letter; or
 - b) Falsifies application documents and information; or
 - c) Has violated any other terms and conditions issued by the Department from time to time.
- 8.3 Each steam boiler shall be tested as specified in the design verification before being operated and witnessed by an authorized inspecting body recognized by the Department as listed in the First Schedule, Occupational Safety And Health (Plant Requiring Certificate Of Fitness) Regulations 2024.

9.0 FEES

Every application for design verification of local steam boiler shall be accompanied with a processing fee as follow:

NO	MATTER	FEE (RM)
1.	Process for design verification for steam boiler (each design unit)	
	Category 1	
	(a) Heating surface less than 50 square meters	RM 500
	(b) Heating surface of 50 square meters and above but less than 100 square meters	RM 1,000
	(c) Heating surface of 100 square meters and above but less than 250 square meters	RM 1500
	(d) Heating surface 250 square meters and above	RM 2,500
	*The fee charged is based on the total heating surface of the steam boiler only and excluding the heating surface of any economizer and superheater connected to it.	
	Category 2	
	Electric steam boiler, steam tube oven, steam tube hot plate or autoclave.	RM 300

Any fee paid for this local steam boiler design verification application shall not be refundable.

10.0 CLIENT CHARTER

Applications submitted with complete documents will be processed within 25 working days from the date of receipt of the application.

**Steam Boiler Unit
Design Approval Section
Industrial Safety Division
Department of Occupational Safety and Health
Ref. Update: 1/2025**

**OCCUPATIONAL SAFETY AND HEALTH (PLANT REQUIRING CERTIFICATE OF FITNESS)
REGULATIONS 2024**

DECLARATION BY AUTHORIZED INSPECTING BODY

I being
a Member / Surveyor of
an Authorized Inspecting Body named in the First Schedule, Occupational Safety and Health
(Plant Requiring Certificate of Fitness) Regulations 2024, hereby certify that the steam boiler
with Serial No. was constructed by
.....
for.....in accordance with
their drawing number.....and design pressure of
.....kPA was surveyed during
construction by me in accordance with recognized standard of
..... as specified in the Fourth Schedule, Occupational
Safety and Health (Plant Requiring Certificate of Fitness) Regulations 2024 and found its
performance quality and workmanship to be good.

Samples of all materials used in its construction were tested or witnessed by Inspectors of this
Company and found to comply with the provisions of the above-mentioned recognized standard.
It was stamped by me as follows:

.....
.....

Dated on:

.....
Member/Surveyor Signature

.....
Authorized Inspecting Body